

TRANSPORTATION ELEMENT

A. Introduction

This section contains the analysis, methodologies and associated transportation recommendations for the City of Snellville for the planning horizon period. It also contains recommendations with regard to policies that reflect Snellville's values and goals as they relate to transportation issues. The capital improvement projects are divided into three categories: short range, intermediate range and long range.

The projects identified are the product of the comprehensive planning process that included goals identification, visioning, and public workshops. Citizens, elected officials, community leaders and city staff provided input and guidance in the process. The goals of the community suggest that a balanced approach to transportation improvements should be taken and an emphasis should be placed on using unique solutions to create a sense of place that the community can be proud of and identify with. An important component to the public's desire for a mixed-use activity center is a transportation network that balances the needs of pedestrians and bicyclists, as well as the automobile. In light of these goals, this element includes a host of recommendations for balancing the automobile with other modes throughout the city. Policy driven issues, such as transportation demand management and better transportation/land use linkages, will also be discussed.

A synopsis of many recent studies begins the element. This is followed by an overview of existing conditions and recommendations. The bulk of the element is a more detailed assessment of various streets, districts and aspects of transportation in the city.

B. Plans and Studies Affecting Snellville

The following summary provides a brief overview of the previous key transportation studies that pertain to the comprehensive planning of Snellville. It updates and supplements the summaries contained in the U. S. 78 Corridor Study as well as summarizing that study. Many options have been studied for the U. S. 78 corridor but none of these studies have identified a long-range transportation solution that has achieved any high degree of consensus among citizens, private interest groups, elected officials, state and federal agency staff and transportation professionals.

1. Cross County Connector/ Ronald Reagan Parkway

The Cross County Connector was a concept developed in the early 1980's for an arterial connector roadway generally extending northwest to southeast. The proposed concept alternative had I-85 connect with Oak Road, ending at S R 124. The project was further refined over the next four years due to increasing traffic congestion on U.S. 78 (S.R. 10), and the U.S. 78/S.R.124 intersection. In the late 1980's and early 1990's, this concept became the Ronald Reagan Parkway (GW 26), which opened to traffic in October 1994 as a four-lane facility extending from S.R. 124 to Pleasant Hill Road.

2. Snellville Area Transportation Study

This study was undertaken by a Study Committee appointed in January 1991 by the Snellville City Council and the Gwinnett County Board of Commissioners to examine

alternative roadway improvements in the Snellville area. The Study Committee included representatives of city and county residents, as well as city, county and GDOT staff. The study committee compiled a list of approximately 21 alternatives to be evaluated, including the original North Snellville Bypass. The main focus of the study, completed in October 1991, involved using the Gwinnett County Transportation Planning Model to project future traffic demands on the roadways in the study area, assuming the implementation of any of several combinations of roadway improvement alternatives. This study did not incorporate traffic projections resulting from the proposed Outer Loop project as a base assumption, and was limited by a traffic analysis planning horizon for the year 2000. The study determined that none of the studied alternatives alone would completely satisfy the travel demands in the Snellville area through the year 2000 if expected growth occurred. A number of road improvements in the area have occurred since the original study, and other potential projects have been identified which might meet future traffic needs.

3. Snellville Loop Road History

The Snellville Loop (Snellville East-West Connector) concept was developed as a loop road connecting U.S. 78 west of Snellville with S.R. 124 north of Snellville. In the late 1980's and early 1990's, this concept went through several iterations and versions until it was developed into a route forming a complete north side loop (bypass) of Snellville, U.S. 78 west to U.S. 78 east. On November 9, 1992, the City of Snellville adopted a resolution opposing any loop road around Snellville. After GDOT later put the connector onto their Statewide Construction Work Program, the City of Snellville passed another resolution (on August 23, 1993)

opposing the proposed Snellville Connector. The Atlanta Regional Commission (ARC) then received a request from GDOT and the City of Snellville to conduct a study to identify the best transportation alternatives that are technically sound and supported by the local community. Recognizing that the preferred alternative may be a major transportation improvement involving federal funds, ARC and its partners in the planning process designated the study as a Major Investment Study (MIS).

4. The Outer Loop /Northern Arc Studies

The concept of a second freeway loop encircling the Atlanta region has been discussed for more than a decade. The "Outer Loop" was planned to be located ranging from about ten miles up to about 30 miles outside the current "Perimeter" (I-285) that rings the core of the metropolitan Atlanta area.

The original concept of the Outer Loop would completely encircle the metro area and was scheduled for construction in the long-range element (after FY2000) of the Regional Transportation Plan. A study completed by the ARC in November 1994 determined the need to investigate the feasibility of an alignment away from environmentally sensitive areas in the section from S.R. 316 south to I-20. That study, along with the advent of the administration of Governor Roy Barnes and the inception of GRTA, resulted in a major modification to the concept in which only a portion of the loop, a 59-mile long Northern Arc, would be built. This Northern Arc would terminate at S.R. 316 near Lawrenceville and would come no closer to Snellville than that point.

Implementation of the Northern Arc is proceeding at an accelerated pace in early 2002. These steps include right-of way acquisition, pre-engineering, and the selection of a design-build firm. It also includes the

selection of a special management team to expedite the complex public/private funding mechanism being considered for this \$2.4 billion expressway.

5. U.S. 78 Corridor Study (1996)

Initiated by ARC in 1994, at the request of the City of Snellville and Georgia DOT, this was a major investment study (MIS) performed in compliance with the federal 1991 ISTEA Act. Purpose of the study was to develop and define cost-effective solutions to the local and regional congestion and safety issues in the 20 mile-long U.S. 78 corridor in DeKalb and Gwinnett. ARC retained HNTB Corporation and Catherine Ross & Associates to prepare it. The study documented existing traffic conditions in 1994 and projected conditions to 2010 using ARC's travel demand model. The model results predicted an increase in congestion and delay was inevitable, even with a major investment within the corridor. Projected population growth along the corridor is too great.

The U.S. 78 corridor was defined as having three distinct segments:

- From I-285 to West Park Place, it is a six-lane limited access freeway.
- At West Park Place, U.S. 78 changes to a six-lane at-grade facility east to S.R. 124. This part of the corridor is heavily developed, with many traffic signals, intersections with local streets, and local traffic entering and exiting businesses. The two center lanes are reversible and change direction to help meet the demand for rush hour travel, but there are safety concerns about the reversible lane system.
- Front S.R. 124 east to Walton County, U.S. 78 is a five-lane road with two lanes in each direction, plus a center

turn lane. This area is currently less developed.

To reach a solution, the U.S. 78 Corridor study team combined technical analysis with input from the corridor resource group and the public to evaluate "all reasonable solutions" and develop the best strategy. The study final report was concluded in March 1996. It found that the best strategy would be a facility providing express travel between I-285 and Walton County. This facility would both ease commuter travel through the U.S. 78 corridor in DeKalb and Gwinnett counties and improve local traffic conditions. To implement the expressway strategy, the following alternative concepts were identified for further consideration:

- Concept 1 is a north Snellville bypass with an expansion of U.S. 78. This would involve converting U.S. 78 to a freeway-type facility from the West Park Place Boulevard area to the Walton County area, with a limited-access bypass around the north side of Snellville.
- Concept 2 calls for a north Snellville bypass with reversible through lanes from the Stone Mountain Park area to west of Snellville, where they would transition to a limited access facility. The reversible through lanes would be separated by a barrier from other traffic lanes. East of the north bypass, U.S. 78 would be improved to a freeway-type facility to the Walton County area. For Concepts 1 and 2, improvements to existing U.S. 78 through the Snellville area will be evaluated.
- Concept 3 would provide barrier-separated reversible through lanes along the existing U.S. 78 corridor from the Stone Mountain Park area to east of Snellville. From there, U.S. 78

would be improved to a freeway-type facility to the Walton County area.

All concepts terminate at I-285 and call for U.S. 78 to be widened to eight lanes from I-285 to the West Park Place Boulevard area. Service roads along existing U.S. 78 would provide access to local destinations.

Interchanges would be provided at key locations along the corridor.

The study recommended that strategies such as transit, carpooling, flexible work hours and telecommuting be explored further. These are particularly important because of the Atlanta Region's air quality, which is currently below federal standards.

ARC and the Georgia DOT produced a video that recaps the study process and explains the three concepts. It features interviews with some study participants. A good faith effort to disseminate the study recommendations to community groups and neighborhood associations did not succeed in generating public support for those recommendations. As of this date, none of the three major alternative concepts has received additional study.

6. Regional Transportation Plan (2001)

Under the Federal-state system that has evolved for transportation planning, ARC is designated as a Metropolitan Planning Organization (MPO) that develops the region's transportation plan (RTP) and project list (TIP, the Transportation Improvement Program). ARC does this in concert with Georgia DOT, MARTA and other transit agencies, and in recent years with GRTA, the Georgia Regional Transportation Authority. The current regional transportation plan was adopted by ARC in 2000 and consists of \$36 billion in planned projects. The RTP establishes long-term policies and strategies that will address the region's needs to the year 2025 and bring the region into compliance with federal air quality standards. The plan

attempts to promote alternatives to the single occupant vehicle and emphasizes the link between transportation investments and land use patterns. The RTP is updated every three years. Preparation for its 2003 update will soon be underway. Basic components of the plan are:

- Meets air quality conformity standards by target date of 2003 and provides continuous improvement through the planning period.
- Expands HOV lane mileage by 380 percent with 220 new land miles added by 2025. 55% of the proposed investment package is devoted to transit facilities.
- A \$500 million expansion to form a regional bike and pedestrian system.
- A \$250 million investment into commuter assistance and efficiency programs.
- \$202 million invested into emissions strategies, including an alternative fuels program, stricter emissions control and inspection and maintenance programs.

The plan is predicated on two significant assumptions: that the region will add 1.5 million people by 2025 increasing to a total of 4.8 million and add 900,000 new jobs in the same period.

The key transportation projects adopted in the RDP which affect Snellville most are the ones dealing with U.S. 78 and S.R. 124.

C. Existing Conditions and Recommendations

1. Roads

a. Overview

The following three figures summarize the road network within the City of Snellville. **Figure VI-1** compiles the traffic volumes of many primary and/or congested streets within the city. **Figure VI-2** illustrates the proposed thoroughfare classification system. This is followed by **Figure VI-3** illustrating the state and county improvements to the transportation

system that are planned within Snellville.

The following sections go into detail on a street-by-street basis including an assessment and recommendations for many of the most problematic thoroughfares in Snellville.

Figure VI-1: Traffic Volumes and Conditions on Snellville Thoroughfares				
Thoroughfare	Existing Classification	ADT (and location of count)	Date Measured	Level of Service (at peak hours)
US 78/SR 10/ Main Street	Principal Arterial	44,600 west side 39,700 east side	2000	F
SR 124/ Scenic Highway	Major Arterial	38,300 south of Ronald Reagan Pkwy. 19,700 south of US 78	2000	F
Ronald Reagan Parkway	Principal Arterial	42,000 @Webb Gin House Rd.	2000	C
Lenora Church Road	Minor Arterial	10,700 - between Pate and SR 124	1999	A
Henry Clower Boulevard	Minor Arterial	10,700 – SR 124 to Lenora Church 6,500 – Knollwood to SR 124	1999	A
Skyland Drive	Minor Arterial	9,600 – Springdale – US 78	1999	E
Oak Road	Minor Arterial	9,300 Scenic Hwy. – Highpoint Rd.	1999	F
North Road	Minor Arterial	8,400 Pinehurst – Oak	1999	F
Pharrs Road	Minor Arterial	8,500 Scenic Hwy. – Hillside Dr.	1999	E
Pinehurst Road	Minor Arterial	6000 – S.R. 124 to Ridgedale Dr.	2000	B
Rosebud Road	Major Arterial	7,600 Cooper – US 78	1998	D
SR 84/Grayson Highway	Major Arterial	4,300 – Ridgedale - US 78	2000	C
Wisteria Drive	Minor Arterial	19,000 – US 78 – SR 124	1999	C

Source: Gwinnett DOT and Georgia DOT data

Figure VI-2: Thoroughfare Plan

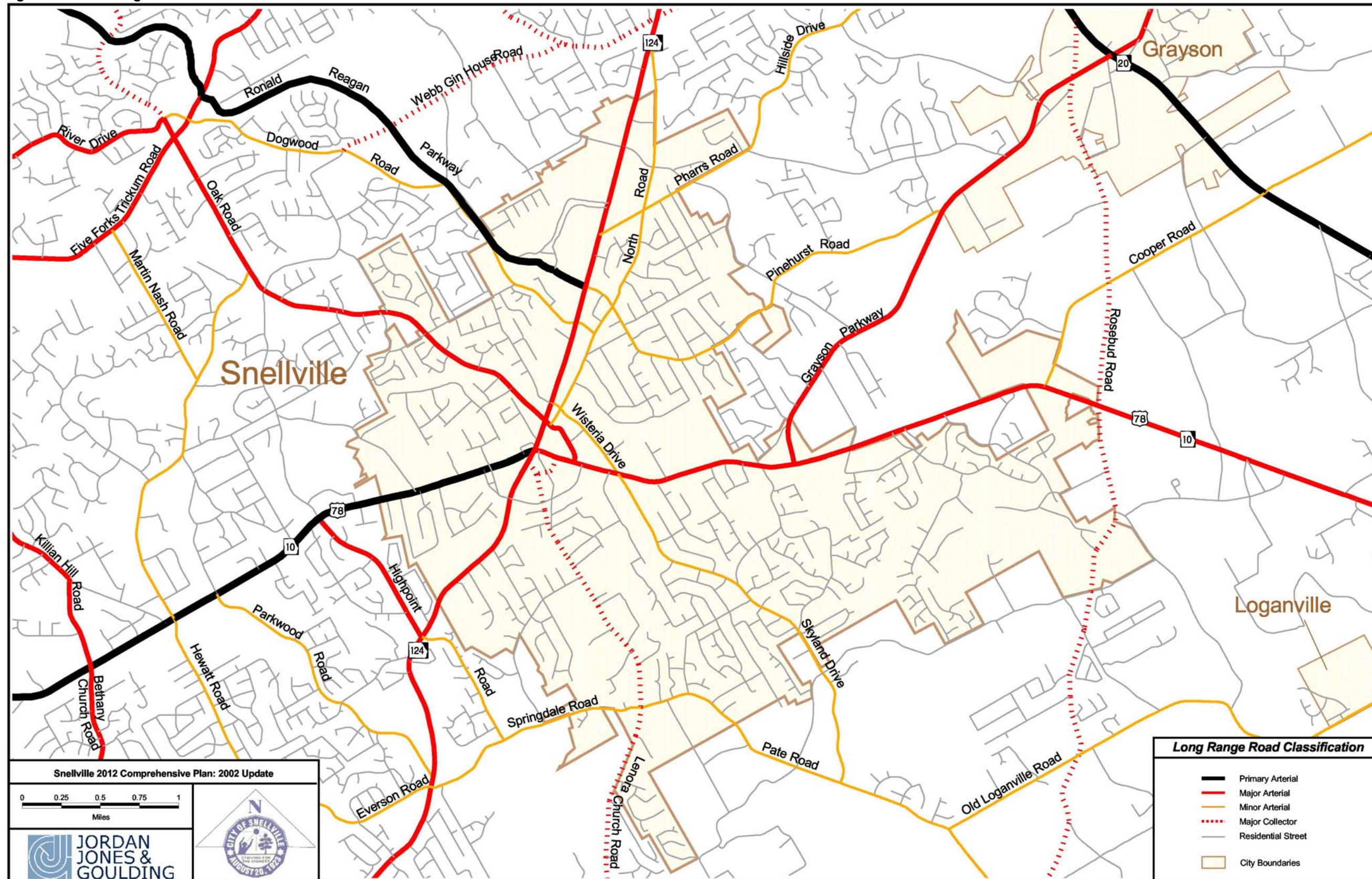
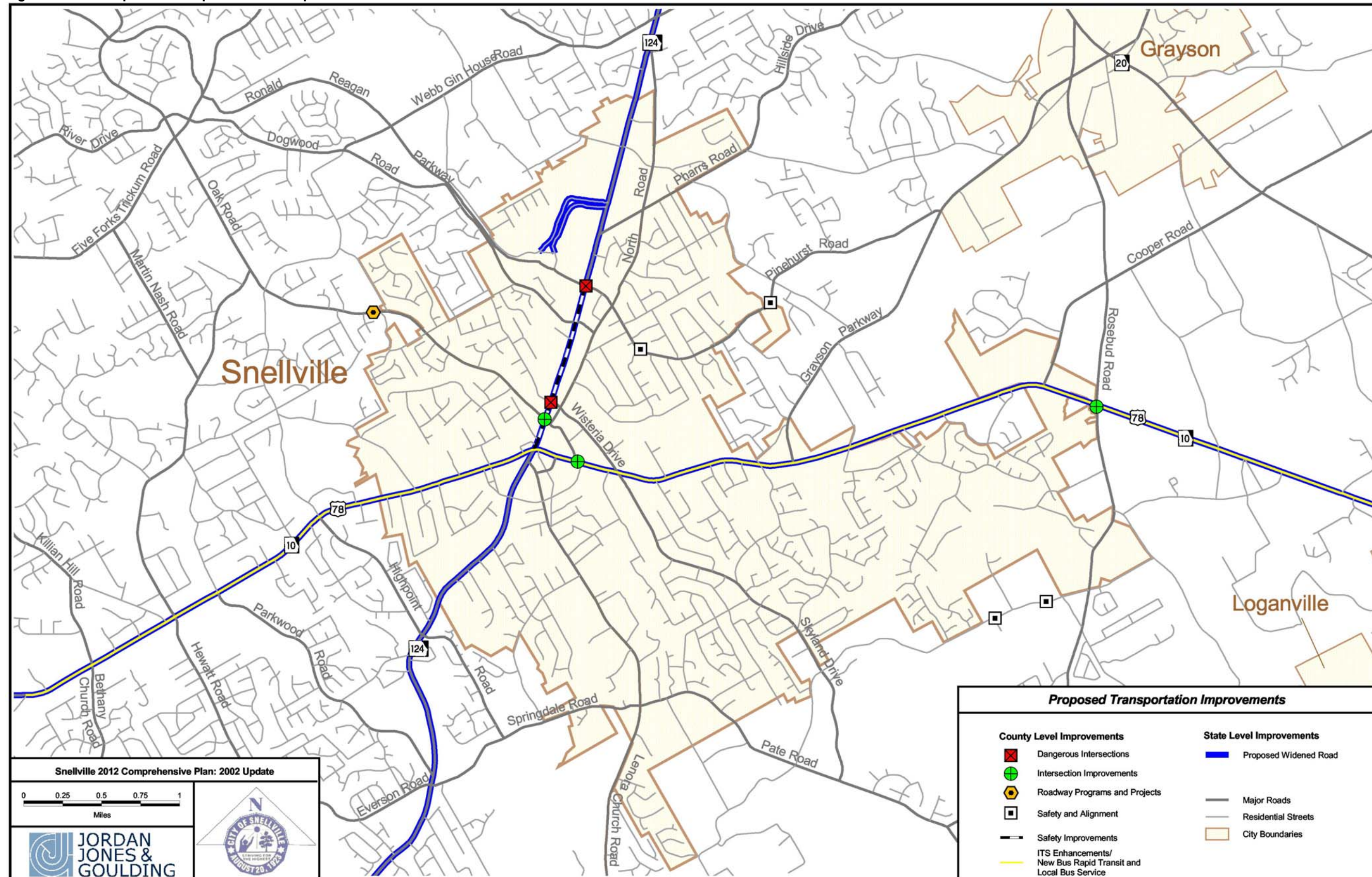


Figure VI-3: Transportation Improvements Map



b. U.S. 78

i. Overview

U.S. Highway 78 is the predominant feature giving urban form to eastern Gwinnett County and the City of Snellville. This highway has historically connected downtown Atlanta and Decatur to Athens. In the 1970's, it evolved into a major route for suburban residents who began moving into Gwinnett to commute to jobs located in DeKalb County and Atlanta. In DeKalb County, U.S. 78 is officially named the Stone Mountain Parkway and operates as a six-lane freeway where it is arguably the most scenic expressway in all of Atlanta. Near the DeKalb/Gwinnett County line, it changes character drastically, transitioning to a four-lane arterial with two reversible lanes that continues to the intersection with S.R. 124 in Snellville. East of S.R.124, U.S. 78 has a configuration of four through-lanes and a turn-lane. This highway is an ever-widening pipeline to accommodate the traffic volumes that increase dramatically as I-285 is approached.

Immediately west of S.R. 124 in Snellville, the traffic volume was 44,600 in 2000, an increase of over 11% since 1994 when the U.S. 78 Corridor Study was completed. That study projected average daily traffic would reach about 55,000 vehicles per day in this part of U.S. 78 by 2010. Even the present volumes result in great congestion and low levels of service during peak hours and, increasingly, during other parts of the day. East of S.R. 124, in the Town Center of Snellville, the traffic volumes are not as great as on the west side of that intersection.

ii. Existing Plan in the RTP

The 2025 Atlanta Regional Transportation Plan proposes that U.S. 78 be reconstructed into a six-lane freeway from DeKalb to Walton County passing through the City of Snellville. This is an expensive and unnecessary highway project that would be

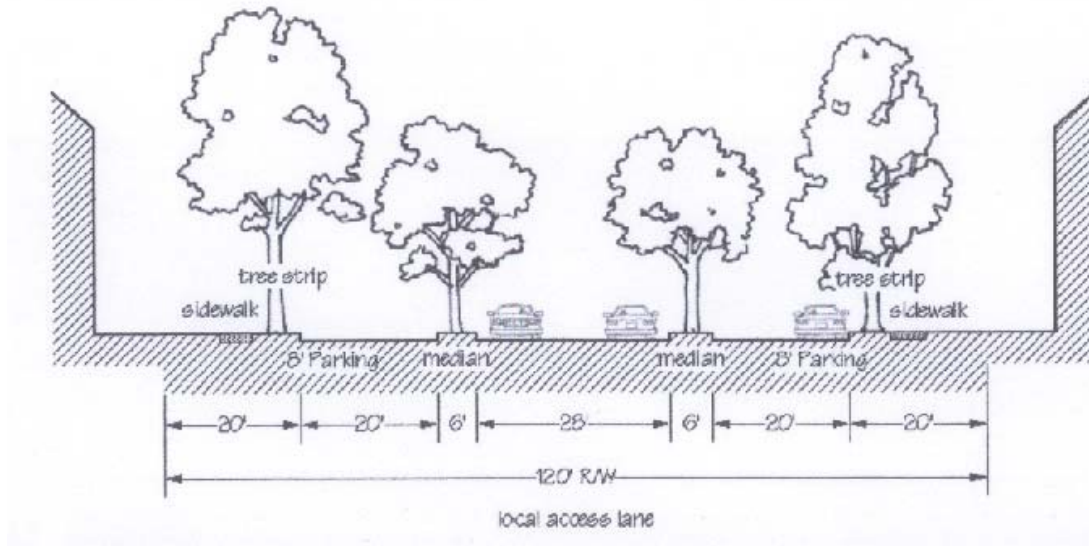
disastrous to the people and businesses of Snellville as well as to all others along U.S. 78. This plan, in essence, converts an existing major arterial into the equivalent of an interstate highway. Elevated interchanges would be required at all major intersecting streets, requiring the acquisition of the surrounding properties and resulting in extensive compensation to land owners and businesses. The typical right-of-way width required for an expressway according to the Georgia DOT is 160 feet. Right-of-way acquisition costs would be significant. This expenditure would be all for the purpose of moving 67,000 vehicles per day through west Snellville at essentially the same levels of congestion experienced today.¹ This proposal severely undermines the goals and objectives of this comprehensive plan. Regional mobility in the U.S. 78 corridor can be accommodated without destroying Snellville.

iii. Proposed Multiway Boulevard

The alternative proposed in this Plan is to convert U.S. 78/Main Street within the city limits of Snellville to a multi-way boulevard where four central through lanes are flanked by narrow tree-lined medians and then local access lanes. Combined with a 35 mph design speed, this type of cross-section design could significantly increase the traffic capacity on U.S. 78. Like the expressway proposed in the RTP, the multi-way boulevard also involves expansion of right-of-way, but at a much less radical level. The rationale for this minor widening to 120 feet are more sophisticated than merely moving the greatest volume of traffic at the greatest speed possible through an existing town center. U. S. 78 in Snellville is named Main Street for a reason: it functions like a classic main street. The most important civic buildings - city hall, several grand churches, an historic cemetery and

¹ Source: U.S. 78 Corridor Study, 1994.

Figure VI-4: Multilane Boulevard Proposal for U.S. 78



South Gwinnett High School - immediately adjoin it.

These would be destroyed or at best severely impacted by a six-lane elevated expressway. A multi-way boulevard allows these land uses to remain relatively undisturbed and intact. It would even enhance the urban corridor that these civic uses by their very presence define. In summary, the features of the proposed multi-way boulevard are:

- Design Speed: 35 mph
- Through lanes: 6, 11-foot wide lanes
- Center median: 10-foot wide min.
- Outer medians: 2, 6-foot wide min.
- Local access lanes: One on each side with one parking lane transitioning to 2 traffic lanes near intersections. 20-foot wide total.

c. S.R.124

i. Growth and Change

Scenic Highway changed radically from a two-lane highway to its present six and four

lane configuration during the 1990's as commercial expansion combined with residential growth to both require and allow the road to be widened. Within the city limits of Snellville, this road provides access to:

- a) Ronald Reagan Parkway,
- b) Four major shopping centers totaling over two million square feet and,
- c) Lawrenceville to the north and Lithonia and I-20 to the south.

ii. Impact of Ronald Reagan Parkway

Ronald Reagan Parkway opened in 1994 to address a need for a cross-county "connector". Over the past six years it has successfully fulfilled that need, but this expressway/parkway has come at a price. That price was a massive cut-through traffic problem. Vehicles from east of Snellville traveling to the Parkway and the traffic produced by the strip shopping centers at the Parkway's intersection with Scenic Highway have created the cut-through problem. This problem is caused by commuters working their way through Snellville's northeast neighborhoods and along U.S. 78 and S.R. 124 to reach the Parkway. A

second major price was paid with the creation of new commercial development at the Parkway's junction with S.R.124/Scenic Highway. The site of what is now the city's highest concentration of retail development was annexed into the City of Snellville and zoned commercial during the late 1980's and early 1990's. These retail destinations have created significant congestion along Scenic Highway, an indication of their commercial success.

d. The Intersection of U.S. 78-S.R. 124: Mason Interchange

i. Overview

The existing intersection of U.S. 78 and S.R. 124 is the most important feature of the traffic system in the city of Snellville. How it is redesigned and reconfigured looms as the biggest single issue affecting the future of Snellville. The intersection is the greatest congestion point on Highway 78. Reducing that congestion and improving the intersection's capacity and efficiency is paramount. But how this is accomplished will determine the future of Snellville's central business district and its new Town Center development. Improvement projects need to develop the new Snellville Town Center. Currently, this is the major intersection for the regional traffic corridor of DeKalb County, Southeast Gwinnett County, and Walton County east to Athens. The intersection currently operates at a level of service F during peak hours. This congestion creates a condition where a significant amount of through traffic seeks alternate routes around this intersection, creating problems elsewhere.

Figure VI-5 below illustrates the peak A.M. and P.M. traffic movements through the intersection. These measurements were compiled by Gwinnett County. The most significant movements through the

intersection are the through traffic in all directions and the eastbound U.S. 78 to northbound S.R. 124 and southbound S.R. 124 to westbound U.S. 78 movements.

Due to the large volume of traffic at this intersection in all four directions, the most efficient improvement for this intersection is a grade separation between U.S. 78 and S.R. 124. Grade separation has been used along U.S. 78 in DeKalb and Gwinnett Counties from just inside the I-285 loop to West Park Place Boulevard. Grade separation has also been used for the Peachtree Industrial Boulevard corridor from I-285 to Peachtree Corners. Currently, a grade separation intersection project is planned to improve traffic conditions for Buford Highway and Pleasant Hill Road in Gwinnett County. This intersection has comparable peak traffic volume to the U.S. 78 and S.R. 124. The budgeted project cost for grade separation of this intersection is \$43 million.

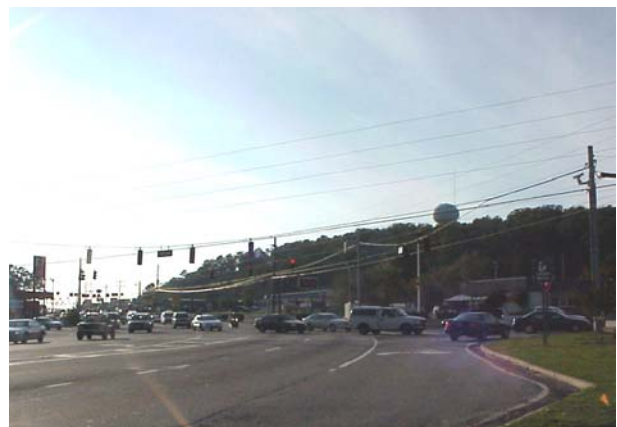
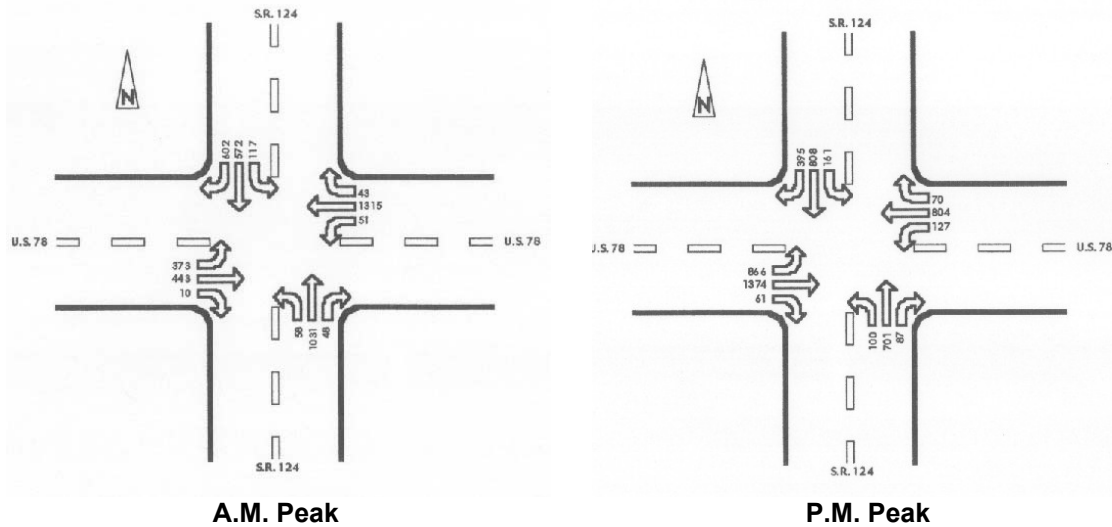


Figure VI-5: Peak Turning Movements at the Intersection of U.S. 78 and S.R. 124



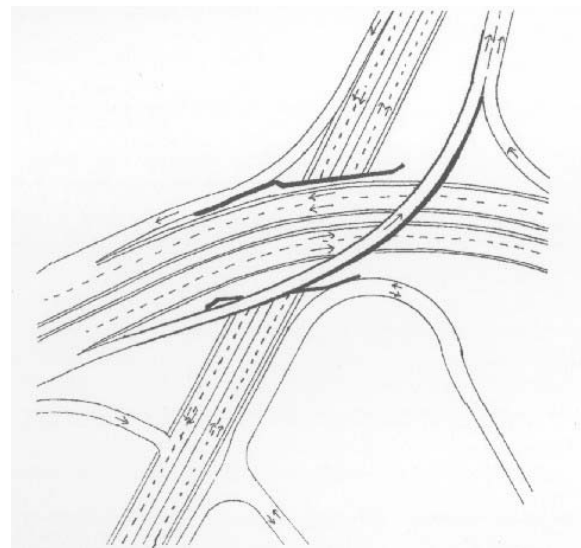
The Mason intersection has sufficient traffic flow volume (5,500 vehicles peak hour in 1997) to warrant a grade separation project. This intersection is located within the Snellville Town Center. A grade separation above grade would create a major barrier to economic development of the Town Center area. It is proposed to provide the necessary grade separation at the U.S. 78 and S.R. 124 intersection by going below grade. Five alternative designs are discussed below:

ii. Mason Interchange Alternatives

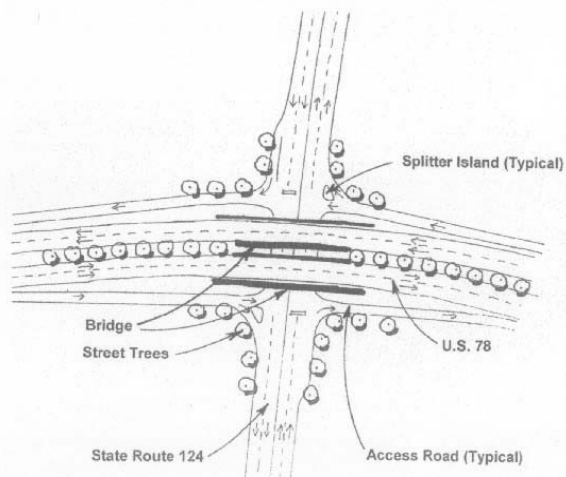
Alternative I - Fly-over ramp for U.S. 78 eastbound to S.R. 124 northbound.

This traffic movement is a significant percentage (16%) of the total traffic utilizing the intersection during the PM peak. This alternative is the least expensive although it has two significant drawbacks. First, it would present negative impacts to the visual image and development potential of the Snellville Town Center by creating a large prominent ramp structure that would dominate the business district. The second drawback is that this ramp would produce most of its benefits only in the evening peak commute period and very little benefit in the morning peak hours when traffic is not flowing in the direction

served by the ramp. Furthermore, a fly-over ramp would only indirectly assist the greatest flow volumes that are the east-west through lanes on Main St./U.S. 78. These lanes would still be controlled by traffic signals and would be subject to the flow restrictions presented by that. The barrier a fly-over ramp creates would seriously jeopardize the Town Center redevelopment. Alternative I does not support the community's vision for the future of Snellville.



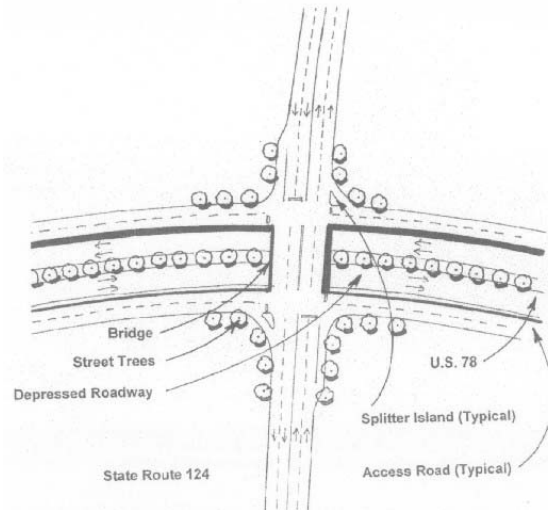
Alternative II - Depress S.R. 124 below U.S. 78.



Alternative II would locate through lanes of Scenic Highway in an underpass below Main Street. All turns at the intersection would be provided at a signalized surface grade intersection. This means that substantial platoons of turning vehicles after receiving a green light would be attempting to merge onto the flowing through lanes of U.S. 78. This might require long merge ramps for storage of these vehicles as they queue up. Further modeling is needed to examine this alternative.

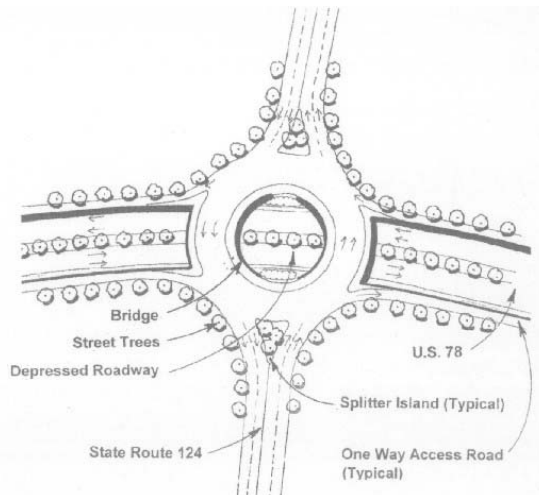
Alternative II has a construction advantage due to the existing topography. Grading and drainage for this alternative would be easier and therefore, the cost to build would be less. However, Alternative II presents a Town Center development disadvantage. Pedestrian movement along Scenic Highway is very limited compared to that on Main Street. U.S. 78 through-traffic would remain at-grade creating difficult pedestrian movements and a less satisfactory pedestrian environment overall in the Town Center development district. Depressing S.R.124 below grade through the Town Center district increases pedestrian safety and improves development potential - but not where it is needed the most.

Alternative III - Depress U.S. 78 below S.R. 124.



Alternative III proposes grade separation by depressing U.S. 78 below S.R. 124 with conventional signalized intersections at grade. All turns at the intersection would be provided and take place at a signalized surface grade intersection. Alternative III has a construction disadvantage due to the existing topography. Grading and drainage for this alternative will be more difficult and therefore, the cost to build this intersection would be higher than Alternative II. Alternative III, however, is much more supportive of the Town Center redevelopment. The through lanes on U.S. 78 are depressed below grade creating improved pedestrian movements and land use benefits in the Town Center. Constructing U.S. 78 below grade through the Town Center would greatly enhance development property values and increase pedestrian safety. An Urban Interchange design (also know as Greiner or single point urban interchange (SPUI), also know as a single point diamond) above an underpass may be appropriate for either alternative II or III, as they are designed to handle a large volume of traffic and require a minimum of right-of-way. These are significant benefits that must be quantified and factored into each alternative that is considered. They cannot be ignored in the consideration of any pure road building solutions.

Alternative IV - Depress through lanes of U.S. 78 below a modern roundabout intersection located at grade with S.R. 124.



Alternative IV would relocate U.S. 78 below grade in the city center to facilitate connectivity and pedestrian movements from the southern sector to the northern sector of the city center. First, it conforms to the recommended practice in the AASHTO Manual (1994) to separate the roadway with greatest through traffic volumes. Second, depressing the roadway to achieve the separation instead of elevating it removes a visual barrier and an aesthetic liability to the adjoining business and civic land uses that are at the heart of the Snellville community. Truck and auto noise is also reduced as sound is reflected within the box of the highway and upward. A significant increase in roadway capacity occurs with the separation from at present to at peak hours. A roundabout at surface grade would be provided to handle all turning movements from Scenic Highway and the local access lanes of U. S. 78 discussed below. A roundabout capable of providing continuous movement for 3,000 vehicles per hour would be expected to have a paved traveled way on the order of 300 feet in outer diameter. This dimension is a rough estimate and requires further calculation. Two computer-based algorithms, the RODEL method and Gap theory, have been used to

design roundabout capacity, with the RODEL method finding increasing favor. Other CAD-based simulation applications, notably, AutoTURN v. 3.0 by Transoft Solutions, are utilized in design of the deflected curves that are among the key components of the modern roundabout. Further detailed modeling using the applications mentioned would be required to determine the specific performance and dimensions of this proposed system interchange enhancement system.

The U.S. 78/S.R. 124 roundabout with grade separation will reduce pollution by significantly reducing stopping and idling. The roundabout, if properly designed, would also reduce the number and severity of accidents by as much as 90% according to recent experience with these facilities in the U.S. and Europe. But additional computer modeling is needed to quantify these benefits with accuracy. What can be accurately stated is that Alternative IV is the most expensive option presented - but it presents the greatest potential benefits both to the city of Snellville and to regional mobility.

Alternative V - Grade separation: elevate U.S. 78 over a signalized interchange with S.R. 124.

This alternative is the standard solution in Georgia for a grade-separated interchange because of its economy. Roadways can be elevated on compacted earth fill, either with or without retaining walls, usually at substantial savings compared to excavated roadways depressed below grade. A nearby and familiar example of an elevated interchange is that of U.S. 78 at East and West Park Place on the DeKalb/Gwinnett County line. But that example clearly illustrates the negative effects of such a design on the adjoining land uses. Imagine the Park Place interchange in a more dense urban setting like downtown Snellville. The massive size requires a minimum of 130 feet of right-of-way. In an urban location like downtown Snellville, there are three major

churches, a class AAAAA high school, and an historic cemetery adjoining the existing 90-foot right-of-way of U.S. 78 to the east of S.R. 124. Right-of-way acquisition costs for an above-grade separation would be astronomical and would negate most of the economies typically associated with elevated construction. Furthermore, once acquired, many of the adjoining businesses would be completely displaced and demolished. A commercial wasteland would likely result. This elevated overpass design is the least supportive of the goals of this comprehensive plan and would make the redevelopment of the Town Center untenable. Its impact on the existing and future business district of Snellville would be nothing short of devastating. Alternative V is not recommended and should be excluded from further consideration by state, regional, and county agencies.

iii. Conclusions: Mason Interchange

All three of the alternatives that include a depressed grade separation, Alternatives II, III, and IV, merit continued planning and engineering analysis. Based upon the information available at the time of this plan and the preliminary assessment allowed by the resources and constraints of this comprehensive plan, the city's planning consultants believe that grade separation of Main Street/U.S. 78 passing underneath S.R.124 is the preferred alternative. Both Alternative III and IV are supportive of the goals and objectives of this comprehensive plan. Additional study is required to determine which is the best choice for Snellville. The following factors should be taken into consideration:

- 1) Project cost: Alternative III will be less expensive to construct.
- 2) Traffic flow: Alternative IV supports a higher traffic capacity.

- 3) Traffic safety: Alternative IV will decrease traffic accidents and improve safety by as much as 90%.
- 4) Urban Design: Alternative IV has the urban design advantage. The center island of the roundabout could become a landscaped public green space suitable for placement of a monument or other significant work of civic art.
- 5) Pedestrian safety: Neither alternative has a significant advantage in terms of pedestrian safety, although Alternatives III and IV are much safer alternatives than the other three.
- 6) Impact to surrounding land uses: Neither alternative has a significant advantage in terms of its impact on surrounding land uses. However, Alternatives III and IV are again much better alternatives than the other three.

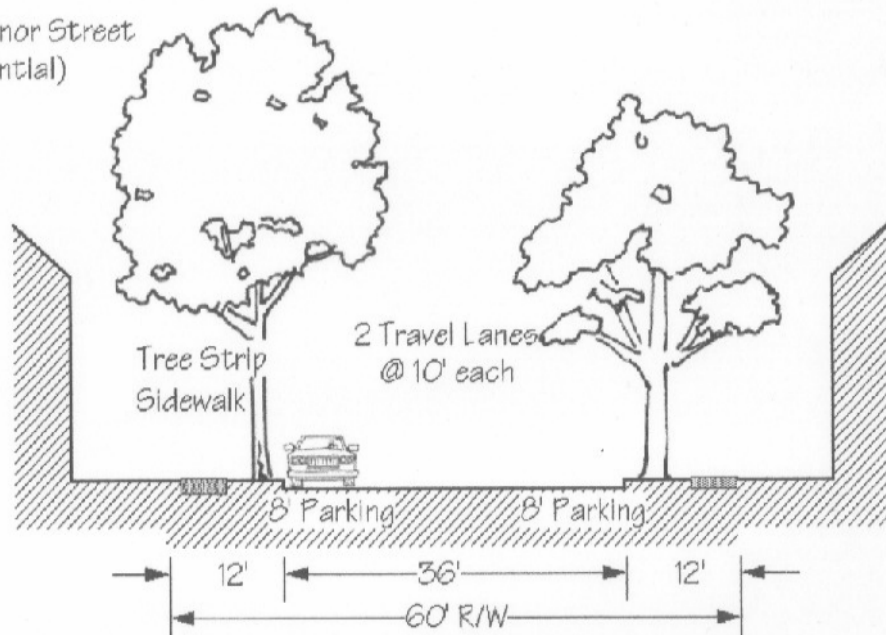
e. Oak Road

i. Re-Alignment with Henry Clower Blvd. at U.S. 78

A key road project in the redevelopment of the Snellville Town Center is the realignment of Oak Road at U.S. 78 to tie the northern and southern parts of the Town Center district together. The Oak Road/Main Street intersection is currently not signalized and left turn movements are hazardous as drivers from Oak Road attempt to force their way across 3-4 lanes of traffic. Oak Road would be aligned with Henry Clower Blvd. making a safer four-way signalized intersection. This would be accomplished by turning Oak Road to the east and bringing it through the Oakland Village shopping center, recently acquired by the city as the site for a new City Hall. The realignment will allow the city to sell the old ROW or develop it into part of the Town Center district. This new alignment of Oak Road and Henry Clower Boulevard will

Proposed

Classification: Minor Street
(Non-residential)



provide a new improved three quarter loop around the Central Business District. An Oak Road/Henry Clower Boulevard alignment would serve as a valuable component in the street network both for local pedestrian and vehicular traffic in the central business district into the future.

turn lane provision. Improvements in turning movements will be an integral part of the new traffic patterns in the Town Center. If necessary, Oak Road will serve as an alternate route during the reconstruction of the U.S. 78 and S.R. 124 intersection.

ii. Streetscape Improvements

Streetscape improvements to Oak Road between S.R. 124 and U.S. 78 will be necessary to develop the pedestrian character of this corridor. Sidewalks buffered by a 5-foot wide landscape tree strip to provide beauty, character and safety will enhance the pedestrian experience on this important street, which is the site of several financial and insurance businesses. On-street parking and changes in pavement texture at pedestrian crossings are key elements to the street improvements.

iii. Intersection of Oak Road and S.R. 124

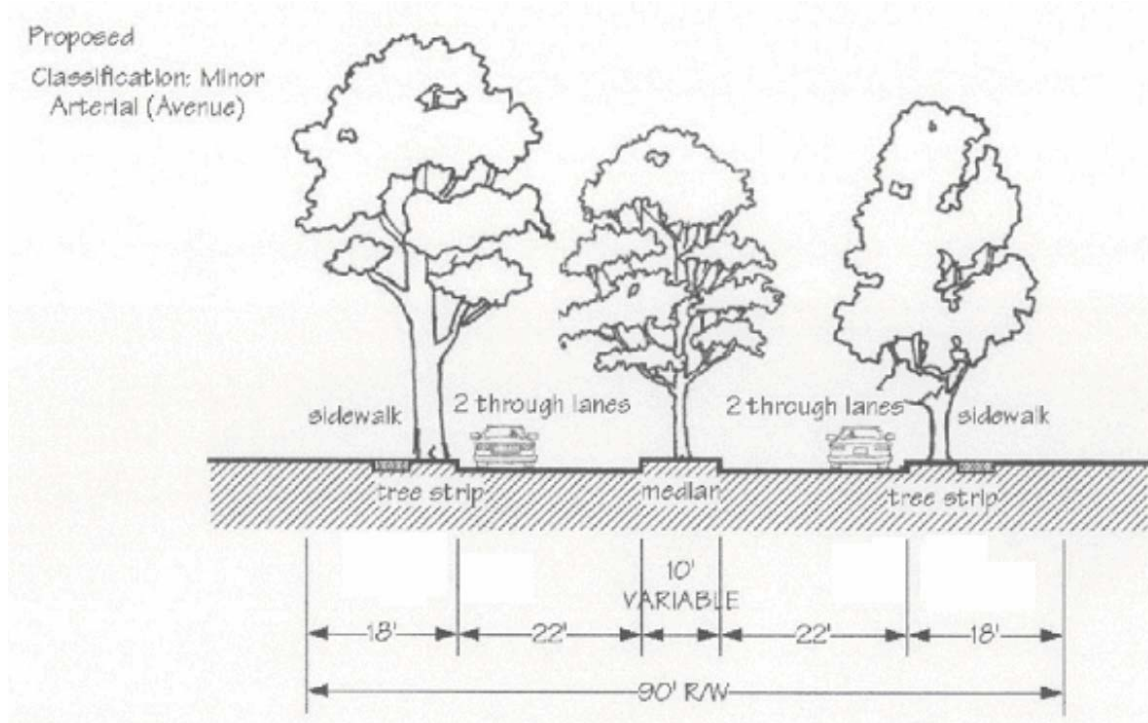
The intersection of Oak Road and S.R. 124 will require improvements in signalization and

f. Wisteria Drive

i. Intersections

Wisteria has three important intersections – all in need of redesign. Wisteria's intersections with S.R. 124 and North Road require improvements to capacity and storage of vehicle queues. The addition of turning lanes and signalization changes at North Road will provide the needed traffic storage and separation of movements needed to enhance intersection performance. Wisteria's intersection with S.R. 124 will require lane adjustments and signalization to help this road become a functioning secondary route from north to east Snellville.

In order to support the intersection improvements at Wisteria, it is recommended



that Harbour Oaks Drive be limited to right in/right out movements only at its intersection with S.R. 124. Westbound Wisteria should be designed to be right turn only onto S.R. 124 and southbound S.R. 124 turning traffic onto Wisteria be provided a new east bound lane on Wisteria. It is also recommended that signalization be provided at this intersection for the left turn onto Wisteria.

ii. Streetscaping

Streetscape improvements to Wisteria between S.R. 124 and U.S. 78 will be necessary to develop the pedestrian character of this important street. Wide sidewalks that are landscaped with street trees to provide beauty, character and safety will enhance the pedestrian experience in this important civic area.

g. Henry Clower Boulevard

i. Streetscaping

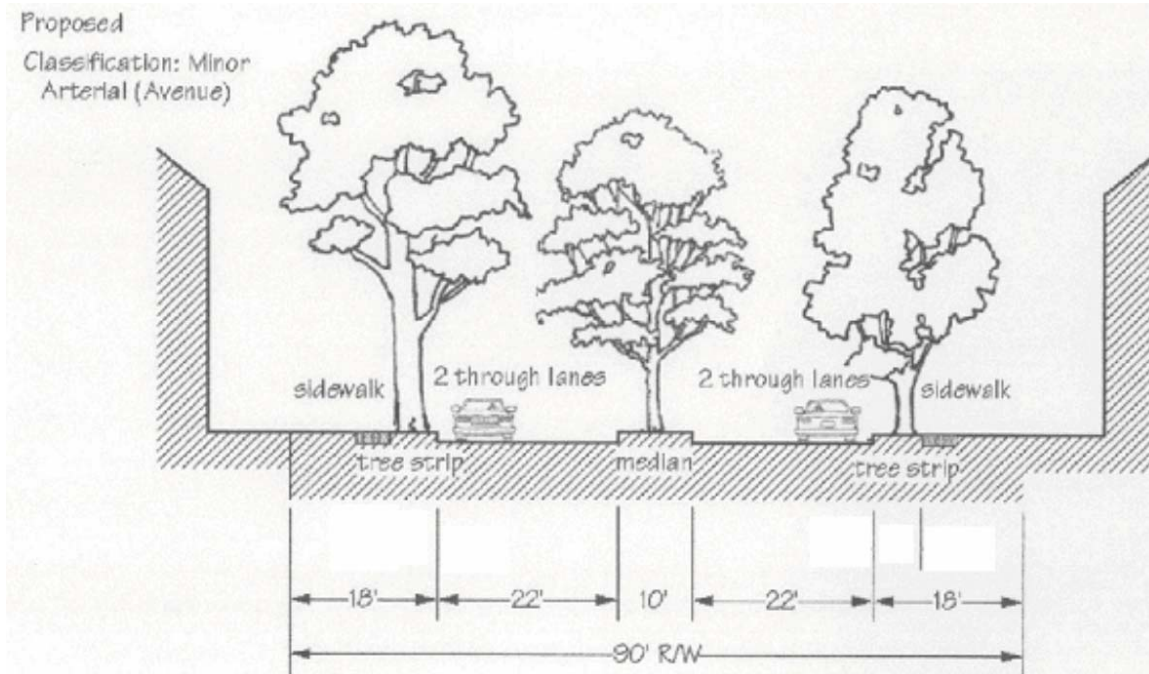
Henry Clower Boulevard is presently a wide loop road around the southern boundary of the

Town Center. The road was completed under Gwinnett County's auspices in 1994 and has significant unused traffic capacity. The City has allocated over \$40,000 of its Tree Bank fund to installing street trees on Henry Clower Blvd. and adjoining Lenora Church Rd. This project is scheduled for completion by the end of 2002. The installation of pedestrian safety areas and street lighting are also needed improvements to make this roadway more pleasant for motorists and a fitting elegant city street as well as making it more inviting for pedestrians, joggers, and bicyclists. Classified as a minor arterial on the Official Thoroughfare Plan, the Boulevard will be important as an efficient loop road to the Town Center.

h. Residential Traffic Calming

**i. North Rd./Pinehurst/
Dogwood Area**

Due to the current congestion at S.R. 124 and U.S. 78 intersection, and the alignment of the terminus of Ronald Reagan Parkway on



S.R. 124 at Pinehurst Road, regional traffic patterns have developed through the northeastern residential area of Snellville. The configuration of Ronald Reagan Parkway and Pinehurst Road creates a natural "cut through" traffic condition through the residential neighborhoods in northeast Snellville. The morning westbound peak flow from the residential area is approximately 60% of the peak afternoon eastbound traffic indicating the entry of significant amounts of non-local traffic into the area.

To calm the afternoon peak traffic eastbound on Pinehurst, placement of a traffic restriction island providing for one-way westbound traffic is recommended beyond the commercial corridor along S.R. 124. This would mean that two-way traffic access would be maintained to the corner commercial properties at Pinehurst and S.R. 124, but only one-way traffic westbound would be provided from the residential area. This would divert the afternoon cut through traffic a short distance south on S.R. 124 and use the improved four-lane Wisteria Drive. Curb extensions would be added to Pinehurst just behind the commercial strip on S.R. 124. This

would make the "cut through" route through the northeast residential area less desirable. These improvements should additionally reduce the traffic volume along North Road thereby reducing congestion along North Road at its intersections with Pinehurst and Dogwood.

ii. Pinehurst Rd. and North Rd. Intersection Improvements

The intersection of Pinehurst Rd. and North Rd. is a critical congestion point. North Rd. serves as a secondary route to the commercial areas along S.R. 124 as well as a route for "cut through" traffic going east and west to Ronald Reagan Parkway. This intersection will continue to handle more traffic than the present four-way stop can efficiently handle during peak time. Traffic patterns vary greatly during the day creating changes in primary traffic direction. A roundabout would be the ideal traffic control and calming method of choice for this intersection. The roundabout would have an inscribed circle outer diameter on the order of 80 feet (similar



to a cul-de-sac's dimensions). This measure will provide for continuous, smooth, safe flow and enhance the appearance of the surrounding residential area.

If high levels of growth continue to the east of Snellville in Grayson, in the unincorporated areas of Gwinnett and in Walton County, the traffic calming measures described above that are designed to divert cut-through, non-local traffic to Ronald Reagan Parkway will be overwhelmed. The time to plan a long-term solution is now. Conversion of Pinehurst Road to a residential parkway connecting Scenic Highway to Grayson Parkway (S.R. 84) and to U.S. 78 east of the Snellville Town Center is a long-range transportation improvement that would solve this growing traffic problem. Such a project might require minimal acquisition of land parcels along the proposed route since most of Pinehurst Road is indicated on the official county and city maps as typically having an 80-foot wide existing right-of-way. Under Snellville's recently revised development regulations, and official thoroughfare plan, a residential boulevard is classified as a minor arterial and can be designed within an 80-foot right-of-way. However, it might be desirable to acquire residential properties on both sides of the existing right-of-way to build a parkway truly rural in character, which would be reforested as a tree natural area.

Under this plan, Pinehurst Road would be expanded from two to four lanes with a central tree median, with additional street trees

planted along the parkway edges, and sidewalks or a bikeway. The tree landscaped central median would have a minimum width of eight feet and would vary in width, but could greatly expand where needed, allowing the travel lanes to further separate in order to conserve landscape features. This roadway would be a classic parkway. There are two design features that are essential requirements for this parkway to be successful. First, a design speed limited to 35 mph with careful engineering and landscape design are essential requirements if the parkway is to maintain the elegant suburban residential character. The second requirement is that no commercial land uses are to be allowed along the parkway. This recommendation for a Pinehurst Parkway is conditioned absolutely on these requirements - otherwise, the parkway would become corrupted into something far too damaging. There are two comparable models in the metro area for this proposed parkway. One is the Freedom Parkway (S.R. 10 / 42) connecting downtown Atlanta to the Carter Presidential Library and terminating at Moreland Avenue. This parkway was designed under Georgia DOT's authority and performs well as a multi-use right-of-way for pedestrians, joggers and bicyclists. The other model is Ponce de Leon Avenue (U.S. 78) and its adjoining Olmstead parks located in the Druid Hills neighborhood of DeKalb County. This parkway is listed on the National Register of Historic Places. Both roads handle substantial volumes of traffic yet complement and even enhance the adjoining properties and neighborhoods where homes are valued in the \$400,000 range.

i. Street Improvement Projects: Planning Team Recommendations

- 1) Intersection of U.S. 78 and S.R. 124: Grade separation as per

Alternative III or IV (2008-2015).

- 2) U.S. 78: Within city limits of Snellville, convert to multi-way boulevard with four through lanes, two outer medians, and 2-4 local access lanes.
- 3) Oak Road: Realign with Henry Clower Blvd. at U.S. 78.
- 4) Oak Road: Implement streetscaping including on-street parking, sidewalks and street trees.
- 5) Wisteria Drive at S.R. 124: Intersection improvements.
- 6) Wisteria Drive: Convert to boulevard (80-foot ROW with 8-foot wide central median and add streetscape improvements.
- 7) Henry Clower Boulevard: Implement further streetscape improvements.
- 8) Intersection of U.S. 78 and Henry Clower Blvd: Intersection improvements.
- 9) Traffic calming improvements: Add traffic calming devices in the North Rd./Pinehurst/Dogwood area; Make Pinehurst one-way west-bound west of North Rd.; Add traffic circle at the intersection of Pinehurst and North Rd.
- 10) Pinehurst Parkway: Convert to a residential parkway with four ten-foot wide lanes, a central tree-lined median, bike path, sidewalks and streetscaping (2010-2020).

2. Transit

a. History of Public Transit Initiatives in Gwinnett County

In the 1970s, Gwinnett voters approved a referendum, which made Gwinnett County a voting partner in MARTA's governing authority. At the same time they rejected referendums allowing rail and bus expansion through a local sales tax. Numerous studies assessing the feasibility of public transportation in Gwinnett County have been conducted. In 1984, at the request of Gwinnett County, the ARC performed a study which found a large number of Gwinnett County residents were riding MARTA in DeKalb County. The study recommended possible transit routes along U.S. 78 or U.S. 29. A 1989 study performed by ARC recommended that a new light rail line be constructed connecting Stone Mountain Park to the MARTA Lindbergh Heavy rail station. The extension of the light rail line to Gwinnett County near U.S. 78 and Rockbridge Road was not found cost effective according to earlier federal guidelines. An extension of MARTA rail was proposed along the I-85/S.R. 316 corridor in 1991. However, Gwinnett voters rejected the proposal

The Georgia DOT conducted a study to determine the feasibility of commuter rail service along 12 existing rail corridors in North Georgia. Recommendations released by the consultant staff in January 1995 include an east-west commuter rail line from Atlanta to Athens, extending through the northern half of Gwinnett County. In 2001, The Project Blueprint study examined commuter rail options throughout north Georgia and included the Atlanta to Athens line in its Phase 1 recommendations. The Study called for a stop along Ronald Reagan Parkway, near the City of Snellville. Another east-west commuter rail line from Atlanta to Madison

was recommended that would parallel I-20, south of the U. S. 78 Corridor study area. At the time this Plan was written, Gwinnett County was in the process of kicking off yet another major study examining transportation options for the I-85 corridor.

b. Gwinnett County Transit

In 2001, Gwinnett County ended its status as the most populated county in the United States without public transit service by initiating its bus rapid transit service. The County government showed initiative in response to the maturation of the county in terms of population growth and composition and in response to the steady increase in traffic congestion and air pollution. The system being implemented is intended to eventually provide countywide express, local and complimentary paratransit services. The start-up phase of the system commenced in the fall of 2001 with six express routes utilizing I-85's HOV lanes to connect with the MARTA system in downtown Atlanta at Peachtree Center and the Five Points stations. These routes operate from park and ride facilities located along I-85 and I-985. The park and ride lots have been upgraded to provide free parking for bus riders. Three of the routes serve shopping malls: Gwinnett Place, Discover Mills, and the Mall of Georgia. The six express routes operate Monday through Friday and are designed to serve people commuting to jobs in downtown Atlanta. The fare is \$2 each way, and transfers to MARTA trains and buses are free. Ridership during the first year of operation has exceeded forecasts.

Local bus service began in late 2002 with a number of routes connecting neighborhoods and businesses to the county's cultural, retail, and educational centers. Local service will operate Monday through Saturday. Paratransit service for the disabled also began earlier this year.

Another aspect of the Atlanta region's public transit activity has been the emergence of a regional bus system coordinated by the Georgia Regional Transportation Authority (GRTA). In exchange for establishing a bus transit system and joining the regional system, county governments will receive state and federal funding to support a portion of the operating costs of their bus systems. As an additional incentive, they receive funds to expedite local road improvement projects. By joining the GRTA regional system, which it did in March 2002, Gwinnett will receive \$3.6 million to apply to bus transit operations for three years and \$41 million to widen Highway 20 to four lanes.

c. Commuter Rail Plans

According to Georgia DOT and the Georgia Rail Passenger Authority, three commuter rail lines are planned in the first phase of a statewide commuter rail system. These three initial lines to Athens, Macon, and Bremen would connect to a central rail terminal in downtown Atlanta. The Athens line would serve Gwinnett County citizens with stops in Lilburn and Dacula. A second phase to commence in 2010 would add three lines to Madison, Gainesville and Canton. The Gainesville to Atlanta route would have stops at stations in Buford, Duluth, and Norcross. These rail lines would utilize existing railroad corridors. Since Snellville is not located along an existing rail line, no commuter rail station or service is currently planned into the city or in its immediate vicinity. Proposed rail stops at U.S. 29 near Ronald Reagan Parkway and at Lilburn would be the closest connections to Snellville.

d. Transit Plans for Snellville - Observations and Conclusions

According to announced plans by Gwinnett County Transit, future local service and express bus routes are planned along U.S. 78 that would directly serve Snellville and the southern part of the county. A park and ride lot is listed in the Regional Transportation Plan for the Snellville area, scheduled for completion in 2006. However, this project has not been placed in the 2003-2005 Transportation Improvement Program, the list of funded projects.

In planning future routes for the GCT system, Gwinnett County Administrator Charlotte Nash stated in March 2002 that recent studies will help in deciding where ridership needs are greatest. However, the decisions thus far by Gwinnett County Transit and the County Department of Transportation in allocating transit routes and in the selection of S.R. 20 as the priority project benefiting from the regional transit program funds clearly indicate that the priorities for transit improvements are being directed away from south Gwinnett, away from the U.S. 78 corridor, and therefore, away from the City of Snellville. This comprehensive plan concludes that this is a misallocation of resources that undervalues the demand for transit in this area and neglects the needs of south Gwinnett citizens who would use transit on U.S. 78 if it were made available.

3. Pedestrian and Bicycle Facilities

a. Pedestrian Facilities

Balancing transportation alternatives via the development of pedestrian facilities is a priority for the City of Snellville. Figure XXX illustrates the locations of existing and proposed pedestrian facilities, namely

sidewalks and crosswalks. Presently, there are sidewalks along Scenic Highway, parts of Main Street, and several other streets throughout the City. The plan calls for the development of sidewalks on almost every street with a designation higher than a residential street, as well as future extensions to residential subdivisions (see also Figure XX-XX).



The pedestrian strategy in Snellville is to provide a safe and attractive route to and from destinations. Average walking trips in the United States are generally very short; Americans will only walk a few hundred feet for a shopping trip and average about 2,000 feet for a journey-to-work trip. For most of the city, these types of trips are not possible because employment and shopping are too far from residential uses, even if sidewalks existed. Nevertheless, it is important to create safe and attractive sidewalks around employment and shopping areas to allow those living near these destinations the choice to walk.

The most feasible trip types within the city are recreational trips and journey-to-school trips. Many of the schools that serve the city are nestled among residential areas and within walking distance for many students. There is some degree of sidewalk coverage around most area schools; the networks should be a priority within the pedestrian facilities plan. And while average shopping and work trip distances are relatively short, recreational walking trips average 4,500 feet. Thus providing sidewalks and pedestrian access to

parks and providing connections along collector streets between subdivisions are priorities.

The Atlanta metropolitan area consistently ranks in the top three most deadly cities for pedestrians. As of 1992, there were only three signalized pedestrian crossings in the entire city. Expanding the number of safe crossings is essential for generating pedestrian trips and keeping pedestrians safe. In conjunction with the development of the new Town Center (see land use element), safe facilities for crossing Main Street and Scenic Highway will be critical to connecting separate quadrants of the district. Possibilities depend on the final design of the new roadway, but could include elevated crosswalks such as the one pictured here.

The city has developed three priority criteria for sidewalk construction:

Priority 1: School age children.

Priority 2: General population (pedestrian friendly shopping).

Priority 3: Neighborhoods.

These should be taken into consideration when funding sidewalk construction.

b. Bicycle Facilities

There are no existing designated bicycle facilities or routes within the city of Snellville. The Regional Transportation Plan, however, includes a multi-use path that would begin at Briscoe Park and run south on Lenora Church Road for several miles beyond the city limits.

Gwinnett County has an aggressive bicycle network plan that includes several segments within or near Snellville. Elements nearby include: Gwinnett Eastern Perimeter Bikeway, Ronald Reagan Parkway Bikeway and Big Haynes Creek Recreation Trail. Snellville should evaluate the City for installation of bicycle lanes where feasible. New

construction of lanes, reduction in road widths, and enlargement of existing sidewalks are options that should be considered to accommodate this form of transportation.

4. Other means – rail, air, and sea

a. Airports

While the City of Snellville does not have an airport, there is currently one regional airport in Gwinnett County, the Gwinnett County Airport-Briscoe Field in Lawrenceville. The airport primarily serves local and corporate aircraft. The Stone Mountain-Britt Memorial Airport, a small airport, is also in the vicinity of Snellville

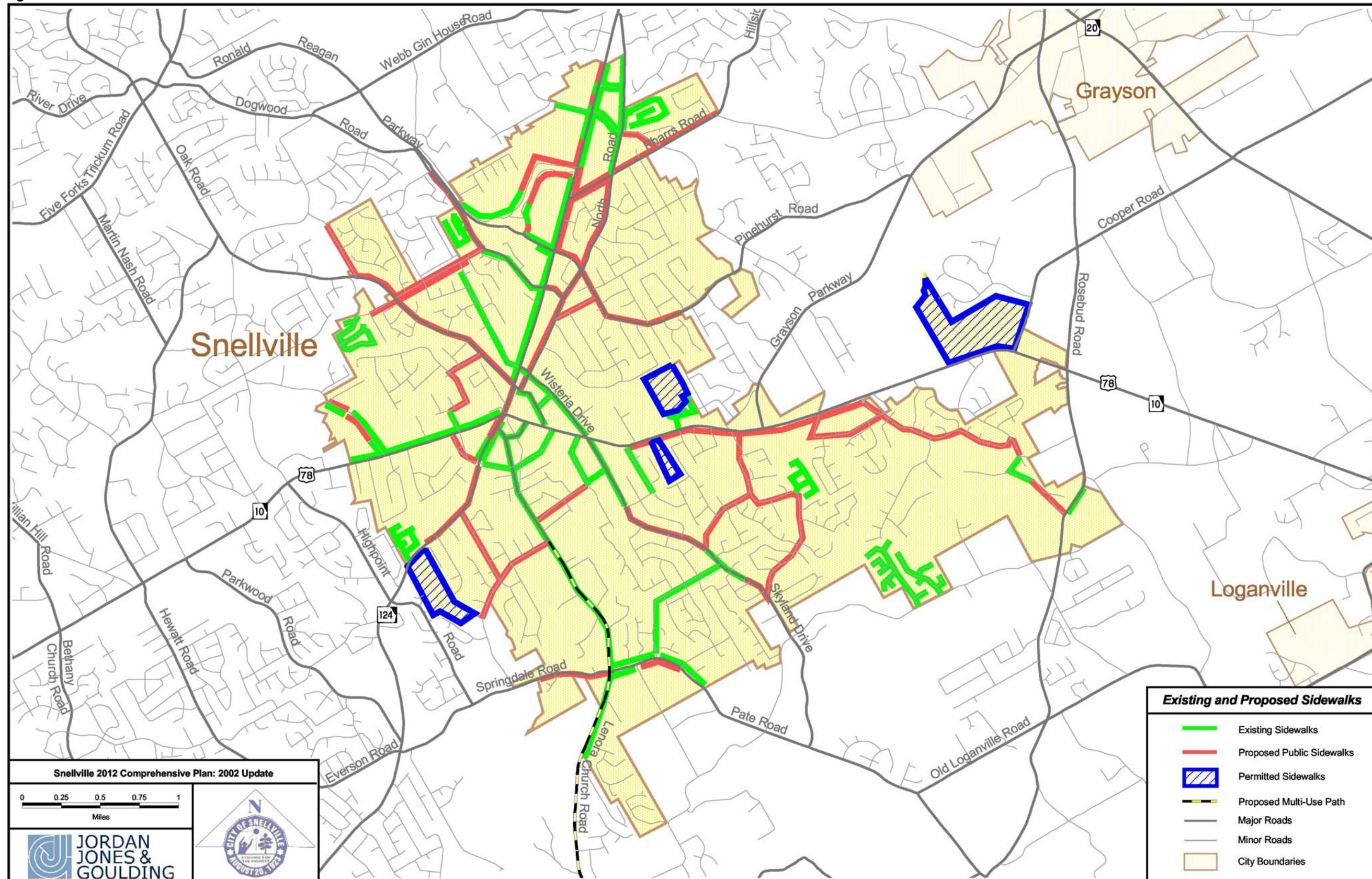
Snellville is also served by the Peachtree-DeKalb and Hartsfield International airports. Peachtree-DeKalb is the second busiest airport in the state, but like Briscoe Field, primarily serves local and corporate aircraft. Hartsfield International Airport is one of the busiest airports in the United States and is a principal hub for both Delta and AirTran. Peachtree – DeKalb airport is a 45 minute drive from Snellville and Hartsfield is a 60 minute drive.

These four airports serve Snellville's needs and the city has no plans to pursue the development of an airport.

b. Railroads and Seaports

There are no rail or sea facilities within the City of Snellville and none are planned.

Figure VI-6: Pedestrian facilities Plan



D. Key Findings

Numerous studies indicate U.S. 78 requires enhancements. The current proposal calls for widening the highway to a level on par with an interstate highway. This form of redesign is not consistent with the goals of this plan and will severely undermine Snellville's vision for the community.

The residents of Snellville prefer a context-specific solution that respects the existing land uses and community vision for redevelopment of the central business district. The preferred alternative is for a multi-way boulevard. The boulevard would include two to three through lanes in each direction divided by a landscaped median. The through lanes would be lined by another landscaped median separating a one to two lane local access road with parallel parking. A boulevard of this type could accommodate roughly the same capacity as the existing proposal, an equivalent level of service. This design also fits within the existing right-of-way, whereas the conventional proposal does not.

As volumes along U.S. 78 through Snellville increase, its intersection with S.R. 124 will require reconfiguration. Studies indicate that grade separation will be required. Here again, the conventional design solution is not compatible with the community's vision and will undermine the goals of this plan. As with the design of U.S. 78, a context-relevant solution is necessary. This plan recommends grade separation with U.S. 78 being depressed below S.R. 124. Alternatives III and IV both meet this requirement. Further study is required to assess which of these alternatives is the best solution.

This plan recommends realigning Oak Road with Henry Clower Boulevard at their intersection with U.S. 78. This realignment

will improve traffic safety by adding a badly needed light at this intersection. It will also create a three-quarter loop around the intersection of U.S. 78 and S.R. 124.

Since the development of the Ronald Reagan Parkway and the new retail center at its intersection with S.R. 124, residential neighborhoods have experienced a sharp increase in "cut through" traffic. To counteract this, traffic calming is needed in the North Road/Pinehurst Road/Dogwood Road area.

The residents of Snellville seek greater balance in terms of their transportation system. Their highest priority is to enhance the pedestrian network to make walking and biking for local trips a viable option. This plan includes an array of recommended sidewalk projects throughout the city. It also recommends streetscape enhancements to Henry Clower Boulevard, Wisteria Drive, and Oak Road. These streetscapes include wide sidewalks and street trees within a landscaped buffer strip. A suite of planned multi-use paths throughout the city will serve both pedestrians and bicyclists. Paths are planned along Lenora Church Road, Ronald Reagan Parkway, and Big Haynes Creek.

In 2001, Gwinnett County Transit began running commuter bus service from park and ride lots and regional shopping malls in Gwinnett County to downtown Atlanta. In 2002, the transit authority initiated local bus service. According to the Regional Development Plan, both Bus Rapid Transit and local bus service will be initiated along U.S. 78 through Snellville by 2020. This plan supports bringing transit service to Snellville.

E. Implementation Strategy

Goal: To establish and maintain a comprehensive transportation system of highways, streets, and pathways that provide safe and convenient circulation throughout the City and relieve congestion at the intersection of U.S. 78 and S.R. 124.

Objective 1: Intergovernmental coordination with the Gwinnett County Department of Transportation, the Atlanta Regional Commission (ARC), and the Georgia Department of Transportation (GDOT) for development of transportation plans to be included in the Atlanta Regional Commission's Transportation Improvement Plan (TIP) and the Regional Transportation Plan (RTP).

Strategy:

- Review and prioritize transportation improvement needs annually.
- Utilize transportation planning models available from the ARC and Gwinnett County DOT.
- Prepare transportation funding plans and identify available funding sources (County, State, Federal).
- Prepare feasibility studies for the construction of access roads that connect Main Street businesses from the back of the establishment, and allow access to U.S. 78 at signalized locations only.
- Identify funding sources and implement the Gwinnett County and ARC TIP.

Objective 2: To provide a network of pedestrian pathways, greenway trails, bike

paths and possible transit services to allow for the efficient and pleasurable movement of people and goods throughout the City.

Strategy:

- Implementation and construction of a pedestrian pathway system based on established priorities and identified needs.
- Intergovernmental coordination for implementation of Gwinnett County bikeway plans that affect Snellville.
- Review and prioritize pathway needs annually.
- Include sidewalk construction on all road improvement plans.
- Develop sidewalk safety criteria that mandates sidewalk construction be at least three feet off residential roadways and five feet off all other classifications.
- Develop minimum streetscaping standards for targeted streets.

Objective 3: Promote transportation measures that result in efficiency improvements on existing roadways and increase auto occupancy rates and decrease auto dependency rates.

Strategy:

- Support employers with incentives to provide vanpools and carpool systems.
- Development and implementation of a pedestrian friendly shopping district and pathway system.
- Develop and implement an access road system for the new Town Center.
- Conduct feasibility studies and cost estimates of a centralized parking

area and trolley car system for new Town Center shopping.

- Coordinate with GRTA and Gwinnett County Transit for the introduction of planned bus service on U.S. 78.
- Ascertain the residents' desires for various forms of public transportation annually.