



Gwinnett Village
Community Improvement District

Indian Trail-Lilburn Road Livable Centers Initiative Corridor Study

March 2, 2007

Final Report



M.P.H.
& associates, inc.

**Indian Trail-Lilburn Road
Livable Centers Initiative Corridor Study**

Final Report

Prepared for:

Gwinnett Village Community Improvement District

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1. Introduction

1.1 Study Background

Since 2000, the Atlanta Regional Commission (ARC) has conducted the Livable Centers Initiative (LCI) program. The LCI program was developed to aid communities across metropolitan Atlanta create “livable” places through the application of land use, zoning, and urban design combined with multimodal transportation improvement strategies. The intent of an LCI plan is to reduce single occupancy vehicle (SOV) trips within LCI areas and ultimately reduce air pollutants emitted by vehicles. An important element of the LCI program has been developing an understanding of places within the community and market context, knowing what’s there, what’s desired, and what’s feasible. In addition, the LCI study process is based on a planning approach underscored by broad community participation, input, and support.

In 2006, the Indian Trail-Lilburn Road corridor was one of nine town centers, activity centers, or corridors to receive an LCI study award. The study was initiated by the Gwinnett Village Community Improvement District (CID) to focus on improving the area known as the “Gateway to Gwinnett”. The area in southwest Gwinnett County contained within the Gwinnett Village CID boundaries encompasses major corridors such as Buford Highway, Beaver Ruin Road, Indian Trail-Lilburn Road, Jimmy Carter Boulevard, and Singleton Road/Steve Reynolds Boulevard. A companion corridor study is being conducted on Jimmy Carter Boulevard.

1.2 Study Area

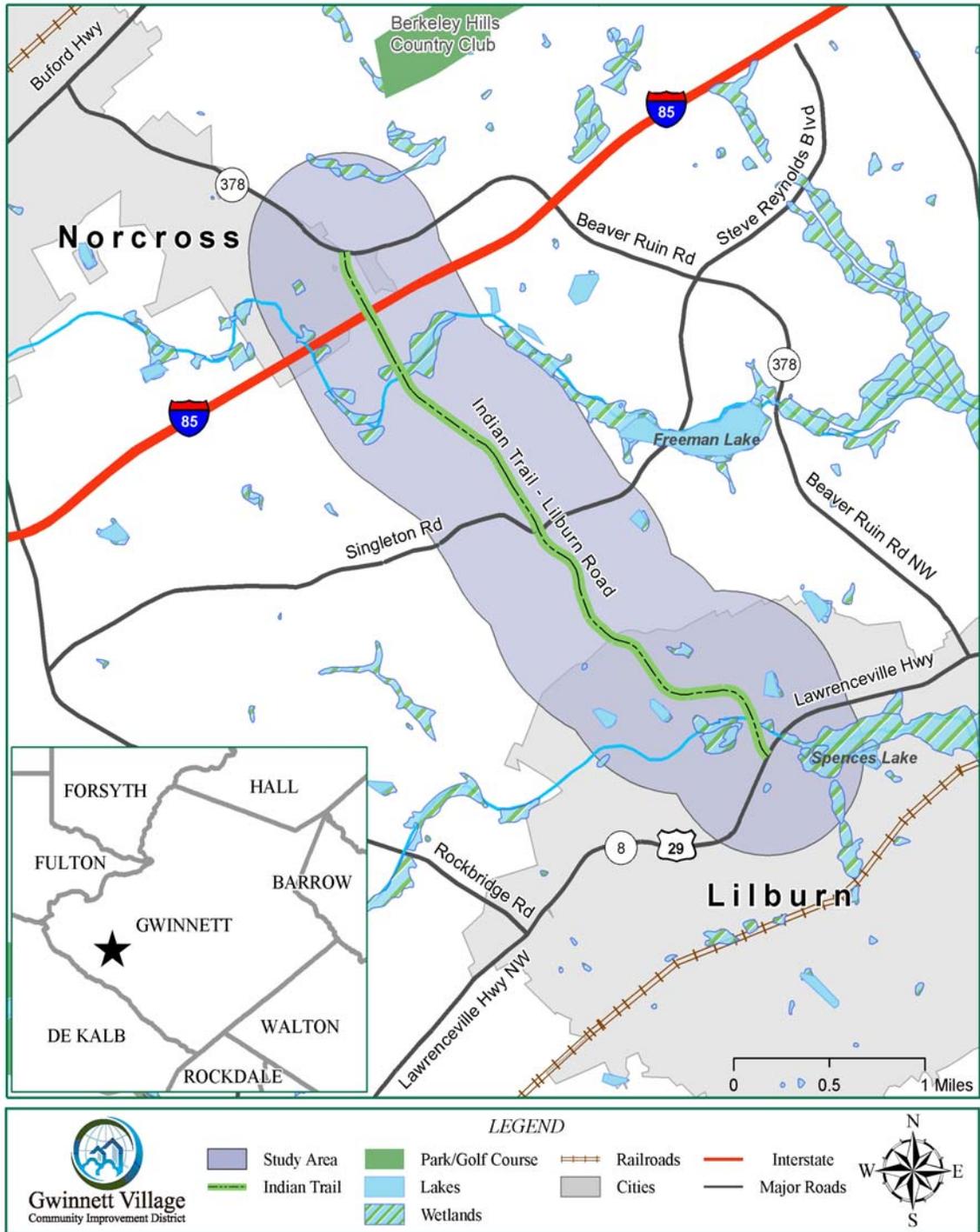


The Indian Trail-Lilburn Road LCI study area comprises a 3.6-mile corridor extending from Beaver Ruin Road/SR 378 in the City Norcross to Lawrenceville Highway/U.S. 29 in the City of Lilburn and includes the area within one-half mile on either side of the corridor, as shown in Figure 1. The middle portion of the corridor is in unincorporated Gwinnett County. The corridor serves as a significant link

between the two Gwinnett cities and provides an important connection for regional travel, with an interchange at I-85. The corridor faces aging infrastructure, as it was one of the earlier commercial, retail corridors within developing Gwinnett County. Through the LCI study process, the purpose is to develop a corridor master plan to:

**Figure 1:
Study Area Map**

Indian Trail-Lilburn Road LCI Corridor Study



- ◆ Identify opportunities for mixed use development;
- ◆ Create development nodes;
- ◆ Expand bicycle and pedestrian facility connectivity;
- ◆ Improve connections to local and express bus services; and
- ◆ Manage vehicular access.

The Gwinnett Village CID managed the study. A consultant team led by URS Corporation in conjunction with Urban Collage, MPH and Associates, Inc. and Bleakly Advisory Group was retained to assist in conducting the study. Jurisdictional partners in the study include the Atlanta Regional Commission (ARC), Georgia Department of Transportation (GDOT), City of Lilburn, City of Norcross, and Gwinnett County. A stakeholder committee comprising property owners and local leaders was developed to provide guidance during the course of the study. Opportunities for public outreach and input were conducted with a project kick-off meeting September 7, 2006; a Design Charrette on October 11, 2006; presentation of the Draft Plan on November 8, 2006; and presentation of the Final Plan at an Open House on December 6, 2006.

1.3 Report Purpose

This report presents a brief overview of the existing transportation, land use, and market characteristic conditions found in the Indian Trail-Lilburn Road corridor study area. It is from this part of the study that the baseline was established for understanding market conditions, land use and urban design, and transportation characteristics. Figure 2 illustrates some of the existing land use, transportation, and building conditions along the Indian Trail-Lilburn Road corridor.

Then a study was performed to evaluate alternative recommendations that could be pursued to achieve the vision for the development of improvements within and adjacent to the corridor. An integral part of this vision was the input provided during the stakeholder and public information meetings. Although not part of this study, ongoing assessment of the corridor will be performed as improvement recommendations are implemented.

1.4 Corridor Transportation System

A more extensive and detailed description of existing conditions was presented in the Existing Conditions Report dated October 17, 2006. Below is a brief summary of the corridor's current transportation system.

Functional Classification

Urban Minor Arterial (per GDOT Road Classification Index)
Posted speed limit of 45 mph

Regional Strategic Transportation System (RSTS)

Indian Trail-Lilburn Road is identified through this system and is eligible for federal funding to mitigate congestion

Traffic Control

Signalized intersections: 15

Cross Section/Median Treatments

Predominantly two lanes in each direction with a two-way center left-turn lane
Two segments with raised medians within Lilburn city limits

Annual Average Daily Traffic and Level of Service

<u>Section</u>	<u>AADT</u>	<u>LOS</u>
Lawrenceville Hwy to Exchange Pl	24,750	C
Hillcrest Rd to Whited Way	41,350	F
Steve Reynolds Blvd to I-85	44,490	F

Crash Experience

From 2002 to 2004, average of 448 crashes per year

Transit

Gwinnett County Transit (GCT) operates local and express service in the area; Georgia Regional Transportation Authority (GRTA) operates express service
Park and Ride Lot located on the north side of Indian Trail-Lilburn Road west of I-85

Route 20: (local) weekday 30 minute headways; travels along Satellite Boulevard, Beaver Ruin Road, Indian Trail-Lilburn Road, and Singleton Road

Route 30: (local) weekday 15 minute headways-peak; 30 minute headways off-peak; travels along Beaver Ruin Road, Steve Reynolds Boulevard, and Indian Trail-Lilburn Road

Route 102: (GCT express) five inbound trips in the morning and seven outbound trips in the afternoon

Route 412: (GRTA Xpress) four inbound trips and four outbound trips midday

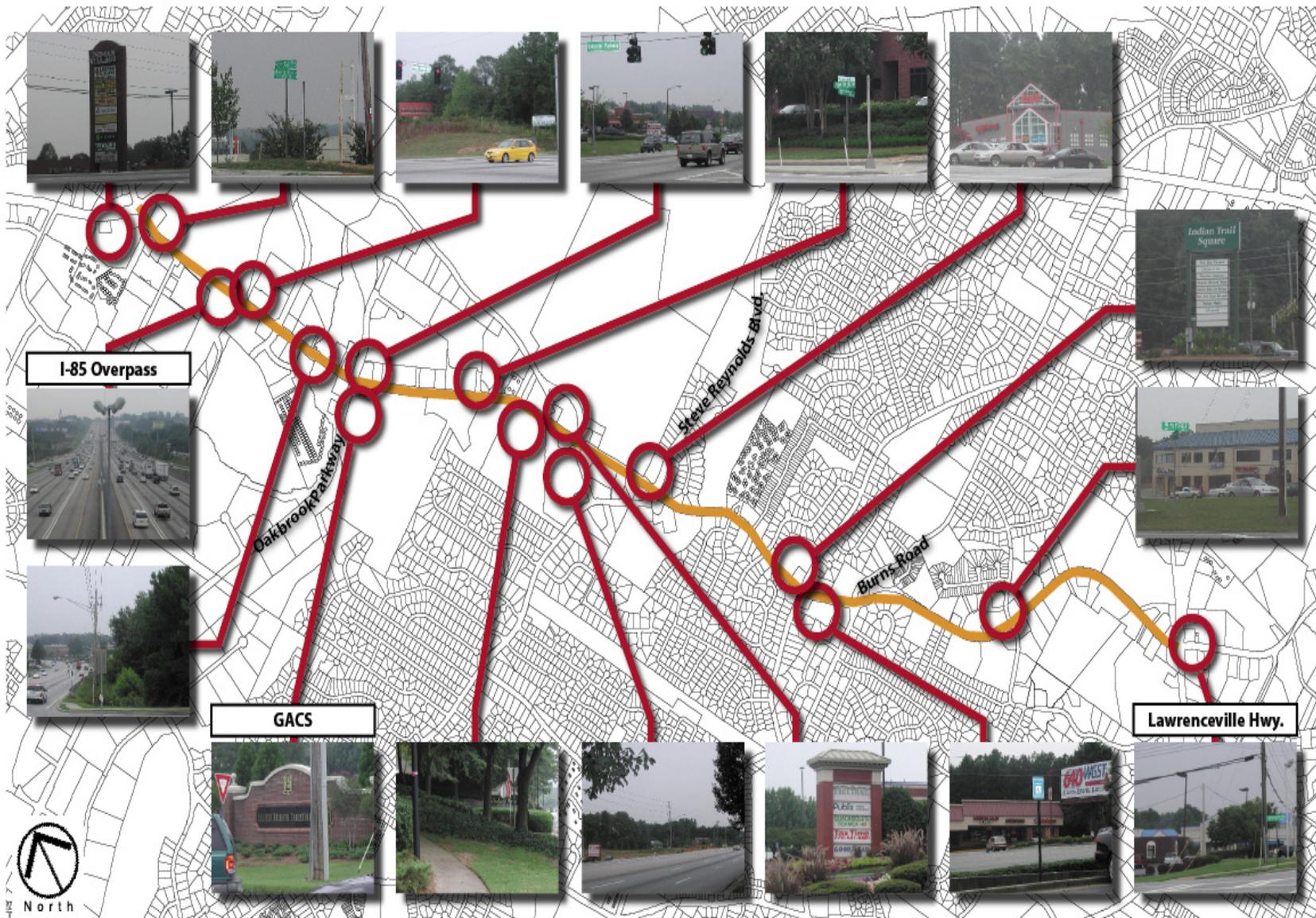
Bicycle/Pedestrian

No formal bicycle facilities

Pedestrian facilities/sidewalks sporadic; Gwinnett County to construct sidewalks along the corridor as part of their SPLOST program

**Figure 2:
Existing Conditions**

Indian Trail-Lilburn Road LCI Corridor Study



2. Land Use

The Indian Trail-Lilburn Road corridor study area runs roughly southeast-northwest through Gwinnett County, extending from Lawrenceville Highway in Lilburn and to Beaver Ruin Road in Norcross, just north of an interchange with I-85. This corridor in the southwest corner of the county goes through several stages of distinct character.

In the southern end of the study area, at Lawrenceville Highway, the corridor begins at a very prototypical suburban strip node. All four corners of the intersection are occupied by shopping centers of various sizes, ages, conditions, and occupancy rates. This condition carries north along the corridor, reducing in scale slightly as it approaches Hillcrest Road and Burns Road. At these nodes, the retail is smaller in scale, and often has a mix of office uses included. The corridor exits the City of Lilburn at Burns Road, and the retail uses begin to thin out in favor of residential. There are few instances of housing actually fronting Indian Trail-Lilburn Road, with a number of residential developments immediately adjacent to the corridor.

At Steve Reynolds Boulevard, the land uses begin to change back to strip retail and commercial. Tree Trail Village is a Publix-anchored center shared with second and third-generation tenants and outparcels. Continuing north, the corridor has a variety of commercial and office development on one side opposite an aging apartment complex, and the Greater Atlanta Christian School (GACS) on the other. Approaching I-85, the dominant uses are hospitality (including an RV park) and stand-alone retail, with an office building at the access ramp. Crossing the interstate toward Beaver Ruin Road, the land use becomes almost exclusively strip and “big box” retail.

Outside the corridor, often only one parcel removed, the land use changes radically. To the south, the make-up is almost entirely housing, the majority of which is single-family. The stock ranges widely in quality, age, and associated income, and much of the area is no longer owner-occupied. Multi-family stock is common but generally not in good condition. To the north, the major land use of note is the quarry. By far the largest contiguous parcel in the study area, it also provides the greatest long-term opportunity for change.

Active and maintained greenspace is in short supply and immediate opportunities for expansion and addition present a variety of challenges. There are several creeks and floodplains that are adjacent to, or cross, the corridor, but these areas may be difficult to improve. As was the case in land use, the quarry offers one of the greatest opportunities for adding meaningful open space to the area. Beyond this, however, there is little within the area. Pedestrian and bicycle amenities are sporadic, where they exist at all. Sidewalks are intermittent and rarely connect to parcels off the corridor. Dedicated bike lanes are non-existent. Sidewalk upgrades are planned along several stretches of Indian Trail-Lilburn Road, and the right-of-way is often wide enough to accommodate a multi-use path. The challenge will be in connecting that path to destinations beyond the study

area. A quick drive through the corridor would reveal that this stretch has been thus far ceded to the automobile.

2.1 Development Opportunities and Challenges

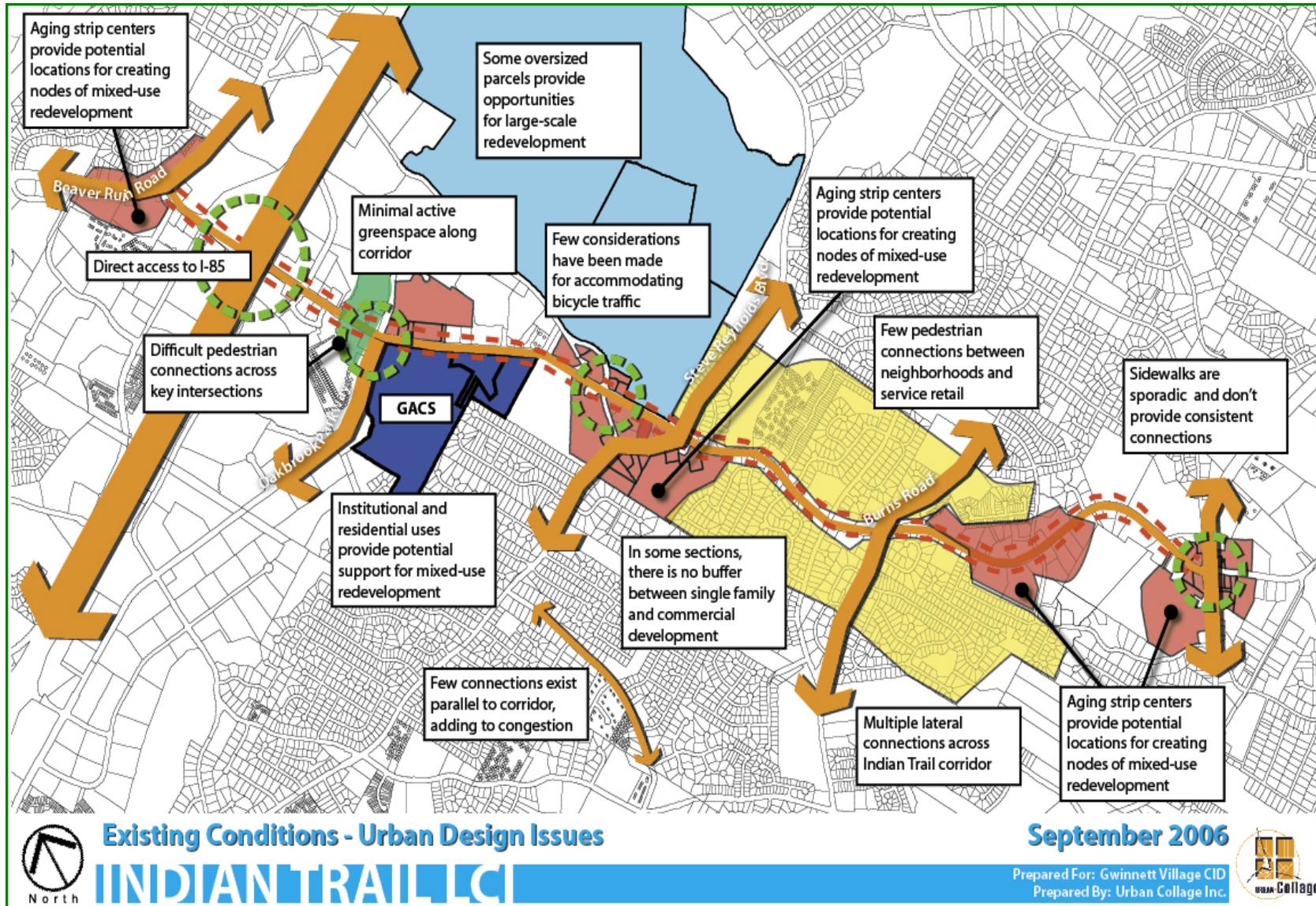
The Indian Trail-Lilburn Road area has quite a few very encouraging conditions that can foster a healthy future. The access of the corridor to I-85 is very attractive to high-density redevelopment. Large-scale development adjacent to the highway can have a ripple effect, providing support for local retailers and increasing demand for quality housing. While the corridor has not seen the over abundance of strip retail that characterizes many suburban arterials, the area does contain some aging retail centers, vacant land, surface parking lots, aging residential areas, and declining light industrial properties that are likely to change over time. These opportunities will provide a chance to change the character of the corridor through the creation of better defined activity centers shaped by the plan. Older retail on both the western and eastern ends of the corridor can become the foundation for higher intensity redevelopment and the creation of new mixed use centers. The middle of the corridor contains more viable retail services. The commercial properties and the quarry operations to the north create the greatest long-term development opportunity to create a first-class urban neighborhood complemented by open space. Urban design issues are highlighted in Figure 3.

The development and redevelopment of land within the corridor at a higher density would better support the use of transit in the area. The wide existing right-of-way is tailor-made for new forms of transit and the park and ride lot on the west side of the Interstate also creates a tremendous opportunity tied to transit investments. Higher density development and transit availability also fosters pedestrian activity. Streetscape enhancements along the corridor will improve the pedestrian environment, widening the sidewalks and creating buffers against the traffic. Improved connectivity between the residential and commercial areas would enhance the livability of the area. There is also opportunity to create a neighborhood-oriented, walkable center to improve the pedestrian environment near GACS. A multi-use greenway could provide opportunities for bicycle and pedestrian connection outside of the corridor. The quarry and the various streams and floodplains provide opportunity for greenspace development. Improved road connections and adjoining circulation routes in the corridor area could also provide a more positive environment for motor vehicles using the corridor.

Challenges to redevelopment are numerous and varied. Much of the existing retail is relatively occupied, so immediate redevelopment opportunities appear limited. The large number of property owners leads to possible challenges in assembling land for larger-scale mixed use. A related issue is the general resistance in suburban areas to higher-density development. Another issue is to overcome the perceptions of increased crime, traffic and infrastructural demand that can foster the unwillingness of both the private and public sectors to accommodate new investment.

**Figure 3:
Urban Design Issues**

Indian Trail-Lilburn Road LCI Corridor Study



2.2 The Public Workshop

On October 11, 2006, from 6:30 pm to 8:30 pm, the Gwinnett Village CID hosted an open Public Design Charrette for residents and business owners within the study area. This interactive session began by orienting the attendees to the particular study area and discussing some of the issues that face redevelopments of the typical strip-lined corridor.

The bulk of the workshop revolved around guiding the participants as they literally and figuratively mapped out the future of this portion of Indian Trail-Lilburn Road. Land use was addressed, both in the sense of what should change and what should remain. Likewise, the need for open space was considered, and the community members examined strategies for increasing the greenspace available within the study area.

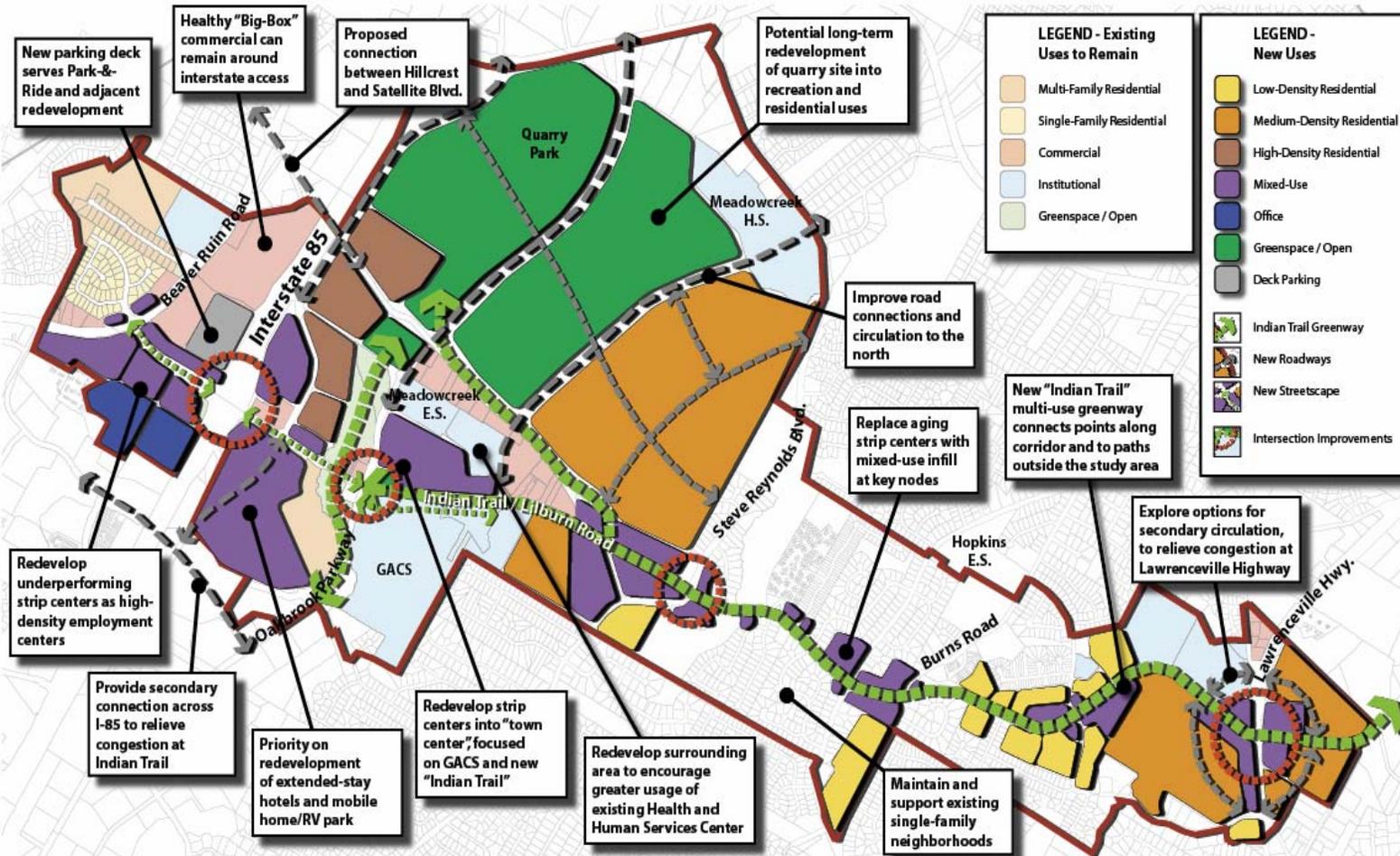


Transportation issues were examined, not just in terms of automobile traffic, but foot and bike traffic as well. Participants suggested greenways and sidewalks to connect neighborhoods and businesses, as well as the development of a parallel road network, to reduce local traffic within the corridor. Finally, the attendees took part in what is known as a 'Block Exercise'. Two potential development nodes were parsed in detail, with a desired redevelopment expressed with colored blocks, showing massing, scale, and building location.

Three weeks later, the participants reconvened to review the results of their input, and to consider an initial draft of the Framework Plan and Development Diagrams based on that input and commentary. The consulting team then took the input from the workshop and the comments from the review and compiled the plans and diagrams that can be found in this report. The Framework Plan, which is described in greater detail in the following section, can be seen in Figure 4.

Figure 4:
Framework Plan

Indian Trail-Lilburn Road LCI Corridor Study



Framework Plan

INDIAN TRAIL LCI

November 2006

Prepared For: Gwinnett Village CID
Prepared By: Urban Collage Inc.



2.3 The Framework Plan

Indian Trail-Lilburn Road possesses a different physical structure and market niche than the nearby commercial corridors along Jimmy Carter Boulevard and Pleasant Hill Road. The LCI Plan calls for accentuating the strengths of the corridor today (access, visibility, and strong community anchors) with new development to accentuate the corridor's role as a neighborhood mixed use center. The Framework Plan that has emerged from public input and professional analysis includes the following major components:

- 1) New transit-oriented mixed use near I-85;
- 2) A neighborhood center to accompany GACS;
- 3) Redevelopment of neighborhood-scale village centers, typified by a specific example at Hillcrest Road in Lilburn;
- 4) Creation of a new urban neighborhood at the quarry.

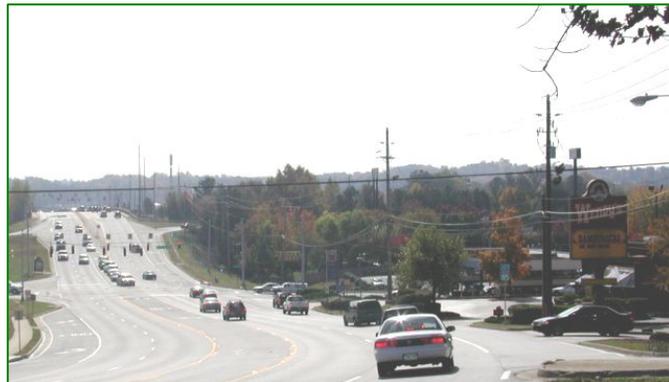
Consistent with the notion to link land use and transportation strategies, these development concepts must be accompanied by a host of multi-modal transportation improvements to tame traffic and accommodate transit, bicycles, and pedestrians. Overall, the strategy is to “pulse” development strategically to create mixed use centers of varying intensity along the length of the corridor, herein referred to as the Interstate Gateway, the Learning Village, Hillcrest Neighborhood Center, and the Quarryside Neighborhood, which are described in greater detail below.

2.4 Interstate Gateway

This area consists of maximizing underutilized commercial and transportation properties on the west side of I-85 and the redevelopment of commercial property just to the east. This area will likely see significant pressure for densification and change given its proximity to the Interstate and due to the possibility of additional bus and/or commuter transit in the I-85 corridor. Figures 5 and 6 depict how the recommended improvements can transform the Interstate Gateway area and Figure 7 shows the potential redevelopment of the Park and Ride lot and Brook Hollow Parkway.

Redevelopment could integrate some existing commercial operations, but redevelopment into higher intensity mixed use is encouraged around the interchange. New development should include structured parking and, particularly in the area to the west, should contain a much greater focus on pedestrian and bike facilities in the emerging transit-oriented development. The eastern side of the interchange will include new redevelopment, including the possibility of a new mixed use commercial center just off of Indian Trail-Lilburn Road, designed to take advantage of this location's visibility and access to the rest of the region. This would include redeveloping the extended stay hotels and mobile homes in the area today.

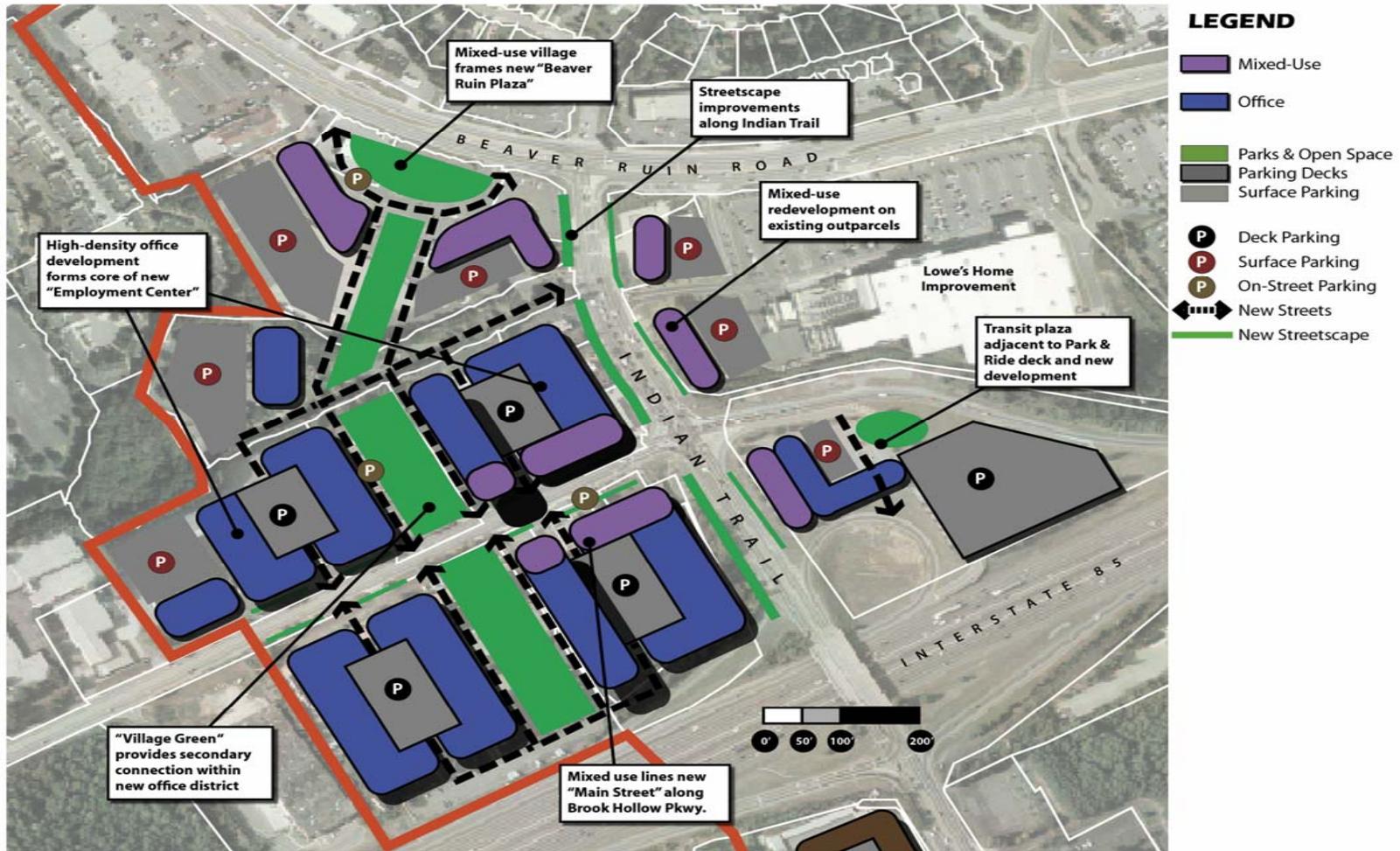
**Figure 5:
Brook Hollow Parkway
Before**



**Figure 6:
Brook Hollow Parkway
After**

Figure 7:
Park & Ride Lot and Brook Hollow Parkway

Indian Trail-Lilburn Road ECI Corridor Study



Node Diagram - Park & Ride Lot and Brook Hollow Pkwy.

INDIAN TRAIL ECI

November 2006

Prepared For: Gwinnett Village CID
Prepared By: Urban Collage Inc., with URS Inc.

2.4.1 Transit Oriented Development

With the location of the current park and ride lot within the area defined by the envisioned Interstate Gateway project, the opportunity exists to develop this project as a transit oriented development (TOD). Today express bus service operates at this facility but future mass transit service enhancements could be made through Bus Rapid Transit or rail. Also local transit service is available by the Route 20 and the Route 30. Consequently, public transit is already a focal point of the area and its accessibility can be expanded. With the site reconfigured to have the transit station parking in a structure, the station and site would be more conducive for moving forward implementing higher density mixed use activities as a TOD.

With the spatial arrangement of the Interstate Gateway having a section of its development on the north side encompassing the park and ride lot and a larger section on the south side, a design issue is to make crossing Indian Trail-Lilburn Road as pedestrian friendly as possible. Emphasizing foot traffic across this arterial, one of the basic TOD tenants, walkability, would be easier to achieve. Techniques such as pedestrian only traffic signal phasing or grade separation of walkways can be explored during the site plan development phase of the project.

Other aspects of the TOD are readily embraced by the Interstate Gateway. There is the internal street grid pattern with the commitment to green space. With the office portion, the employees provide a market for the retail activities that would also be utilized by the nearby residents. In addition, the streetscape program as shown in Figure 6 softens the thoroughfare aspect of Indian Trail-Lilburn Road making the area more appealing for circulation by means other than the automobile.

2.5 The Learning Village

The area around Oakbrook Parkway, GACS, Meadowcreek Elementary School, and the Health and Human Services Center contains the strong anchors to make a dynamic center for institutions accentuated by supportive retail, open space and housing. Unlike the Interstate Gateway, this area will need to step down in scale and focus on neighborhood-oriented development that provides the opportunity to relax, shop, and recreate. Figures 8 and 9 illustrate some of the recommended improvements to the area and Figure 10 shows a map of the Learning Village with its mix of land use activities. New housing in close proximity can build the supportive population for the two schools and, ideally, provide housing for some faculty members.



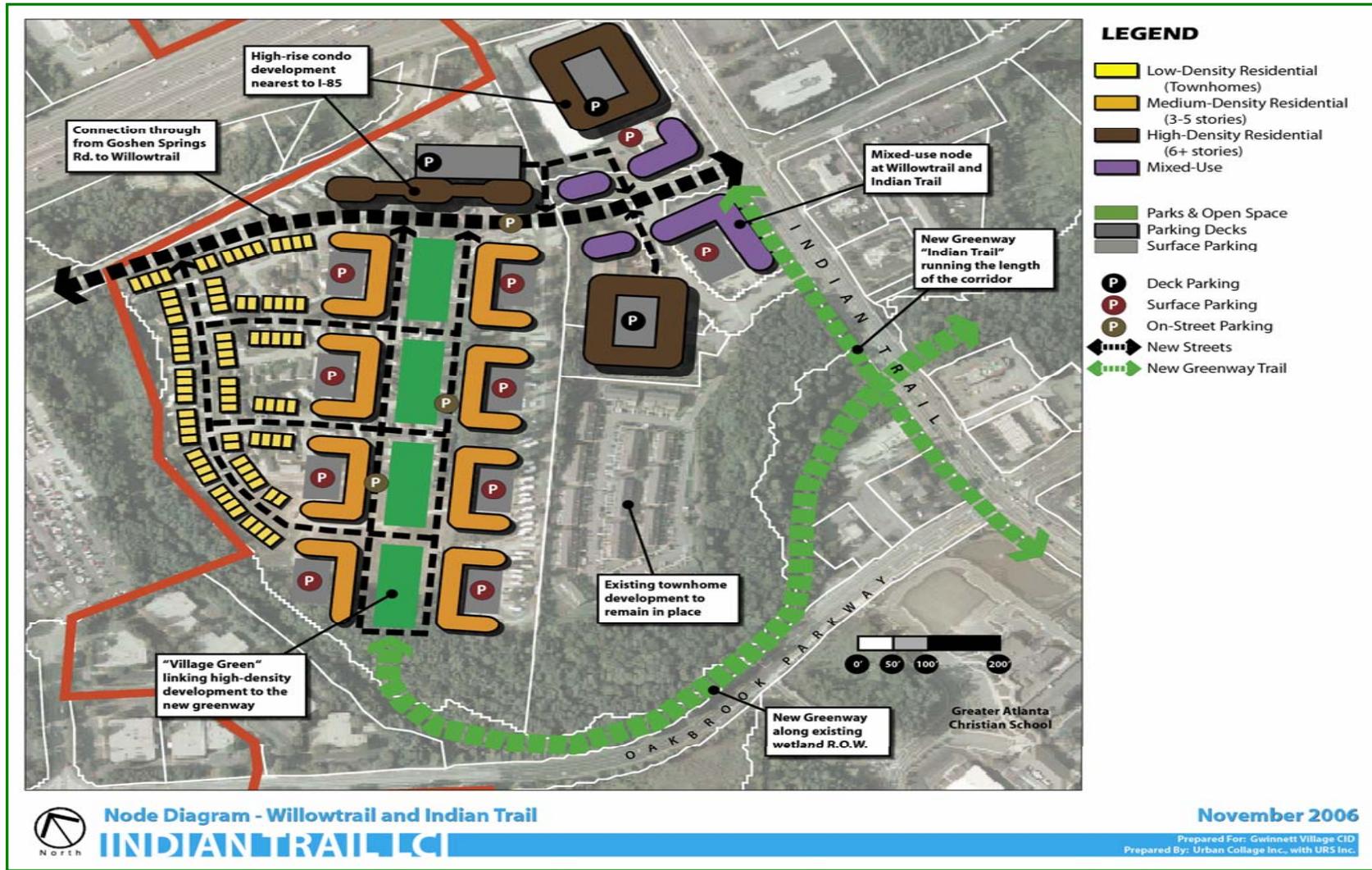
**Figure 8:
RV Park-Before**

**Figure 9:
RV Park-After**



Figure 10:
The Learning Village

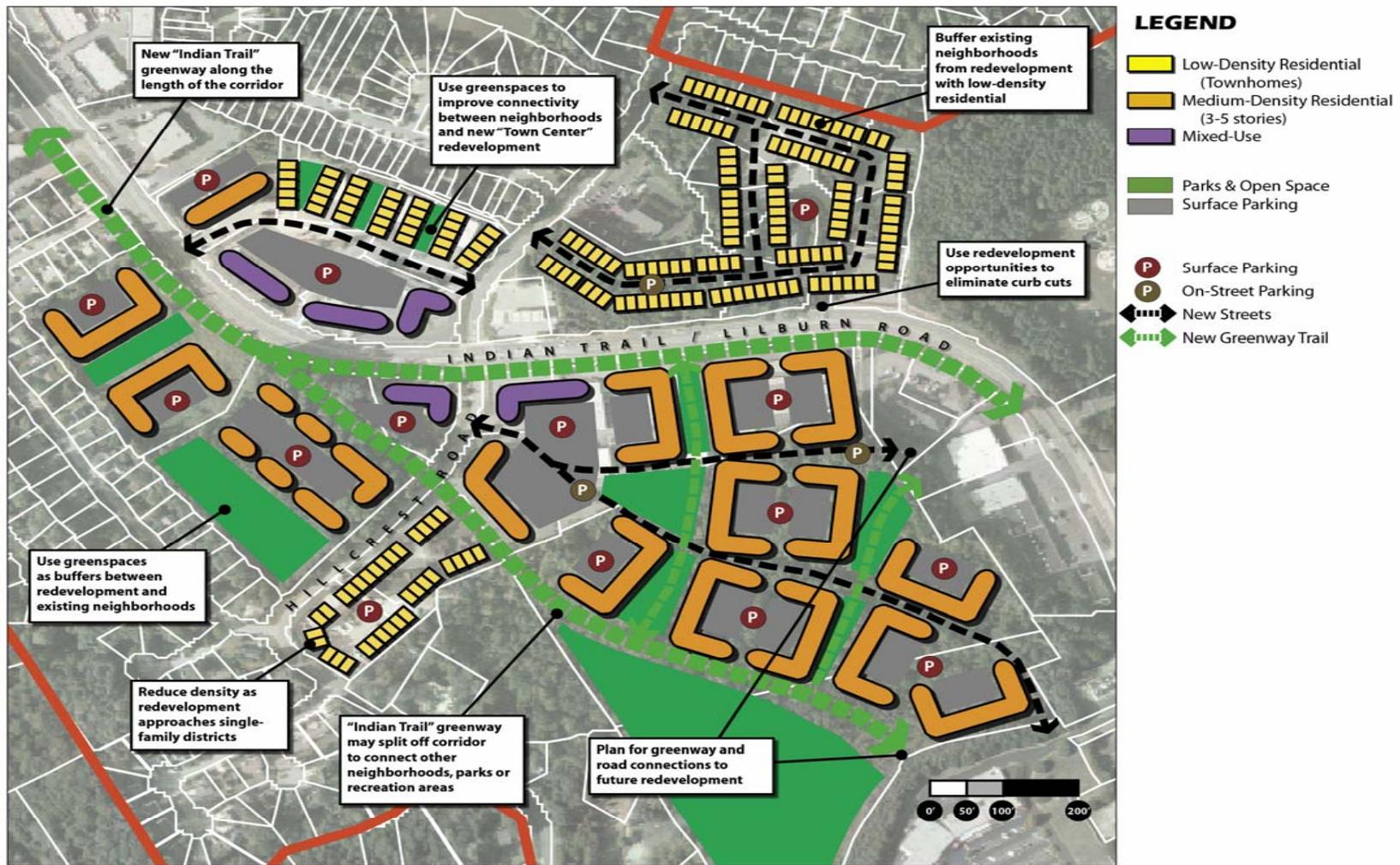
Indian Trail-Lilburn Road LCI Corridor Study



2.6 Hillcrest Neighborhood Center

The eastern end of the corridor provides several opportunities to create neighborhood activity centers within and adjacent to the City of Lilburn. Some of these opportunities are highlighted in Figure 11. The intersection with Lawrenceville Highway includes several shopping centers and residential properties likely to redevelop. Similar, smaller-scaled opportunities are present throughout the corridor at intervals to the northwest. A key strategy for connectivity and traffic congestion relief would be a secondary system of streets around these intersections that tie to new development. This would set the tone for new mixed use development opportunities and would provide more options for connectivity in a given area.

Figure 11:
Hillcrest Neighborhood Center



Node Diagram - Hillcrest Road (South)

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November 2006

Prepared For: Gwinnett Village CID
Prepared By: Urban Collage Inc., with URS Inc.

2.7 Quarryside Neighborhood

One of the biggest challenges and largest development opportunities in the corridor lies to the north at the quarry owned and operated by Vulcan. Over the long-term, ceasing this operation will both eliminate the impedance to residential development and create one of the largest open space opportunities in Gwinnett County. The plan seeks to make a major recreational amenity and park out of the quarry and to encourage new mixed use multi-family development on its periphery to take advantage of the open space amenity and provide an economic incentive for the quarry's conversion. The land in the area can be a new "urban" neighborhood of primarily residential structures of a variety of types and styles, with a focus on creating housing choices for diverse ages and incomes.

In between the activity center nodes, smaller-scale opportunities will arise for lower density mixed use and residential redevelopment near existing neighborhoods. The plan's intent is to support and revitalize stable neighborhoods in these locations.

There are transportation projects that compliment these land use development projects within the tenants of the LCI program. Primary among these transportation projects is the idea to accentuate the mixed use character of the corridor by installing as a multi-use pathway for pedestrians and cyclists and an opportunity to create a more attractive landscape along the roadway; during the design Charrette some participants referred to this facility as the "Indian Trail". The area also has other natural floodplains and creekbeds and "leftover" spaces that can form a first-class open space and greenway system tying to existing and proposed neighborhoods. There may be opportunities to further tame the corridor and accentuate the more residential feel in the eastern end, where a median could be considered. These projects are described in greater detail in the Transportation Projects section of this report.

Other important transportation improvements will include the creation of new connectivity between the corridor and surrounding neighborhoods and access management improvements as strip centers redevelop. As much as possible, new local roads servicing multiple developments and local trips should be encouraged to the north and south of the corridor, including a new local street network that can serve redevelopment of the quarry. These street networks should follow principles of urban character and walkability and should ideally create blocks of no more than 600 feet. In addition, new street connections for all modes should be considered to bridge the divide that exists at the Interstate as redevelopment occurs.

2.8 Regulatory Framework

The existing zoning within the study area is widely varied. From single-family residential to office and commercial, this stretch of the corridor has many compliant uses. However, there are two initiatives that have overarching effects on land use and zoning within the Study Area. In October of 2002, the Gwinnett Board of Commissioners unanimously approved a Mixed-Use Overlay District. Subsequent to that, in March of

2005, the Gwinnett County Revitalization Task Force presented its final report to the County Commissioners. Both documents have developmental implications for the corridor.

2.9 The Mixed-Use Overlay District

Application of the Mixed-Use Overlay to the Indian Trail-Lilburn Road corridor would be consistent with many of the goals of the LCI program and indeed the Task Force recommendations mentioned below. Key aspects and points for consideration:

- ◆ Residential densities of up to 32 units per acre. Given parking requirements, this should not overly restrict the development of mixed use along the corridor. This should in fact be sufficient to support the future expansion of transit along Indian Trail-Lilburn Road.
- ◆ Building heights by underlying zoning. On its surface, this would restrict much of what is proposed in the LCI. However, the provision for review on a case-by-case basis allows for some flexibility especially adjacent to the Interstate.
- ◆ Development to occur on no less than 10 contiguous acres. Many of the parcels along the corridor fall in to this category, and given the diversity of ownership, assembling a suitable parcel could hinder redevelopment. It may be advisable to add more detailed build-to lines and mandate internal curb cuts, so that smaller parcels could be developed in a manner that would accommodate future adjacent building. At the very least, some layer of flexibility should be integrated, to alleviate any potential problems.
- ◆ Reduced requirements for setbacks and parking. The reduced setbacks will encourage new buildings to define an edge to the site, and the reduced (or shared) parking will allow for more density on a parcel that might not otherwise support it.
- ◆ Eliminate internal buffers. Not all mixed-use development is vertical. In those instances, eliminating buffers that might typically be required between different uses allows for a denser development.
- ◆ Design Standards. In the case of the overlay, these are limited primarily to delineations of materials. While in some cases proscriptive material regulations might be seen as discouraging development, in most cases the effect is the opposite. A project is more likely to occur in a revitalizing area if the developer can be assured that adjacent redevelopment will be of a quality that augments, rather than detracts from, the developer's work.

2.10 The Revitalization Task Force

The Task Force, charged with creating strategies for redeveloping stagnating portions of Gwinnett County, identified three specific areas, of which the adjacent Beaver Ruin Road corridor was one. The Executive Summary outlined 11 key recommendations, many of which are applicable to the Indian Trail-Lilburn Road corridor.

The LCI plan specifically addresses many of these recommendations. Among them:

- ◆ The need to buffer existing lower-intensity uses from impending higher-density redevelopment.
- ◆ The assessment and development of regulations that can accommodate mixed use development.
- ◆ Using capital improvements to add value to the infrastructure and allowing increased density, thereby creating incentives for redevelopment.
- ◆ Recommending the addition to or expansion of several greenspaces, as well as connections to regional park amenities.
- ◆ Improve pedestrian and vehicular mobility. A central tenet of all LCI studies, the pending Indian Trail-Lilburn Road streetscape improvements are the first of several steps. The plan also recommends improved pedestrian connections between the neighborhoods and commercial nodes, and the creation of a secondary street network parallel to the central corridor.

Beyond the key recommendations, the Task Force examined selected corridors in detail. The results of this study yielded more refined recommendations. Among these that might also be applicable to the study area:

- ◆ Create Revitalization Zoning Districts. These are ‘parallel’ codes that are optional to the owner, and encourage redevelopment with more density and a mix of uses.
- ◆ Protect existing residential. A recurring concern at the public meetings, this was also a part of the recommendations, and has a key component in the LCI plan.
- ◆ Inter-nodal Development and Activity Nodes. In short, consistent with the Strip Recovery notion of ‘pulsing’ development. This principle has guided the creation of the two node concepts.
- ◆ Open Space Amenities. This includes many of those recommended within the plan, as well as connections to amenities outside the study area.

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- ◆ **Quality Residential.** A recommendation of the Task Force, this would be guided by a set of design standards.
- ◆ **Local Transportation Network.** Includes both automotive and pedestrian considerations.

The recommendations outlined by the Task Force are very much in line with the plan outlined by this LCI, both in philosophy and specifics. The focus is on fostering smart-growth, mixed use, transit-supportive redevelopment along the corridor, with the end goal of improving the quality of life for all who live, work and play along Indian Trail-Lilburn Road.

3. Market Analysis

As part of the on-going research for the Indian Trail-Lilburn Road LCI corridor study, the market potential of three of the catalyst projects identified in the Framework Plan were evaluated. The information below summarizes the conclusions about the market potential of these three catalyst sites, based on the information provided in the earlier Market Conditions report, field research and input from the public involvement process.

3.1 The Three Catalyst Projects

The Framework Plan identified three catalyst sites which could be the anchors for the future development of the Indian Trail-Lilburn Road corridor as it transitions from an aging suburban commercial corridor into a mixed use corridor that can serve as a commercial gateway to the surrounding residential areas. The goal of each catalyst site or project is to stimulate development/redevelopment and provide a model for the types of development envisioned throughout the corridor. The three catalyst areas identified in the Framework Plan are:

- ◆ Interstate Gateway: Commercial Mixed Use Center at the Park and Ride Lot/Brook Hollow Parkway
- ◆ The Learning Village: Residential Mixed Use Village at Willowtrail and Indian Trail-Lilburn Roads
- ◆ Hillcrest Neighborhood Center: Residential Mixed Use Village at Hillcrest Road South

The development plan and market overview of each area follows:

3.1.1 Interstate Gateway

The goal is to create a vibrant commercial center at the northern end of the Indian Trail-Lilburn Road corridor, on the west side of the intersection of I-85, towards Beaver Run Road. This area was viewed as supporting the highest density of commercial development with a large inventory of office space, mixed use and retail space on the ground floor and along major roadways and linked to a future major multi-modal transit opportunity at the current park and ride lot, which could accommodate future Bus Rapid Transit or other enhanced transit options.

The projected development plan for this catalyst area would include the following land uses outlined in Table 1.

**Table 1:
Interstate Gateway Node Development Plan**

	Units	Pricing	Absorption (Per Year)
Residential			
Townhomes	0		
Condominiums (Stacked Flats)	175	\$150,000-\$230,000/unit	17.5
Apartments	0		
Total Residential	175		17.5
Commercial			
Retail	140,000	\$16.00-\$18.00/s.f.	14,000
Office	450,000	\$16.00-\$20.00/s.f.	45,000
Total Commercial	590,000		59,000

As shown above, it is anticipated that the new commercial center would develop over time into a major office concentration with approximately 450,000 s.f. of new office space in four main buildings built around a new village green, linking the four facilities. Additional mixed use development with retail and office uses on the bottom floor and stacked flat lofts on the upper floors would be created. The goal would be for the new center to become a new commercial core for the Indian Trail-Lilburn Road corridor and serve as the entranceway into the area at the key access point on I-85.

3.1.2. The Learning Village

The goal for this catalyst project is to build on the existing residential and commercial uses in the area to create a new residential mixed use village which would become an appealing new neighborhood within the larger Indian Trail-Lilburn Road LCI area. The plan calls for commercial mixed use development at the key intersection of Indian Trail-Lilburn and Willowtrail Roads, extending southward on Willowtrail Road. The commercial development would be bracketed with two major new residential mid-rise structures on either side of Willowtrail Road. A third major mid-rise complex would be built further south on Willowtrail Road. On the south side of Willowtrail Road, a residential neighborhood organized around a new village green would include 360 stacked flat rental and for-sale units with additional townhome development, creating an appealing new residential environment for this area of the LCI.

The development plan for the area, shown in Table 2, envisions a mix of mid-rise condominium and rental apartment structures combined with additional townhouse residential development. Mixed use structures combining retail and residential units would be grouped at the key intersection of Willowtrail and Indian Trail-Lilburn Roads. The village green would provide a major green space amenity for all of the residents of the area to enjoy and would be compatible with the existing townhouse development already in the area.

**Table 2:
The Learning Village Node Development Plan**

	Units	Pricing	Absorption (Per Year)
Residential			
Townhomes	80	\$175,000-\$250,000/unit	8
Condominiums (Stacked Flats)	240	\$150,000-\$220,000/unit	24
Apartments	380	\$900-\$1100/month	38
Total Residential	700		70
Commercial			
Retail	55,000	\$14.00-\$18.00/s.f.	5,500
Office			
Total Commercial	55,000		5,500

3.1.3. Hillcrest Neighborhood Center

The vision for this catalyst project is to create a lively new residential mixed use area at the southern end of the corridor, near downtown Lilburn, which is also undergoing positive redevelopment. The proposed catalyst project would cluster commercial mixed use development near the intersection of Hillcrest Road and Indian Trail-Lilburn Road, to create a more concentrated and vibrant commercial core for the area. Residential development would dominate the rest of the area. The plan calls for a mix of townhouse units which serve as a transition and buffer for the surrounding single family areas, to moderate density stacked flats, either as condominiums or rental apartments. The proposed multifamily units would have an extensive amount of shared green space, including the routing of the multi-use pathway/greenway through the heart of the catalyst project.

As currently planned, the Hillcrest Neighborhood Center would be designed to create an appealing residential environment around extensive green space and pedestrian walkways which connect to the concentrated commercial development at the key intersections. It also would provide a direct linkage to the redeveloped core of Lilburn to the south. As outlined in Table 3, the residential units would include a large number of townhomes and stacked flat condominium and rental apartment units.

**Table 3:
Hillcrest Neighborhood Center Development Plan**

	Units	Pricing	Absorption (Per Year)
Residential			
Townhomes	195	\$150,000-\$250,000/unit	19.5
Condominiums (Stacked Flats)	350	\$150,000-\$220,000/unit	35
Apartments	210	\$900-\$1100/month	21
Total Residential	755		75
Commercial			
Retail	40,000	\$13.00-\$18.00/s.f	4,000
Office	40,000	\$13.00-\$18.00/s.f	4,000
Total Commercial	80,000		8,000

Total Development Plan – Three Catalyst Projects

The three projects described above would produce a total of 275 townhomes, 765 condominium units and 590 apartment units for a total of 1,630 residential units over the 10-year period. In terms of commercial development, the three projects could contain 235,000 square feet of retail space and 490,000 square feet of office space.

**Table 4:
Nodes Development Plan Summary**

	Residential			Commercial	
	Townhomes	Condominiums	Apartments	Retail	Office
The Learning Village					
Low-Density Residential	80	-	-	-	-
Medium-Density Residential	-	-	280	-	-
High-Density Residential	-	200	100	-	-
Mixed-Use	-	40	-	55,000	-
Total	80	240	380	55,000	-
Hillcrest Neighborhood Center					
Low-Density Residential	195	-	-	-	-
Medium-Density Residential	-	350	210	-	-
Mixed-Use	-	-	-	40,000	40,000
Total	195	350	210	40,000	40,000
Interstate Gateway					
Mixed-Use	-	175	-	140,000	-
Office	-	-	-	-	450,000
Total	-	175	-	140,000	450,000
Indian Trail-Lilburn Road Corridor Total	275	765	590	235,000	490,000

3.2 Residential Supply and Future Demand

3.2.1 Recent Sales Activity

Single Family

The average sales price for a single family in the 2-mile market area decreased from \$194,993 in 2003 to \$183,350 in 2005, a decrease of 6.4% (there have been no sales in 2006). During the same period in Gwinnett County, the average price for a single family home has increased 30.1%, from \$227,461 in 2003 to \$296,996 in 2006. In 2005, the average sales price for a single family home in the 2-mile market area was 67.0% of the average sales price in Gwinnett County. Residential demand for the area is shown in Table 5. The information used to develop this table was from the following sources: U.S. Census American Housing Survey, Claritas, and the Bleakly Advisory Group.

In the 2-mile market area, there were 48 new single family home sales from 2003-2006¹, representing 12.9% of all sales in the market area. In Gwinnett County from 2003 to 2006, there were 28,731 new single family sales, representing 81.6% of all new sales in Gwinnett County. The Indian Trail-Lilburn Road 2-mile market area represented 0.2% of all Gwinnett County single family sales. These figures are represented in Table 6.

¹ Through mid-year 2006, annualized

**Table 5:
2-Mile Market Area Residential Demand**

Indian Trail-Lilburn Road 2-Mile Market Area Residential Demand 2006-2016			
	Indian Trail	Gwinnett County	Total
I. Estimated Housing Demand Due to Growth			
Income qualified households (\$35,000+) 2006	9,472	253,472	
Income qualified households (\$35,000+) 2016	9,879	280,696	
Net growth in income qualified households 2006-2016	407	27,224	
Percentage growth in income qualified households	4.3%	10.7%	
Estimated percentage owner occupied	53.9%	74.8%	
Estimated percentage renter occupied	46.1%	25.2%	
Estimated Owner Demand 2006-2016	219	20,364	
Estimated Renter Demand 2006-2016	188	6,860	
Indian Trail 2-Mile Market Area Capture Rate	80%	3%	
Annual Owner Demand --Market Area	18	61	79
Annual Renter Demand- Market Area	15	21	36
II. Estimated Demand Due to Turnover			
Total occupied housing units	12,866	250,610	
Total owner occupied housing units	6,935	187,530	
% of owners who moved in previous year	16%	16%	
Annual Owner Turnover	1,110	30,005	
Annual turnover owner to owner (47%)	522	14,102	
Annual turnover owner to renter (53%)	588	15,903	
Total renter occupied housing units	5,931	63,080	
% of renters who moved in previous year	23%	23%	
Annual Renter Turnover	1,364	14,508	
Annual turnover renter to owner (21%)	286	3,047	
Annual turnover renter to renter (79%)	1,078	11,462	
Annual Owner Demand due to Turnover	808	17,149	
Annual Renter Demand due to Turnover	1,666	27,364	
Income Qualified Households	68.1%	80.3%	
Income qualified owner demand due turnover	550	13,778	
Income qualified renter demand due to turnover	1,135	21,984	
Indian Trail 2-Mile Market Area Capture Rate	80%	3%	
Annual Turnover Demand for Owner Housing	440	413	854
Annual Turnover Demand for Rental Housing	908	660	1,567
Total Demand			
Owner			
I. Annual demand from household growth 2006-2016	18	61	
II. Annual demand from turnover of existing units	440	413	
III. Other demand @ 5%	22	21	
Total annual demand for owner housing	480	495	975
Renter			
I. Annual demand from household growth 2006-2016	15	21	
II. Annual demand from turnover of existing units	908	660	
III. Other demand	45	33	
Total annual demand for rental housing	968	713	1,681

Townhomes

In the 2-mile market area, there were 323 new townhome sales from 2003-2006, representing 87.1% of all sales in the market area. Townhome sales in the 2-mile market area accounted for 5.2% of all townhomes in Gwinnett County.

The average sales price for a townhome in the 2-mile market area increased 9.0%, from \$136,255 in 2003 to \$148,491 in 2006. In 2006, the average sales price for a townhome in the 2-mile market area is 78.1% of the average sales price in Gwinnett County. In Gwinnett County, the average price for a townhome has increased 33.9% since 2003.

Condominiums

From 2003 to mid-year 2006, there were no condominium sales in the Indian Trail-Lilburn Road 2-mile market area. Gwinnett County had 287 condominium sales over the time period, or an average of 72 units per year. The number of condominiums sold in Gwinnett County has increased 355% from 4 sales in 2004 to a projected 146 sales in 2006. The average price for a condominium in Gwinnett County increased 37.8%, from \$127,633 in 2003 to \$175,802 in 2006.

Owner Demand by Type

The demand for owner-occupied housing within the Atlanta region, Gwinnett County, and the Indian Trail-Lilburn Road 2-mile market area is changing:

- **Single Family** housing is declining as a percentage of owner-occupied housing, especially in higher cost mixed use corridors, like the study area.
- **Townhomes** are gaining significantly. They represent 17.6% of new sales in Gwinnett County over the 2003-2006 period and 87.1% in the 2-mile market area over the same period.
- **Condominiums** have a small presence in Gwinnett County but are a growing dramatically, 355% from 2003 to 2006. They are an important and successful property type in other mixed use suburban districts like the proposed catalyst projects.

**Table 6:
Residential Sales 2003-2006**

	Indian Trail-Lilburn Road 2-Mile Market Area				Gwinnett County, Georgia			
	All	Single Family	Townhomes	Condos	All	Single Family	Townhomes	Condos
2003 Sales	57	15	42	-	8,712	7,617	1,091	4
Average Price	\$331,248	\$194,993	\$136,255	\$-	\$497,031	\$227,461	\$141,937	\$127,633
2004 Sales	104	31	73	-	8,902	7,576	1,280	46
Average Price	\$335,312	\$205,623	\$129,689	\$-	\$558,692	\$249,661	\$162,922	\$146,109
2005 Sales	142	2	140	-	9,291	7,290	1,910	91
Average Price	\$331,757	\$183,350	\$148,407	\$-	\$580,501	\$273,702	\$179,166	\$127,633
2006 Sales*	68	-	68	-	8,326	6,248	1,932	146
Average Price	\$148,491	\$-	\$148,491	\$-	\$662,827	\$296,996	\$190,029	\$175,802

* Through June, annualized

Source: SmartNumbers, Inc.

It is estimated that over the next decade in the Indian Trail-Lilburn Road LCI area, due to changing buyer preferences, increasing land costs, and the other costs associated with redevelopment, the future mix of owner units would likely be:

- ◆ Single Family: 10-30%
- ◆ Townhomes: 40-50%
- ◆ Condos: 30-40%

Rental Apartments

There are 3,997 apartments in twenty complexes in the 2-mile market area. In 2006, the average rent in the market area is \$718. Rents range broadly from \$439 for a 290 square foot studio to \$1,055 for a 1,364 square foot three bedroom. In 2005, the average rent in the 2-mile market area was \$729, or 7.7% lower than the South Gwinnett Submarket and 11.5% lower than the Atlanta Metro as a whole, due largely to the age of the inventory.

In 2006, the average vacancy in the market area is 6.9%, a slight decrease from 2005, 7.1%, which was slightly higher than vacancy in the South Gwinnett Submarket at 6.7%, but lower than the Atlanta metro market vacancy rate at 8.0%. Vacancies in the Indian

Trail-Lilburn Road market area have improved significantly since 2002, which is consistent with trends across the Atlanta metro market. The poor performance of the local rental market is in part due to the lack of new, attractive inventory.

Future Residential Demand

This section of the market report discusses the level and character of housing demand in the Indian Trail-Lilburn Road market area. The demand analysis is based on an assessment of current conditions and projected growth in the Indian Trail-Lilburn Road market area and Gwinnett County. The key data derived for this analysis is summarized in Table 7. The analysis focuses on housing demand derived from three main sources:

1. **Household Growth**—Over the next ten years, the Indian Trail-Lilburn Road market area and Gwinnett County are projected to add significant numbers of new households. The Indian Trail-Lilburn Road market area will be completing for its share of these new households.
2. **Turnover in Indian Trail and Gwinnett County Households**—Every year a significant number of households, both renters and owners move for a variety of reasons, such as: changes in income status, changes in marital status, job-related factors, and lifestyle preferences. The Indian Trail-Lilburn Road market area will be competing for its share of these turnover-related moves.
3. **Other Sources of Demand**—A small portion of total demand in a market area will come from other sources including lifestyle preferences, relocation from another region or country, or other factors not captured in the two other demand sources above.

Since the focus of the market analysis is on market rate housing, there is concern with growth from households with incomes sufficient to afford market rate rental or ownership units. The income of qualified households is defined as earning \$35,000 or more.

Housing Demand for Household Growth

Between 2006 and 2016 the number of households with incomes of \$35,000 or more in the Gwinnett County will increase from 201,349 to 253,472-- an increase of 52,123 households over the ten year period or 5,212 units annually. In the Indian Trail-Lilburn Road market area, the number of income qualified households is projected to increase by 407 over the ten year period, or 41 households annually. Of these new households in Gwinnett County an estimated 75% are expected to be owner occupants and 25% renters and 54% owners and 46% renters in the Indian Trail-Lilburn Road market area. This results in demand for 39,207 new owner units from 2006-2016 and 13,323 rental units over the same period. Assuming that the Indian Trail-Lilburn Road market area can capture 80% of its potential demand, and 3% of the demand within broader Gwinnett County, the annual demand for housing in the Indian Trail-Lilburn Road market area due to growth in households is for 135 ownership units and 54 rental units per year over the ten year period.

Housing Demand from Household Turnover

A significant number of households in the Atlanta region move in a given year due to a wide range of factors. Based on an assessment of mobility trends for the Atlanta MSA in 2004 as reported in the American Housing Survey, 16% of Atlanta homeowners move each year. Of these movers, 47% go from one owner unit to another while 53% move from being an owner to a renter. Among renters 23% move each year, and among the movers 21% go from renters to owners and 79% stay renters. Applying these metro mobility rates to household characteristics for Gwinnett County and the Indian Trail-Lilburn Road market area indicates that there will be additional income qualified demand due to turnover for 854 owner units and 1,567 rental units annually over the ten year period.

Other Demand

The category of other demand measures those households who move for a variety of reasons in addition to those captured above by household growth and turnover, such as lifestyle preferences, relocation from another region or country, and a range of other often highly individual factors that can trigger a move to an area. It is estimated that 5% of total demand will come from other sources of demand. In the Indian Trail-Lilburn Road market area, other demand accounts for an additional 43 owner units and 78 rental units annually.

Total Income Qualified Housing Demand

Owner—Based on an analysis of the three sources of housing demand discussed above, over the 2006-2016 period there will be annual demand for 1,031 income qualified owner units in the Indian Trail-Lilburn Road market area. The estimated annual absorption of the ownership units proposed for Indian Trail-Lilburn Road would average 104 units per year over the 10-year period (1,040/10 years). Ownership sales at this level represent a capture rate of 10.1% of the annual demand for ownership housing in the market area, and appear achievable.

Renter—The income qualified demand for rental housing in the Indian Trail-Lilburn Road market area is estimated to be 1,700 units annually over the next ten years. The estimated annual absorption of the renter units proposed for Indian Trail-Lilburn Road would average 59 units per year over the period (590/10 years). This represents a capture rate of 3.5% of the annual demand for renter housing in the market area, and appears achievable.

**Table 7:
Residential Demand 2006-2016**

	Indian Trail 2- Mile Market Area	Other Gwinnett County	Total
Owner			
I. Annual demand from household growth 2006-2016	18	117	
II. Annual demand from turnover of existing units	440	413	
III. Other demand @ 5%	22	21	
Total annual demand for owner housing	480	551	1,031
Owner units in 3 catalyst projects			1,040
Annual absorption of owner-occupied units			104
Capture rate of owner units in catalyst projects			10.1%
Renter			
I. Annual demand from household growth 2006-2016	15	39	
II. Annual demand from turnover of existing units	908	660	
III. Other demand	45	33	
Total annual demand for rental housing	968	732	1,700
Renter units in 3 catalyst projects			590
Annual absorption of renter units			59
Capture rate of renter units in catalyst projects			3.5%

Sources: U.S. Census American Housing Survey, Claritas, Bleakly Advisory Group

3.3 Retail Supply and Future Demand

3.3.1 Current Retail Supply

The Indian Trail-Lilburn Road corridor is a highly-developed area with a significant amount of retail space. As shown in Table 8, the 2-mile market area contains 780,722 square feet of retail space, representing 2.6% of Gwinnett County's retail space. The 2-mile market area contains 43,628 square feet of vacant retail space, or 5.6%, slightly lower than Gwinnett County as a whole with 7.1% vacant retail space. Rents for retail space in the 2-mile market area range from \$8.75 to \$21.50, with an average rent of \$15.63. The average age of retail space in the 2-mile market area is comparable to the corridor at 18 years old.

**Table 8:
Existing Retail in Major Centers, 2006**

	Indian Trail 2- Mile Market Area	Gwinnett County
Square Feet	780,722	30,339,535
% of Market Area	100.0%	
% of County	2.6%	100.0%
Vacant	43,628	2,143,851
Vacant %	5.6%	7.1%
Min Rent	\$8.75	\$8.00
Max Rent	\$21.50	\$60.00
Avg Rent	\$15.63	\$19.53
Avg Year Built	1988	1992
Proposed/Planned/UC	0	3,125,739

Source: Doreys

Future Retail Demand from New Residents

As shown in Table 9, between 2006 and 2016, the 1,208 new households in the 2-mile market area will generate approximately \$66 million in additional retail demand. This is based on Claritas estimates that households in the market area have annual retail expenditures of \$25,038. The additional retail demand from household growth in the years 2006-2016 will support approximately 131,928 square feet of retail space.² As noted early, there is currently 780,722 square feet of retail space located in the Indian Trail-Lilburn Road corridor study area, of which 43,628 square feet, or 5.6 %, is vacant. Because the corridor vacancy rate is lower than the county average (7.1%), it is unlikely that additional retail demand from future household growth will absorb any of the existing vacant retail space over the next 10 years. Therefore, additional household retail demand in the market area could support an additional 131,928 square feet of new retail square footage in the corridor.

**Table 9:
Retail Demand Generated by Household Growth 2006-2016**

	2006-2016 New Households	Additional Retail Demand	Retail Demand (Sq. Ft.)
Indian Trail 2-Mile Market Area	1,208	\$30,245,904	131,928

Source: Claritas

The proposed Indian Trail-Lilburn Road catalyst projects would contain up to 235,000 square feet of retail space. The new retail demand from new residents could contribute a

² According to the Urban Land Institute's Dollars & Cents of Shopping Centers survey, the median sale per square foot for community shopping centers in the U.S. South is \$229.26 per square foot.

significant portion of the demand for the new retail space with other sources of demand coming from existing area residents, businesses, employees, and visitors.

3.4 Office Supply and Future Demand

3.4.1 Current Office Supply

The 2-mile market area contains 688,931 square feet of office space, representing 3.4% of Gwinnett County’s 20,241,917 square feet of office space. The 2-mile market area contains 129,755 square feet of vacant office space, or 18.8% of its inventory, comparable to Gwinnett County at 18.7%. This reflects the current “soft” conditions of the office market. Rent for office space in the 2-mile market area ranges from \$12.00 to \$18.00, with an average rent of \$15.00. This compares to Gwinnett County with an average office rent of \$16.13. These figures are shown in Table 10.

**Table 10:
Existing Office in Major Centers, 2006**

	Indian Trail 2- Mile Market Area	Gwinnett County
Square Feet	688,931	20,241,817
% of Market Area	100.0%	
% of County	3.4%	100.0%
Vacant	129,755	3,786,561
Vacant %	18.8%	18.7%
Min Rent	\$12.00	\$6.50
Max Rent	\$18.00	\$27.00
Avg Rent	\$15.00	\$16.13
Avg Year Built	1987	1992
Proposed/Planned/UC	0	1,669,838

Source: Doreys

3.4.2 Future Office Demand

As shown in Table 11, in the years 2006-2016, the market area is projected to add 1,831 net new office-related jobs, which are jobs created in the employment categories listed in the table below. Based on a ratio of 300 square feet of office space per employee, overall office-related employment growth over the next 10 years will generate potential demand for 549,295 square feet of additional office space in the market area. If a substantial portion of this demand were met in the Indian Trail-Lilburn Road market area, it would result in significant growth in the office sector.

**Table 11:
Projected Office Demand Growth 2006-2016**

	2006 Employment	2016 Employment	2006-2016 Net New Employment	2006-2016 Additional Office Related Demand
TCU	212	258	46	13,727
FIRE	1,225	1,647	422	126,561
Services	7,226	8,557	1,331	399,290
Public Administration	180	212	32	9,716
Total	8,843	10,674	1,831	549,295

Source: Claritas / ARC

* 20 % of TCU Employment is considered office-related

The proposed Indian Trail-Lilburn Road catalyst projects would contain 490,000 square feet of office space with the majority at the new commercial mixed use center/Interstate Gateway at I-85 and Brook Hollow Drive. Projected employment growth for the 2-mile market area would provide demand for a significant portion of this space. However, it would be necessary to attract additional office demand from other portions of Gwinnett County to support the office development in the initial 10-year period. A combination of the prime location of a key interchange with I-85 and the ability to create a major multi-modal transit node at this location would greatly enhance its appeal as an office location and help achieve the vision of the LCI plan for the area.

3.5 Resident and Employee Growth Estimates 2007 to 2027 for the 2-Mile Market Area

In 2006, there were 38,934 residents, 12,866 households and 21,285 employees in the Indian Trail-Lilburn Road 2-Mile Market Area. Although forecasting growth over a long period of time can be difficult due to changing economic and real estate trends, the forecasts in this section shown in Table 12 are based on historic real estate cycles and the assumption of redevelopment in the study area.

**Table 12:
Growth Estimates for the 2-Mile Market Area**

	2007	2012	2017	2022	2027
Population	39,076	39,970	41,154	42,404	43,739
Households	12,947	13,425	14,024	14,603	15,134
Suggested Household Size	3.02	2.98	2.93	2.90	2.89
Employment					
Agriculture, Forestry and Fishing	214	223	239	256	272
Services	7,314	7,878	8,658	9,451	10,213
Construction	1,336	1,292	1,303	1,308	1,304
Retail Trade	4,420	4,888	5,489	6,075	6,580
FIRE	1,263	1,453	1,637	1,809	1,940
Manufacturing	2,989	2,842	2,852	2,892	2,978
Nonclassifiable Establishments	410	426	458	490	520
Public Administration	182	196	214	234	255
TCU	1,073	1,168	1,314	1,461	1,596
Wholesale Trade	2,198	2,061	2,011	1,979	1,971
Mining	0	0	0	0	0
Total Employment	21,400	22,428	24,176	25,954	27,629
Jobs to Housing Ratio	1.65	1.67	1.72	1.78	1.83

Source: ARC/BAG/Claritas

Population – After the population boom of the 1980s and 1990s, growth still continues in the study area. Population in the study area is forecasted to be 39,970 residents by 2012, with the population growing by 2.9% to 41,154 by 2017, and growing by an additional 6.3% to 43,739 by 2027.

Households – According to the forecast, there will be 478 net new households in the study area bringing the total count of households to 13,425 in 2012. The number of households is expected to grow over the next 20 years with 14,024 households by 2017, 14,603 households by 2022 and 15,134 by 2027. However, while the number of households is expected to increase over the next 25 years, household size is expected to decrease during this period.

Employment – By 2012, there will be 22,428 employees working in the study area, with the number of employees consistently growing over the next 25 years. The number of employees is expected to grow by 7.8% to 24,176 employees by 2017, 7.3% to 25,954 employees by 2022 and grow by an additional 6.5% to 27,629 employees by 2027. With employment growth outpacing household growth, the jobs to housing ratio is anticipated to increase from 1.65 to 1.83 over the next twenty years.

3.6 The Impact of a Future TAD on the Catalyst Projects

The potential impact of a possible future tax allocation district (TAD) in the Gwinnett Village CID on the proposed catalyst projects was considered. Based on the suggested development plan for each of the catalyst projects a preliminary estimate of the potential TAD funds was made. As shown below, the three catalyst projects could support a significant level of TAD funding totaling \$16.8 to \$33.7 million.

The largest TAD potential is associated with the residential mixed use development at Hillcrest Neighborhood Center, due to the fact that this catalyst project would have the largest taxable value of the three projects. Thus, if in the future the Gwinnett Village CID were able to secure the ability to use TAD funding, it would have strong potential to support the creation of the catalyst projects. The TAD funds could be used for land acquisition, site preparation, installation of needed new public infrastructure, and the creation of structured parking and other transportation improvements as part of the overall LCI initiative.

The TAD has proven in many locations in Georgia to be a very effective incentive to encourage the transition of existing under-performing properties into major new projects of the type contemplated for the three catalyst projects. These are shown in Table 13.

**Table 13:
TAD Potential of Three Catalyst Projects**

	Units/S.F.	Price Unit/S.F.	Total Market Value	TAD Potential
The Learning Village				
Residential				
Townhome	80	\$220,000	\$17,600,000	
Condominium	240	\$190,000	\$45,600,000	
Apartment	380	\$125,000	\$47,500,000	
Commercial				
Retail	55,000	\$80	\$4,400,000	
Office			-	
Total			\$115,100,000	\$5,755,000- \$11,500,000
Hillcrest Neighborhood Center				
Residential				
Townhouse	195	\$220,000	\$42,900,000	
Condominium	350	\$190,000	\$66,500,000	
Apartment	210	\$125,000	\$26,250,000	
Commercial				
Retail	40,000	\$80	\$3,200,000	
Office	40,000	\$80	\$3,200,000	
Total			\$142,050,000	\$7,102,000- \$14,205,000
Interstate Gateway				
Residential				
Townhome			\$0	
Condominium	175	\$190,000	\$33,250,000	
Apartment			\$0	
Commercial				
Retail	140,000	\$80	\$11,200,000	
Office	450,000	\$80	\$36,000,000	
Total			\$80,450,000	\$4,022,500- \$8,045,000

Source: Bleakly Advisory Group

3.7 Conclusions of Market Overview

- ◆ The proposed three catalyst projects would create three exciting new centers within the Indian Trail-Lilburn Road LCI study area which would stimulate the future development of the area consistent with the vision for the corridor expressed in the Framework Plan.
- ◆ The three catalyst projects would create a new commercial core for the corridor at I-85 and Brook Hollow Parkway, Interstate Gateway, which would be centered on a potential future multi-modal transportation option, and two new residential mixed use villages at other strategic locations in the corridor.

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- ◆ The three catalyst projects would result in the creation of 1,630 new housing units, 235,000 s.f. of support and mixed use retail, and 490,000 s.f. of new office space in the corridor.
- ◆ The catalyst projects would have a combined market value of \$337 million and would support between \$16.8 and \$33.7 million in potential future TAD funding. The Gwinnett Village CID should support the future creation of this important incentive which could be a critical element in accelerating the pace of redevelopment in the Indian Trail-Lilburn Road corridor.
- ◆ There would be sufficient market demand to support the creation of the proposed residential components of the three projects.
- ◆ The retail spending by new residents in the three projects combined with attracting some additional demand from existing area residents, businesses, employees, and visitors would support the proposed unique retail development.
- ◆ The creation of a major office concentration at I-85 and Brook Hollow Parkway would be supported by a combination of growth in office demand in the market area, the appeal of its location at a major intersection of I-85, and the strong potential appeal of creating a major multi-modal transportation option as a key component of the project.

4. Transportation Projects

The LCI program fosters the relationships to create livable centers by identifying development and redevelopment opportunities in conjunction with providing supportive transportation projects. The transportation projects are intended to promote accessibility and mobility within the community independent of the automobile by enhancing walkability, providing non-motorized travel facilities, and supporting transit options.

Identified below is the tool box of transportation projects that can be programmed for implementation to support the LCI goals for Gwinnett Village along Indian Trail-Lilburn Road.

4.1 Streetscaping

Corridors such as Indian Trail-Lilburn Road fill an integral role within the localized transportation system by providing connectivity between activity centers such as Norcross and Lilburn plus accessibility to higher level facilities such as I-85. These corridors also fill a dual role of being the place where different land use activities occur: people live here, they shop and conduct business, as well as going to church and school.

Implementing a streetscaping plan affords many benefits to enhance the dual and at times conflicting roles that the Indian Trail-Lilburn Road corridor serves. A primary benefit to tree and bush/foilage plantings is the dramatic improvement in the aesthetics of the corridor. The greening of the corridor especially in the commercial areas tempers the barrenness of parking lots and signing. This effect is enjoyed by both the motorists as well as the pedestrians traversing the corridor. If an activity can be made more visually pleasurable then a trip whether on foot, bicycle, or car, is more enjoyable. This effect, which makes the area more desirable, can be realized with plantings on the shoulders of the roadway as well as in medians.

Another benefit is that as width allows, the plantings can separate the travel lanes from the sidewalks. In that way a buffer is in place between the cars and pedestrians enhancing the safety along the corridor. Another contributing affect of roadside vegetation is that it can tend to have the effect of slowing down traffic. Cars operating at lower speeds contribute to reducing the crash potential along the corridor.

For all of the development and redevelopment efforts plus the transportation projects, streetscaping will be an integral part of their plan to create the visual synergy for that desirable sense of place.

4.2 Sidewalks

Providing pedestrian facilities is an effective technique for improving communities and reducing driving trips. As of the date of this study, sidewalks exist intermittently

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throughout the Indian Trail-Lilburn Road corridor. One of the components of the Gwinnett County Special Purpose Local Option Sales Tax (SPLOST) is to construct sidewalks. Gwinnett County currently has plans to build sidewalks on both sides of Indian Trail-Lilburn Road where they do not exist. The sidewalk projects, as well as other transportation related projects in the corridor, programmed for construction by Gwinnett County are described in Table 14.

Table 14: Programmed Projects

Project Name	Location	Improvement Type	Source	Project No.	Status
Indian Trail Road	From Beaver Ruin Road to Lawrenceville Highway (includes project M-0439)	Sidewalks, pedestrian safety	Gwinnett County SPLOST 2005	F-0596	Design underway; construction 2007
Brook Hollow Parkway	From Mitchell Street to Indian Trail Road	Sidewalks, pedestrian safety, bikeway improvement	Gwinnett County SPLOST 2001	4448	Design underway
Indian Trail Road	From Hillcrest Road to Burns Road and others	Pedestrian improvements, sidewalks	ARC FY 06-11 TIP	GW-AR-BP103	Programmed, 2010
Indian Trail Road	Burns Road intersection	Sight distance intersection improvement	Gwinnett County SPLOST 2001	4181	Project under review
Indian Trail Road	Jackson Creek	Bridge, culvert, drainage improvement	Gwinnett County SPLOST 2001	4333	Design underway; construction 2007
Lawrenceville Highway	Indian Trail Road intersection	Intersection widening, dual lefts for all approaches	Gwinnett County SPLOST 2001	4123	Design underway; construction 2007
Indian Trail Road	Oakbrook Parkway (includes project F-0596)	Intersection widening, dual left turn lanes westbound from Indian Trail Rd.	Gwinnett County SPLOST 2005	M-0439	Design underway; construction 2007
Indian Trail Road	I-85 northbound ramps	Intersection improvement	Gwinnett County SPLOST 2005	M-0535	Funded, no activity
Hillcrest Road/Satellite Blvd. Connector	From Beaver Ruin Road to Steve Reynolds Blvd.	Major roadway improvement	Gwinnett County SPLOST 2005	F-0551	Funded for right-of-way, no additional activity
Indian Trail Road	Beaver Ruin Road/SR 378 to Lawrenceville Highway/US 29	ITS, fiber optic cable and cameras	ARC FY 06-11 TIP	GW-321	Programmed, 2015

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Beaver Ruin Road/SR 378	From Buford Highway/US 23 to Lawrenceville Highway/US 29	ITS, fiber optic cable and cameras	ARC FY 06-11 TIP	GW-324	Programmed, 2010
I-85 North Bus Rapid Transit (BRT)	From Doraville MARTA station to Sugarloaf Parkway	Transit	ARC Mobility 2030	AR-905A AR-905B	Long range, 2025
I-85 North Ramp Meters	From City of Atlanta to Pleasant Hill Road	ITS ramp meters and highway advisory radio	ARC FY 06-11 TIP	AR-439	Programmed, 2010

4.3 Multi-use Pedestrian Path

To promote alternative modes of travel for accessing the residential, commercial, and institutional land uses along the Indian Trail-Lilburn Road corridor, a multi-use path facility is proposed to provide non-vehicular mobility between these areas. Both sides of Indian Trail-Lilburn Road were investigated for constructing the path and the recommendation is to construct it along the south side. This recommendation is due to the larger amount of development along the south side supporting a greater degree of path usage. Due to the length of the corridor a path would need to be constructed in phases. Phase 1, which would tie Beaver Ruin Road to Oakbrook Parkway, is approximately 2.5 miles as shown in Figure 12. Sidewalk improvements by Gwinnett County are planned for this area and would be the prime opportunity to enhance the programmed facilities. This construction would require a dedicated bridge over Beaver Ruin Creek.



Figure 12:
Multi-use Path Phase 1

Indian Trail-Lilburn Road LCI Corridor Study

Multi-use path phase 2 shown in Figure 13 below would connect Oakbrook Parkway to Steve Reynolds Boulevard covering approximately 1.0 miles. This section of Indian Trail-Lilburn Road fronts GACS and Orchard Parke Apartments. Topography along the frontage of Orchard Parke Apartments shown in Figure 14 will require a retaining wall which is similar to the one along Kennesaw Avenue north of Tower Road as shown in Figures 15 and 16.



Figure 13:
Multi-use Path Phase 2

Indian Trail-Lilburn Road LCI Corridor Study

Figure 14 shows existing topography along the south side of Indian Trail-Lilburn Road between Greater Atlanta Christian School and Tree Trail Parkway at Orchard Parke Apartments.



Figure 14: Topography Frontage Along Orchard Parke Apartments

The photographs in Figures 15 and 16 show an existing multi-use path and retaining wall along Kennesaw Avenue north of Tower Road.



Figures 15 & 16: Existing Retaining Wall Along Kennesaw Avenue North of Tower Road

Multi-use path phase 3 shown in Figure 17 would connect Steve Reynolds Boulevard to Burns Road covering approximately 0.7 miles. A significant portion of the frontage along this segment of Indian Trail-Lilburn Road is residential.

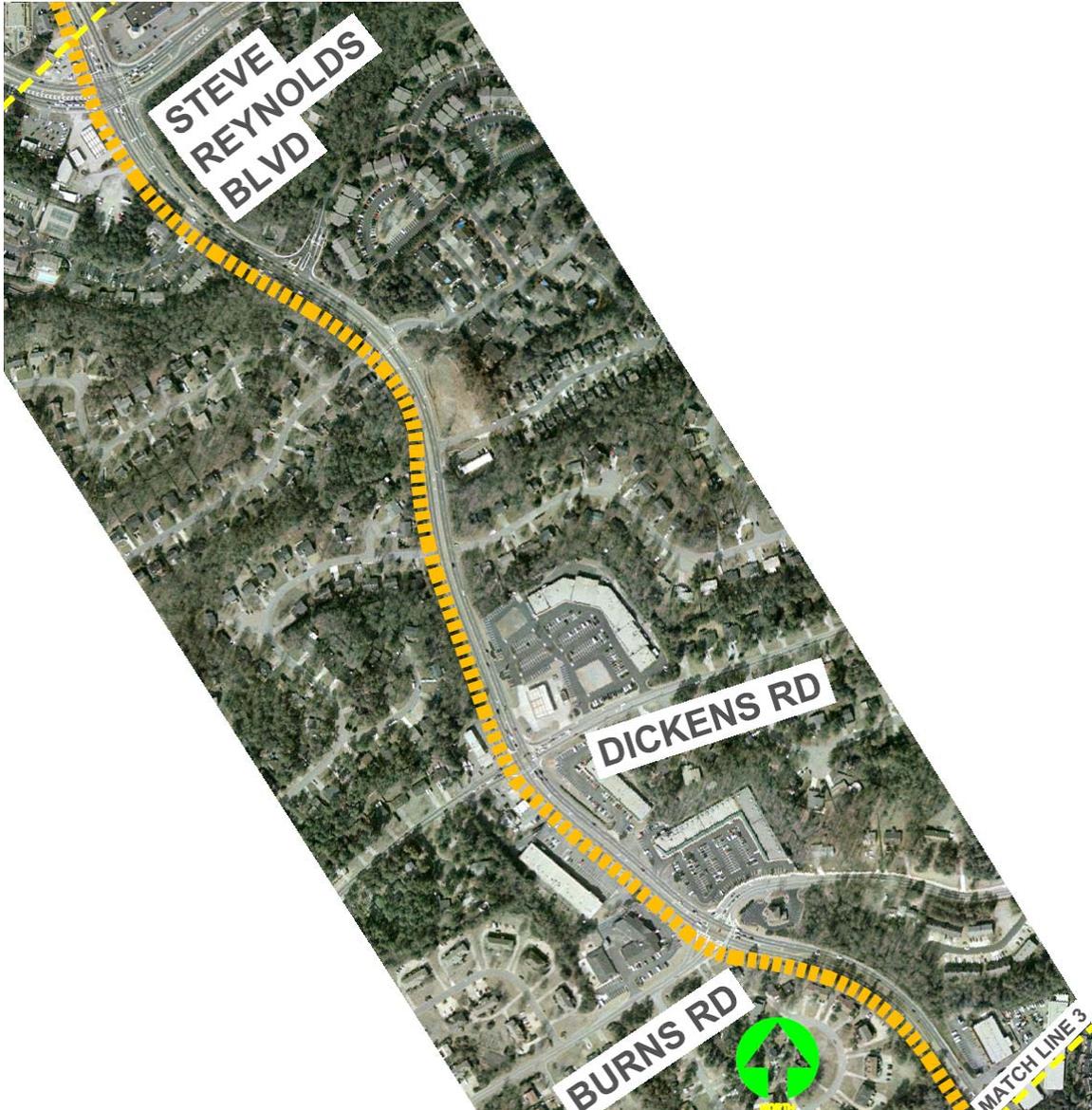


Figure 17:
Multi-use Path Phase 3

Indian Trail-Lilburn Road LCI Corridor Study

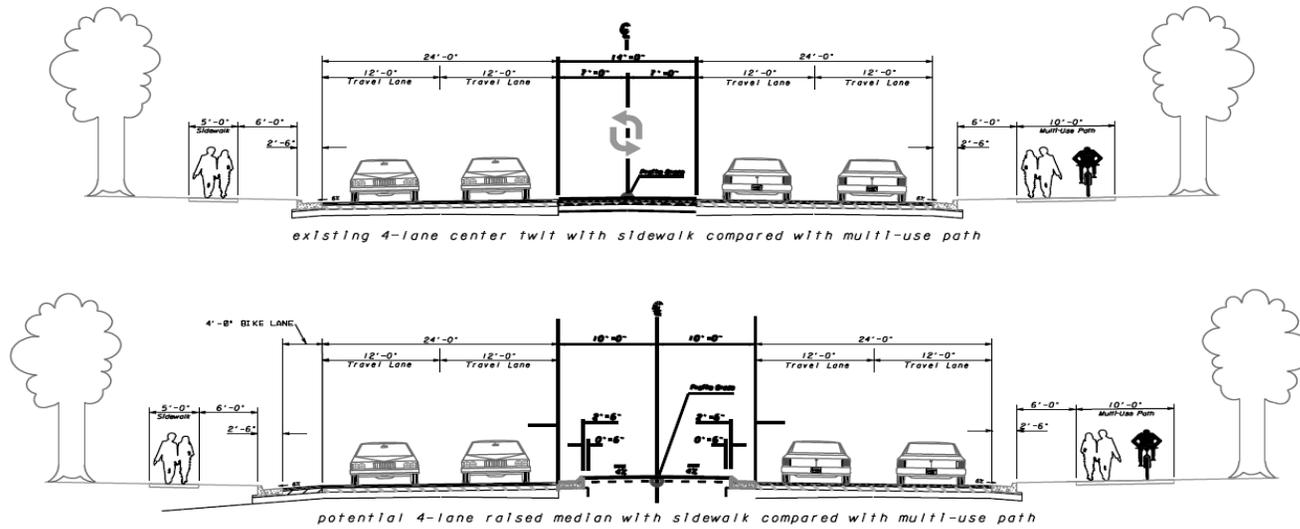
Multi-use path phase 4 shown in Figure 18 would connect Burns Road to Lawrenceville Highway covering approximately 1.1 miles. A significant portion of the frontage along this segment of Indian Trail-Lilburn Road is commercial and would benefit from a reduction in driveways through access management improvements. There is also a need for a separate pedestrian bridge at Jackson Creek. An excellent opportunity exists to coordinate this project with the Indian Trail-Lilburn Road Bridge at Jackson Creek Gwinnett County SPLOST project 4333.



Figure 18:
Multi-use Path Phase 4

To depict the implementation of the multi-use pathway, typical pavement and path cross sections are illustrated in Figure 19.

Figure 19
Pavement and Path Cross Sections



URS

400 NORTHPARK TOWN CENTER
 1000 ABERNATHY ROAD, N.E., SUITE 900
 ATLANTA, GEORGIA 30328
 TEL: (678) 808-8800 FAX: (678) 808-8400

INDIAN TRAIL LILBURN ROAD
 PAVEMENT & PATH CROSS SECTIONS

Date: 11-06-2006

drawn by: scy

CHECKED BY: DBD

REVISION DATES

NO.	DATE	DESCRIPTION

4.4 Parallel Routes

Another tool to meet LCI goals of supporting localized circulation includes creating parallel routes. Providing road users multiple options can help relieve congestion, reduce crashes, and accommodate incidents which block a road segment. Several opportunities exist to create parallel routes throughout this corridor.

One alternate route as shown in Figure 20 could be created through redevelopment of the Indian Trail Shopping Center. This approximately 4/10th of a mile route would tie Hillcrest Road into the new access road which would continue to Indian Trail-Lilburn Road. Assuming redevelopment of the Indian Trail Shopping Center, construction through private funding of this two 12 foot lane facility with curb and gutter and sidewalks on both sides is estimated to cost \$917,820.

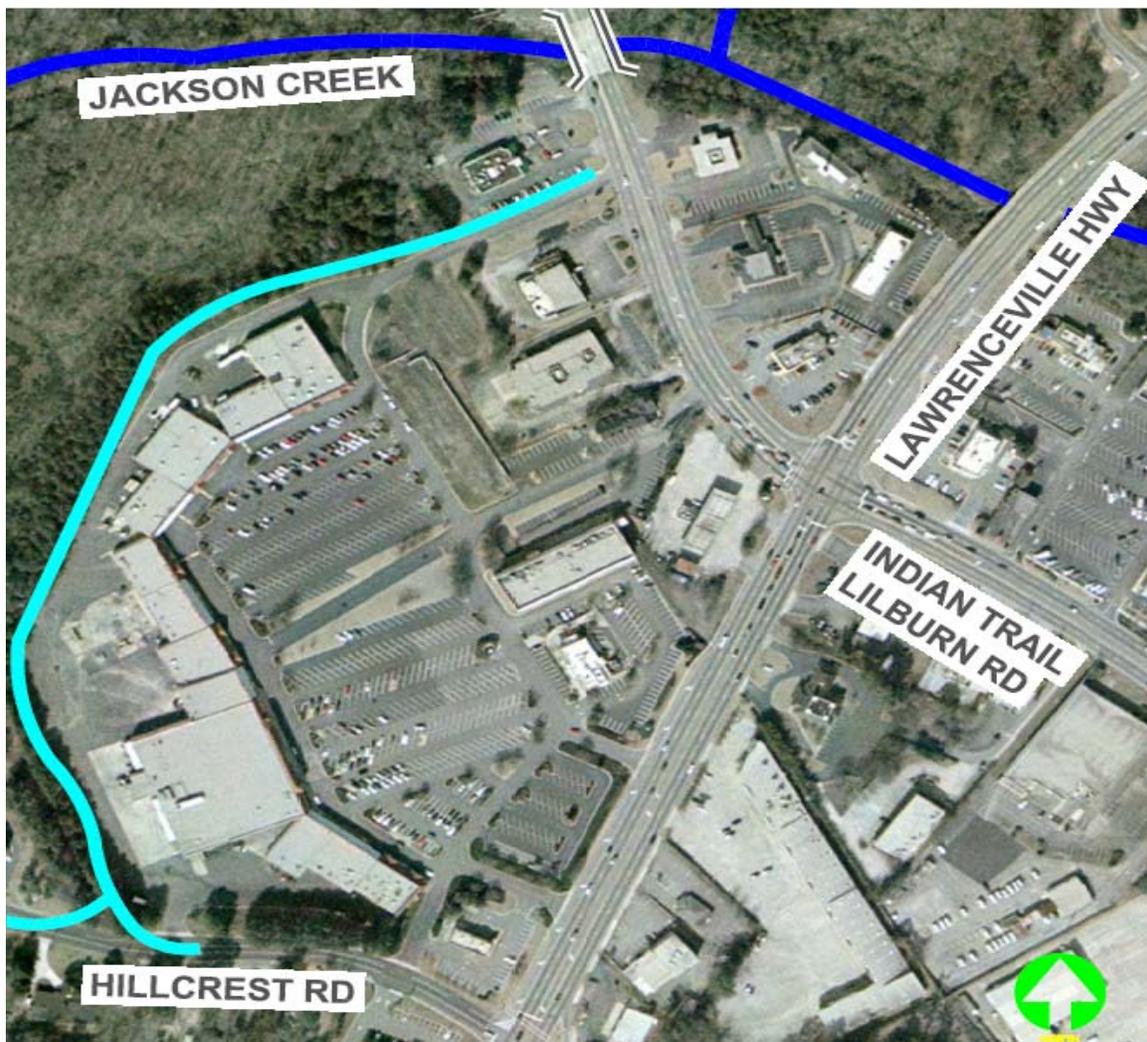


Figure 20:
Parallel Route Behind Indian Trail Shopping Center

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A second location where an alternate route would allow traffic to avoid the congested intersection of Indian Trail-Lilburn Road at Lawrenceville Highway is shown in Figure 21. Two possible, approximately 0.2 mile, routes are shown that would connect Indian Trail-Lilburn Road to Wynne Russell Drive. An additional bridge across Jackson Creek would be required. Construction of this road of this two 12 foot lane facility with curb and gutter and sidewalks on both sides is estimated to cost \$433,415.

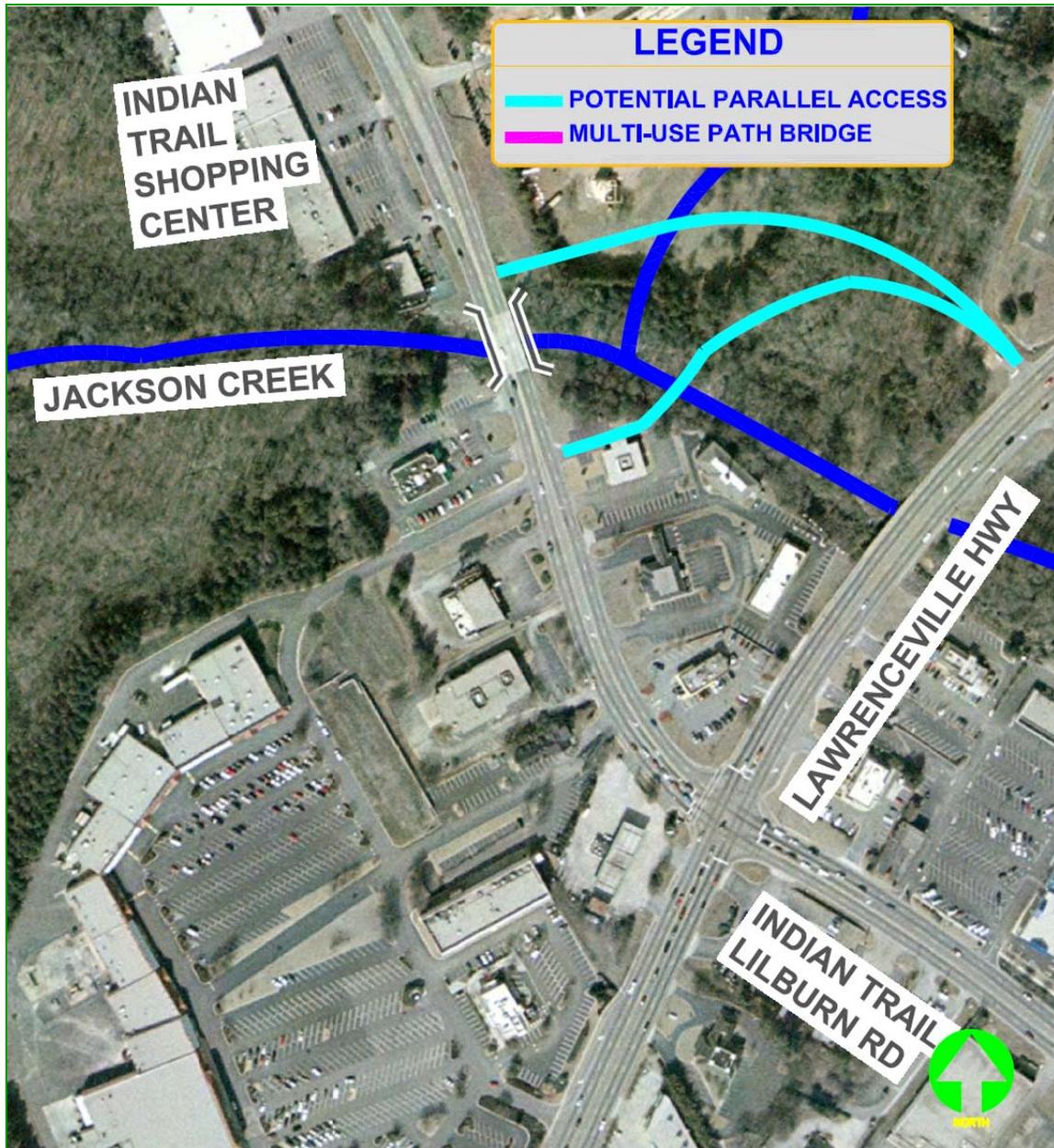


Figure 21:
Alternate Route 2

A third alternate route that would allow traffic to avoid the congested intersection of Indian Trail-Lilburn Road at Lawrenceville Highway is shown in Figure 22 below. This approximately 0.5 mile route would connect Dickens Road to Burns Road.

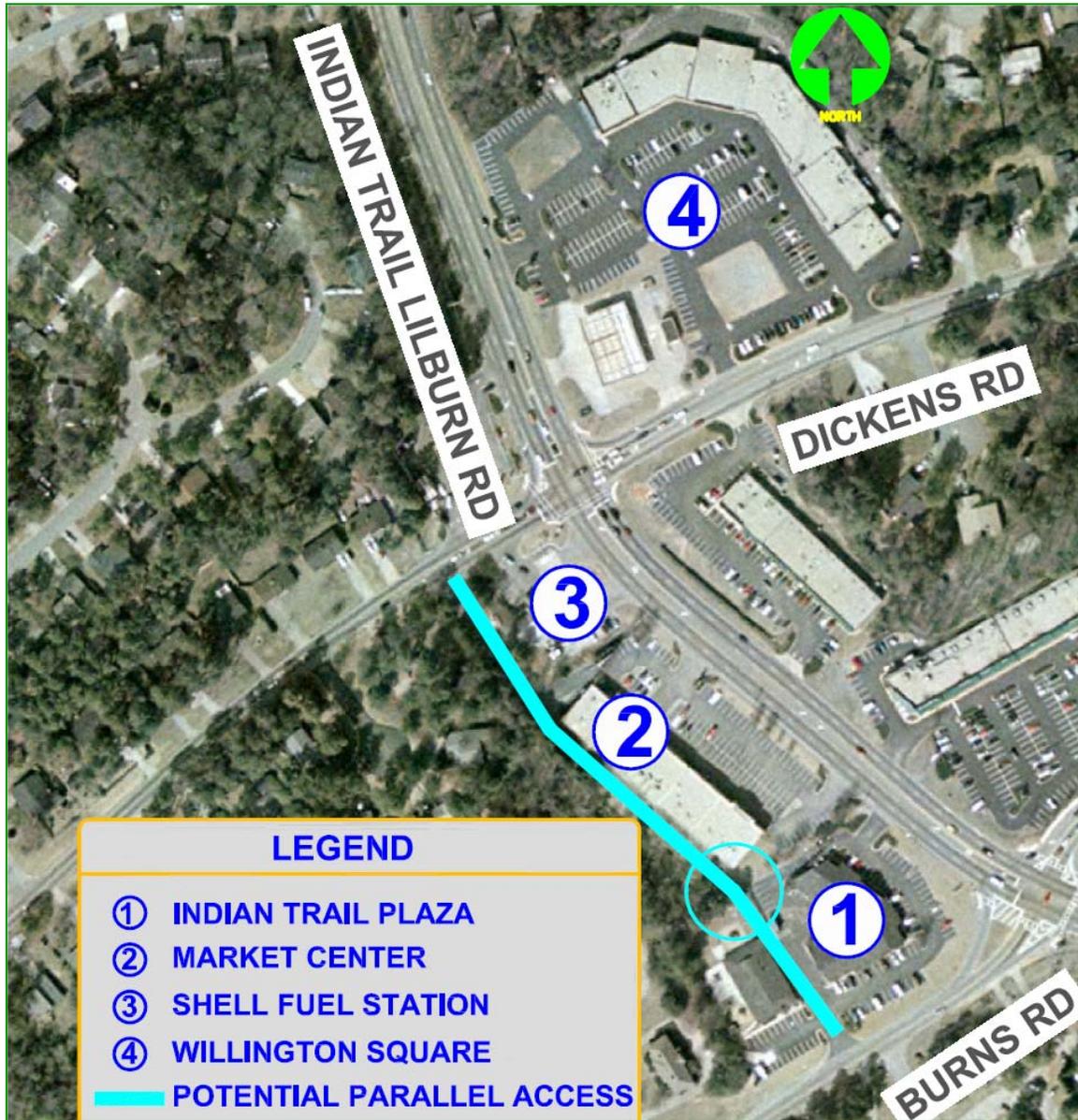


Figure 22:
Alternate Route Between Dickens Road and Burns Road

4.5 Multi-Use Pathway Bridge

Two bridges exist within this corridor at Beaver Ruin Creek and at Jackson Creek. Today the existing bridges accommodate two travel lanes in each direction and no pedestrian facilities. Figure 23 below shows the existing pedestrian challenge crossing Beaver Ruin Creek and Jackson Creek along Indian Trail-Lilburn Road. Both of these locations require bridge improvements to accommodate future sidewalks or a multi-use pathway. The potential also exists for a parallel/separate bridge to accommodate a non-vehicular facility.



**Figure 23:
Existing Bridges Across Beaver Ruin Creek and Jackson Creek**

Figure 24 below shows the location of the future pedestrian/multi-use path bridge along the south side of Indian Trail-Lilburn Road over Jackson Creek. Through the 2001 Gwinnett County SPLOST program, there is Project No. 4333 to construct bridge and drainage improvements for the Indian Trail-Lilburn Road bridge over Jackson Creek. This bridge is within the city limits of Lilburn. Although the Gwinnett Village CID cannot expend construction funds outside of their boundaries, an opportunity exists to facilitate the bridge improvements to include the multi-use path. This facilitation can take the form of coordinating with these two governmental agencies to include the multi-use path as part of the project or funding the incremental cost of the overall project for the engineering design for the multi-use path portion.

Another consideration with this improvement project is reconstructing the bridge with a median for incorporation in a future access management plan for the Indian Trail-Lilburn Road corridor.

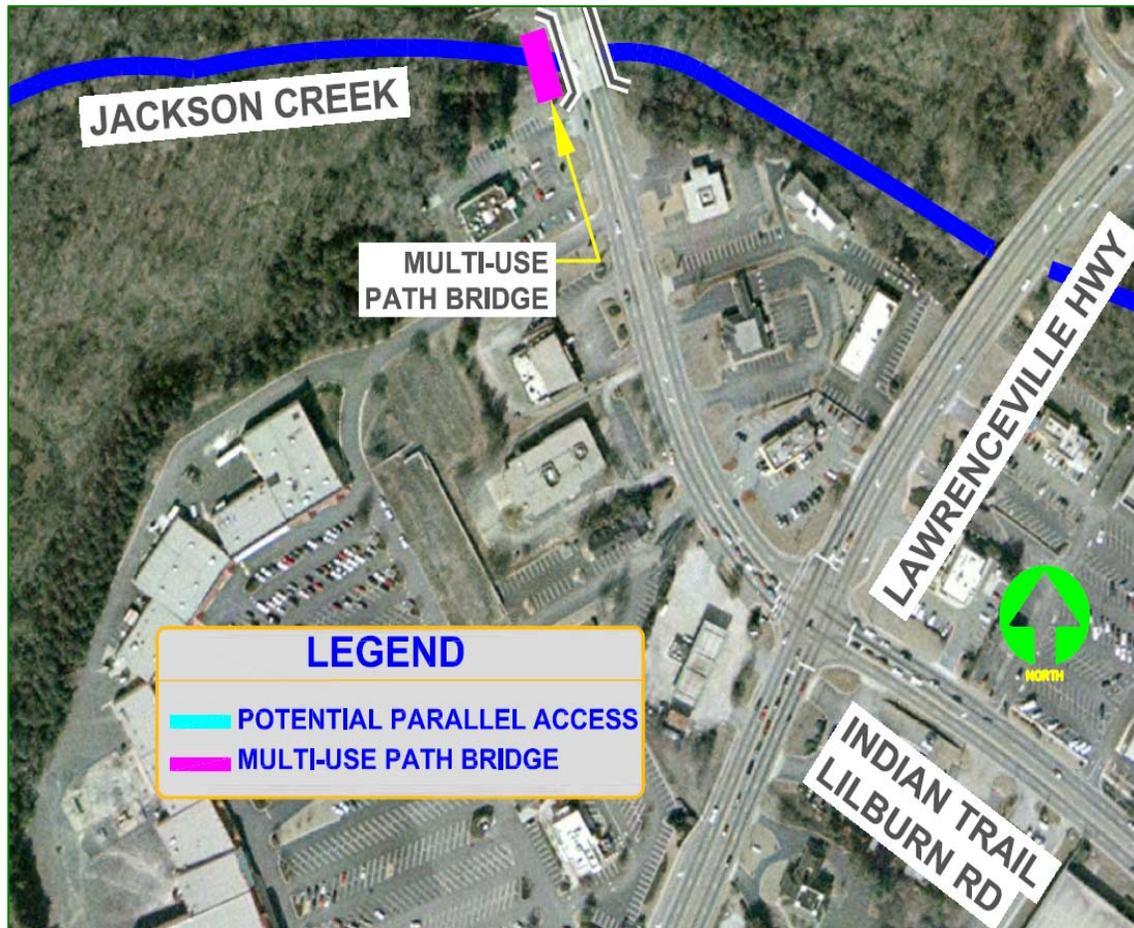
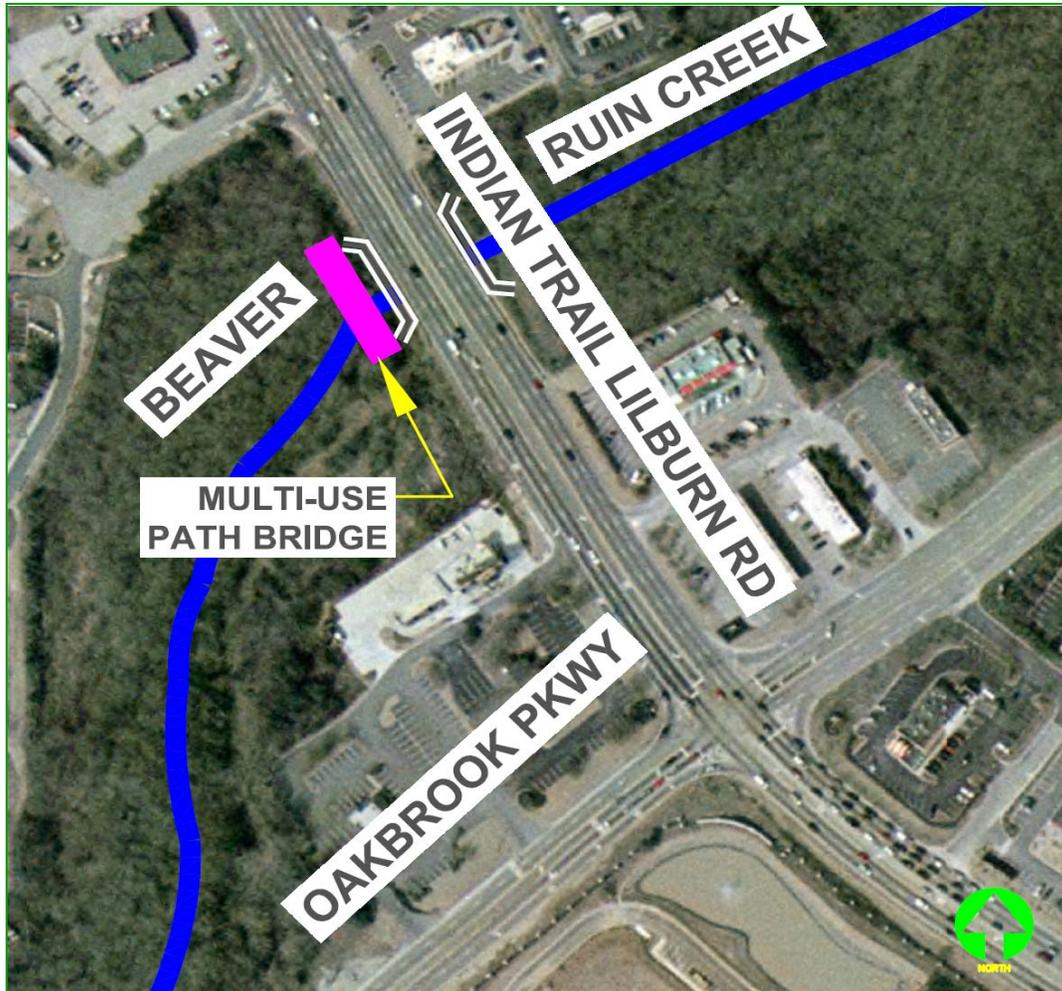


Figure 24:
Multi-use Path Bridge at Jackson Creek

Figure 25 shows the location of the future pedestrian/multiuse path bridge along the south side of Indian Trail-Lilburn Road over Beaver Ruin Creek.



**Figure 25:
Multi-use Path Phase at Beaver Ruin Creek**

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Examples of the types of multi-use path structures that could be constructed are shown in Figures 26 and 27. These pictures show an existing pedestrian bridge located on Mabry Road between Loch Highland Pass and Loch Highland Parkway.



**Figures 26 & 27:
Sample Pedestrian Bridge Along Mabry Road**

Indian Trail-Lilburn Road LCI Corridor Study

Figures 28 to 30 below shows existing pedestrian bridges located at the City of Roswell Big Creek Park off Old Alabama Road adjacent to Belcourt Parkway.



**Figures 28, 29 & 30:
Big Creek Park Pedestrian Bridges**

4.6 Signal Improvements

There are 15 signalized intersections along the Indian Trail-Lilburn Road corridor which averages over four signals per mile. As the number of signals increases, capacity tends to decrease. To improve the capacity to accommodate the large through volumes on Indian Trail-Lilburn Road, Intelligent Transportation Systems (ITS) techniques can be applied. When applying these technological advances, operational improvements can be achieved much more cost effectively when compared to the significant capital expenditure to construct additional lanes. In this direction, Gwinnett County has a project identified in the approved ARC FY 2006-2011 TIP (Project No. GW 321) to install fiber optic cable and cameras on Indian Trail-Lilburn Road from Beaver Ruin Road to Lawrenceville Highway. This project is, however, programmed for late in the TIP. To accelerate this project, consideration should be given by the Gwinnett Village CID to participate in the cost sharing with Gwinnett County. This cost sharing could be in either engineering or construction. The engineering design costs are currently estimated at \$52,500. The construction costs are significantly higher, currently estimated at \$14,421,000. The local match for construction is typically 20% which would be \$721,050. In addition, if the Gwinnett Village CID were to participate at a level of 10% of the local construction match, \$72,105 would be required.

4.7 Safety Enhancements

An objective of the LCI program is to decrease the amount of vehicular traffic by providing facilities and support activities to encourage walking and other modes of travel such as bicycle and transit. The signal system not only regulates vehicular flow, it stops traffic to allow pedestrians to safely cross Indian Trail-Lilburn Road. To facilitate pedestrian crossings and enhance safety, the existing signalized intersections could be upgraded. The upgrade would be in two specific areas. The first enhancement would be to restripe all of the crosswalks with the current State standard for such markings. The second would be to upgrade all of the pedestrian push buttons and pedestrian signals. In particular the pedestrian signals would include the count-down timer feature so pedestrians would know how much time is left to safely cross the street. Depending on the width of the street and the number of crosswalks and existing pedestrian signals, upgrading a signalized intersection is estimated to cost between \$15,000 and \$20,000. To upgrade the 15 signalized intersections could cost approximately \$300,000.

From the October 17, 2006 Existing Conditions Report an annualized crash rate for Indian Trail-Lilburn Road of 866 crashes per 100 million vehicle miles of travel (VMT) was calculated and compared to a statewide annualized crash rate of 557 crashes per 100 million VMT for similar roadways. This higher crash rate warrants performing location specific detailed traffic engineering evaluations to determine the cause and effect of these crashes. After this intensive evaluation, safety funds can be programmed by either the State or Gwinnett County to implement corrective measures.

An example of the outcome of this type of analysis to improve vehicular safety is the project by Gwinnett County funded through their SPLOST program (Project No. M-

0535). This project would construct a separate westbound right-turn lane at the I-85 northbound ramp. Currently, the lane is shared by vehicles wanting to proceed either northbound or southbound on I-85 and this condition causes confusion and there are a large number of rear-end and side-swipe crashes. By constructing the separate right-turn lane to proceed north, travel safety will be enhanced through this portion of the Indian Trail-Lilburn Road corridor.

4.8 Transit

GCT provides local transit service along the western end of the Indian Trail-Lilburn Road corridor through the Route 20 and the Route 30. There are different techniques that can be applied to expand the opportunities for citizens to use transit along the corridor.

One technique that does not involve any capital expenditure is to expand the route in the Gwinnett Village area to include more streets. This approach would require adjustment to the schedules to account for longer route coverage but the increased service would be handled with the existing rolling stock and drivers. An example of this expanded coverage would have the Route 20 deviate from its current route at the intersection of Indian Trail-Lilburn Road and Steve Reynolds Boulevard/Singleton Road to travel southeast on Indian Trail-Lilburn Road, east on Burns Road, north on Beaver Ruin Road, and west on Steve Reynolds Boulevard to then continue on its route on Singleton Road. The length of the route would increase by slightly over 5 miles. A similar approach could be taken with the Route 30 where it would deviate from its current route at the intersection of Indian Trail-Lilburn Road and Steve Reynolds Boulevard/Singleton Road to travel southeast on Indian Trail-Lilburn Road, west on Dickens Road, north on either Harbins Road or Williams Road, and east on Singleton Road to then continue on its route on Indian Trail-Lilburn Road. The length of the route would increase by slightly over 4 miles.

Another technique to expand transit opportunities in the Indian Trail-Lilburn Road corridor is to increase the frequency of the Route 20, especially during the peak hours. Currently the route operates on 30 minute headways. To operate at 15 minute headways during both peak periods would require four new buses, which are estimated at \$360,000 per vehicle.

A third technique for consideration for expanding transit opportunities, but one that is not recommended, would be to establish a circulator system within the Gwinnett Village boundaries. This type of service would provide the localized connectivity between the residential areas with the other land use activity centers. The difficulties with such a system are the large initial capital costs to purchase the vehicles and then the large recurring labor costs for administration, management, drivers, and mechanics on top the recurring operating costs for fuel and maintenance. Plus to be successful the fare would have to be minimal, if a fare is charged at all, so a long term dedicated funding source has to be committed and none exist today or are identified for the immediate future.

5. Access Management

As developed corridors continue to carry increasing traffic volumes, especially ones like Indian Trail-Lilburn Road having an interchange with I-85, there is a need to minimize impacts to capacity and maintain efficient traffic flow. One technique to accommodate more vehicles is to widen the road; this however, is not the most feasible approach along developed corridors like Indian Trail-Lilburn Road because of exorbitant right-of-way costs.

Access management is another technique used to facilitate flow of vehicles along a corridor and avoid disruption of this traffic created by vehicles entering and existing driveways. The purpose of a properly implemented access management plan is to improve safety and to maximize existing roadway performance. According to GDOT's Driveway and Encroachment Control manual the number of crashes is correlated to the number of driveways. As the number of points of potential conflict between the vehicles on the roadway and those entering and exiting the roadway are decreased, safety and roadway efficiency increase.

The benefits of an effective access management practice extend beyond improving traffic conditions and result in improved pedestrian facilities. Fewer driveways reduce potential vehicle-pedestrian conflicts and result in safer sidewalks.

There are numerous strategies that can be implemented for an effective access management plan that include removing extraneous curb cuts, providing inter-parcel access, installing medians, and reevaluating traffic signals. Identified below are some of these strategies and how they can be applied along Indian Trail-Lilburn Road.

5.1 Median Installation

Installing medians restricts entering and exiting maneuvers by creating a physical barrier limiting the access to existing driveways. This technique can be controversial because drivers consider that something is being taken away from them if they no longer have unlimited access. Also businesses perceive that their commerce is negatively impacted if their previously unrestricted access is affected. These positions were brought out during the public outreach activities in that there was almost no support for median installation along the western section of Indian Trail-Lilburn Road. Therefore, opportunities were investigated along the eastern section. If this technique were applied, it would require the support of Gwinnett County or the City of Lilburn depending in which jurisdiction the median was built.

There are at least three issues when considering medians. One issue is that a standard median is 20 feet in width and the standard two-way center left-turn lane is 14 feet in width. Consequently, building a median requires the road to be widened by 6 feet. Another issue is that medians can be landscaped to improve the aesthetics along Indian Trail-Lilburn Road. The view shed can be enhanced but there are maintenance costs to

be anticipated. A third issue is that the curbs at the intersection may have to be reconstructed to facilitate the resultant U-turns. GDOT does have a standard for constructing this site specific widening which is vernacularly referred to as an eye brow.

One potential location for a median is from Warner's Trail to Burns Road. For the section north of Dickens Road, the residential street of Indian Way intersects both Indian Trail-Lilburn Road and Dickens Road. Therefore, left turns into these neighborhoods on both sides of Indian Trail-Lilburn Road are made available through a slightly more circuitous route. For the commercial section from Dickens Road to Burns Road, each of the retail centers has access to two streets, except for the Market Center. If inter-parcel access were provided to Indian Trail Plaza then all left turn maneuvers could be accommodated at the intersecting signalized streets of Dickens Road and Burns Road.

Another potential location for a median is to extend the existing median south of Burns Road to Hillcrest Road. A similar scenario exists for the commercial properties at Hillcrest Road in that they have access to two streets. There are commercial/industrial businesses on Indian Trail-Lilburn Road approximately midway between Burns Road and Hillcrest Road. Due to their building, parking lot, and driveway alignment, there is no good way to realign their driveways to create a four-legged intersection for a median break. Consequently, there is a section approximately 600 feet in length where maintaining the five-lane cross section without a median is desirable.

One other potential location is to extend in both directions the existing median south of Exchange Place. The bridge at Jackson Creek is a limiting factor and would have to be reconstructed to accommodate a median.

The commercial area north of Lawrenceville Highway could be considered for a median. To make this successful though, inter-parcel access would have to be created between the various properties on both sides of Indian Trail-Lilburn Road. This median could be done in conjunction with the two parallel route projects presented in the Transportation Projects section of the report.

Cost estimates were not developed for these potential median locations because of the unknown costs for right-of-way that would be needed for the widening to accommodate their construction. Also because of their controversial nature, an improvement project that achieves goals established through an adopted policy would have to be programmed after public involvement so that there is concurrence for that particular capital commitment of public funds.

5.2 Driveway Elimination and Consolidation

Today much of the Indian Trail-Lilburn Road corridor is developed and an abundance of closely spaced driveways exist in spots creating driver confusion, disrupting traffic flow, and increasing crash potential. Along this corridor, potential for improvement exists by removing or consolidating driveways on Indian Trail-Lilburn Road and creating parallel

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routes that can provide access to and carry traffic between adjacent land uses. Policies should be implemented that encourage inter-parcel access between future developments, discourage driveways along Indian Trail-Lilburn Road in favor of driveways along side streets, and encourage parallel roadways to minimize the need for use of Indian Trail Road for short trips.

Figure 31 identifies several driveways that should be considered for consolidation. Combining the adjacent driveways at Market Center and Indian Trail Plaza could provide access to a potential parallel route behind these shopping centers, provide interparcel access, reduce one driveway, and remove conflict points.

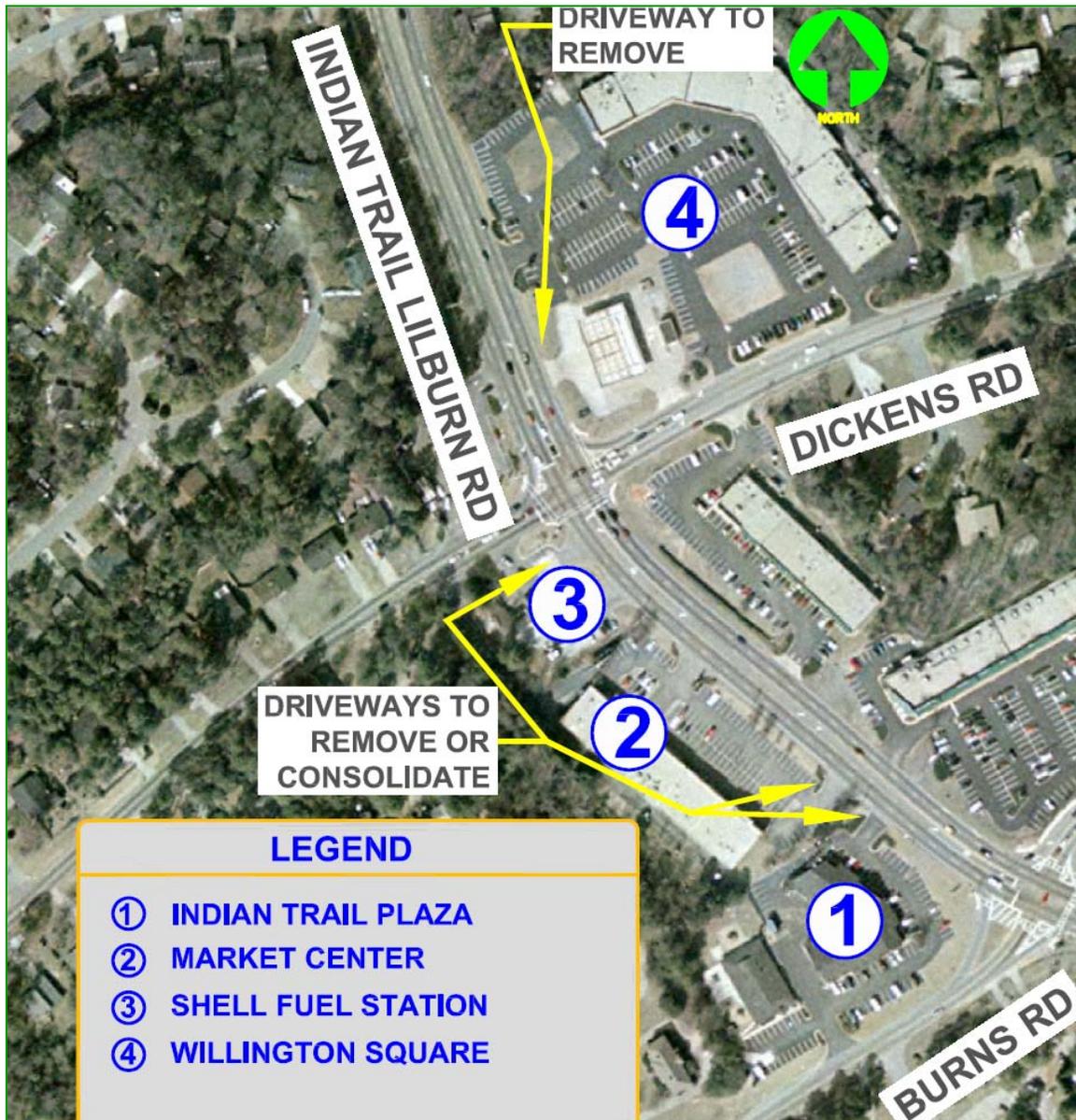


Figure 31:
Access Management

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Shown below, Figure 32 shows two closely spaced driveways, currently serving the Shell Fuel Station adjacent to Dickens Road that could be considered for consolidation.



Figure 32:
Two Driveways Immediately South of Dickens Road

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Photographs below in Figures 33 and 34, show two closely spaced driveways, one driveway currently serving Market Center and another Indian Trail Plaza that could be consolidated if there were inter-parcel access between the properties.



**Figures 33 & 34:
Driveways Between Market Center and Indian Trail Plaza**

Indian Trail-Lilburn Road LCI Corridor Study

Figure 35 below identifies several driveways that should be considered for consolidation. These driveways currently serve the existing Paco's SuperTacos and Citgo businesses. Paco's has an existing driveway to Tree Trail Parkway and interparcel access to the Tree Trail Village. Citgo currently has two full access driveways along Indian Trail-Lilburn Road and one along Tech Drive.

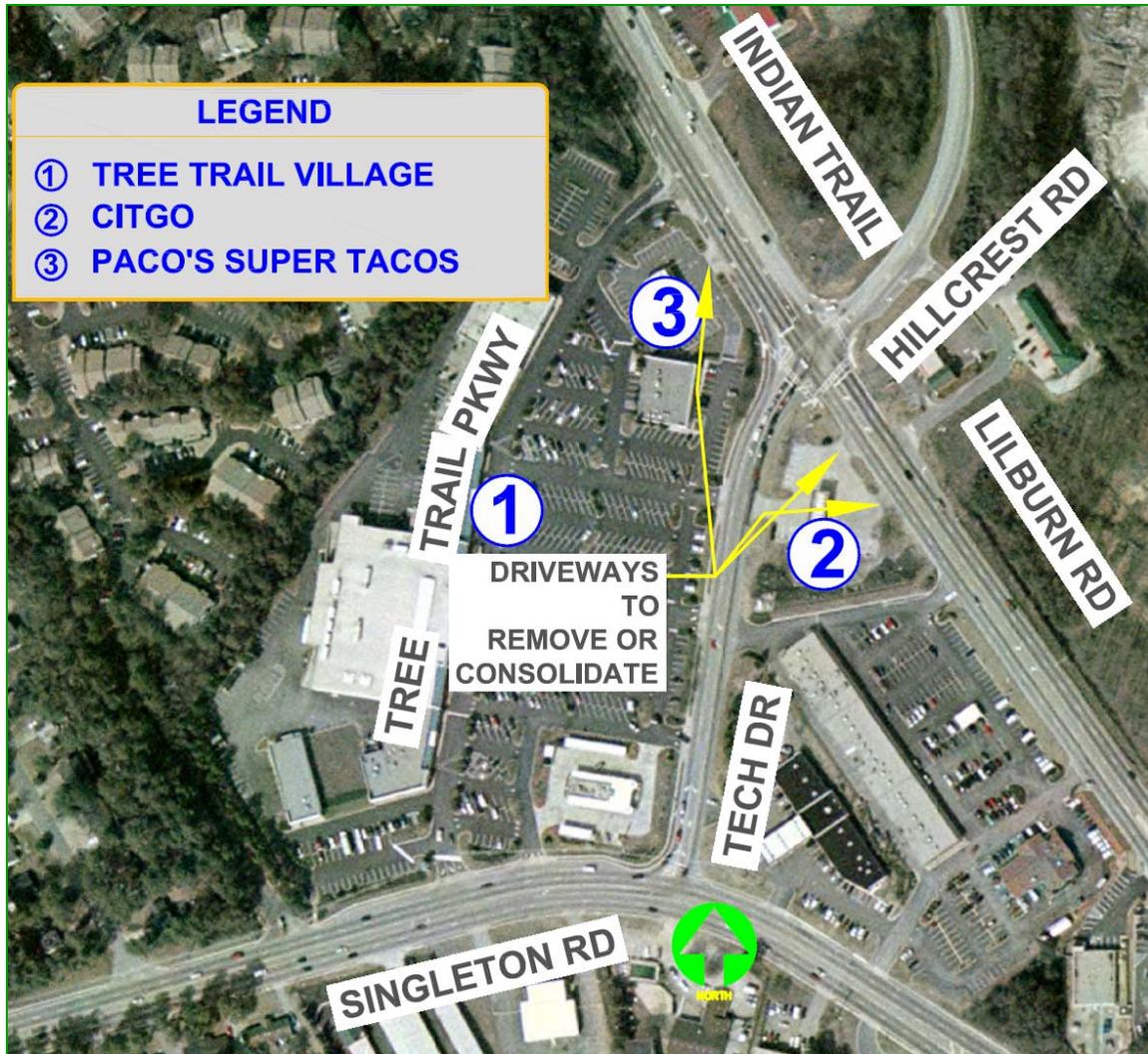


Figure 35:
Access Management at Tree Trail Village

Indian Trail-Lilburn Road LCI Corridor Study

Figures 36 and 37 give two views southbound on Indian Trail-Lilburn Road showing two closely spaced right-in-right-out driveways at Tree Trail Parkway and Paco's Supertacos driveway located immediately north of Tech Drive/Hillcrest Road. Note barriers along the center line to prevent left turns from these driveways indicating a problem already exists with the driveways that had to be addressed.



**Figures 36 & 37:
Two Right-In-Right-Out Driveways Serving Tree Trail Village**

Indian Trail-Lilburn Road LCI Corridor Study

Figure 38 shows the view from Cherokee Hills looking north along Indian Trail-Lilburn Road towards two Citgo driveways and Tech Drive/Hillcrest Road showing close spacing of three driveways where consolidation would be of benefit to traffic operations and not negatively impact parcel access..

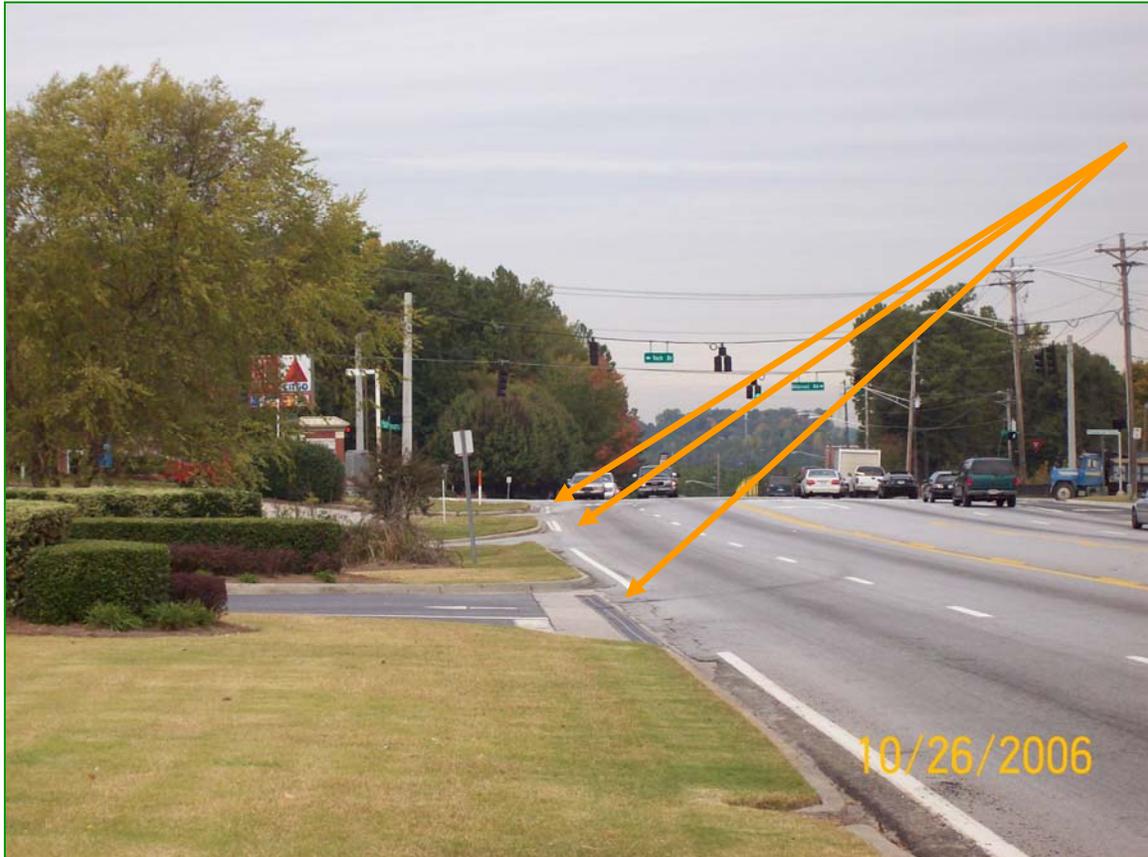


Figure 38:
View Towards Tech Drive Looking North-West

Figure 39 through 41 identify several potential driveway consolidation locations north of Lawrenceville Highway (US 29).

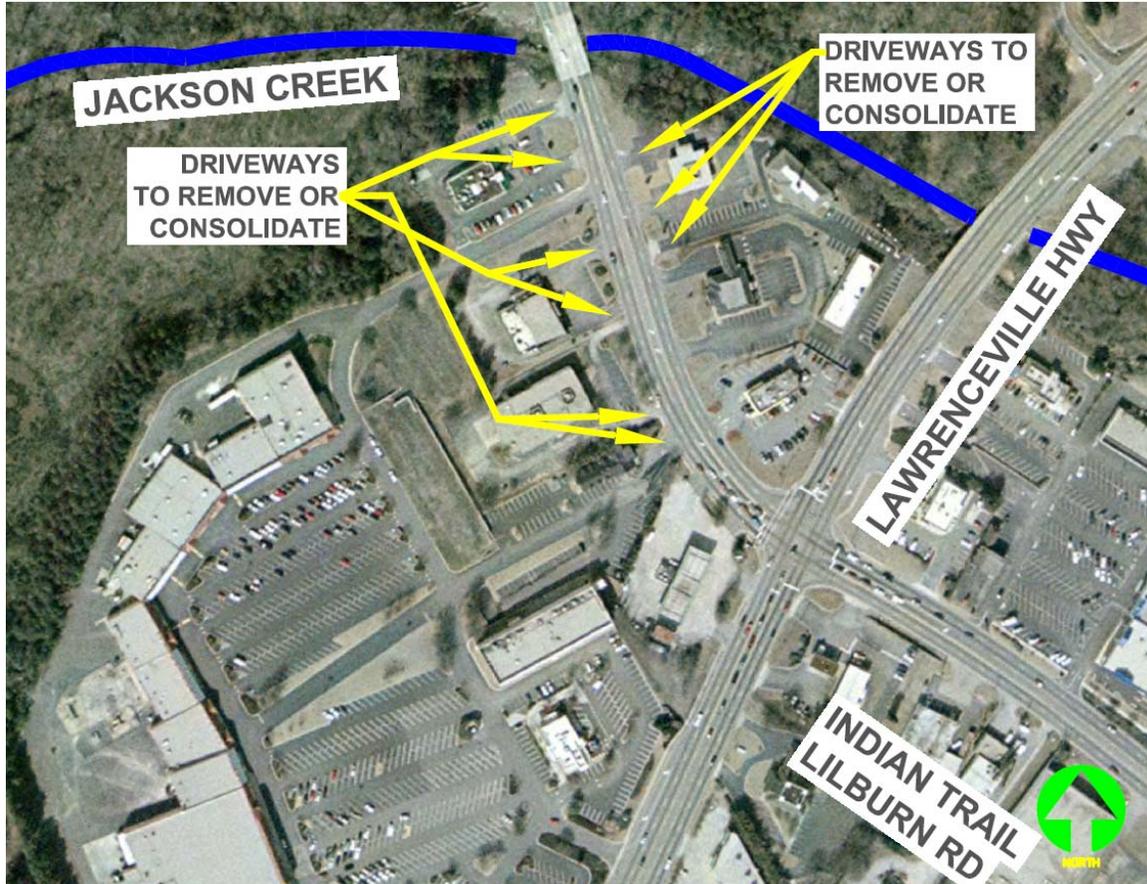


Figure 39:
Access Management at Indian Trails Shopping Center



Figure 40:
Existing Driveways On The Northside of Indian Trail-Lilburn Road NW of US 29

Indian Trail-Lilburn Road LCI Corridor Study

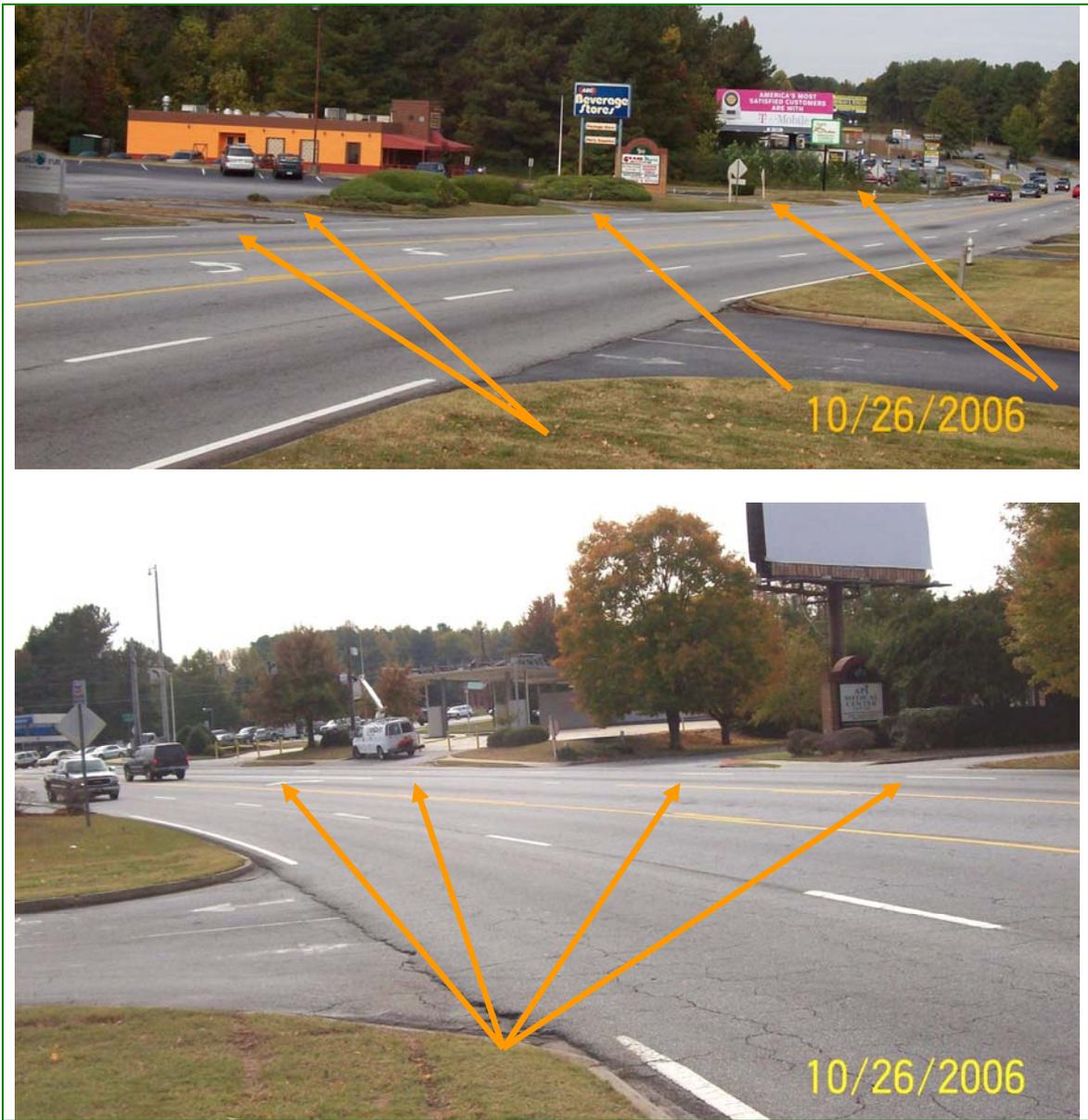


Figure 41:
Existing Driveways On The Southside of Indian Trail-Lilburn Road NW of US 29

Figure 42 below identifies several driveways that should be considered for consolidation.

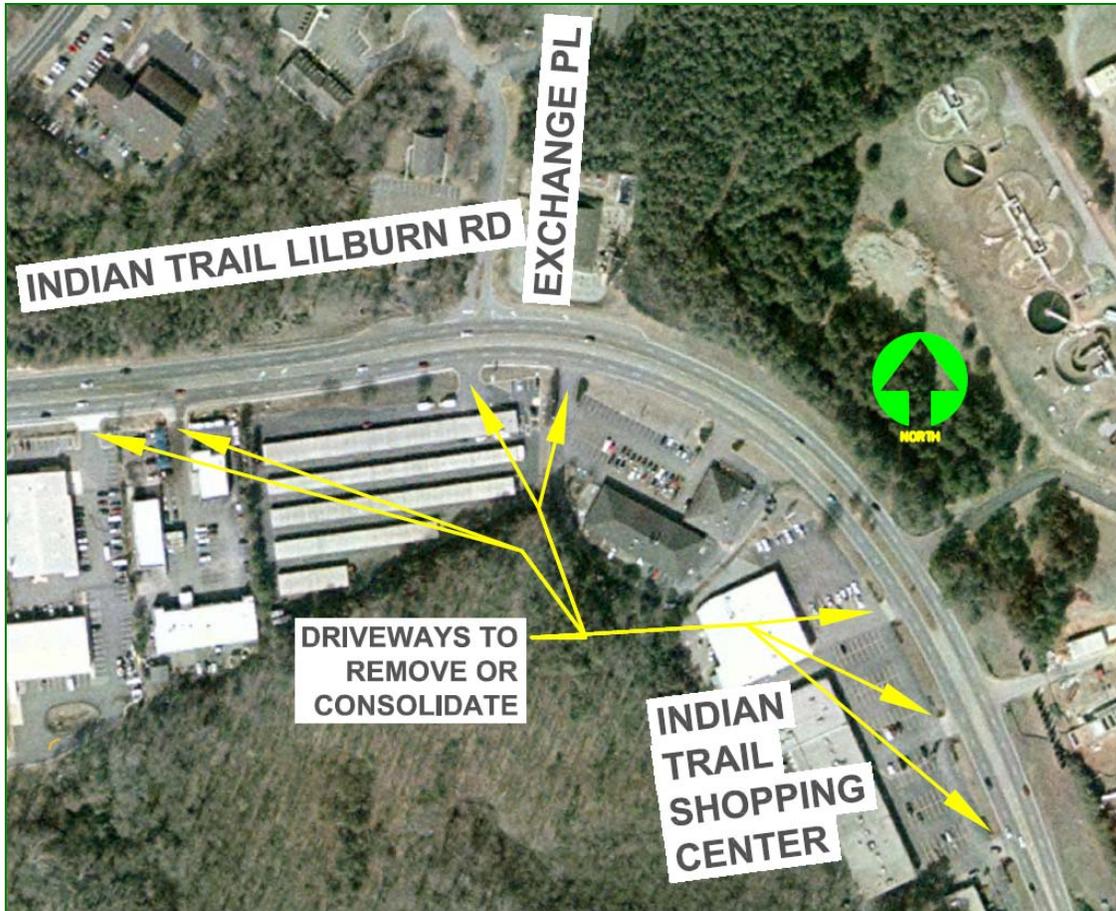


Figure 42:
Access Management at Indian Trail Shopping Center and Exchange Place

Figures 43 through 45 shows another view of the three Indian Trail Shopping Center driveways identified above.



Figure 43:
Indian Trail Shopping Center Driveways



Figure 44:
Sunrise Square shopping center.



Figure 45:
Access Management Potential at Sunrise Square

6. Implementation Strategy

Adoption of the recommendations arrived at through the public involvement process and the LCI study is only the preliminary step to realizing the vision for the Indian Trail-Lilburn Road corridor. Actions are needed by both the public and private sector to establish the ground work for the investments in the development and redevelopment of the catalyst projects and to program funding to implement the transportation improvement projects. Identified below are the agencies and governments that will play a role, actions and policies to be enacted in support of the projects, and the Five Year Implementation Plan.

6.1 Involved Agencies

Gwinnett Village Community Improvement District

The planning process defines a framework for implementation understanding that it takes time to realize a concrete result given the process to get approvals and construct a project. The long term commitment comes from those local groups that have been and continue to be invested in the community. These local groups include residents, business owners,

and those individuals that conduct their business (retail, office, institutional, etc.) along the Indian Trail-Lilburn Road corridor.

The group that is the focal point for involvement in these activities is the Gwinnett Village CID. The role most critical to the success of the projects in this LCI study is for the Gwinnett Village CID to be the central facilitator. There are a variety of ways that this role can be fulfilled. Some of the activities that can be undertaken by the Gwinnett Village CID include facilitating discussions between the private investors and the public decision makers; providing input on policy and rule changes; administrating the design of public infrastructure improvement projects; and providing capital as part of the local match for transportation enhancements.

In summary Gwinnett Village CID has to be in the fore front as the champion for the Indian Trail-Lilburn Road corridor.

Gwinnett County

The agency that has the primary responsibility for creating the legal framework for advancing the vision for the Indian Trail-Lilburn Road corridor is Gwinnett County. Being the responsible party for the commitment of public funds to construct transportation improvements, Gwinnett Village CID has to insure that the established and evolving plans remain budgeted and on schedule. Also Gwinnett County has to develop and implement policies and land use revisions that are supportive of the redevelopment and development projects envisioned through the LCI study.

City of Norcross

Only the western portion of the Indian Trail-Lilburn Road corridor is within the incorporated city limits of Norcross. However, this area is very much a part of the Interstate Gateway project. Due to its proximity to the I-85 interchange, it is not expected that Norcross would be programming capital for transportation projects and instead would defer to improvements GDOT would make to the interchange and its approaches. Norcross should primarily engage in a collaborative effort with Gwinnett County in evaluating the zoning, land use, and development standards policy and rule changes that must occur to allow the catalyst projects to advance.

City of Lilburn

Approximately one quarter to one third of the eastern portion of the Indian Trail-Lilburn Road corridor is within the incorporated city limits of Lilburn. As Gwinnett County has maintenance and operations responsibility for Indian Trail-Lilburn Road, it is not expected that Lilburn would be programming capital for transportation projects. Like Norcross, Lilburn should engage in a collaborative effort with Gwinnett County in evaluating the policy and rule changes that support the LCI study development/redevelopment projects.

Gwinnett County Transit

As the agency that operates the local transit system, GCT is critical to incorporating the plans for transit enhancements in the Indian Trail-Lilburn Road corridor into their overall system plans.

Private Investors

For land owners, investors, and developers, the land use changes particularly those that are mixed use, have to be prepared within the context of this LCI study that would ultimately result in a return on their investment. Site plan preparation, marketing and economic analyses, and rezoning are critical aspects to preparing a framework for the individual project's long term success. In addition to developing the plans that will make these projects concrete, a role the developers have to vigorously pursue is the financial backing of the lending institutions that do not have a history of investing in mixed use developments.

6.2 Actions and Policies

Identified below are various actions and areas for policy changes for the involved agencies that would need to occur to support the success of the projects envisioned through the Indian Trail-Lilburn Road corridor LCI study.

Neither the public nor the private sector projects will be built without the commitment of monies. One action Gwinnett Village CID can undertake to support the transportation improvement projects is to provide capital as portions of the local match. This can be accomplished in one form by undertaking the administration and funding of the engineering design of individual projects. Another form would be to provide a portion of the construction cost local matches. With the Gwinnett Village CID funds involved and taking a lead on projects, these improvements can be accelerated and have a better opportunity to take advantage of available programmed funds either by the State or Gwinnett County.

Another action for the Gwinnett Village CID is to be an advocate for land use plan and policy decisions being contemplated by the local jurisdictions. Making the Gwinnett Village CID's position known on changes with the emphasis on the short term and long term positive outcomes for the community can help guide the decision makers. Depending on the particular policy or rule change, Gwinnett Village CID can deal with staff or through contacts with the elected officials.

A third action is to be a facilitator for private investors looking at making the financial commitment to in the Indian Trail-Lilburn Road corridor. Gwinnett Village CID being the originator of the plans and vision for the community, insight on the perspective of the various agencies on implementing the land use plans, and having a working relationship with these jurisdictions can facilitate the series of conversations needed in order for a specific project to successfully meet established goals.

As the primary governmental entity with jurisdiction for the Indian Trail-Lilburn Road corridor, Gwinnett County has to undertake several actions that would affect the projects identified in the LCI study. The first action is to ensure that the programmed transportation improvement projects for the corridor stay within their current schedule and that budgeted funds remain committed to these projects. There are two Gwinnett County SPLOST programs, years 2001 and 2005, which have active funding for projects in the Indian Trail-Lilburn Road corridor. Along those lines as mentioned above, it may be prudent to accelerate the engineering design of these projects by allowing the Gwinnett Village CID to take the lead. This would be a unique relationship for the Gwinnett Village CID and the first attempt could be for a project smaller in scope and as this process evolves, more challenging projects, which would result in larger benefits, albeit larger funding commitments, could be undertaken.

The second action for Gwinnett County is to develop and implement policies and land use, zoning, and development standard revisions that are supportive of the mixed use higher density promulgated projects proposed through this promulgated study. The Mixed Use Overlay District defines the requirements and development standards for the development and redevelopment projects that are envisioned. This zoning district can only be applied in designated Major Activity Centers. The next revision of the Future Land Use plan for Gwinnett County has to consider designating the area around Indian Trail-Lilburn Road and I-85 as a Major Activity Center for the application of the mixed use zoning.

At this time, Gwinnett County does not have an access management policy. Formal guidelines to plan for the number and location of driveways would direct subsequent development and redevelopment so that their access plans do not negatively impact the safety and operational capacity of Indian Trail-Lilburn Road. Using the work initiated by GDOT would assist in promulgating an access management plan for Gwinnett County.

Norcross and Lilburn have portions of the Indian Trail-Lilburn Road corridor within their city limits. As the projects envisioned through the LCI study cross their boundaries, it is important that there be a high level of consistency between the land use plans, zoning districts, and development standards of the cities and Gwinnett County. The primary action by the cities is to encourage and coordinate with Gwinnett County to make the appropriate land use plans plus development and access management policies.

6.3 Five Year Action Plan

A plan was developed identifying the implementation of the transportation improvement projects as part of the Indian Trail-Lilburn Road LCI study. The projects are in categories that group the LCI short term projects (over the next five years); LCI long term projects (over the next twenty years); Gwinnett County SPLOST projects; and projects listed in ARC's FY 06-11 Transportation Improvements Program. Estimates were prepared on the engineering, right-of-way, and construction costs as well as the fiscal year the funding would be needed. The priority of the catalyst development projects was previously identified.

Indian Trail-Lilburn Road LCI Corridor Study

Table 15: Five Year Action Plan

FIVE YEAR IMPLEMENTATION PLAN												
Indian Trail-Lilburn Road LCI												
Updated: 2/13/07												
Transportation Projects												
Description	Type of Improvement	Engineering Year	Engineering Costs	ROW Year	ROW Costs	Construction Year	Construction Costs	Total Project Costs	Responsible Party	Funding Source	Local Source & Match Amount	
LCI Short-term Priorities												
Expand Route 20 and Route 30 area of coverage	Transit	2007	\$0	N/A	\$0	2008	\$0	\$0	Gwinnett County Transit	Gwinnett County Transit	Gwinnett County Transit	\$0.00
Indian Trail-Lilburn Road at I-85 northbound on-ramp; M-0535 (construct separate westbound right turn lane)	Roadway	2007	\$77,500	2008	\$500,000	2009	\$775,000	\$1,352,500	Gwinnett Co	Gwinnett SPLOST	Gwinnett Co	\$155,000.00
Indian Trail-Lilburn Road Multi-use Path Phase 1 (Beaver Ruin Road to Oakbrook Pkwy)	Sidewalks/ Pedestrian	2008	\$77,500	2009	\$500,000	2010	\$775,000	\$1,352,500	Gwinnett Co/Gwinnett Village CID	LCI	Gwinnett Co/Gwinnett Village CID	\$155,000.00
Multi-use Path Bridge at Beaver Ruin Creek	Pedestrian Bridge	2008	\$17,600	2009	\$75,000	2010	\$176,000	\$268,600	Gwinnett Co/Gwinnett Village CID	LCI	Gwinnett Co/Gwinnett Village CID	\$35,200.00
Indian Trail-Lilburn Road Multi-use Path Phase 2 (Oakbrook Pkwy to Steve Reynolds Blvd)	Sidewalks/ Pedestrian	2008	\$82,500	2009	\$500,000	2010	\$825,000	\$1,407,500	Gwinnett Co/Gwinnett Village CID	LCI	Gwinnett Co/Gwinnett Village CID	\$165,000.00
Indian Trail-Lilburn Road Multi-use Path Phase 3 (Steve Reynolds Blvd to Burns Road)	Sidewalks/ Pedestrian	2010	\$60,000	2010	\$400,000	2012	\$600,000	\$1,060,000	Gwinnett Co/Gwinnett Village CID	Gwinnett Co/Gwinnett Village CID	Gwinnett Co/Gwinnett Village CID	\$120,000.00
Multi-use Path Bridge at Jackson Creek (Coordinate with Gwinnett SPLOST Project 4333)	Pedestrian Bridge	2011	\$17,600	2012	\$75,000	2013	\$176,000	\$268,600	Gwinnett Co/City of Lilburn	Gwinnett Co/City of Lilburn	Gwinnett Co/City of Lilburn	\$35,200.00
Indian Trail-Lilburn Road Multi-use Path Phase 4 (Burns Road to Lawrenceville Hwy)	Sidewalks/ Pedestrian	2011	\$100,000	2012	\$500,000	2013	\$1,000,000	\$1,600,000	Gwinnett Co/City of Lilburn	Gwinnett Co/City of Lilburn	Gwinnett Co/City of Lilburn	\$200,000.00
LCI Long-term Priorities												
Purchase 4 buses to increase Route 20 frequency of service	Transit	2012	\$0	N/A	\$0	2102	\$1,440,000	\$1,440,000	Gwinnett County Transit	Gwinnett County Transit	Gwinnett County Transit	\$288,000.00
Connector Road from Dickens Road to Burns Road (behind Market Center and Indian Trail Plaza area)	Roadway	2012	\$43,342	2015	TBD	2015	\$433,415	\$476,757	Private	Private	N/A	N/A
Connector Road from Indian Trail Road to Hillcrest Road (through Indian Trail Shopping Center area)	Roadway	2012	\$91,782	2015	TBD	2015	\$917,820	\$1,009,602	Private	Private	N/A	N/A
Connector Road from Indian Trail Road to Lawrenceville Hwy (through Indian Trail Commons area)	Roadway	2012	\$40,792	2015	TBD	2015	\$407,920	\$448,712	Private	Private	N/A	N/A
Gwinnett County SPLOST												
Brook Hollow Road from Indian Trail-Lilburn Road to Mitchell Street; 4448	Sidewalks/ Pedestrian	SPLOST 2001	\$112,495	TBD	\$0	TBD	\$1,406,190	\$1,518,685	Gwinnett County SPLOST	Gwinnett County	Gwinnett County	N/A
Indian Trail-Lilburn Road from Beaver Ruin Road/SR 378 to Lawrenceville Highway/US 29; F-0596 (includes project M-0439)	Sidewalks/ Pedestrian	SPLOST 2005	\$364,954	2007	TBD	2009	\$4,561,920	\$4,926,874	Gwinnett County SPLOST	Gwinnett County	Gwinnett County	N/A
Indian Trail-Lilburn Road at Oakbrook Parkway; M-0439 (intersection widening, dual westbound left turn lanes; includes project F-0596)	Roadway	SPLOST 2005	TBD	TBD	TBD	2007	TBD	TBD	Gwinnett County SPLOST	Gwinnett County	Gwinnett County	N/A
Indian Trail-Lilburn Road/Burns Road Intersection; 4181 (sight distance improvement)	Roadway	SPLOST 2001	TBD	TBD	TBD	TBD	TBD	TBD	Gwinnett County SPLOST	Gwinnett County	Gwinnett County	N/A
Indian Trail-Lilburn Road/Jackson Creek; 4333 (bridge, culvert, drainage improvements)	Bridge	SPLOST 2001	TBD	TBD	TBD	2007	TBD	TBD	Gwinnett County SPLOST	Gwinnett County	Gwinnett County	N/A
Indian Trail-Lilburn Road and Lawrenceville Highway/US 29; 4123 (intersection widening, dual lefts for all approaches)	Roadway	SPLOST 2001	TBD	TBD	TBD	2007	TBD	TBD	Gwinnett County SPLOST	Gwinnett County	Gwinnett County	N/A
Hillcrest Road/Satellite Boulevard Connector; F-0551 (new roadway and bridge over I-85)	Roadway	Long Range	\$700,000	Long Range	\$300,000	Long Range	\$3,000,000	\$4,000,000	Gwinnett County	State/Gwinnett County	Gwinnett County	N/A
Programmed Projects in FY 06-11 TIP and Mobility 2030												
Indian Trail-Lilburn Road from Beaver Ruin Road/SR 378 to Lawrenceville Highway/US 29; GW-321 (ITS fiber optic cable and cameras)	ITS	2009	\$52,500	N/A	\$0	Long Range	\$14,421,000	\$14,473,500	Gwinnett County	FHWA	Gwinnett County	\$52,500
Beaver Ruin Road/SR 378 from Buford Highway/US 23 to Lawrenceville Highway/US 29; GW-324 (ITS fiber optic cable and cameras)	ITS	2006	\$105,000	N/A	\$0	2008	\$1,421,000	\$1,526,000	Gwinnett County	FHWA	Gwinnett County	\$389,200
Totals			\$1,943,564		\$2,850,000		\$32,336,265	\$37,129,829				\$1,595,100

7. Conclusions and Recommendations

To guide the growth and development along the Indian Trail-Lilburn Road corridor, the Gwinnett Village CID undertook this LCI study to formulate the local community's vision for the future of their area. Through an analysis of the existing land use, market, and transportation conditions; direction offered by the Stakeholders Committee; feedback received from a telephone survey; and input solicited during public meetings, a plan was developed to help guide the types of development and redevelopment to lead to the creation of such a community.

The proximity of the corridor to and an interchange with I-85 provides opportunities for increasing the density of land use activities which will support the economic base needed to benefit the growth of the community as a whole. Through the study process key areas were identified for stimulating the potential development.

The priority that has been established to encourage the development and redevelopment with projects that will act as catalysts for other development activities were identified as:

- The Learning Village: neighborhood center at Willowtrail and Oakbrook Parkway
- The Interstate Gateway: transit oriented mixed use adjacent to I-85
- The Hillcrest Neighborhood Center: neighborhood village-scale centers

A redevelopment project that is tied to the property fulfilling its current economic usage is located at the Vulcan Quarry. Its currently projected service life is approximately 20 years. Consequently, a longer term project to contribute to the revitalization of the Gwinnett Village is The Quarryside Neighborhood: mixed use redevelopment.

The market analysis for these catalysts projects indicate the potential for the creation of 1,630 new housing units, 235,000 s.f. of support and mixed use retail, and 490,000 s.f. of new office space in the corridor. There would be sufficient market demand to support the creation of the proposed residential components of the projects. The market analysis also indicated that retail spending by new residents in the projects combined with attracting some additional demand from existing area residents, businesses, employees and visitors would support the proposed unique retail development.

Transportation improvement projects have been identified to meet the goals of the LCI program for increasing non-motorized accessibility and mobility and also support the land use plan for the proposed developments. The primary project recommended for construction is a multi-use path along the south side of Indian Trail-Lilburn Road that would provide connectivity along the corridor to and between the new developments as well as from the existing residential areas. To facilitate this multi-use path, separate pedestrian style bridges are recommended at Beaver Ruin Creek and Jackson Creek.

A transit service enhancement in the area that can be achieved without additional capital is expanding the coverage of the Route 20 and the Route 30. It is recommended that coordination be advanced with GCT to analyze the impact to schedule and operations with additional street coverage and stops in the Gwinnett Village. Longer term enhancements that require capital is to decrease the headways between buses. To have the arrival interval of the buses be less necessitates purchasing more buses which requires capital and will also result in an incremental increase in operation and maintenance budgets.

A vehicular safety improvement that will have an immediate impact to reduce the crash experience is the construction of the westbound right-turn lane for Indian Trail-Lilburn Road at the I-85 northbound ramp. Gwinnett County has a project in their SLOST program to build this improvement and it is recommended that its construction be accelerated.

As more of a long range plan to provide improved circulation and access management at the eastern end of the corridor, parallel routes between Indian Trail-Lilburn Road and Lawrenceville Highway, which would be tied to privately funded redevelopment projects, should be explored.

With the goal of fulfilling the vision of a truly “livable center”, the Indian Trail-Lilburn Road corridor is preparing to move into its next phase of development, that of a more diverse community of opportunities. With the proposed projects in this report as the framework to create different developmental mixed use projects which will form the basis of a thriving community, the Indian Trail-Lilburn Road corridor will be postured to capture increased quality commercial, office, institutional, and residential growth that will be occurring in Gwinnett County over the next 20 years.