

city of
ALPHARETTA



downtown circulation study

Final Recommendations Report

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With

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1.0 Introduction

1.1 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 2003, the City of Alpharetta developed the *Downtown Master Plan* as a separate initiative. At the time, the City developed the Plan to meet or exceed the goals and objectives of the LCI program. A year later, the City petitioned ARC to grandfather the *Downtown Master Plan* into the LCI program. ARC agreed and the City's downtown area became a formal part of the LCI program making it eligible for future study and implementation funding.

The City of Alpharetta received a supplemental LCI grant in 2007 to study circulation in and around the downtown area. This study is envisioned to be the first opportunity to implement elements of the *Downtown Master Plan* by identifying strategies and projects to improve pedestrian and bicycle connections, mitigate traffic volumes and speeds, develop stronger transit presence, review and suggest parking strategies, and provide expanded development and redevelopment opportunities throughout the downtown area.



1.2 Study Area

The area defined for this study is roughly bordered by Mayfield Road to the north, Haynes Bridge Road to the east, SR 120/Old Milton Parkway to the south, and the old Milton High School property to the west. The area is bisected by SR 9 (known locally as Main Street), a major north-south arterial roadway connecting Atlanta to the northern suburbs. SR 9 also serves as a parallel facility to SR 400 (and US 19), a limited access freeway

connecting Atlanta to Dahlonega.

A consultant team led by URS Corporation in conjunction with Sprinkle Consulting, and Urban Collage was retained to assist in conducting the study. Opportunities for public outreach and input were conducted with a project kick-off meeting December 12, 2007. The Final Plan was presented at a Public Information Meeting held on March 19, 2008.

1.3 Study Area Transportation System

This section of the report presents a brief overview of the *Existing Conditions Report* developed in February 2008 that inventoried and documented transportation and land use found in the downtown Alpharetta study area. It is from that report that the baseline was established for understanding the transportation characteristics as well as land use and urban design. Below is a brief summary of the area's current transportation system.



1.3.1 Functional Classification

Three Urban Minor Arterials, SR 9/Main Street, SR 120/Old Milton Parkway, and Haynes Bridge Road contain a posted speed limit of 35 mph except for the segment of SR 120/Old Milton Parkway east of Main Street which is posted at 45 mph. All other roadway facilities are classified as Collector or Local and have a speed limit no higher than 35 mph.

1.3.2 Regional Strategic Transportation System (RSTS)

Both SR 9/Main Street and SR 120/Old Milton Parkway (within the Study Area) have been identified through this system and are eligible for federal funding to mitigate congestion.

1.3.3 Traffic Control

Signalized intersections: 9

1.3.4 Cross Section

- SR 9/Main Street: Two lanes in each direction with no center turn lane or median; turn lanes available at intersections with SR 120/Old Milton Parkway and Academy Street/Milton Avenue. At the Mayfield Road intersection, one northbound lane becomes a dedicated left turn lane.
- Haynes Bridge Road: Two lanes in each direction with median. South of SR 120/Old Milton Parkway, road becomes six lanes.



- SR 120/Old Milton Parkway: west of SR 9/Main Street – two lanes in both directions with median; east of SR 9/Main Street – three lanes in both directions with median.
- Academy Street: west of Haynes Bridge Road – two lanes in both directions with no center turn lane; east of Haynes Bridge Road – one lane in both directions.
- Milton Avenue: one lane in each direction.
- Roswell Street/Canton Street: one lane in each direction.
- Mayfield Road: one lane in each direction.

Table 1 displays the average traffic volume on certain key roadway segments within the Study Area as well as that segment's level-of-service. Table 2 shows the crash data compiled from the Georgia Department of Transportation's CARE database.

Table 1
Annual Average Daily Traffic and Level of Service

Segment	AADT	LOS
SR 9/Main Street from SR 120/Old Milton Parkway to Academy Street	26,090	D
SR 9/Main Street from Mayfield Road to Winthorpe Park Drive	22,840	D
Haynes Bridge Road from SR 120/Old Milton Parkway to Academy Street	17,200	D
SR 120/Old Milton Parkway from Main Street to Haynes Bridge Road	50,460	E

Source: GDOT

Table 2
Crash Experience

Route Name ¹	From/To	Length (miles)	Average Daily Traffic	Crash Rate (Crashes per 100 MVM) ²
SR 9	SR 120/Old Milton Parkway to Milton Avenue	0.31	26,090	927
SR 9	Milton Avenue to Cumming Street	0.18	27,330	851
SR 120	Haynes Bridge Road to Park Street	0.27	16,270	355
SR 9	Roswell Street to SR 120/Old Milton Parkway	0.40	8,260	291
Haynes Bridge Road	SR 120/Old Milton Parkway to Academy Street	0.24	33,810	279

Source: GDOT CARE Database, 2004 -2006 and available 2007 data (July-January)

¹ Locations are approximate

²MVM = Average crash rate in million vehicle miles

1.3.5 Transit

Route 140 – North Point/Mansell Road Park/Ride

Travels along SR 400 from the MARTA North Springs rail station (N11) to the Mansell Park and Ride lot located at the southwest quadrant of the SR 400/Mansell Road interchange. Using North Point Parkway and Old Milton Parkway, this route loops around downtown before returning to SR 400.



Route 185-Alpharetta/Holcomb Bridge Road

Follows SR 400 to SR 140/Holcomb Bridge Road then turns north along SR 9/120-Alpharetta Highway (Main Street within the Alpharetta city limits) continuing east across SR 400 along Windward Parkway to North Point Parkway.

Route 143 – Windward Park/Ride

While not directly serving the Study Area, this route intersects with Route 185 in the Windward Parkway area north and east of downtown.

1.3.6 Bicycle/Pedestrian

- No formal bicycle facilities
- Pedestrian facilities/sidewalks exist on nearly all roadways within Study Area
- Crosswalks and pedestrian signals are present at all signalized intersections
- A variety of streetscape amenities exist along Main Street, Milton Avenue, Canton Street, Roswell Street, Old Milton Parkway, Marietta Street, and Haynes Bridge Road

1.3.7 Existing Land Use

- The “downtown” of Alpharetta is centered at the crossroads of SR 9/Main Street and Milton Avenue/Academy Street
- SR 9/Main Street is bordered almost exclusively by retail and civic/institutional properties
- Milton Avenue includes the old Milton High School site, a cemetery and the study area’s only light industrial use
- Canton Street area (north of Milton Avenue) is largely residential including a variety of older single family homes and several proposed and new residential townhome developments
- Roswell Street (south of Milton Avenue) includes a number of older homes and buildings that have been converted to small office space
- Marietta Street includes some older residences and Victoria Square, a new attached townhome development

1.3.8 Parking

- On-street parking along both sides of Milton Avenue, just east of its intersection with Roswell Street/Canton Street
- On Old Roswell Street, just south of Milton Avenue
- On South Main Street adjacent to City Hall at the intersection of Main Street and Academy Street
- On Roswell Street, located across from the intersection of Roswell Street and Old Roswell Street
- Private parking is also provided in association with a number of the retail and commercial establishments, office, institutional, and residential facilities within the study area (such as the Publix grocery store)





2.0 Recommendations

2.1 Introduction

Like many cities across the state of Georgia, Alpharetta has several state routes and major roadways that converge in or close to the downtown area. As Alpharetta and the surrounding area grew over the last two decades, these roadways were widened to accommodate ever growing traffic volume. Now, as Alpharetta begins the process of reclaiming and redeveloping its downtown area, these major roadways have become impediments. Speeding traffic, unsafe pedestrian conditions, and lack of land use connectivity have segmented the downtown area. One example is the lack of convenient pedestrian crossings along Main Street. Pedestrians frequently stand in the middle of the road to wait for traffic to clear before continuing across the street. There is no center turn lane or median for the pedestrian to take refuge in so therefore, he puts himself and others at risk.

As part of the Downtown Alpharetta Circulation Study, the Team reviewed common and innovative ways to improve circulation in and around the downtown area by mitigating the impact roadways have, augmentation of additional transit service to provide options to the automobile, improving bicycle connections from downtown to other city amenities such as the Big Creek Greenway, and improving safety for those wishing to simply walk. All of these enhancements coupled with land use suggestions mentioned later in this section will ensure all modes of transportation are weaved seamlessly throughout downtown Alpharetta making the area a desirable place to live, shop, and visit. As each mode of transportation is addressed, specific objectives will be highlighted and addressed by the recommendations.

2.2 Roadways

Objectives:

- ***Move predominant north-south movement off of Main Street***
- ***Redesign Main Street to improve safety and connectivity while maintaining mobility***

In order to begin the process of stitching downtown Alpharetta back together and improving overall traffic flow in and around the downtown area, the need to move significant amounts of traffic volume off of Main Street is imperative. The following section represents a compilation of improvements along Main Street to improve safety for pedestrians and bicyclists and mitigate the impact Main Street currently has in the downtown area. Following the section, Table 3 shows estimated costs for each recommendation.

Recommendation: Assign SR 9 designation to other existing facilities

This recommendation would reassign the SR 9 designation using existing roadways in order to allow Main Street to be returned to City control. From the intersection of

South Main Street and Old Milton Parkway, SR 9 would follow SR 120 eastbound to the intersection with Westside Parkway approximately $\frac{3}{4}$ mile east of downtown. SR 9 would then turn north on Westside Parkway (currently under construction) to the Westside Parkway/Windward Parkway intersection. At this point, SR 9 could either follow Windward Parkway west back to the existing SR 9 alignment or continue north on Deerfield Parkway to the existing SR 9 alignment. In addition to making signing changes, a minor intersection modification at Main Street and Old Milton Parkway to add dual right turn lanes from northbound Main Street to eastbound Old Milton Parkway would facilitate better through traffic flow.



Because reassignment of a state route is being recommended, GDOT would need to be involved early and often to ensure the regional through movement can be maintained.



Recommendation: Adjust Lane Widths

It may be acceptable to reduce lane widths to reduce pedestrian crossing distances, reallocate space for medians, and/or add on-street parking or bicycle lanes. According to the American Association of State Highway and Transportation Officials (AASHTO) *Green Book* for rural and urban arterials, lane widths may vary from 10 to 12 feet. The *Green Book* states 12-foot lanes should be used where practical on higher speed, free-flowing, principal arterials. However, under interrupted-flow (i.e. roads with signals) operating conditions at low speeds (45 miles per hour or less¹), narrower lane widths are normally quite adequate and have some advantages.



Despite the guidance in the AASHTO *Green Book*, two primary arguments are used against the concept of reducing lane widths: narrow lanes reduce capacity; and, narrow lanes increase crashes. In 2007, Kittleson and Associates performed a literature search to evaluate findings of research on impacts to urban street capacity resulting from narrowing lane widths. The findings of this literature search are presented below:

All of the relevant research is in general agreement as to the impact of narrowing lane width on saturation flow for through lanes on signalized intersection approaches. The measured saturation flow rates are similar for lane widths between 10 feet and 12 feet. For lane widths below 10 feet, there is a measurable decrease in saturation flow rate. Thus, so long as all other geometric and traffic signalization conditions remain constant, there is no measurable decrease in urban street capacity when through lane widths are narrowed from 12 feet to 10 feet.²

¹ AASHTO. *Geometric Design of Highways and Streets*, pg. 473, AASHTO, Washington, D.C., 2004.

² John Zegeer, in a memo to Sprinkle Consulting Engineers, March 22, 2007.

With regard to safety, much research has been performed evaluating the crash impacts of narrowing lanes. Most recently, the Midwest Research Center³ reported:

A safety evaluation of lane widths for arterial roadway segments found no indication, except in limited cases, that the use of narrower lanes increases crash frequencies. The lane width effects in the analyses conducted were generally either not statistically significant or indicated that narrower lanes were associated with lower rather than higher crash frequencies. There were limited exceptions to this general finding.

The report went on to say:

The research found three situations in which the observed lane width effect was inconsistent—increasing crash frequency with decreasing lane width in one state and the opposite effect in another state. These three situations are:

- *lane widths of 3.0 m (10 ft) or less on four-lane undivided arterials*
- *lane widths of 2.7 m (9 ft) or less on four-lane divided arterials*
- *lane width of 3.0 m (10 ft) or less on approaches to four-leg STOP-controlled arterial intersections*

Because of the inconsistent findings mentioned above, it should not be inferred that the use of narrower lane must be avoided in these situations. Rather, it is recommended that narrower lane widths be used cautiously in these situations unless local experience indicates otherwise.

This goal addresses two issues that combined will add to the aesthetic beauty of the downtown area while providing the sense of place as well as improving the overall circulation in and around the downtown area.

Recommendation: Addition of a raised median along Main Street

The installation of a raised median along Main Street from (at least) SR 120/Old Milton Parkway to Mayfield Road would provide multiple benefits. First and foremost, medians tend to slow traffic down as the perception of drivers assumes the roadway is not as wide. Further, medians can provide refuge for crossing pedestrians if necessary. Medians can also provide aesthetic value to the downtown area with the addition of street trees and foliage, lighting and the like (Figure 1). The one drawback is the potential need for additional right-of-way along the corridor. Also, on-street parking may be lost to accommodate the same amount of lane counts as Main Street approaches Academy Street. Criteria recognized by GDOT suggest Main Street could be a positive candidate for a raised median. Currently, Main Street is classified

³ Ingrid B. Potts, Harwood, D., Richard, K., *Relationship of Lane Width to Safety for Urban and Suburban Arterials*, Transportation Research Board, 2007 Annual Meeting.

as an arterial with traffic volume above 18,000 vehicles per day, has high turning volumes, has a large number of driveways, and has the need to provide more pedestrian crossings especially in the area between Marietta and Academy Streets. Additional benefits of a raised median include reducing vehicular head-on crashes, improved left-turn movements, and better opportunities for addressing access management in the downtown area.

Business and property owners tend to be the loudest opponents to the installation of medians; however, it should be pointed out that numerous surveys across the United States have shown little or no impact to patronage of stores where a median was installed and that in some cases, property values actually increased after the installation of a median. According to an Iowa State University Study in 1997 related to the installation of a raised median, four in five businesses saw increased sales and nearly 90% of the motorists using the corridor had a favorable rating for the median. Furthermore, in a 1999 Texas study, specialty retail, fast-food establishments, and sit-down restaurants all experienced increases in customers per day, overall sales, and property values after median installation. If the City chooses to pursue a median along the Main Street corridor, it is imperative to engage business and property owners early and often to ensure information is factual and accurate.



Figure 1
Example of a raised median with landscaping in an urban area



Figure 2
Wayfinding Sign in Grapevine, TX

Recommendation: *Additional streetscape treatments such as pole banners, signing, other design elements on road signs*

When the Team interviewed key Alpharetta staff, it was mentioned that Alpharetta suffers from a lack of the appearance of a “downtown”. With the construction of the new City Hall as part of the City Center development, this perception will be mitigated slightly; however, additional measures may be required to tell the motorists (or bicyclist, transit rider, etc) that “you have arrived at downtown Alpharetta!”

In addition to the streetscape treatments already constructed by the City, other enhancements can be made to further define the character of the downtown area.

Capitalizing on the historic nature of downtown, the addition of pole banners, wayfinding road signs for motorists (Figure 2), and distinctive road name signs placed on the mast arms at signalized intersections (Figure 3) would be beneficial. Additional opportunities to capitalize on the downtown's historic nature include signing for parking facilities as well as pedestrian wayfinding signage. Finally, Alpharetta could highlight its city limits by erecting more prominent banner or plaque signs introducing travelers to the City and displaying its historic past. The pole banners displayed throughout downtown are a source of pride to the City of Alpharetta and they could easily be incorporated into any recommendations coming from this report. Additionally, the continuation of more traditional street furniture and lighting in the Georgian Revival design style should be encouraged



Figure 3
Street Sign in Grapevine, TX

Table 3
Recommendations for SR 9/Main Street

Segment	From/To	Type of Improvement	Cost
Reassign SR 9 Markers along existing streets	Old Milton Parkway/South Main Street to Windward Parkway/ North Main Street	Signage	\$40,000
Create dual-right turn lanes from NB Main Street to EB SR 120	South Main Street at Old Milton Parkway	Striping/ Signing	TBD (part of maintenance?)
Adjustment of Lane Widths	Old Milton Parkway to Mayfield Road	Striping	Variable (part of maintenance?)
Add raised median with landscaping	Old Milton Parkway to Mayfield Road	Median	\$270,000 (excluding ROW)
Additional streetscape treatments such as pole banners, signing, other design elements on road signs	Throughout downtown	Streetscape Elements	Variable

Source: Atlanta Regional Commission's Project Costing Tool

NOTE: The figures above are estimates.

Select Link Analysis

During development and review of the roadway recommendations, the Team ran a sketch analysis using estimated traffic flows from the Atlanta Regional Commission (ARC) travel demand model. This analysis was conducted using a select link process in the ARC model to estimate the AM and PM peak period origins and destinations of traffic passing through Main Street, just north of Old Milton Parkway.. It is important to note this analysis was conducted using the ARC model, a planning model which cannot directly incorporate the affects of signal timing and other traffic operational



controls on traffic patterns. As such, these results are intended to provide a general idea of traffic flows in and around the Study Area.

The results indicate that in both the AM- and PM-peak periods, roughly 30 percent of the traffic passing through Main Street from the south is heading to or coming from SR 400 via the Haynes Bridge Road interchange. It is on the north approaches to downtown Alpharetta that the influence of Westside Parkway's opening is most visibly felt in year 2010, with virtually no traffic coming from or going to the area northeast of downtown along Windward Parkway. As a result, despite only moderate increases in actual traffic volume, there appears to be a much larger amount of traffic coming from/going to the areas north and northwest of Downtown Alpharetta. The end result is that the model is predicting substantial decreases in traffic volume along Main Street in downtown Alpharetta once Westside Parkway is opened.

These projected changes in traffic distributions and volume have the potential to positively affect the livability of the downtown Alpharetta area, and further detailed traffic study is recommended after Westside Parkway is open.

For Additional Discussion:

Haynes Bridge Road Extension

This long-discussed option would require new or upgraded facilities to move pass-through traffic to Haynes Bridge Road. The construction of a new roadway starting at Academy Street and Haynes Bridge Road continuing to the intersection of Mayfield and Main Streets would be required to remove the "dog leg" movement currently occurring along-Academy Street-between Haynes Bridge Road and Main Street. This new roadway segment would be approximately ½ mile in length and be a four lane facility with a median and sidewalks on both sides.

The Team reviewed this option and chose to not include it as a formal recommendation primarily due to its cost which could approach \$16,000,000. Additionally, the impact to surrounding businesses and neighborhoods (most notably the Baptist and Methodist church properties) would be great and would require significant mitigation.

"Cut the Corners" – Haynes Bridge Road Realignment

This fairly new idea would "cut the corners" between Haynes Bridge Road and Main Street via a pair of smooth curves. Academy Street, Manning Street and Main Street would all require realignment to better intersect the "new" Haynes Bridge Road.

The Team reviewed this option and chose to not include it as a formal recommendation again primarily due to its cost estimated at \$14,000,000. Additionally, there would be a need to displace at least one and possibly two existing businesses.



Put Main Street on a “diet”

One benefit, of moving through traffic onto Haynes Bridge Road is the ability to create a true “Main Street” by emphasizing pedestrian and bicycling rather than vehicle travel. The segment of Main Street from Old Milton Parkway to Mayfield Road would be given a “road diet” – that is, reduction of travel lanes from four to two. The additional roadway footprint could be used to add parallel or angled parking, widened sidewalks, bicycle lanes, or a large median with appropriate trees and/or plantings. However, absent the removal of significant traffic volume off of Main Street, the idea of removing lanes would not be feasible.

North Fulton Traffic Management Plan

Additional study may also be needed to address traffic moving from northwest Fulton and eastern Cherokee County via Mayfield, Mid-Broadwell, and Rucker Roads. In concert with neighboring jurisdictions, notably the City of Milton, a more comprehensive study of traffic patterns throughout this quadrant of the region would be advantageous.



2.3 Transit

Objective: *Augment and expand transit options in the Study Area*

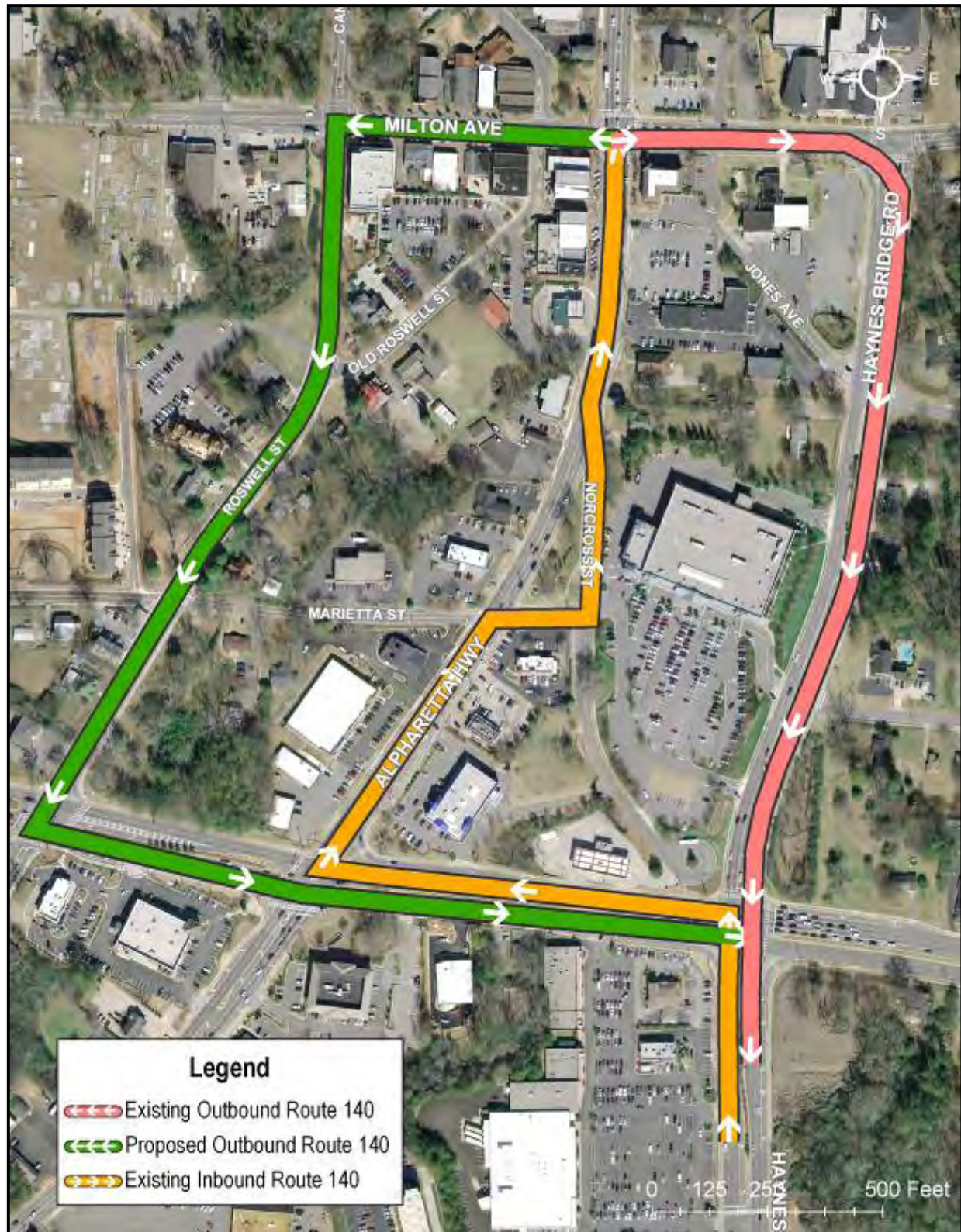
Recommendation: *Expanded MARTA service*

MARTA recently began a System Optimization Study to explore the routing and service of the bus and rail elements. This may be an opportunity for the City to explore expansion of the two MARTA routes currently serving the downtown area. As the Business District continues to grow west of Main Street, the need for enhanced transit service becomes more and more important.

To improve transit service within the downtown area, the Team is recommending the realignment of MARTA Route 140 (Figure 4). Currently, the route loops around the eastern part of downtown via South Main and Academy Streets and Haynes Bridge Road continuing to the North Point Mall area. The Team proposes the route be modified as follows. After making the northbound turn onto South Main Street, the route would continue north to Milton Avenue where it would turn west. The route would travel two blocks to Roswell Street where it would turn south then turn east on SR 120/Old Milton Parkway and returning south on Haynes Bridge Road. The loop to the Alternative School would be maintained on days when school is in session and the loop onto Norcross Street would also be maintained. Addition of this leg of the route would open direct transit service to residential properties developing along the western side of downtown along Roswell and Canton Streets. Additionally, it is expected no significant physical roadway improvements (widened lanes, increased turning radii, etc.) would be required to accommodate the standard MARTA transit vehicle; however, some signal retiming may be needed to address the transit vehicle's turning movements.

Other potential enhancements of transit service in downtown include increasing the frequency of service, creation or relocation of bus stops, and/or the exploration of new route(s) in and around the downtown area.

Figure 4
Proposed Change in MARTA Route 140



Recommendation: Add/Improve Amenities at Transit Stops

Following design guidelines already in place with the streetscapes in the downtown area, there is an opportunity to improve transit stops to better weave their impact into the adjacent area. The primary addition would be a bus shelter that would offer cover from weather and benches for patrons while waiting for the transit vehicle. These stops could be accented with brick or other similar materials to ensure they visually blend with the surrounding community. Additionally, pavers could be used in the sidewalk to highlight the transit stop. Signing could be upgraded to identify specific routes that serve the stop as well as phone numbers to reach customer service representatives. Finally, special pavement markings could highlight the transit stop to motorists.



Figure 5
Standard bus shelter with associated amenities
without advertising

It is important to note the City currently prohibits ad-supported bus shelters through its sign ordinance. However, this would not deter the construction of bus shelters completely. Figure 5 shows an example of a standard bus shelter without any form of advertising. Improved bus stops with shelters, pavers and adjacent sidewalk improvements typically cost about \$10,000 per stop. Currently, there are 14 bus stops throughout the downtown area covering Main Street, Haynes Bridge Road, and Old Milton Parkway, including two within the Alternative School site. Additionally, in order to bring a unique element to each stop, a special theme could be implemented that highlights important points about downtown such as historical facts or whimsical items such as “fun facts” or the like.

For Additional Discussion:

Shuttle/Circulator

The Team explored the possibility of implementing a shuttle or circulator system in the City that would connect various major destinations such as the business district in the downtown area, the North Point Mall and surrounding commercial properties, and the Windward Parkway area. However, the Team chose to not include a formal recommendation for two main reasons:

- **Cost** – the cost of a simple circulator/shuttle system would be quite extensive. In this region, there is a lack of dedicated funding reserved for transit



systems. In fact, several activity centers such as the Cumberland/Galleria area have performed feasibility studies to implement shuttle service and have found the financial burden too great to overcome. A potential opportunity exists to partner with the North Fulton Community Improvement District (CID) to implement a circulator system in Alpharetta; however, if that does not come to fruition, the City would be forced to fund 100% of the capital and operations costs.

- **Land Use** – the areas the circulator would connect (other than downtown) do not support effective transit routing. Most businesses in and around the North Point Mall and Windward Parkway areas have extensive parking lots that front the roadway. A transit rider would be forced to walk the length of this parking with no pedestrian protection in place. Additionally, the majority of shopping center owners do not wish to have transit vehicles of any type utilizing their service roadways. If a center owner did allow transit vehicles to provide curbside service, more vehicles would be required in order to maintain efficient and timely service pushing the operations costs even higher.

One important note: the recently completed *North Point LCI Study* recommended the redevelopment of large expansive surface parking lots in the North Point area to increase densities and better support transit service. If this type of redevelopment takes place, there may be future opportunities to explore improved transit connectivity.

Other Projects of Note:

Bus Rapid Transit (BRT) along SR 120

The Transit Planning Board's (TPB's) *Concept 3* calls for Arterial BRT along SR 120 between Marietta and Lawrenceville including the stretch through the Study Area. Although this project remains in the conceptual phase, there could be future opportunities for connection to and interaction with this service as well as provide development and redevelopment opportunities around the stations once the project moves into design.

MARTA Rail Expansion to Windward

Concept 3 also calls for the MARTA North Heavy Rail line to be extended along SR 400 between North Springs (N11) and the Windward Parkway area. While this proposed transit service does not directly connect the Study Area to the surrounding area, there could be an opportunity in the future for connection via a MARTA bus route or connector shuttle. This would be especially advantageous for the reverse commuter and those wishing to visit the downtown Alpharetta area without the use of a car.

2.4 Pedestrian Conditions

Objective: *Create a safe and enjoyable pedestrian experience throughout the Study Area*

Recommendation: *Improve and augment pedestrian facilities throughout the City*

As was noted in the *Existing Conditions* report, sidewalk coverage within the study area is generally good. There are occasional gaps, such as streets with sidewalks on one side only, but only one segment — Marietta Street between Roswell and Main Streets — suffered from having no sidewalks at all. These gaps do not seriously hinder mobility within the downtown area. It is recommended a requirement be put in place that would require sidewalks to be constructed as part of any redevelopment of property fronting these segments (see Table 4), but until such time, closing these gaps is less critical to overall mobility in the Study Area.

Table 4
Potential Sidewalk Projects

Road(side)	Facility Type	From	To
Marietta Street (N)	Sidewalk	Wilshire Glen	Roswell Street
Marietta Street (N&S)	Sidewalks	Roswell Street	Main Street
Old Canton Street (W)	Sidewalk	Canton Street	Milton Avenue
Church Street (N)	Sidewalk	Canton Street	North Main Street
Milton Avenue (S)	Sidewalk/Driveway Consolidation	Cemetery	Canton Street

Americans with Disabilities Act (ADA) Issues

The *Existing Conditions* report noted instances of sidewalk and curb ramp facilities that were not in compliance with ADA standards. It was noted that at some driveway crossings, sidewalks did not stay within the maximum 2 percent cross slope required for an accessible route. It is important that the City be proactive about correcting such issues. Maintaining a proper accessible route in such situations can be challenging, especially when sidewalks are built immediately at the back of the curb. An accessible route can be maintained by the use of parallel ramps that drop the sidewalk to the grade of the street and begin the incline of the driveway at the back of the sidewalk.

Another approach is to divert the accessible route to where the driveway has leveled off; this may require the acquisitions of additional right-of-way. The standards for curb ramps now also include the provision of standard detectable warning strips to alert visually impaired pedestrians that they are entering a vehicular way. It is

recommended that the City review its ADA Transition Plan to ensure that it includes sidewalk and curb ramp improvements.⁴

It is also important that any streetscape improvements associated with redevelopment be careful to maintain the necessary clearances for accessible routes. ADA regulations require that accessible routes be at least 36 inches wide, with a 60-inch passing zone at least every 200 feet. Going beyond this minimum requirement, a good practice is to utilize the “Sidewalk Zone System,” developed by the City of Portland, Oregon, which recommends preferred widths for different functional areas of sidewalk corridors in high volume, urbanized areas.



Figure 6
Pedestrian Zone along Milton Avenue looking west

The Zone System recommends a minimum of 60 inches for the pedestrian zone – that area intended primarily for pedestrian movement. The pedestrian zone is separated from building facades by the frontage zone, which should be at least 30 inches wide, to allow a shy distance from buildings and a clearance for outward swinging doors. The frontage zone should be wider if sidewalk cafes or other extensions of businesses into the sidewalk are going to be encouraged. Between the pedestrian zone and the street is the

planter/furniture zone. This zone is a good place for street tree plantings, bus shelters, benches, or seating not associated with a certain business, utility poles, fire hydrants, and bicycle racks. The planter/furniture zone provides a place for such permanent fixtures that may otherwise obstruct the movement of people through the pedestrian zone. It also serves as a buffer between pedestrians and traffic. The zone system recommends a minimum width of two feet for the planter/furniture zone; four feet if trees are planted. It is important to preserve sight triangles at intersections and driveways, especially if a sidewalk area is also designed to accommodate bicycles. Any streetscape enhancement designs considered in the downtown area should carefully allocate the width of each of these sidewalk zones. However, when space is constrained, it is most important to respect the functional needs of the pedestrian zone and the legal requirements of the ADA.

Figure 6 shows a situation on Milton Avenue where the accessible way is maintained but planters and utility poles constrict the pedestrian zone. To use an existing example, the North Point Activity Center recommends sidewalks with a

⁴ Self evaluations and transition plans are required by Title II of the Americans with Disabilities Act, to rectify barriers to all programs, services, facilities, policies, practices, and procedures provided by government entities. In 2002 the 9th Circuit Court of Appeals, ruling in the case Barden v. Sacramento, declared that public sidewalks qualify as a program, service, of facility, and are therefore subject to inclusion in the self evaluations and transition plans mandated by Title II of the ADA.



planter/furniture zone that is generally 5-10 feet (depending upon the adjacent roadway and GDOT standards for horizontal setback of trees and lights) and a 10-12 foot clear sidewalk zone. The downtown area should duplicate similar dimensions where applicable. Recommended ADA improvement projects appear in Table 5.

Table 5
ADA Improvement Projects

Location	Project Type
Citywide	Update ADA Transition Plan
Citywide	Provide Accessible Routes across driveway cuts
Citywide	Upgrade curb ramps to current standards

Intersections

The AASHTO *Green Book*⁵ provides extensive guidance for the design of intersections. Through this guidance, the *Green Book* provides principles for intersections. While the *Green Book* is not written primarily as a pedestrian design document, the City of Alpharetta can become more pedestrian- and bicycle- (and motorist-) friendly, through the appropriate and consistent application of these principles. These principles are discussed in the following sections. They apply to any intersection, but they should be especially relevant to dealing with the crossing conditions found at the intersections of Haynes Bridge Road and SR 120/Old Milton Parkway, Haynes Bridge Road and Academy Street, and Academy Street/Milton Avenue and Main Street.

Provide for clearly visible conflicts

Conflict areas between motor vehicles, bicycles, and pedestrians should be clearly visible to all users. Landscaping should be designed to ensure clear sight lines. Pedestrian staging areas should not be shielded from motorists by large poles, signal controller boxes, or other visual screens. With special regard to channelization islands, pedestrian crossings to and from the islands should be placed on the approach side of the island. This will help ensure that pedestrians will be located where drivers are looking – adjacent to the roadway directly in front of the motorists.

Provide for conflicts to occur at low speeds

Speed is a major factor in both the likelihood and the severity of crashes. When crashes involve pedestrians, the probability of fatality rises dramatically with the speed of the vehicle, more than doubling when speeds are increased from 20 to 30 miles per hour.⁶ Where pedestrian crossings occur, three things must be accomplished to ensure the safety of the crossing:

⁵ American Association of State Highway and Transportation Officials, *A Policy on Geometric Design of Highways and Streets*, AASHTO, Washington, D.C., 2004.

⁶ American Association of State Highway and Transportation Officials, *Guide for the Planning, Design, and Operations of Pedestrian Facilities*, AASHTO, Washington, D.C., July, 2004.

- It must be clear that a conflict area exists;
- Both motorists and pedestrians must be made aware of their responsibilities to yield; and,
- There must be adequate time for motorists and pedestrians to react appropriately.

All three of these objectives can be more readily accomplished by reducing travel speeds.

Use small radii

Closely related to the previous principle is the use of small radii. Intersections need to be designed to accommodate the appropriate users. Arterial-to-arterial intersections should be designed to accommodate larger trucks, semis and buses. Arterial-to-collector intersections may not need to be designed for these larger vehicles; service vehicles such as delivery trucks are probably more appropriate design users. Local roadway intersections should be designed to easily accommodate passenger cars turning from the right lane to the right lane. Local roadway intersections must be able to accommodate the occasional moving van or emergency vehicle; however, these vehicles may use the entire intersection area to turn.

According to the *Green Book*, curb radii into minor side streets in urban areas usually range from 5 to 30 feet. It goes on to note that on most streets, curb radii of 10 to 15 feet are reasonable. For streets with heavy turning volumes, 15 to 25 feet may be necessary to ensure efficient traffic operations. It should be noted that AASHTO recognizes when on-street parking is present; the effective turn radius includes the width of the parking lane and the curb radius dimension.

Provide for conflicts at right angles

Skewed intersections often result in difficulty for left-turning vehicles. Free-flow turns resulting in merging and weaving areas downstream of the intersection can increase traffic congestion if they do not have an adequate length. The *Highway Capacity Manual* tables do not provide for any weaving distances less than 500 feet; for these short sections, gap acceptance (yield control) slip lanes frequently provide better capacity and safety for motorists.



Figure 7
Preferred Placement of Crosswalk on Approach
Side of Channelization Island

Right turn slip lanes, when designed with the preferred geometry

presented in the AASHTO Pedestrian Guide and the National Highway Institute's Pedestrian Facility Design course, also provide significant advantages for pedestrians. By placing the crosswalk crossing of the right-turning movement on the approach end of the slip lane, the pedestrian is in a better position to be seen by approaching right-turning motorists (Figure 7).

Additionally, placing the crosswalk at this location usually results in its placement about 20 feet in advance of the point at which right-turning motorists must yield to cross street traffic. The combination of the geometry and crosswalk placement makes for a crossing much like a modern, urban compact roundabout⁷ which has been found to improve safety for pedestrians over right turn on red operations. A recent study has also found that right turn channelization islands are seen as beneficial by pedestrians at intersections with higher right turn volumes.⁸

The City of Alpharetta makes use of curb extensions where there is on-street parking (Figure 8). This practice not only reduces pedestrian crossing distances, it provides space for plantings and for ADA compliant curb ramps. Additionally, it defines the motorist's turning radius and reduces turning speeds. This practice of using curb extensions should be continued and expanded to new locations as appropriate.

Provide positive guidance for vehicles and pedestrians

Large intersections can result in confusion for drivers and pedestrians. Guide striping, signage, signalization, channelization, and geometry should all serve to direct the users along well defined paths.



Figure 8
Example of Curb Extension along South Main Street

Accessible pedestrian signals with audible signals also provide positive guidance by queuing all users when to begin crossing.⁹ This guidance can be further enhanced by the use of a pilot light which illuminates upon activation of the push button (much like that of an elevator push button). Two FHWA-sponsored studies have recently found that these pilot lights reduce violations of the DON'T WALK signal by pedestrians.

Signals which count down the remaining seconds of flashing DON'T

⁷ Federal Highway Administration, *Roundabouts: An Informational Guide*, FHWA, Washington, D.C., 2000.

⁸ Petritsch, et al, *Pedestrian Level-of-Service Model for Urban Arterial Facilities with Sidewalks*, Transportation Research Record 1982, Transportation Research Board, Washington, D.C., 2006.

⁹ Federal Highway Administration, *Manual on Uniform Traffic Control Devices*, Section 4E.06 Accessible Pedestrian Signals, FHWA, Washington, D.C., 2003.

WALK phase are another useful tool to provide positive guidance. While currently optional, the *Notice of Proposed Amendments* for the next revision of the *MUTCD* requires countdown timers for all signals whose pedestrian clearance phase is greater than three seconds.

Channelize intersections

Closely related to the previous principles, channelization – median and median extensions, curb extensions, and right turn slip lanes – can help clarify motorist and pedestrian movements and highlight conflict areas.

Minimize pedestrian crossing distances

Through channelization and lane width reductions, pedestrian crossing distances can be minimized. Reduced pedestrian crossing distances result in reduced clearance interval requirements at signalized intersections; this can decrease delays for all users.

Eliminate conflicts where possible

In some cases it may be possible to permanently eliminate conflicts by prohibiting turns at an intersection. More likely, however, is the potential for restricting turns only at certain times. Through the use of pedestrian activated electronic No RIGHT TURN ON RED blank-out signs turns can be prohibited only when pedestrians are crossing the conflicting roadway (Figure 9). This real time traffic control greatly increases intersection efficiency over continuous restrictions and makes intersections more pedestrian friendly.

A similar treatment can be used for left turning vehicles. Instead of prohibiting the left turn, however, these blank out signs typically have a legend such as YIELD TO PEDS that is displayed when the pedestrian signal is activated for the conflicting crosswalk.



Figure 9
Example of “No Turn On Red” Blank-Out Sign

Recommendation: Construct new midblock crossings

The citizens of Alpharetta have access to a reasonably complete sidewalk network. These sidewalks provide both recreational and transportation opportunities for Alpharetta’s workers, students, and families to walk along roadways. Additionally, Alpharetta’s numerous signalized intersections provide roadway crossing opportunities. There are some locations where it may be desirable to provide for mid-block crossings of the roadway network (or crossings at unsignalized intersections, which can be treated in very similar ways). Midblock crossings must be safe and



convenient, however, if they are to be useful of the sidewalk and pathway network. The Team identified desirable locations for midblock crossings along South Main Street:

- Aligned with the walkway connected to the municipal parking lots (adjacent to the Smokejack Restaurant)
- At the unsignalized intersection of South Main and Marietta Streets (to serve the bus stop in front of Hardee's).

Additional crossings may be considered for Milton Avenue between Roswell and Main Streets, and the crossings of SR 120/Old Milton Parkway adjacent to Wills Park would benefit from the enhanced crossing treatments described below.

Appropriate traffic control devices for both sidewalk users and traffic on the roadway are critical if the safety and mobility of all users is to be maintained. Simply marking a crosswalk, however, will not ensure a safe crossing, especially of multilane roadways.¹⁰ While no traffic control can prevent crashes if drivers and path users are not paying attention, a consistent approach to signing, marking, signalizing, and grade separating these crossing locations is important to condition the expectations of all users, and thereby improve safety for all parties as well. Consequently, while this report gives a specific example of what traffic control devices may be appropriate at a particular midblock crossing, the City should develop a methodology for consistently evaluating and signing and striping midblock crossings throughout Alpharetta.

Traffic Control Devices

One significant barrier to creating safe crossings at midblock locations is the lack of guidance on which treatments should be used in particular circumstances. Currently, the *Manual on Uniform Traffic Control Devices (MUTCD)*¹¹ provides several options for midblock pathway crossings, including: crossing advance and crossing signs, in-pavement flashing lights, and signalized crossings. The *MUTCD* also provides specific guidance in the form of signal warrants for application to midblock locations.

Static signs, such as the Pedestrian Crossing Advance sign and the Pedestrian Crossing with the supplemental downward arrow have not been found to significantly increase motorist yielding over study base conditions. However, two new traffic control devices are available for application at midblock crossings and have been shown to dramatically increase motorist yielding rates. These two treatments are the pedestrian crossover treatment and the HAWK pedestrian beacon.

¹⁰ Zegeer, Charles V., J. Richard Stewart, Herman F. Huang, Peter A. Lagerwey, John Feaganes, and B.J. Campbell. *Safety Effects of Marked vs. Unmarked Crosswalks at Uncontrolled Locations – Final Report and Recommended Guidelines*. Report No. FHWA-HRT-04-100. Federal Highway Administration, McLean, VA, February 2005.

¹¹ FHWA, *Manual on Uniform Traffic Control Devices*, 2003.

Pedestrian Crossover Treatment

The Pedestrian Crossover Treatment (or PXO, also known as “the Enhancer”) includes a combination of striping and activated rectangular strobes attached to pedestrian crossing signage (Figure 10). The strobes, which are very bright, are activated by a pedestrian push button. A recorded voice informs pedestrians that they have activated the crossing and that they need to ensure motorists are yielding prior to crossing the street.

The strobe-supplemented flashers are placed in the median of divided roadways as well as the right side ensuring the motorist driving in the right lane does not obscure the left lane motorist’s view of the activated crossing.

Advance yield lines are used with this treatment as well. Solid lane striping extends from the yield line back to a predetermined distance in advance of the crosswalk. This solid lane line assists law enforcement in enforcing yield-to-pedestrian laws. A concept of how this treatment might be applied on South Main Street in Alpharetta is shown in Figure 11.



Figure 10
Pedestrian Crossover
Treatment

At the January 2008 meeting of the National Committee on Uniform Traffic Control Devices (NCUTCD), the Signals Committee discussed this treatment and it has been recommended for interim approval by FHWA; we believe this will occur prior to the 2009 update to the *MUTCD*. A study was recently released which compares the yielding rates obtained from various crosswalk treatments at midblock crossings¹². Information summarizing those results is provided in Table 6.

Table 6
Compliance with Crosswalk Treatments

Treatment	Average Compliance
Crosswalk and Static Signs	1.55%
Dual Overhead Round Amber Flashers	15.50%
Side Mounted (continuous) Flashers	11.48%
Enhancer (PXO) Crosswalk	81.54%

¹² Fredrick, M., “Increasing Motorist Yielding Compliance at Pedestrian Crosswalks,” *FLITE*, Florida Section of Institute for Transportation Engineers, vol. 48, no.2, January 2008.

Figure 11
Possible PXO Treatment on South Main Street



The HAWK Signal

The HAWK signal has been recommended for adoption into the next *MUTCD* by the NCUTCD. It is currently in the FHWA Notice of Proposed Amendment to the *MUTCD*. The HAWK signal is constituted of three signal heads – one yellow and two red. An installation is shown in Figure 12. The signal appearance and phasing is somewhat different to a normal “3-head”, or red-yellow-green traffic signal that is typical at most intersections. Instead, the signal heads remain dark until activated. Once the button is pressed by someone wishing to cross, the signal flashes yellow then transitions to a steady yellow before changing to red for the pedestrian walk interval (when the WALK signal is lit). As the pedestrian clearance interval begins (when the DON’T WALK signal begins flashing), the red signal alternates flashing. Upon conclusion of the pedestrian cycle, the signal head goes dark once again. (For a video demonstration of a HAWK signal, visit <http://www.dot.ci.tucson.az.us/traffic/tspedestrian.cfm>.)



Figure 12
HAWK Signal Installation

In Alpharetta, the PXO treatment would likely be the more appropriate of these two activated pedestrian crossing treatments. However, both have been provided for consideration as they will likely be approved for use by FHWA next year.

Recommendation: Pedestrian Programs

In addition to designing and improving facilities for pedestrians, several programmatic approaches should be considered to improve pedestrian conditions in Alpharetta. First, enforcement of motorists yielding to pedestrians at crosswalks should be vigilant. The continuous turn locations identified in the existing conditions report should receive special attention, as should the location of any new mid-block crossing treatments. Educational programs for children, such as Safe Routes to School, can teach safe behaviors; of particular importance to teach at an early age is the practice of stopping at the curb and scanning for traffic before crossing the street.



2.5 *Bicycling Conditions*

Objective: *Increase connectivity of bicycle transportation in and around the Study Area*

Recommendation: *On-Street Facilities and Treatments*

Every roadway in downtown Alpharetta is already an on-street bicycle facility, as bicycles are vehicles according to Georgia Law, and none of the roads in the Study Area prohibit bicycles by categorical or specific exclusion. This is not the same as saying that they are accommodating to bicycles, however. High traffic volumes on some of the roadways through downtown and the narrow width of others can induce anxiety in cyclists, and only a select few will overcome their anxiety and assert their rights and privileges as vehicles on a public roadway.

Improvements can be made to roadways that make them more bicycle-friendly. These range from traffic calming measures (to reduce the speeds of motor vehicles of the roadway) to installation of bicycle facilities such as bicycle lanes or paved shoulders. Shared lane symbols and warning devices that remind motorists to be alert for cyclists can also be deployed in areas where the roadway cross section is constrained and geometric alterations are infeasible.

Traffic Calming

Traffic calming measures such as curb extensions, bulb-outs, and speed tables can be very effective in reducing the speeds of motor vehicles on roadways, which makes it less stressful for cyclists. Some of these methods have been described in the section on intersections above. It is important, however, that any traffic calming treatments be carefully designed so as not to impede movement by bicycles along those streets, and leave a clear passage aligned with the area where bicyclists are expected to ride.

Bicycle Lanes

Designated bike lanes should also be considered on roadways where sufficient space is available. The AASHTO *Bike Guide* recommends that designated bike lanes be at least four feet wide, or that the lane stripe be at least five feet from the face of curb in curb-and-gutter cross sections. Research has found that bicyclists experience less stress when provided with at least three feet of shoulder space;¹³ accordingly, many communities have striped off shoulders wherever they can provide three feet or more, but have only designated those that meet the AASHTO recommendations (some communities have gone further and designated those roads with shoulders

¹³ Landis, B., Vattikutti and Ottenberg., "Real Time Human Perceptions: toward a Bicycle Level of Service," *Transportation Research Record 1578*, TRB, National Research Council, Washington D.C., 1997.

between three and four feet wide, but that is dependent upon the judgment of the local engineering staff).

Of course, finding room for bicycle lanes also depends on engineering judgment with regard to the minimum width of travel lanes on Alpharetta's roadways. As discussed in the Roadway section above, research indicates that lane widths can be reduced to less than 12 feet without impacting either capacity or safety. If Alpharetta pursues this strategy, a 28-foot wide two-lane, undivided road such as Mayfield Road could be reconfigured from having 14-foot lanes to having 11-foot lanes and three foot shoulders, or depending on the judgment of local engineers, 10-foot lanes and four foot bicycle lanes. If the City wishes to develop a comprehensive network of shoulders and bicycle lanes (which have relatively low construction costs compared to off-street facilities), the City would need to establish what minimum lane widths are reasonable in the judgment of its engineering staff. Once such decisions are made, a data collection effort could reveal opportunities for more on-street bicycle facilities.

Paved Shoulders

For roadway cross sections which do not include curb-and-gutter, but are not wide enough to accommodate re-striping for bicycle lanes, it may be possible to construct new paved shoulders. Ideally, new shoulders should allow for a full four-foot bicycle lane. The constraints of individual corridors (available right-of-way, roadside drainage, etc.), however, may dictate different widths for each corridor. The guidelines described for bicycle lane widths apply here as well: shoulders should be at least three feet wide and travel lanes may be reduced according to the judgment of the City's engineering department.

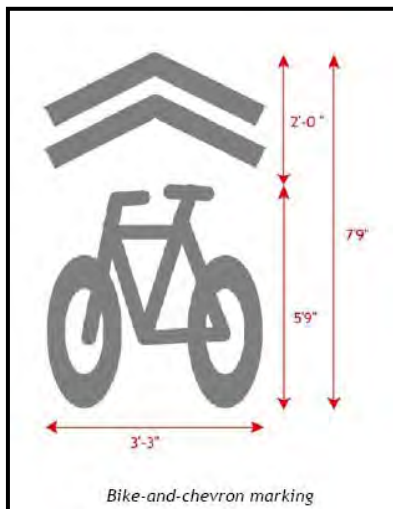


Figure 13
Bike-and-Chevron Symbol

Shared Lane Symbols

For situations where it has been determined to be infeasible to provide a facility (i.e., a bicycle lane or shoulder) for the preferential use of bicyclists, it may be worth considering the use of the shared lane symbol sometimes referred to as the "bike-and-chevron," or "corporal bike" marking (Figure 13) on the roadway surface. This treatment is currently experimental, but has been included in *Notice of Proposed Amendment* to the *MUTCD*, meaning that it is highly likely to become a standard treatment in the 2009 edition. The City may wish to use this symbol to encourage safe passing of bicyclists by motorists on roadways that are too narrow for bike lanes and construction of shoulders is infeasible. The shared lane symbol is intended to assist bicyclists with lateral positioning in lanes that are too narrow to safely accommodate motorists and

bicyclists travelling side by side and also to alert motorists of the position bicyclists are likely to occupy within the roadway. Research has indicated that this treatment is understandable to both motorists and cyclists alike¹⁴, and that it can have an added benefit of reducing the occurrence of bicyclists riding on the sidewalk and against traffic.¹⁵

Activated Warnings

Another treatment to increase safety for bicyclists riding in the roadway is to deploy detection devices that are linked to flashers affixed to warning signs (such as SHARE THE ROAD, or WATCH FOR BIKES ON BRIDGE), that will flash only when bicycles are detected in the specific zone. As was discussed in the Midblock Crossing section above, real-time activated warnings have been found to gain higher response rates from motorists than both static warnings (signs alone) and continuously flashing warnings. These could be used on very constrained sections of an otherwise accommodating route. For example, certain roadways may have sufficient pavement width for bicycle lanes or new paved shoulders, but become significantly narrower on bridges over SR 400. In these cases, detectors placed in the bicycle lane or shoulder on approaches to the bridge could be activated to begin flashing when a bicyclist passes and be timed to turn off after the amount of time it would take a typical cyclist to cross the bridge. Studies have found inductive loop detectors to be very effective at detecting the presence of most bicycles, with the exception of those which are almost entirely (both wheels and the frame) made of carbon fiber. If the City experiences a high volume of carbon-fiber bicycles at such locations, other technologies such as video and microwave are also effective.

Recommendation: Off-Street Facilities/Shared Use Pathways

There are two strategies that can be recommended with regard to improving the network of off-street bicycling facilities and shared use pathways in downtown Alpharetta, and each takes advantage of existing opportunities. First, the City could improve the wide sidewalks identified in the *Existing Conditions* report to function as shared use paths. Second, the City could develop new pathway connections where land use allows. Each of these strategies is discussed in detail below.

Improve Wide Sidewalks into Pathways

The eight-foot sidewalks identified in the *Existing Conditions* report have the potential to serve as pathways — and provide substantial connectivity into downtown — if important improvements are made to bring them up to AASHTO Guidelines for shared use paths, as described in the *Guide for Development of Bicycle Facilities*. While each potential pathway segment will need to be examined closely, block-by-block, to

¹⁴San Francisco Department of Planning and Traffic & Alta Planning+Design, *San Francisco's Shared Lane Pavement Markings: Improving Bicycle Safety*, FINAL REPORT, February 2004.

¹⁵Florida Department of Transportation and UNC-HSRC, *Evaluation of the Shared Lane Arrow*, December, 1999.

determine which specific improvements will need to be made, there are some general improvements that can be named and should be considered for all of them. These improvements include:

- Providing curb ramps that are the same width as the pathway;
- Designing appropriate radii at curves and turns;
- Retrofitting to keep appropriate cross-slopes at driveway crossings;
- Installing appropriate signage and pavement markings to warn and direct pathway users;
- Maximizing visibility between path users and motorists; and,
- Widening the pathways wherever possible.

Each of these recommendations is discussed in detail below. It should also be noted that if improved to function as paths, these facilities will be of a type known as “sidepaths,” meaning a shared use path located immediately adjacent to a roadway. The AASHTO *Guide* points out that on sidepaths, “*some operational problems are likely to occur*,” and continues to identify additional problems¹⁶. These operational problems should be considered carefully at the outset of the design process and steps should be taken to minimize the risks associated with these problems. **It must be clear that the conversion of these sidewalks into functional pathways is not just a simple matter of designating them as pathways.**

Full Width Curb Ramps

It was noted during the existing conditions phase of this project that many of the eight-foot sidewalks in Alpharetta constrict into narrower ramps when they come to intersections with cross-streets (Figure 14). If these sidewalks are to be improved into being shared use pathways, these ramps will need to be reconstructed.



Figure 14
Sidewalk-to-Ramp width inconsistency along
Haynes Bridge Road

The AASHTO *Bike Guide* states, “*Ramps for curbs at intersections should be at least the same width as the shared use path*.” This is for a number of reasons. The most important is to allow safe passing of pathway users travelling in opposite directions. Sidewalk ramps are constructed to meet the requirements of the Americans with Disabilities Act (ADA), which intends to accommodate the passage of one wheelchair at a time, and so can sometimes be as narrow as 36”. Shared use pathways are subject to ADA

¹⁶ AASHTO, *Guide for the Development of Bicycle Facilities*, 1999, p. 33.



requirements as well, but need to allow for the continuous two way travel of numerous types of vehicles and devices. Ramps that narrow to less than full-width of a pathway force opposing trail users into the same space and become bottlenecks.

Designing appropriate radii at curves

Most of the existing eight-foot sidewalks in Alpharetta are parallel to the adjacent roadways and run fairly straight within the length of a given block. However, if they are to be considered shared use pathways it will be important to examine each segment carefully with a design speed in mind and to reconstruct any curves in the pathway alignment that are too tight for that design speed. The *AASHTO Bike Guide* recommends that, “in general, a minimum design speed of 20 mph should be used” on shared use pathways, which translates into a minimum radius of 100 foot on curves. Design engineers may choose slower design speeds and correspondingly smaller radii when constrained conditions warrant. If smaller radii are used on a pathway, warning signs and pavement markings should be deployed as indicated by the *AASHTO Bike Guide* and the *Manual on Uniform Traffic Control Devices*.

As was noted above, most of the existing eight-foot sidewalks are relatively straight, but some have short jogs or offsets in their alignments and many bend sharply as they approach curb ramps at intersections. If pathway traffic is to continue through the intersection or if the a path alignment turns to continue parallel to the intersecting roadway, curves on these approaches will need to be carefully designed with radii appropriate to the design speed.

Cross-slopes at driveway crossings

During site visits conducted for the *Existing Conditions* report, it was noted that cross slopes of the eight-foot sidewalks (all sidewalks, actually) were often interrupted at driveway crossings. As was discussed in the pedestrian facilities section, the Americans with Disabilities Act requires that pedestrian facilities (which includes shared-use pathways) maintain an accessible route of at least 36 inches for their entire length. As improvements are made to these pathways, accessible routes will need to be provided at all driveway crossings. While the ADA requirements are for a 36-inch accessible route, it is highly recommended that the cross slope be set to 2 percent for the full width of the pathway and that the grade of the driveway be adjusted accordingly. This will prevent trail users — two way traffic of people on foot, in wheelchairs, on bikes and in-line skates — from having to negotiate for position at driveway crossings. This will have the added visual/psychological effect of highlighting the pathway as a public transportation facility with operational needs to which private driveways should defer.

Signage and Marking

If the existing eight-foot sidewalks are to be upgraded into functional shared-use pathways, it is important that users of those pathways be guided by signage and



pavement markings in accordance with the AASHTO *Bike Guide* and the *MUTCD*. While, the *MUTCD* does allow for some local flexibility in the design of wayfinding and informational signage, it is important to remember that pathways are transportation facilities and that trail users are also (or will one day become) users of the roadway system. Standard signage, especially regulatory and warning signage, should be used to assure that pathway users understand what is being communicated to them.

Maximize visibility

One of the most significant risk factors associated with sidepaths is the potential for conflict between path users and motor vehicles turning across the path at driveways or intersections. Turning motorists, especially those making left turns, are pre-occupied with finding gaps in oncoming traffic and may not be looking for pathway users coming from their right.

Widening

If the City wishes to improve the existing wide sidewalks so that they function as shared-use pathways, it is important to consider widening them wherever feasible. The AASHTO *Guide for the Development of Bicycle Facilities* recommends a width of ten feet for shared use paths in most cases. The *Guide* does allow for eight-foot paths in circumstances where both bicycle and pedestrian traffic are expected to be low even on peak days; such conditions are not consistent with the desired outcome of improving conditions for biking and walking in Alpharetta. The *Guide* also recommends an additional 2-3 feet of shoulder on each side of a path, which increases the overall footprint of the paths in the right of way. With proper signage and marking, occasional narrowing of the path in constrained areas is acceptable, but every effort should be made to avoid such cases.

Recommended sidepath or shared-path projects along several corridors in the Study Area are shown in Table 7 and have been mapped in Figure 16 later in this section.

Table 7
Potential Pathways on Existing Wide Sidewalks

Road(side)	Facility Type	From	To
Old Milton Parkway (N&S)	Improved Pathway	Wills Road	South Main Street
Roswell Street (E)	Improved Pathway	Old Roswell Street	Old Milton Parkway
Milton Avenue (N)	Improved Pathway	West end of School Campus	Canton Street
Haynes Bridge Road	Improved Pathway	SR 400	Academy Street
Canton Street	Improved Pathway	Old Canton Street	Mayfield Road



Develop New Pathway Connections where Land Use Allows

The Team looked for opportunities for pathway connections into and through the study area by reviewing aerial photos and parcel maps for undeveloped parcels and rights-of-way that could accommodate short pathway connections for non-motorized use only. The most promising results were found on the west side of downtown and have the potential to dramatically reduce the length of some trips between residences and important destinations, thereby increasing the utility of walking and biking. All of the pathways discussed below are mapped in Figure 19 at the end of this section.

Lynne Circle to Heritage Lane Connection

Lynne Circle is a residential street just north of Milton Avenue and just west of the old Milton High School campus. As its name describes, it is a circle that comes off of Lee Drive with no other outlet. Heritage Lane is a short street that comes off of Mayfield Circle in the neighborhood behind Alpharetta Elementary School. Parcel maps show that the platted right-of-way for Heritage Lane connects to Lynne Circle, but this connection has not been built. A pathway connection through this apparent right-of-way could greatly increase mobility among these neighborhoods, and shorten trips into the downtown area. For, example, a trip from the intersection of Mayfield Circle and Heritage Lane to the fountain at Main Street and Milton Avenue could be reduced by approximately $\frac{1}{4}$ mile (1.2 miles to 0.9), which is a small but significant figure for a walking trip or a bicycle ride by a parent with small children. More dramatically, this short pathway connection could reduce a trip from that same origin (Mayfield Circle and Heritage Lane) to the pool at Wills Park by over a mile (1.8 miles to 0.7). This connection would also close a gap on a two-mile circular route that originates out of downtown and provide more direct walking and biking access to Alpharetta Elementary School and the Alpharetta Public Library for residents of neighborhoods south of Milton Avenue.

Marietta Street to Upshaw Drive Connection

Another, longer, north-south link could also be developed — either through easement or acquisition — in cooperation with the school board and the owners of three parcels between Marietta Street and Milton Avenue. The parcel that fronts Marietta Street (parcel ID 22 48241270061) is undeveloped, yet large enough (1.4 acres) that it may have potential for a future residence. The parcel that fronts Milton Street (parcel ID 22 48241270063) is undeveloped, both small and narrow (0.3 acres), and likely very difficult to develop. The parcel that lies between them (Parcel ID 22 48241270120) is the site of a drainage pond for the Victoria Square townhomes. An easement wide enough for a pathway may be able to be carved from these three parcels, linking Marietta Street and Milton Avenue. A pathway through this corridor would parallel a creek bed, so the ultimate feasibility of this option would depend upon environmental review in addition to the functional needs of the pathway and the success of easement acquisition. Also, it should be noted that the parcels



identified are used as examples for additional connections in the Study Area and do not imply this would be the ultimate alignment of a future path. Detailed design and engineering work would need to be performed to identify the specific parcels impacted by a path connection.

This pathway could continue on the north side of Milton Avenue by following the western and northern perimeters of the old Milton High School Property, to the truncated end of Upshaw Drive. Of course, such a connection would be subject to negotiation with the Fulton County Board of Education and may be constrained by the presence of fences on school property as well as the proximity of the larger baseball field to the northern property line. Even if an arrangement cannot be made with the Board of Education in the short term, the concept of such a connection to between Upshaw Drive and Milton Avenue bears mentioning for consideration as part of any discussion of future redevelopment of the old Milton High School campus. Such a connection would have many of the same benefits as the Heritage Lane connection described above: a shortened and looped walking route from neighborhoods off of Mayfield Road to downtown, increased bike and pedestrian access to Marietta Elementary School and the Alpharetta Public Library from neighborhoods south of Milton Avenue, and increased bike and pedestrian access to Wills Park from the northwest side of downtown.

It is also worth noting that aeriels and Fulton County GIS show what appears to be an abandoned street or driveway along the northeast side of the old Milton High School campus. City staff identifies this corridor as the old Teasley Street. It appears to be entirely contained on private property, some of which is currently being redeveloped. It may be on its way to being plowed under, but we note it because it is the sort of corridor for non-motorized circulation that could be preserved with some foresight in the redevelopment process. The preservation of any other such roadway corridors anywhere else in Alpharetta could become negotiating “chips” in the development approval process. Recommended new pathways within the Study Area are highlighted in Table 8.

It is important to note the City is currently acquiring right-of-way for a path connection between Milton Avenue and Old Milton Parkway. The path is roughly 1,400 feet starting at the southwest corner of the old Milton High School property proceeding south, to the east of the Wilshire Glen subdivision, crossing Marietta Street and terminating on Old Milton Parkway about 500 feet east of the Old Milton Parkway/Marietta Street intersection.

Table 8
Potential New Pathways via New Connections

Road or Location	Facility Type	From	To
Heritage Lane Path	New Pathway*	Heritage Lane	Lynne Circle
Parcels between Marietta Street and Milton Avenue	New Pathway*	Marietta Street	Milton Avenue
School Campus (west and north perimeter)	New Pathway*	Milton Street	Upshaw Drive
School Campus (northeast perimeter)	Salvaged Road*	School Drive	Upshaw Drive

* The facilities identified in this action list will each need to be studied in detail for feasibility. They also serve similar connectivity needs, so it is unlikely that they would all be developed.

Bicycle Parking

If a goal of this study is to make downtown Alpharetta a place people want and are able to access by bicycle, it will be important to provide adequate secure bicycle parking for patrons and employees of downtown businesses. The Association of Pedestrian and Bicycle Professionals (APBP) published *Bicycle Parking Guidelines* in 2002, which discusses the pros and cons of various bicycle rack styles and offers guidance on the arrangement and location of bicycle racks. The guidelines recommend that bike rack elements (the hardware to which a single bike is secured) be able to easily secure both the frame and one of the wheels; rack styles that achieve this easily are known as the “inverted U” and the “post and loop.” The guidelines also point out that efforts to increase the aesthetic character of bike racks can have negative impacts on their functionality. A design known as “the wave,” for example, is very attractive, but when used as intended does not stably support both the frame and one wheel.

Bicycle parking should be conveniently located to the buildings it is intended to serve. In downtown Alpharetta, single-element bike racks should be placed in the planter/furniture zone (see sidewalk discussion above) of the sidewalks along Main Street and Milton Avenue, or any other locations that are expected to have street level retail after redevelopment. Larger shopping centers and public buildings should each have their own multiple-element racks in an appropriately sited area with easy access to a primary building entrance. The APBP guidelines include recommended dimensions for arranging multiple-element racks. The public parking lots west of Main Street would be a good location for bicycle lockers, (plastic shells or metal boxes that cover and secure bicycles that are parked for longer periods of time) protecting them from the elements and vandalism. Bicycle lockers could serve





bicycle commuters to downtown workplaces who will be parked for the duration of their shifts, preserving the racks closer to the businesses for customers or other short-term parkers.

The City can employ both requirements and incentives to increase the presence of bicycle parking. Cities around the country are establishing development standards for provision of bicycle parking in new developments. These standards are often based on a percentage of the motor vehicle parking required for certain types of developments.

For example, the City of Atlanta has a bicycle parking requirement for its Downtown Special Public Interest District, which requires one space for every 4,000 square feet of building space (with a two space minimum and certain exclusions); the downtown district also specifies that at least 20 percent of the bicycle parking should be in the furniture/planning zone of the sidewalk, with the balance in a sheltered location within 100 feet of a building entrance. In other Special Public Interest Districts, Atlanta requires that non-residential developments provide one bicycle parking space for every 20 required motor vehicle spaces and that multi-family residential developments include one bicycle space for every five dwelling units.¹⁷ The city may also seek funding to assist existing businesses with providing bike parking.

If the downtown Alpharetta area is to be truly bicycle friendly, then bicycle parking must be integral to any redevelopment project within the Study Area. It was noted in the *Existing Conditions* report that there is little or no bike parking at some of the major public buildings in the Study Area, such as at City Hall and the Public Library. Correcting this should be a priority. The plans for the new City Hall should be reviewed to be sure that they include adequate bike parking. The library has a bicycle rack, but it is of a style that secures only the front wheel and it is far from the main entrance to the building. The addition of visible and secure bicycle parking at the public library will indicate that Alpharetta is a place where that tradition survives. Recommended bicycle parking improvements within the Study Area are highlighted in Table 9.

Table 9
Potential Bicycle Parking Improvements

Location	Recommended Parking Type	Quantity
Milton Avenue, Main Street, other areas with street level retail business	Single-element bike racks in the “furniture zone” of the sidewalk	3-4 per block
Public buildings, large commercial buildings	Multiple element bike racks	1 per 20 vehicle spaces, or 1 per 4,000 s.f. (min. 5)
Municipal Parking Lots	Bike Lockers	1 per 20 motor vehicle spaces (min. 5)

¹⁷ City of Atlanta, Code of Ordinances, Part III, Land Development, Sec. 16 (zoning), chapter 18 (Special Public Interest Districts).

Recommendation: Signage tailored for bicyclists

A system of clear and uniform signs that indicate the direction and distance to important destinations via either on- or off-street facilities can be helpful to bicyclists and can reinforce the message that Alpharetta is an active, bicycle-friendly community. Custom wayfinding could be designed for the pathway system, and signage could also extend onto the on-street network using a simplified version of the traditional BIKE ROUTE (D1-11) signs and supplemental plaques identifying destinations and directions (Figure 15). Such signs could point the way into downtown, to City Hall, the library or to any of the nearby schools, as well as to the key destinations described below: Wills Park, North Point, and the Big Creek Greenway. Beyond wayfinding, informational kiosks at intersections or key points can also direct riders to amenities such as public restrooms, restaurants, water fountains, or local points of interest. These simple touches can improve a path user's experience of riding on Alpharetta's pathway system.

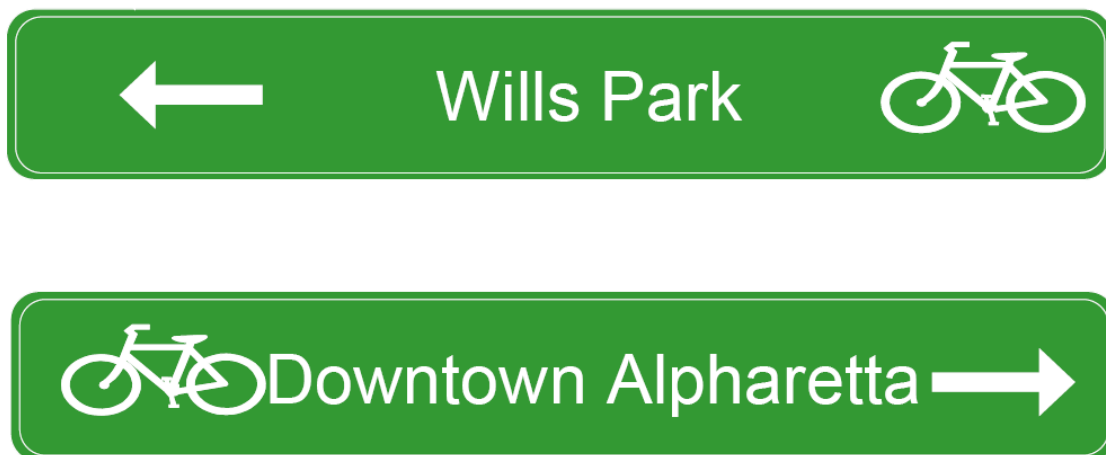


Figure 15
Example of Directional Bicycle Route Signage

Recommendation: Bicycling Programs

As an area such as downtown Alpharetta becomes more bicycle-friendly, it is assumed that bicycling will become more popular in that area. As bicycling becomes more popular, both good and bad bicyclist behavior becomes more obvious. Visibility of bad bicyclist behavior can undermine support for bicycling in the community as complaints are vocalized to elected officials and law enforcement personnel. Educational campaigns about good biking habits and the rules of the road can help a community stay ahead of such complaints and keep public attention focused on the benefits of improved biking and walking. Two bicycling related issues that are common in communities across the country are riding on the sidewalk and riding without lights at night.

Many people are more comfortable riding on the sidewalk as opposed to riding in the street with traffic. Sidewalk riding is legal, except where specifically prohibited, but it carries with it certain risks. The most obvious risk is of collision with pedestrians on the sidewalk. Pedestrians on sidewalks do not adhere to the same general “rules of the road” as vehicles in the roadway. For example, they do not tend to keep to the right or pass on the left; they flow around each other as conditions allow. This improvised decision making is a relatively low risk behavior, as pedestrians can stop and redirect quickly and do not move very fast. But bicycles require greater reaction time, stopping distance, and turning clearance; these factors contribute to the risk of collision with pedestrians in the less predictable sidewalk environment. It is important that bicyclists be reminded that it is their duty to yield to pedestrians when riding on the sidewalk.

Another risk associated with sidewalk riding involves the lower likelihood of motorists yielding to bicyclists on sidewalks at intersections or driveways. Turning motorists are focused on threats from other cars and generally think last of pedestrians or cyclists on the sidewalk. This is especially true for cyclists riding against traffic on the sidewalk; they emerge more quickly than pedestrians and from a direction the driver is not likely to be scanning. Motorists making right turns from side streets and driveways are looking for gaps in traffic coming from their left; they are not likely to scan for bicycles coming from their right, or may have looked that way at first but have waited for some time before a gap became available.

Riding at night without lights is another cyclist behavior that is very risky. Unlit bicycles cannot be seen within the stopping distance of cars travelling 40 miles per hour. Bicycles with reflectors only reflect directly back to the light source, and so offer no increased visibility to drivers on intersecting streets. Because riding without lights and sidewalk riding are such common behaviors, it is logical to assume that instances of both will increase as the overall level of cycling increase in Alpharetta. Educational campaigns about both can counter the rise of these behaviors.

Educational initiatives can be augmented with coordinated enforcement of actions that are in violation of Georgia or Alpharetta codes. Sporadic enforcement will not result in significant improvements to cyclist behavior and will likely result in resentment of law enforcement personnel. Those behaviors to be targeted should be determined at the outset of the law enforcement campaign. It is recommended the following behaviors be targeted:

- Riding at night without lights,
- Violating traffic signals,
- Riding against traffic on the roadway, and
- Violating traffic signals

These four behaviors were chosen for two reasons. First, they represent particularly hazardous behaviors which result in many crashes in communities around the



country. Secondly, and very importantly, the enforcement of these behaviors is easy to justify to the public. When coupled with (or preceded by) a large scale education campaign, the public will understand the importance of the campaign and consequently will accept the enforcement activity.

Recommendation: Improve Connectivity to Nearby Destinations

Wills Park

Wills Park is connected to downtown by wide sidewalks on either side of Old Milton Parkway and on the east side of Roswell Street. Improving these sidewalks to function as shared use pathways would establish a useful and direct bicycle connection, complete with a signalized crossing at Old Milton Parkway and Roswell Street. Development of any of the potential new pathway connections described above would also improve access to Wills Park from neighborhoods northwest of downtown. People coming to Wills Park from neighborhoods northeast of downtown would likely make a trip to Wills Park by passing through downtown, therefore other recommendations of this report would benefit their trips as well. Bicycle trips from residential areas southeast of downtown will be more difficult to improve as there does not appear to be sufficient right-of-way for a pathway in the block of Old Milton Parkway between South Main Street and Haynes Bridge Road. Construction of paved shoulders along Devore Road, however, could improve access to Wills Park from the southeast; it is presently a two-lane, open shouldered road within a sixty-foot wide right-of-way.

Pedestrian access to Wills Park from the north could be greatly assisted by improving the crossing treatments at the intersections of Old Milton Parkway with Marietta Street, Wills Drive and the sidewalk connection to Burnett Way. Presently these crossings are indicated by high visibility crosswalks, multiple, but static advance warning signs, and a continuously flashing single warning beacon in advance of the sequence of four crossings. These crossings are situated in such a way that they pass through cuts in the median, and thereby forgo any refuge offered by the median. As described in the midblock crossing section above, research has shown that yield rates for crosswalks with static warning are very low. The treatments described in the midblock crossing section, such as the PXO or the HAWK, could be appropriate for use at these unsignalized intersections as well. If adopted, these real-time warnings would replace the continuously flashing beacon in advance of these crossings. Recommended bicycle and pedestrian connections to Wills Park are shown in Tables 10 and 11, respectively.

Table 10
Potential Improvements for Bicycle Access to Wills Park

Road (side)	Facility Type	From	To
Old Milton Parkway (N&S)	Improved Pathway	Wills Drive	South Main Street
Roswell Street (E)	Improved Pathway	Old Roswell Street	Old Milton Parkway
Devore Road	Paved shoulders	South Main Street	Haynes Bridge Road

Table 11
Potential Improvements for Pedestrian Access to Wills Park

Crossing of	At	Treatment Type
Old Milton Parkway	Burnett Way	Real-time, activated
Old Milton Parkway	Wills Drive	Real-time, activated
Old Milton Parkway	Marietta Street	Real-time, activated

Big Creek Greenway (northern trail terminus)

The most direct connection to Big Creek Greenway from downtown Alpharetta is via Academy Street and Webb Bridge Road to the Greenway's northern terminus just past Alpharetta High School. An added benefit to any improvement along this route is that bicycle and pedestrian access to the high school would be improved at the same time, should any students be interested in walking or biking to school. Given the nature of the Greenway itself, it would be ideal to provide access from downtown on a similar facility: a shared use pathway that is designed for a full range of users and accessible to more than those who are comfortable riding with traffic on the roadway. Review of parcel maps, however, shows that there is not a consistent swath of undeveloped right-of-way that would lend itself easily to the development of a pathway alongside Webb Bridge Road. The cross section of the existing roadway is highly variable along this 2.5 mile corridor. As noted in the *Existing Conditions* report, there is a paved shoulder on one side of the road only in the section between downtown and SR 400. After that, the road is lined with curbs on both sides east to the trailhead. A detailed study of this corridor could reveal opportunities for reallocating the amount of pavement dedicated to shoulders, travel lanes, and turn lanes so that a more consistent and bi-directional set of paved shoulders could get people to and from the Greenway. If such a study reveals new opportunities for shoulders but those segments are discontinuous, shared lane symbols, activated SHARE THE ROAD signs, or a combination of the two could be installed at "choke points," where cyclists will be re-integrating with the motor vehicle traffic; similar treatments could be applied on the bridge over SR 400. Recommended bicycle connections to the Big Creek Greenway are shown in Table 12.

Table 12
Potential Improvements for Bicycle Access to Big Creek Greenway

Road(side)	Facility Type	From	To
Academy Street	Lane reallocation, shoulder widening	Haynes Bridge Road	Westside Parkway
Webb Bridge Road	Shared Road Symbol	Westside Parkway	Big Creek Greenway
Bridge over SR 400	Activated Warnings		

North Point Mall

There are two principal connections between downtown and the North Point Mall area: directly via Haynes Bridge Road or a combined route via Roswell or South Main Streets, then Maxwell Road (which passes through Roswell for ¼ mile), Westside Parkway, and Encore Parkway. The Haynes Bridge Road route could be improved for both bicycles and pedestrians by the improvement of the wide sidewalk on the east side of the road into a shared-use pathway. If this pathway is developed, it will have to be very carefully designed to minimize turning conflicts at intersections and driveway crossings, especially given the high traffic volumes associated with SR 400 and the many large office buildings in this area. Bicycle lanes along Haynes Bridge Road are also possible, depending on what minimum width the City decides it is willing to pursue; currently there are 3 lanes spread over 34+ feet of pavement. If bicycle lanes are developed, bicycle travel over the bridge could be accommodated by the use of activated warning signs.

The combined route could be improved by different steps along different segments. Cyclists already comfortable riding on the roadway may prefer it for its lower traffic volumes, but its narrow pavement will cause anxiety. Parcel maps indicate that Roswell Street carries only two lanes within a 40-foot wide right-of-way, which suggests that paved shoulders could be added to accommodate cyclists. Similarly, parcel maps show the right-of-way for Maxwell Road to be significantly wider than the existing two-lane pavement; the right-of-way is approximately 40 feet wide in the segment north of the north Roswell city limit. As Maxwell Road passes through a portion of Roswell and comes back into Alpharetta at Hembree Road, the right-of way is 60 feet. These segments could benefit from the addition of paved shoulders to accommodate bicyclists. If either of these roads is reconstructed as this part of the City develops, it would be wise for both cities to coordinate so that the new cross section accommodates bicyclists with bike lanes or an adjacent pathway (or possibly both).

Next, bicyclists could make use of the wide sidewalk along the south side of Westside Parkway if it were improved to function as a shared use pathway. Access to the North Point area could then be gained via the Encore Parkway overpass over SR 400, perhaps with the assistance of activated warnings over the bridge. Recommended bicycle connections to the North Point Mall area are shown in Table 13.

Table 13
Potential Improvements for Bicycle Access to North Point Mall

Road(side)	Facility Type	From	To
Haynes Bridge Road (E)	Improved Pathway	SR 400	Old Milton Parkway
Haynes Bridge Road (E&W)	Bike Lanes	SR 400	Old Milton Parkway
Encore Parkway	Activated Warning Signs, Shared Lane Emblems	SR 400	Westside Parkway
Westside Parkway (S)	Improved Pathway	Encore Parkway	Maxwell Road
Maxwell Road (E&W)	Paved Shoulders	Westside Parkway	South Main Street
Maxwell Road (E&W)	Sidewalks	Westside Parkway	South Main Street
Roswell Street (E&W)	Paved Shoulders	South Main Street	Old Milton Parkway
South Main Street	Bike Lanes or Shared Lane Symbol	Old Milton Parkway	Maxwell Road









Conclusion

The scope of this study was limited to assessing conditions within downtown Alpharetta and connections between downtown and a select few destinations. The study identified potential strategies for improving conditions for bicycling and walking in this defined area. Implementation of these recommended strategies will require corridor-specific engineering decisions to determine the exact facility appropriate for each roadway. Similar strategies could apply to roadways and pathway corridors elsewhere in the city as well.

Participants in the study's public meetings eagerly identified other potential locations for pathway connections and bicycle facilities. In light of this, the Team recommends that the City pursue a plan for the implementation of the facility recommendations contained in this study and also develop a comprehensive, city-wide plan for improvement of on-street bicycle facilities and shared use pathways. Such studies could determine which types of facilities are appropriate in different settings around Alpharetta and become the basis for a comprehensive non-motorized transportation system for the City.

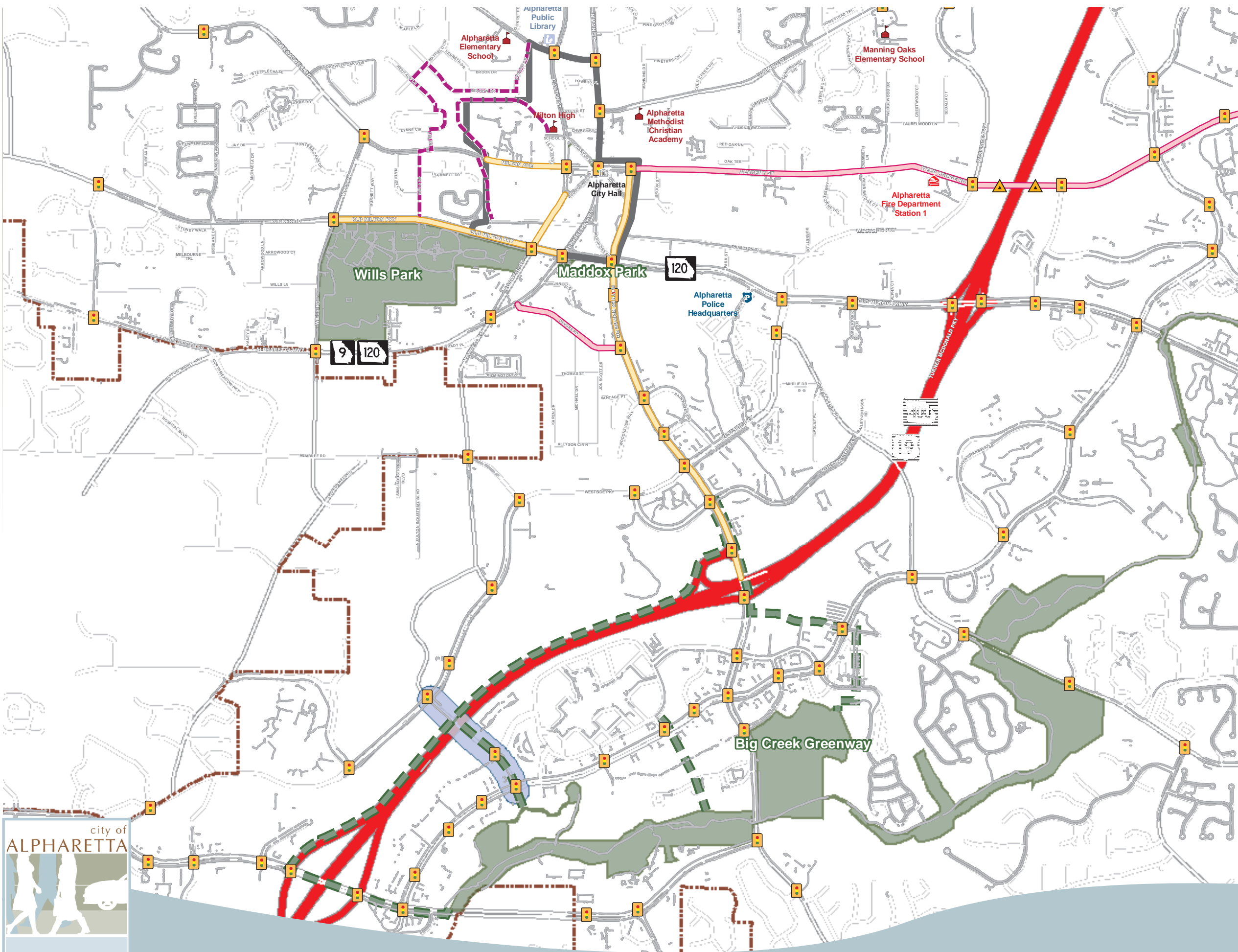
FIGURE 16 PROPOSED BICYCLE - PEDESTRIAN IMPROVEMENTS OVERVIEW

LEGEND

-  Traffic Signals
-  Activated Warnings
-  Pathways on Existing Sidewalks
-  Bicycle Access
-  Pathway Connections
-  LCI Study Area
-  Sidewalks
-  Greenway Connections
-  Parks
-  Encore Pkwy Transportation Enhancements
-  Freeway
-  Major Roads
-  Local Street
-  Alpharetta City Limits



0 250 500 1,000 1,500 2,000 Feet





2.6 Parking

Objective: Improve, expand, and better facilitate parking in and around the downtown area

In our vehicle-dominated society, the availability of parking can have a great impact on local economies. The amount of parking, its visibility, and accessibility plays a pivotal role in consumerism. In the City of Alpharetta, Main Street serves as the core of the commercial retail district in the downtown area. On the west side of Main Street and around the surrounding blocks of Milton Avenue, Roswell/Canton Streets and Old Roswell/Old Canton Streets, unique, individually-owned boutiques and restaurants characterize the area. The prosperity of its businesses is very important to the surrounding community. The accessibility of parking for these small businesses is integral to their success.

At both public meetings during development of this plan, the Team heard loud and clear that the downtown area has a perceived parking problem. Parking requirements as part of the zoning process, lack of parking turnover (long-term parking), and too much demand are creating problems for patrons wishing to shop at, dine in, or visit the downtown core. This in turn puts a strain on local businesses to the point where some have been forced to close. Generally speaking, the downtown area has a good supply of parking; however, it is questionable if the parking is conveniently located.

It should be noted that the City Center development on the east side of South Main Street south of Academy Street will include a revamped City Hall as well as expanded public parking in a multi-level deck. This project will encompass the area bordered by Academy Street to the north, the Publix grocery store to the south, South Main Street on the west and Haynes Bridge Road on the east. While still in design, the parking deck serving the City Center project will likely have access on the Haynes Bridge Road side of the property. Based on the Request for Qualifications (at the time of this writing), the deck will have 600-700 spaces. Coupled with many of the roadway treatments such as midblock crossings mentioned above, the new deck will inject much needed parking in the downtown area especially those businesses facing South Main Street. Since the majority of parking issues along South Main Street will likely be addressed with the construction of the deck at City Center, the balance of recommendations in this section of the report will focus on the area to the west of South Main Street.

Zoning Requirements for Parking

The *Downtown Incentive Zoning Regulations* established by the City of Alpharetta recognizes the strengths and constraints of the Historic Downtown Area. In order to establish a more pedestrian oriented environment the incentive regulations provide a means to reduce large parking lots that break up the downtown environment by

reducing the required ratio of parking spaces to square footage for certain establishments (Table 14). The ratios required under the Downtown Incentive Zoning Classification for commercial, civic and entertainment uses differ from those in the surrounding areas which are by their nature more automobile dependant.

The regulations go further by allowing developers, in certain cases, to pay a nominal fee to adjust the number of required on-site, off-street spaces. The fee collected with this option is paid into a “Historic Downtown Parking Fund”. The goal of these incentives is to provide a shared parking network for all downtown businesses and reduce the potential for oversized, underutilized parking lots within the historic area. However, these policies put the City in a position to take on the burden of providing enough public parking for the district. Collectively, the parking provided in the Historic District may follow the spirit of the *Downtown Incentive Zoning Regulations* but without a centralized public parking facility, do not yet meet the parking demanded by downtown patrons.

Table 14
Parking Ratios in the Historic Downtown Area

Development Type	Parking Ratio (spaces to square footage)	Amount reduction allowed ¹
Residential Village – single family detached	2 spaces per lot	No change
Residential Village – single family attached	1.5 spaces per unit	No change
Retail/Residential Mixed Use	<ul style="list-style-type: none"> General Retail² – 1 per 200 sf Restaurant – 1 per 100 sf 	<ul style="list-style-type: none"> 50% for retail or restaurant portion 0% for residential
Retail/Office Mixed Use	<ul style="list-style-type: none"> General Retail² – 1 per 200 sf Office – 1 per 250 sf Restaurant – 1 per 100 sf 	<ul style="list-style-type: none"> 50% for retail, restaurant, or office portion 0% for residential
Civic/Institutional Mixed Use	<Widely variable>	<ul style="list-style-type: none"> 50% for retail, restaurant, or office portion 0% for residential
Family Entertainment	<Widely variable>	<ul style="list-style-type: none"> 25% for park or playground

1 - With a contribution to the Historic District Parking Fund

2 - Does not include medical facilities, banks, daycare facilities, and service or repair facilities.

Source: Downtown Incentives Zoning Regulations, page 16-17

As stated in the *Existing Conditions* report, the downtown area has an adequate supply of parking in total; however, there are opportunities to use it more efficiently and to provide public parking in more strategic locations (at the periphery of the walkable, historic district). Further, more parking could be provided in selected

locations where it is convenient to businesses but remains inconspicuously woven into the surrounding fabric of the downtown area.

Recommendation: Parking by Street/Corridor

As detailed in the *Existing Conditions* Report, there are numerous on- and off-street parking spaces, including three paved lots within the study area. Business owners at the first public meeting (held in January 2008) expressed a desire to keep these parking spaces as they offer quick-in, quick-out access to their establishments. For the sake of clarity, this section is divided into sections based on parking issues along specific streets or corridors.

Main Street

This report has several recommendations for improved pedestrian circulation and mitigated traffic impacts along Main Street; however, it is important to note that they all must work in harmony with any discussion of parking in the downtown area. Specifically on Main Street south of Milton Avenue, there is limited but heavily used diagonal parking in front of the storefronts south of Milton Avenue (Figure 17). Planning for this area either follows recommendations that move towards keeping this parking or modifying/eliminating it in favor of other projects.

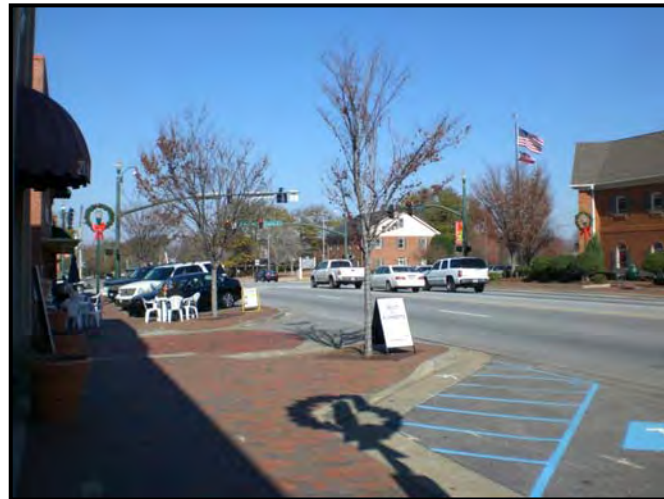


Figure 17
On-street parking along South Main Street

One additional possibility is to convert the parking from diagonal to parallel parking. This would still allow some form of on-street parking while setting enough width to perform roadway modifications such as the addition of a median. Conversion of the parking spaces to parallel could present a significant safety issue due to stopped traffic waiting for a space to clear. However, the implementation of other recommendations mentioned in Section 2.2 would aid in slowing down traffic on Main Street as well as add to the continuity of the “downtown” feel.

Conversely, if parking along South Main Street is eliminated, it would likely be discouraging to business owners. However, the long term gain could outweigh the short-term loss. This option could benefit business owners by increasing walkability around their establishments. As South Main Street became more pedestrian friendly, consumers will feel more comfortable parking and walking around the downtown area. While parking is an amenity store owners greatly desire, it could be worth the sacrifice to make the overall downtown core more walkable. Additionally, the attitude

of customers would change from an automobile-driven shopping experience to a walking shopping experience. This shift of attitude can take place, and improving and increasing pedestrian amenities and safety including slowing down vehicle traffic can help facilitate this type of improvement.

Milton Avenue

On-street parking is present along both sides of Milton Avenue between Old Canton/Old Roswell Streets and Canton/Roswell Streets. There is also exclusive parking available for two businesses west of the Roswell/Canton Street intersection. Since this report is not calling for any significant upgrades or improvements to the



Figure 18
Exclusive Parking and Undefined Sidewalk along Milton Avenue Looking East

Milton Avenue corridor, (other than the relocation of MARTA Route 140), the need to remove or reorient parking spaces does not exist. However, the exclusive parking in the western section of the corridor bares more review (Figure 18).

There could be an opportunity to address two issues by moving the parking out to the street and making it available for general use. First, additional general parking would be advantageous to those businesses in the immediate area of the Roswell/Canton Street and Milton Avenue intersection that would

benefit from quicker turnover of spaces. Second, the prospect to provide a sidewalk and streetscape treatments along this segment of Milton Avenue (as discussed in Section 2.4) would be made available. Both of these options add to an overall positive experience in this part of downtown and could further stimulate development and redevelopment opportunities.

If the opportunity arises to redevelop the old Milton High School property some time in the future, there could be a positive impact to the parking issues especially in the western downtown areas as commercial areas continue to expand. Lastly, there is little or no signage alerting travelers along Main Street, Haynes Bridge Road, or other major roadways that parking exists along this corridor.

Old Roswell Street/Roswell Street

Along Old Roswell Street, there are two parking lots including a small area behind the SmokeJack Restaurant and a larger lot across the street. Combined these two lots

have nearly 110 spaces. This is the predominant area of parking for most downtown patrons.

On several site visits during plan development, the Team noted the majority of the spaces in the Old Roswell Street lot were being used by employees of the surrounding businesses. If the spaces in this lot were metered or enforced in one- or two-hour increments, the instances of long-term parking would likely reduce or disappear altogether. The turnover of cars every couple of hours ensures that there is ample parking available at all times for visitors wishing to shop or dine downtown. For employees that currently use the lot, there would have to be some allocation of parking in surrounding facilities to allow for employee parking. One notable suggestion could be the forthcoming City Center parking deck. Negotiation between downtown shop owners (or the City itself) and the City Center developer could allow for a designated amount of parking spaces for downtown employees. Another suggestion would be to dedicate spaces as part of the expanded parking at the Roswell Street lot discussed in the next section. This in turn would return the lot on Old Roswell Street to its intended purpose – a short-term parking lot for patrons of downtown businesses.



Figure 19
City-owned parking lot on Roswell Street

The city-owned lot at the intersection of Old Roswell and Roswell Street is another idea for expanding parking options in the downtown area. This lot has about 100 spaces but is underutilized showing an occupancy rate of about 15% on the average weekday compared to nearly 95% occupancy for the two lots further up on Old Roswell Street. The future use of the larger lot on Old Roswell Street is tied with the future use of the lot on Roswell Street. The Roswell Street lot is just a mere 250 feet away from the Old Roswell Street lot and is within one block of the shops around Main Street and Milton Avenue but remains extremely underutilized. In terms of signage, there is one city-issued sign and one temporary sign on Roswell Street directing drivers to the lot coupled with very small signs at the Roswell Street/Marietta Street intersection. No other signs were observed.

Recommendation: Parking Structure

The addition of a parking structure to downtown Alpharetta would begin to alleviate the parking strain that currently exists. As part of the draft Recommendations, the Team suggested the Roswell Street lot as the best location for a parking deck (Figure

19). However, at the Public Information Meeting held on March 19, 2008, the Team heard the construction of a deck on top of the current Old Roswell Street lot would better serve downtown businesses. While this study will not get into design elements of a deck, planning judgment suggests the Old Roswell Street lot would not be able to handle the construction of a multi-level deck mainly due to being hemmed in by existing buildings and roadways. On the surface, the Roswell Street lot seems to be a better fit given the lack of constraints around the land.

The topography of the Roswell Street lot is lower than the street itself which lends itself to hiding a larger structure. Keeping in mind that the surrounding buildings are no more than three stories high, if the structure were between three and four stories, there is the opportunity to have one or more of the stories below grade – that is below street level. The above-ground stories could be modified aesthetically so as to reflect the surrounding built environment. The first above-ground story could include shops and/or restaurants accessible from both the deck and the street. This would make the parking structure look less institutional and minimize its impact to the surrounding area.

There are also many treatments for parking structures that mask or enhance its appearance such as adding windows or the construction of a brick façade. These treatments blend the structure with its surroundings. There are several examples of more artistic parking structures throughout the U.S. Some are even so unique that they become a focal point of the community. Instead of hiding, these designs emphasize the structure with modern lighting, decorative glass treatments, and other effects. Some examples of parking structure design can be seen in Figure 20. It is important to note, the cost of a multi-story deck could average \$12,000-15,000 per space not including the land cost. If the Roswell Street lot is used, there could be a significant cost savings recognized. Finally, the driveway/entrance should be enhanced to invite and direct downtown visitors to use the structure.

With a large parking structure in place, the lot on Old Roswell Street could be converted into shops and restaurants which would not only expand the downtown retail district but more specifically pull the district farther west, towards the new parking structure. The main complaint of the existing lot on Roswell Street that the Team has received besides the fact that people are not aware of it, is that it is too far from the retail district. If the district were extended all the way to Roswell Street it would effectively make parking for the whole downtown area – just right across the street.

Figure 20
Example of parking decks from other municipalities



Santa Monica, CA



Palo Alto, CA



Davenport, IA

Recommendation: Improve Visibility of Signage

As observed by the Team with the underutilized lot on Roswell Street, parking availability is only half of the story. Visibility is also a key consideration. There can be a lot with hundreds of spaces available that would remain unused because no one knows it is there. Signage plays a crucial role in directing patrons to and advertising the availability of parking. Signage must grab the attention of the driver as they approach their destination. This means putting signs directing drivers to “Public Parking” on Main Street, Milton Avenue, Canton/Roswell Streets and Old Roswell/Old Canton Streets. If signs are visible from where people are planning to shop or dine, they will be more likely to use the provided parking rather than continue to drive around or simply leave the area. Signage must be visible at nearly all of the intersections as well as at midblock. A map showing strategic locations for new or upgraded parking signs is shown in Figure 21.



For Additional Discussion

Some other recommendations that should be added to the comprehensive analysis include:

- Is there an opportunity to partner with the two churches adjacent to the downtown area to lease parking Monday to Saturday? The lots for these downtown institutions remain virtually empty for several days of the week. Are there opportunities for sharing parking during off-peak times?
- While the scope of work for this project instructed the Team to look at city-owned property for parking opportunities, there may be additional properties for purchase such as the large residential track close to the Old Roswell/Roswell Street intersection. This property will likely be expensive to purchase but would provide additional land as part of a comprehensive parking implementation strategy.

It is recognized that the discussion of parking within the downtown area cannot be concluded without some sort of comprehensive parking analysis. Questions such as how many spaces would the deck need and how much it would cost, would need to be posed so as not to have the deck become obsolete upon opening. In other words, this study cannot be the end of the discussion.

Figure 21
Recommended Locations for New or Upgraded Public Parking Signage



2.7 Land Use

Objective: Downtown development/redevelopment opportunities and strategies

To maximize connectivity and walkability in the Downtown area, future development in the Downtown District will need to create more continuous building fronts along Downtown's major arterial streets (Main Street and Academy Street/Milton Avenue). To that end, the development opportunities map (Figure 22) affirms the City's Historic Business District as the primary focus for new, "infill" development/redevelopment. Continuing to seek development consistent with the City's downtown incentive zoning district, with strong architectural character, significant street presence, and positioned along significant sidewalk facilities, is vital to creating the type of dynamic, walkable environment desired by the city and community.

The development opportunities map highlights properties that are generally available or underdeveloped based on their current use and the potential provided by the downtown incentive zoning district. The Team does recommend that the Historic Business District and thus, the core walking district, be extended to include the bank property on the northeast corner of Main and Academy Streets and the properties on the east side of Main Street (between Main Street and Haynes Bridge Road) between Academy Street to the north and the Publix grocery store property to the south. These properties are generally low intensity, civic properties, surface parking lots and former residences that are now used for low-intensity commercial facilities.

Beyond the historic downtown core, future development should continue to enhance connectivity, the pedestrian/walking environment, bicycle connectivity, and the vitality of the downtown district by accommodating denser development patterns and architectural character consistent with the Downtown Incentive Zoning District. Development opportunities within the Central Business District, but outside the Historic Downtown Core include commercial and mixed-use development/redevelopment opportunities along Haynes Bridge Road, SR 120/Old Milton Parkway, Marietta Street, and Milton Avenue. Development opportunities on the north side of the study area along Canton Street largely fall within the downtown district's R-15 Single Family Residential area. This area is a prime opportunity for continued residential development to support building a critical mass of residents within close proximity to the downtown area while providing a transition from the downtown core, to mid to high intensity residential (multi-story flats, condos, townhomes, etc.), to single family neighborhoods.

3.0 Funding and Implementation

As is the case with a majority of major transportation improvements in the Atlanta region today, funding stands out as a significant issue. The lack of transportation resources across the region, and the country, have made cheaper, more cost-effective solutions become more enticing. Also, with very limited funding available for capital improvements at the local and state levels at this time, the possibility of major projects being built in the short term seems slim. However, there are some limited pots of funding the City can pursue to begin implementation of the recommendation listed in this report. These funding sources are detailed in Table 15 below:

Table 15
Potential Funding Sources

Fund Source	Description	Funding Provided By
Livable Centers Initiative (LCI) Implementation Funds	A setaside of STP-Urban funds dedicated to the implementation of projects identified in LCI Studies across the region.	ARC
Surface Transportation Program-Urban (STP)	Funds to implement a wide variety of highway, transit, bicycle, pedestrian, transportation demand management and air quality projects, studies and programs.	ARC
Surface Transportation Program –Statewide (STP)	Funds to implement a wide variety of highway, transit, bicycle, pedestrian, transportation demand management and air quality projects, studies and programs.	GDOT
Transportation Enhancement (TE)	Transportation enhancement activities, such as providing facilities for bicyclists and pedestrians, landscaping and historic preservation.	GDOT
Safe Routes To School (SRTS)	Encourages primary and secondary school children to walk and bicycle to school. Both infrastructure-related and behavioral projects are geared toward providing a safe, appealing environment for walking and biking that will support national health objectives by reducing traffic, fuel consumption, and air pollution in the vicinity of schools.	GDOT

3.1 Summary of Proposed Projects

Proposed projects and their costs are reflected in Figure 23. It is important to note the costs listed are estimates and additional design, concept, and/or study of each project would likely be required prior to programming the project in the region's Transportation Improvement Plan (TIP).



There are several examples where a project could be funded by the City or using Federal Aid (i.e. LCI, STP, etc.). If these projects are programmed using Federal Aid, their implementation could be delayed due to additional requirements to pull down Federal funding through the TIP process including alignment of adoption and approval schedules.

Additionally, it is likely opportunities exist to group projects together in order to implement them collectively. For example, there are two line items for multi-use path connections around the old Milton High School site. If these projects are grouped together, there may be a better chance of them receiving funding through the general TIP or through the LCI implementation program.

Figure 23

City of Alpharetta Downtown Circulation Study Projects for Implementation

May 2008

Priority Projects

Project	Limits	Type	Distance	Cost	Funded By..
Median along Main Street	Old Milton Avenue to Mayfield Road	Roadway Upgrade	.75 mile	\$270,000 (excluding ROW)	LCI, STP
Reassign SR 9 to other City streets		Signing	N/A	\$40,000	City, GDOT
Reduction of Lane Widths	Old Milton Parkway to Mayfield Road	Striping	.75 mile	Variable (maintenance)	City
Dual Right Turn lane NB Main to EB Old Milton	Old Milton and Main Street	Striping/Signal	N/A	Variable (maintenance)	City
Midblock Crossing Upgrades with Signals	Old Milton Parkway at Wills Park – 3 locations	Pedestrian	N/A	\$744,000	LCI, STP, TE
Install new midblock crossing	Adjacent to Smokejack Restaurant	Pedestrian	N/A	\$248,000	LCI, STP, TE
Install new midblock crossing	North of South Main Street/Marietta Street Intersection	Pedestrian	N/A	\$248,000	LCI, STP, TE
Heritage Lane Path	Heritage Lane to Lynne Circle	Multi-Use Path	300 ft.	\$85,000 (excluding ROW)	LCI, TE
Marietta Street/Milton Avenue Connection	Western edge of cemetery	Multi-Use Path	.25 mile	\$80,000 (excluding ROW)	LCI, STP, TE, SRTS
School Campus (north and west perimeter)	Milton Avenue to Upshaw Drive	Multi-Use Path	.40 mile	\$138,000 (excluding ROW)	LCI, STP, TE, SRTS
School Campus (northeast perimeter)	School Drive to Upshaw Drive	Multi-Use Path	.25 mile	\$80,000 (excluding ROW)	LCI, STP, TE, SRTS
Wills Park Connection	Along Devore Road (paved shoulders)	Bicycle	.45 mile	\$55,000 (excluding ROW)	City
Big Creek Greenway Connection	Webb Bridge Road over SR 400 (activated warning signal)	Bicycle Signage	N/A	\$25,000	LCI, TE, City
Big Creek Greenway Connection	Via Academy Street (striping)	Bicycle Striping	.65 mile	TBD (maintenance)	City
Big Creek Greenway Connection	Via Webb Bridge Road (shared lane symbol)	Bicycle	1.6 miles	TBD (maintenance)	City
Pathway along Old Milton Parkway	Wills Road to South Main Street	Shared-Use Path	.50 mile	TBD (maintenance)	City
Pathway along Roswell Street	Old Roswell Street to Old Milton Parkway	Shared-Use Path	.20 mile	TBD (maintenance)	City
Pathway along Milton Avenue	Western end of HS Campus to Canton Street	Shared-Use Path	.30 mile	TBD (maintenance)	City
Pathway along Haynes Bridge Road	SR 400 to Academy Street	Shared-Use Path	1.6 miles	TBD (maintenance)	City
Pathway along Canton Street	Old Canton Street to Mayfield Road	Shared-Use Path	.30 mile	TBD (maintenance)	City
Streetscaping throughout downtown		Other	N/A	Variable	LCI, TE, City
Additional parking signs throughout downtown		Parking	N/A	Variable (maintenance)	City

Secondary Projects					
Project	Limits	Type	Distance	Cost	Funded By..
Marietta Street	Roswell Street to Main Street	Sidewalk	.15 mile	\$80,000	LCI, STP, TE
Marietta Street	Wilshire Glen to Roswell Street (north side only)	Sidewalk	.25 mile	\$58,000	LCI, STP, TE
North Point Mall Connection-Segment 1	Encore Parkway Segment (shared lane symbol)	Bicycle	.13 mile	\$12,000	City
North Point Mall Connection-Segment 2	Via Westside Parkway (pathway)	Bicycle	.46 mile	TBD (maintenance)	City
North Point Mall Connection-Segment 3**	South Main Street Segment (bicycle lane)	Bicycle	.34 mile	\$94,000	LCI, STP, TE, City
North Point Mall Connection-Segment 3**	South Main Street Segment (shared lane symbol)	Bicycle	.34 mile	\$31,000	LCI, TE, City
North Point Mall Connection-Segment 4A	Maxwell Road Segment (paved shoulders)	Bicycle Facility	1 mile	\$123,000	LCI, STP, TE
North Point Mall Connection-Segment 4B	Maxwell Road Segment (sidewalks)	Pedestrian Facility	1 mile	\$230,000 (excluding ROW)	LCI, STP, TE
North Point Mall Connection-Segment 5	Roswell Street Segment (paved shoulders)	Bicycle	.32 mile	\$40,000	LCI, TE
Old Canton Street	Canton Street to Milton Avenue (west side only)	Sidewalk	.14 mile	\$35,000	LCI, TE
Church Street	Canton Street to North Main Street (north side only)	Sidewalk	.13 mile	\$31,000	LCI, TE
Milton Avenue	From Canton Street to Cemetery Property (south side only)	Sidewalk	.16 mile	\$37,000	LCI, STP, TE
Upgrade Bus Stops throughout downtown	12 locations along Main Street, Haynes Bridge Road, Milton Avenue, and Old Milton Parkway	Transit Facilities	N/A	\$120,000	LCI, City
Bicycle Racks	Various locations (\$75-100/rack)	Other	N/A	\$3,000	LCI, TE, City, Developer
Bicycle Lockers	Municipal Parking Facilities (\$800/locker)	Other	N/A	\$8,000	LCI, TE, City
New 300-space Parking Structure	Old Roswell Street and Roswell Street (\$12,000/space)	Parking	N/A	\$3,600,000	City

** - Only one of these would need to be chosen.

CWC



3.2 Next Steps

Working with ARC staff, the City of Alpharetta should use the priority projects listed in Figure 23 as a guide for prequalification in the LCI Selection Process. ARC prequalifies up to two projects every other year. The entire prequalification process is described on the ARC's website: <http://www.atlantaregional.com/html/322.aspx>. Once projects have been prequalified, the City can submit an application for funding during the annual update to the Transportation Improvement Program (TIP).

The Team recommends improvements and upgrades to Main Street should be the highest priority for implementation funding. Specifically, the following projects should be submitted to ARC for prequalification at the earliest possible time. Since ARC requires a minimum project cost to be \$500,000, the projects should be submitted collectively.

Project	Limits	Type	Cost
Median along Main Street	Old Milton Avenue to Mayfield Road	Roadway Upgrade	\$270,000 (excluding ROW)
Install new midblock crossing	Adjacent to Smokejack Restaurant	Pedestrian	\$248,000
Install new midblock crossing	North of the South Main/Marietta Street intersection	Pedestrian	\$248,000

The remaining projects along Main Street (i.e. reduction of lane widths, reassignment of SR 9 markers) can be handled by City staff as part of a lead up to the construction of the afore-mentioned projects.

The other project recommended for submission to ARC would be the trail and path connections around the west and northwest sections of the Downtown area near the high school.

Project	Limits	Type	Cost
Heritage Lane Path	Heritage Lane to Lynne Circle	Multi-Use Path	\$85,000 (excluding ROW)
Marietta Street/Milton Avenue Connection	Western edge of cemetery	Multi-Use Path	\$80,000 (excluding ROW)
School Campus (north and west perimeter)	Milton Avenue to Upshaw Drive	Multi-Use Path	\$138,000 (excluding ROW)
School Campus (northeast perimeter)	School Drive to Upshaw Drive	Multi-Use Path	\$80,000 (excluding ROW)

4.0 Conclusions

This document represents the first opportunity for the City of Alpharetta to implement some of the policies and projects mentioned in the 2003 *Downtown Master Plan*. During the development of the *Final Recommendations Report*, several key goals were identified by staff and each improvement or enhancement endeavored to address each goal.

Roadway

- Move predominant north-south movement off of Main Street
- Redesign Main Street to improve safety and connectivity while maintaining mobility
 - Reassign SR 9 to other facilities
 - Adjust Lane widths
 - Additions of raised median
 - Additional streetscape treatments such as pole banners, signing, other design elements on road signs
 - Wayfinding signage
 - Distinctive street name signs

Transit

- Augment and expand transit options in the Study Area
 - Realign MARTA Route 140
 - Amenities (shelters, etc)

Pedestrian and Bicycle

- Create a safe and enjoyable pedestrian network throughout downtown
 - Zone System
 - ADA Compliance
 - Intersections
 - Midblock Crossings
- Increase connectivity of bicycle transportation in and around the Study Area
 - On-Street Bicycle Facilities and Treatments
 - Traffic Calming
 - Bicycle Lanes
 - Paved Shoulders
 - Shared Lanes
 - Off-Street Bicycle Facilities and Shared-Use Pathways
 - New Pathway Connections
 - Bicycle Parking
 - Connectivity to Nearby Destinations
 - Wills Park



- Big Creek Greenway
- North Point Mall

Parking

- Improve, expand, and better facilitate parking in and around the downtown area
 - Parking Recommendations by corridor
 - Parking Structure
 - Signage
 - Other Recommendations

Land Use

- Downtown development/redevelopment opportunities and strategies
 - Historic Business District
 - Central Business District

Each of these enhancements represents a specific investment in the infrastructure within the downtown area. Taken together, the improvements will create a sense of place within downtown Alpharetta that is inviting and defines the downtown environment. It is important to note that implementation will take a large amount of support from the public and local policy leaders to ensure funding is identified and channeled to these improvements. Although funding in the Atlanta region is limited, projects with the right support through a Plan (such as the *Final Recommendations Report*) can be identified for implementation.

The City of Alpharetta has been a progressive leader in the metropolitan Atlanta region in terms of how to address its growth and create a sense of place for itself. The recommendations mentioned in this report will assist the City in achieving the next steps of implementation while setting the standard for other local municipalities to follow by showing the success of improved connectivity throughout the downtown area and advanced quality of life for current and future residents of Alpharetta.