

5 - Transportation and Mobility

Clemmons quality of life is greatly influenced by the community's infrastructure and services. Communities around the nation understand that businesses looking to locate in a community not only look for affordable land with development entitlements, they also evaluate the quality of the community and the quality of life a community can offer to its employees. Protecting the high quality of life found within Clemmons is essential for maintaining a healthy fiscal future and improving the character of the Village. Implementation of the objectives included in this section will continue to make Clemmons an attractive and unique community in the region. Additionally, these objectives will also enhance the community's infrastructure and services.

TRANSPORTATION AND MOBILITY

Providing adequate transportation infrastructure will be important for accommodating growth in Clemmons and ensuring that existing roads are safe and accessible. Street connectivity and effective land use planning can improve efficiency, minimize the need for private automobile transportation, and create opportunities for alternative modes of transportation. This section recommends that Clemmons plan for long-term Village and regional needs to reduce traffic congestion, enhance safety for users of all modes, and lay the foundation for a more diverse transportation system that reduces the demand for automobile travel and provides opportunities for more energy efficient modes.

Policies for providing efficient and accessible transportation include:

- Support planning and design for safe, multi-modal connections to major thoroughfares, regional roadways and key destinations
- Connecting local streets
- Enhancing safety
- Expanding alternative transportation options
- Improving pedestrian and bicycle facilities

Clemmons' primary transportation system includes a coordinated hierarchy of roadways comprised of interstate highways, regional roadways, connector roads, and local streets that serve the Village's neighborhoods. Just as important as the roadway networks are the secondary systems that provide walking, bicycling and transit opportunities and generally enhance mobility throughout the Village.

The most sustainable transportation systems are those that are multi-modal. Multi-modal systems are integrated and balanced systems that promote safety and



Safety improvements to Lewisville-Clemmons Road are intended to improve safety and walkability. Credit: Noah Williams

efficiency without relying on a single mode of transportation. Advancing Clemmons' transportation system to one that offers multi-modal choices will move the Village in the direction of being more sustainable, will allow the Village to more efficiently use energy resources, and will provide more opportunities for walking and bicycling that can increase the health of the community.

Village Transportation Plan

Clemmons adopted the Village Transportation Plan (VTP) in 2009 and is in the process of an update with an estimated completion date of 2019. The VTP was developed in response to rapid regional growth and the community's desire "to support sustainable growth through proactive transportation and land use integration." The VTP is a multi-modal plan that develops projects and policy recommendations for the Village's roadways, bicycle and pedestrian systems, and transit. It includes a detailed action plan (VTP, Table 5.1) that lays out how to implement the various recommendations in an efficient and effective way.

The Village Transportation Plan is incorporated into the Clemmons Community Compass by reference. It is the intent of the transportation element to support VTP implementation and continue to build on the momentum from the plan's development. The following sections summarize important elements of the VTP and tie them into development of the Future Land Use map and other plan goals and objectives.

Regional Transportation Context

Clemmons is located just southwest of Winston-Salem in Forsyth County, on the outer edge of the Triad metro area. Travel patterns in Clemmons are heavily influenced by access to and from I-40, which carries Clemmons residents and workers to points in the Triad for employment and access to other destinations and services. US-158 and US-421 are other major highways used to access regional destinations. Because alternative transportation options, such as mass transit, are limited, the majority (86 percent) of Clemmons residents continue to drive alone to work.

Major Transportation Issues

Clemmons is faced with a number of transportation challenges. While the focus of many efforts is on improving the area's roadway system, efforts should be made to improve the other elements of the Village's transportation system, such as bicycling, walking, and transit. The major transportation issues for Clemmons, addressed in the Village Transportation Plan, as well as the Clemmons Community Compass Update are:

- Congestion along major transportation corridors, especially during the morning and afternoon peak hours as workers access I-40 and other major thoroughfares.
- Safety (vehicular, bicyclist, and pedestrian) at major intersections.
- Lack of connectivity between major thoroughfares and minor and local roadways, creating few alternatives to driving along the major thoroughfares.
- Poor access management along major corridors, adding to congestion and safety problems.

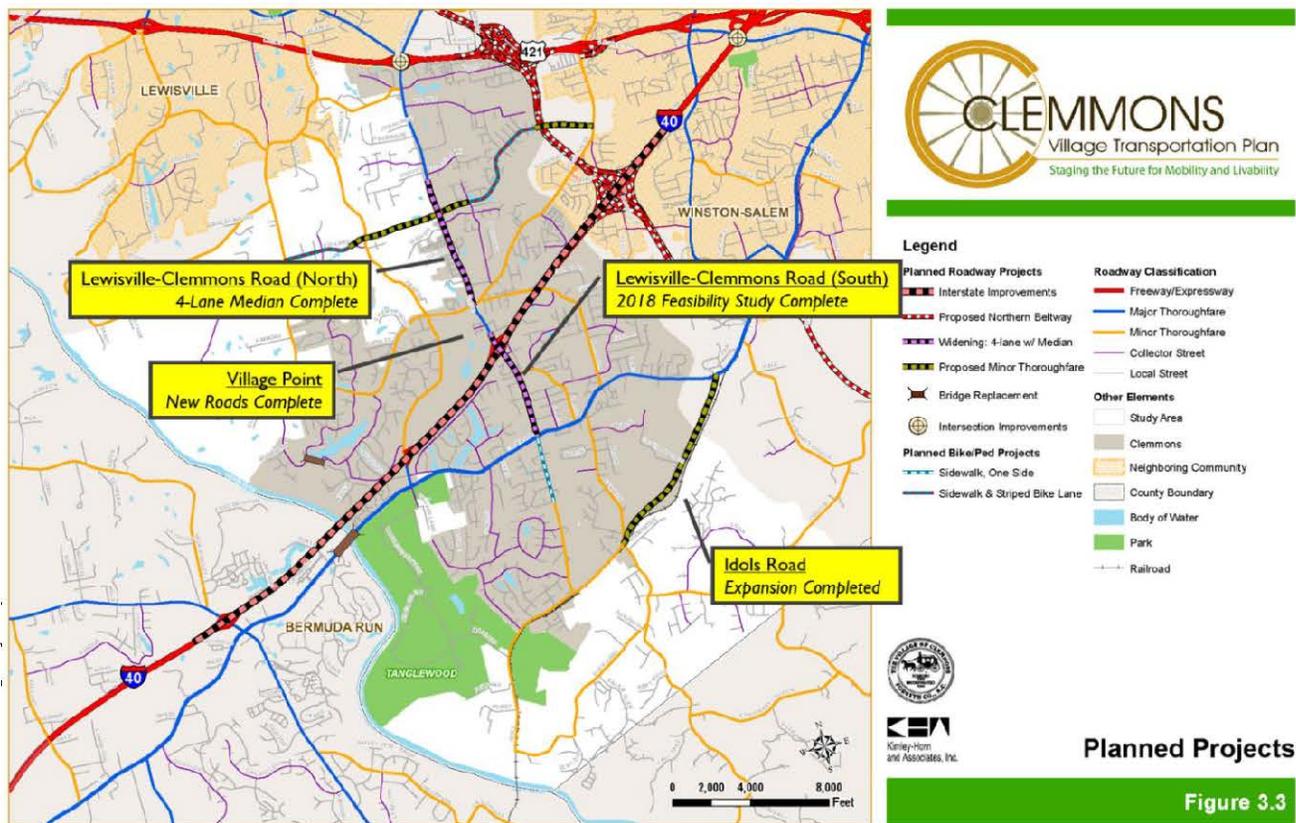


- Lack of on-road and off-road bicycle facilities.
- Lack of pedestrian facilities, such as sidewalks, multi-use paths, and intersection crossings and treatments.
- Lack of mass transit options.

Roads

I-40 bisects the community from east to west, and the Lewisville-Clemmons Road corridor bisects it from north to south, creating four quadrants in the community. Non-residential development in Clemmons is very linear, clustered primarily along the Lewisville-Clemmons Road corridor north and south of I-40, with a heavy concentration of commercial uses near the I-40 interchange, and to a lesser extent along the US-158 corridor. Low density residential development dominates the areas of the Village off the main travel corridors. These residential areas are serviced by local, neighborhood roads and are connected to the main corridors by collector and minor arterial roadways. In certain key locations, these connectors are missing or lacking. The result is heavy congestion along major corridors, especially during peak hours, and safety concerns at major intersections.

Chapter 2 of the Village Transportation Plan identified and ranked roadway segments and intersections according to existing traffic volumes, congestion, and safety, as well as future deficiencies. These problem areas are analyzed in more detail in eight Community Strategic Corridors, and specific recommendations and improvements are developed for each of these corridors. The map below identifies the planned roadway projects in the Village Transportation Plan.



mixed-use development opportunities along the existing Lewisville-Clemmons Road corridor and adds new commercial, retail, office, and mixed-use opportunities along other corridors and within major activity centers. As these land use changes are implementing in concert with recommendations in the Village Transportation Plan to improve roadways, connectivity, and access management, motorists will have more options in their daily travel choices and the efficiency and safety of the overall transportation system should improve.

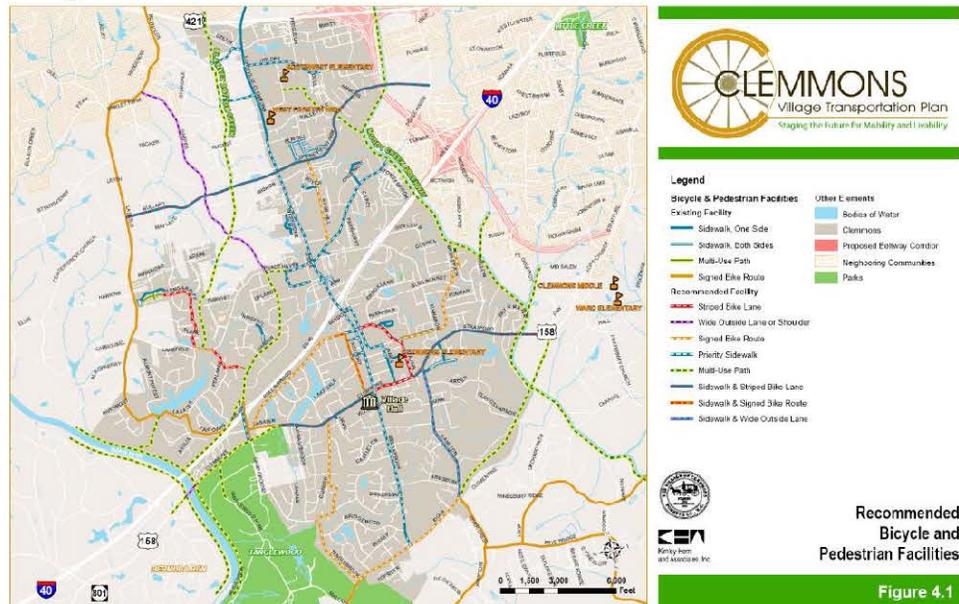
Bicycling

Clemmons lacks an extensive network of bicycle facilities, such as bike lanes, wide outside lanes, multi-use paths, and greenways. While bicycle trips are possible on low-volume neighborhood streets, bicycle trips to other parts of town are difficult. The Village Transportation Plan identifies a variety of opportunities for enhanced bicycle travel and improved and new bicycle facilities and amenities, as shown on the VTP map below. These include:

- On-street striped bike lanes, wide outside lanes, and paved shoulders
- Off-street multi-use paths
- Greenways
- Signed bike routes



New road improvements should include “complete streets” improvements that improve traffic flow, enable cyclists to travel, and provide sidewalks for pedestrians.



The Winston Salem Urban Area Comprehensive Bicycle Master Plan was adopted in 2005 and the Village Transportation Plan reflects proposed facilities from that planning effort as well as other priorities. An update to the Urban Area Bicycle Plan is underway in 2018 and will update network connections, facilities, routes and other features of the bicycle network.

Over time, as planned and adopted improvements are implemented, Clemmons residents will benefit from improved health, reduced vehicle miles traveled and improved access and mobility for those without automobiles.

Walking

Some residential neighborhoods have sidewalks, as do some of the more recently developed commercial areas, but like many other communities, missing links in the system make anything but short walking trips or walking in a single neighborhood difficult. The Village of Clemmons requires sidewalks as part of its Unified Development Ordinance, and the Village is working with the Winston-Salem Urban Area Metropolitan Planning Organization and the NCDOT to fund current sidewalk and pedestrian improvements throughout the Village. These improvements include sidewalks on portions of Lewisville-Clemmons Road, Allegacy Way, US 158, Middlebrook Drive, Fair Oaks Drive Harper Road and Stadium Drive. The Village Transportation Plan also identifies specific pedestrian improvement projects. As these missing links are filled in, new sidewalk projects are built, and safety and intersection improvements are implemented, Clemmons will become a more walkable community. Continued improvements will have a lasting impact on the community by providing safer opportunities for pedestrians and new opportunities for children to walk to school in conjunction with the Safe Routes to School program.



Intersections can be designed to provide pedestrian-friendly treatments that make road crossing safer by alerting drivers of the presence of pedestrians.

Transit

Transit services are an important piece of a complete, multi-modal transportation system. Transit services offer an alternative choice to those who typically drive alone and offer viable mobility for those who may be transit-dependent or otherwise unable to drive. The Village is not currently served by continual bus service. The Piedmont Authority for Regional Transportation (PART) operates a series of express routes connecting Triad destinations, but none of those routes serve Clemmons. PART also operates a regional vanpool service which Clemmons residents are eligible to participate in. PART established Route 28 serving the Clemmons Medical Plaza during the Business 40 closure in October of 2018. The Village of Clemmons will advocate for the continuation of this service to the Clemmons area after completion of Business 40 improvements.



Piedmont Authority for Regional Transportation (PART) provides regional transit connections and interlinks with City transit systems.

The Winston-Salem Transit Authority (WSTA) operates the county-wide paratransit service, a human transportation service targeting the disabled, the elderly, and other qualifying recipients. It is a demand-response system with users calling the service to arrange trips. WSTA also operates the fixed-route county-wide bus service for Forsyth County, but none of those routes extend into Clemmons.

As Clemmons continues to develop, transit will become a more important part of its transportation system. The new land use patterns defined on the Future Land Use map will encourage transit-oriented development, allowing for future transit routes and services to feed into Clemmons. There are also ongoing discussions and planning efforts at the regional level to potentially extend a future light rail line from Winston-Salem into Clemmons, terminating at a station on Idols Road in the southern part of the Village (identified on the future land use map).

As this station site is developed in the future, careful consideration should be given to both land use planning and development around the station, as well as roadway access to the station from other parts of the Village.



Dedicated multi-use paths and greenways offer opportunities to walk or bicycle. Creating safe ways to connect with trail systems from adjacent roadways accessing trails and trailheads creates a network for safe bicycle transportation. (Village Point Lake)

Village Transportation Plan Goals and Objectives

The Village Transportation Plan includes a variety of goals and objectives that were developed to guide development of the Village Transportation Plan. These goals and objectives continue to be relevant and are applicable to the Comprehensive Plan. They are included here with updates from the Compass 2017 update:

Objective #33: Create a Multi-modal Transportation System

Create an accessible, convenient, and efficient multi-modal transportation system through:

1. A thoroughfare system that comprehensively incorporates a variety of transportation modes for adequate access, flow, connectivity, safety, and mobility.
2. Partner with PART to expand ride share, vanpools and regional transportation, in conjunction with other agencies, for travel in the Triad region.
3. Provision and promotion of opportunities for travel by transit, cycling, and walking.
4. Strategic routes for the movements of goods by truck from freeway corridors to local commercial and industrial businesses. This includes the new northern beltway improvement.

Objective #34: Safe Operation of Existing Facilities

Provide serviceable and safe operation of existing facilities through:

1. Traffic operation improvements to reduce congestion.
2. Safety improvements to reduce crash likelihood.
3. Access management improvements to improve safety and network efficiency.

Objective #35: Promote a Bicycle and Pedestrian-Friendly Environment

Promote a Complete Streets policy, including:

1. A pedestrian system that fills in gaps and connects neighborhood & recreations
2. A trail and greenway system within and connecting local and regional parks.
3. Safe roadway crossings and sidewalk placement within the Village core.
4. Creation of a bicycle strategy that provides opportunities and safety education skill levels, including a Safe Routes to School program that will encourage students to walk to school and will educate them about safety.
5. Provide 4-6' paved shoulder facilities for bicyclists on roadways where curb and when roads are rebuilt.

Objective #36: Identify Financing Mechanisms for Improvements

Working with regional transportation partners, identify sufficient, timely, and equitable financing mechanisms and partnership opportunities to implement transportation improvements identified in the Village Transportation Plan.

Objective #37: Facilities Should Uphold Community Character

Plan, design, and construct transportation facilities that are consistent with existing community identity. Evaluate specific transportation improvements to ensure they promote Clemmons' vision for community appearance.

Objective #38: Build Community Consensus Through Planning

As new projects are being designed and developed, build community consensus through stakeholder interviews, public workshops, and committee participation.

Objective #39: Improve Environmental Quality Through Transportation Choices

Improve environmental quality by implementing transportation choices that minimize impacts to physical, natural, and social environments and integrate with Village land use policies. Work with regional transportation partners to evaluate specific transportation improvements to ensure they promote Clemmons' objective to protect its natural environment.

Objective #40: Develop a Transportation Planning Tool to Assist in Evaluating the Impact of New Development on Existing Roadways

The Village of Clemmons will initiate the development of a Transportation Tool that will aid in evaluating traffic impacts of new development on adjacent roadways. It is envisioned that this tool will aid the Village in better understanding the impact of new trip generations on existing roadways and existing traffic volumes in an effort to limit new development in certain areas of the community that are facing traffic congestion.

Objective #41: Create a Transportation Advisory Committee

The Committee will be charged with finding consensus within the community regarding future transportation plans that address traffic congestion and safety. The Committee will engage with the community, develop alternatives and recommend a preferred future for key corridors. The committee will work to create safe routes to schools in Clemmons, reducing traffic congestion and improving physical activity.

Objective #42: Establish Mechanisms to Account for External Growth

Monitor land use and development within neighboring jurisdictions through coordinated and collaborative regular meetings and updates to learn of developments and changes. Include Davidson, Davie, and Forsyth counties and municipalities.

