# Lafayette Drive Corridor Study Final Report











P.O. Box 33066 P.U. box 5000 Rateigh, North Carolini 27638-3068

March 30, 2007 RE: Lafayette Drive Corridor Study Our Project Team is pleased to submit the Lafayette Drive Corridor Study Report for your review. The report summarizes our community outreach efforts to build support for transforming the corridor as well as the planning, urban design, and engineering analyses performed to validate consensus for reinventing Lafayette Drive as a functional corridor that promotes mobility and safety, while enhancing aesthetics and Think of this report as a blueprint for implementation. It contains planning and engineering conceptual plans creating a vibrant gateway to your community. as well as funding strategies and an action plan to initiate recommended improvements. The photos, conceptual renderings, and design plans presented herein capture the vision of your community developed during a three-day public design charrette. Specific analysis and recommendations have been provided for safety improvements, interchange design, streetscape elements, and appropriate public policy initiatives. These recommendations reflect critical functional and aesthetic components of a plan for recapitalizing in the Lafayette Drive corridor, including encouragement of development and redevelopment opportunities that This report represents successful collaboration between the South Carolina Department of Transportation

(SCDOT), the City of Sumter, and local stakeholders - one that reaches a common objective from often conflicting perspectives. With this in mind, it is clear that the City of Sumter has reached a turning point in establishing the delicate balance between traffic safety/mobility and quality-of-life issues. However, improvements to the Lafayette Drive corridor described herein will only be realized through a collaborative effort. Local leaders must be bold, SCDOT supportive, and community champions like you must lobby your constituents for implementing the recommendations of this study. We appreciate being a part of this outstanding effort and look forward to its successful implementation.

Marken Kallowski Sincerely,

Michael Rutkowski, AICP, P.E. Project Manager

TEL \$19 677 2000 FAX \$19 677 2050





### **Table of Contents**

ntroduction	
ackground and History	
lanning Process	
xisting Conditions	
Traffic Volumes	
Crash History	
Existing Land Use Profile	
Recommendations	
Comprehensive Recommendations	
South Gateway District	
South End District	
Government District	
Learning District	
North Gateway District	•
Implementation Plan	
General Recommendations	
Site Access Mitigation Measures	
Right-of-Way Requirements	
Probable Construction Costs	
Responsible Agencies	
Construction Phasing	
Action Plan/Funding Strategies	
Conclusion	



1
1
2
5
6
8
10
12
23
25
32
33
35

#### Table of Contents

### **List of Figures**

Figure 1 - Context Zones	4
Figure 2 – Existing Traffic and Crashes	7
Figure 3 - Existing Zoning	11
Figure 4 - Proposed Corridor Access Improvements	13
Figure 5 - Proposed Truck Route Designation	15
Figure 6 - Lafayette/Manning Proposed Improvements	17
Figure 7 - Lafayette/US 378 Proposed Improvements	26
Figure 8 - Lafayette/US 378 Proposed Redevelopment	29







#### List of Figures

### Lafayette Drive Corridor Study

### Acknowledgments

The development of the Lafayette Drive Corridor Study was a collaborative process that involved numerous stakeholders, including the Transportation Plan Advisory Group, Sumter Metropolitan Planning Organization, Study Team, Sumter City and County Planning Staff, Sumter City and County Council, and the South Carolina Department of Transportation.

#### Sumter City and County Planning Staff

George McGregor	Lorra Bailey
Donna McCullum	Crystine Rathburn
Charlie Holmes	Emily Poole

### **Transportation Plan Advisory Group**

Eddie New man	Les Carpenter	Deron McCormick		
Linda Pekuri	Ann August	O.J. Pappuci		
Al Harris	Gary Hallmark	Tom Olsen		

#### Consultant

Brett Wood, EI Matt Noonkester, AICP Allison Lockwood, EI Jonathan Whitehurst Mike Rutkowski, AICP, P.E. Julie Gavin Janet Doughty

Special thanks to the staff at the South Hope Center for hosting the design charrette

Gale McCoy Michael Walters

Thank you to the Sumter Community for attending and providing the foundation for this plan







Acknowledgements

### Introduction

Lafayette Drive (US 15) is a primary north-south corridor within the City of Sumter. The corridor addresses many needs, including serving in the following capacities:

- Principal north-south bypass around the central business district, accommodating through traffic and heavy vehicles from the industrial parks south of Sumter
- Local access point for numerous residential and commercial land uses to both downtown Sumter and the US 378 Bypass
- Primary gateway into Sumter from both the north and the south
- Designated truck route

City officials recognize the importance of this corridor in the continued enhancement of Sumter's downtown. They have assumed the task of creating a plan that protects the mobility of existing Lafayette Drive while enhancing the corridor's character. In addition, this study can provide a foundation for future endeavors, with the design guidelines instituted in this study serving as the basis for similar corridor improvements.

The Lafayette Drive corridor study represents a community-wide effort to reinvigorate the corridor, both to reinforce the corridor's status as an asset to the community, as well as to confirm the future vision for Sumter as an area of grow th and change. A three-day public design charrette was held during the corridor study process. It brought together residents, business owners, developers, town officials, and the South Carolina Department of Transportation (SCDOT) for a collaborative planning process that built consensus for implementing the recommendations presented in this report.

The recommendations outlined in this report signify a long-term vision for the corridor and its surrounding community. These improvements will not occur overnight, and the success of this plan hinges on the continued support of the community and its leading officials. Phased implementation should be carried out by leaders within the community. In collaboration with state and local officials, their collective efforts will lead to a safe, efficient, and aesthetically pleasing gateway that creates a new standard for future corridor changes in Sumter.

### **Background and History**

Located near the geographic heart of South Carolina, the City of Sumter is situated in the western "High Hills of the Santee" area of Sumter County. A rich history of native communities, local conflict, and economic growth has created the environment for Sumter to develop into the community it is today.

Even before English speaking explorers first arrived in 1567 and eventually took control of the Sumter area, transportation had been an important aspect of the community. Early settlers traveled by river, but trips through the area were difficult. Initially, townships in the area were developed around protecting the economically booming Charleston, and a network of public roads began to take shape. One of the earliest public roads was designated in 1753, having started as a path through woods connecting isolated townships. The lack of access to the area hindered settlement efforts, and in 1758, thirty-eight pioneers signed a petition requesting new roads.

Despite the inherent difficulties of settling the backcountry, the appeal of the area as being ripe for development remained strong. A local site was selected for construction of a fort during the French and Indian War, and one of the soldiers arriving in 1761 for the project was named Thomas Sumter. He would spend more than 40 years in the area that would eventually bear his name, watching as significant changes were made in the region — including to the transportation network.

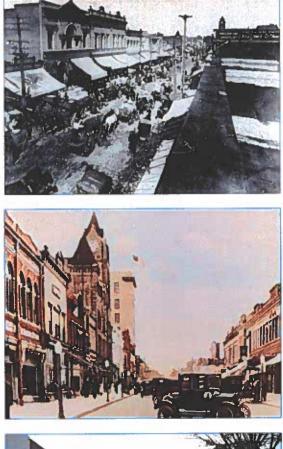
Despite significant changes, effective transportation in the Sumter area remained elusive following the American Revolution. One key road to the Sumter area was King's Highway (SC 261), which originally connected the larger cities of Camden and Charleston and served as a trade route for settlers and Native Americans. As a result of the settler's petition in 1758, another road was constructed along the Black River. Prior to the arrival of railroad, all local commerce traveled through Charleston along these two primitive roads. Ferries provided necessary links to a variety of locations, including the new capital at Columbia. Commerce accompanied the construction of roads and launching of ferries in the form of a collection of general stores, taverns, and inns.

The arrival of the railroad ushered in additional change to the region. Residents clamored for rail service in the early 1830s, but high costs, political wrangling,











Main Street through the years

### Lafayette Drive Corridor Study

poor weather, and an inconsistent economy conspired to delay its arrival for nearly 20 years. When the railroad was eventually established in the region, it was accompanied by the construction of new buildings and homes, a new jail, freight depot, and bank. This grow th created a demand for additional services, such as fire protection and improved infrastructure. Streets in town were improved, and by 1855 the community known as Sumter had grow n considerably.

The Civil War, however, left behind a town in disarray. Local residents endured the restructuring of the south's economy and relied even more heavily on the access provided by the local railroad. Between 1888 and the turn of the century, a number of railroad lines opened to connect Sumter with large cities and small trading posts throughout the state. Good access by rail and ample cotton and lumber resources gave particular strength to these industries.

Road construction in the area increased in the early 1900s, particularly following a program in 1915 that expanded the few paved roads and sidewalks along Sumter's Main Street. Not to be outdone by the city's efforts, Sumter County led the state with a commitment to improve the roadway network. The county held a referendum in 1920 that approved \$2.5 million in bonds for constructing and paving roads. By 1924, the total had been increased to \$4 million. Within the next few years, hundreds of miles of new highways radiated from city to the county limits, including a highway across the Wateree Swamp that connected Sumter with the state capital in Columbia. Only after the state began constructing highways in 1925 did portions of the Sumter County paved roads become part of the state system and fall under the state's maintenance program.

The transportation network available in Sumter today has evolved since these early days. The National Interstate and Highway Defense Act of 1956 brought increased access to the area, as three Interstate Highways now encircle the region. The railroad still passes through town and local roads carry more traffic.

As the importance of regional access grows and the employment and population bases expand, major arterials such as Lafayette Drive become critical to the success of the transportation network. Lafayette Drive provides a strategic north-south corridor to motorists and freight providers, connecting I-20 and points north to I-95 and points south. In addition to supplying regional access to Interstate Highways, the roadway provides access to homes, businesses, local industry, churches, and schools and offers one of only a few grade-separated crossings of the railroad track. SCDOT is currently developing a statewide corridor plan which will establish an on-going planning process to focus on corridors with multi-regional and statewide significance. The plan will identify and prioritize project specific needs along the identified corridors, which will be evaluated multimodal assessment of current needs and future opportunities for expanded efficiencies.

Lafayette Drive provides a valuable opportunity to recapture the historic integrity of Sumter's transportation network, while enhancing today's access and mobility needs. This corridor study provides a planning tool for the community to improve this key roadway while laying the groundwork for the region's future.

### **Planning Process**

The City of Sumter initiated the Lafayette Drive corridor study to evaluate the land use, transportation, and mobility constraints along the corridor. Public involvement was considered a critical component of the study's success, and was accomplished through an interactive three-day public design charrette. The charrette was held at the South Hope Center, located along the Lafayette Drive corridor, from February 13–15, 2007. The process gathered input from representatives from the surrounding community and stakeholders including local land owners, Sumter government representatives, local planning officials, and SCDOT representatives. The charrette process resulted in a set of recommendations that can be used by the City planning staff as a tool for implementing future improvements and land development along the Lafayette Road corridor.

Several overarching issues were addressed during the design charrette.

- The resulting plan must enhance access and mobility. Lack of access management leads to a struggle for mobility along the corridor. In addition, the existing outdated design creates driver confusion and congestion problems at the US 378 Bypass.
- Safety must be addressed. Three of the worst safety related intersections, as identified in the SUATS Long Range Transportation Plan (LRTP), are located along the Lafayette Drive corridor. This plan must address safety issues at these locations, as well as the entire corridor, for both vehicles and pedestrians.
- Changes to the corridor must be aesthetically pleasing. Improvements to Lafayette Drive should enhance the character of the surrounding community,











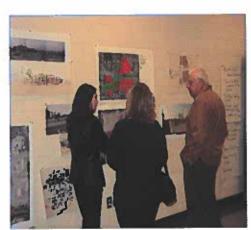
South Hope Center - Sumter, SC

not detract from them. The redevelopment efforts exercised in the central business district should be extended to this corridor. Additionally, the recommendations implemented along the corridor should create a gateway into the community.

Plan recommendations must be functional and implementable. Recommendations should be constructible and based on sound engineering principles. A plan which is based on sound engineering and planning can lead to easier implementation through phased improvements.

The first day of the charrette involved getting orientated with the corridor and identifying specific issues for the project team. After driving the corridor to identify local design issues, the project team established four context zones and three focus areas along the corridor. Figure 1 highlights the extents of the four context zones and the three focus areas.

The four context zones correspond to differing cross sections developed along the corridor (discussed later in this document). The three focus areas include the South End District, the Government District, and the North Gateway District. The South End District includes the now defunct Sumter Cabinet Company surrounded by primarily industrial and residential land uses. The Government District includes the area between Calhoun Street and Liberty Street, comprising primarily civic and institutional land uses, including the Library, Chamber of Commerce, Court House, County Office, Law Center, and City Hall



Citizen involvement at the design charrette

Kimley-Horn and Associates, Inc facilities. The North Gateway District consists of the area surrounding the US 378 Bypass interchange and Lafavette Drive/Main Street intersection. The predominant land uses in this focus area are residential and commercial.

The first evening session of the charrette provided representatives of the community with the opportunity to discuss issues affecting the corridor and identify potential corridor-wide and site-specific improvements. To help orient the public participants, a presentation was conducted to outline the charrette process as well as initiate topics for discussion along the corridor. Following the presentation, attendees were given the opportunity to discuss their concerns and identify their visions for the future of the corridor. Comments from the first day of the charrette include:

- The "best money spent" along the corridor would be an upgrade to the existing interchange at the US 378 Bypass
- Bicycle and pedestrian facilities should be considered along the corridor
- Pedestrian improvements should include improved crosswalks and pedestrian countdown signal heads
- Synchronized signal system w ould enhance mobility
- Improve way-finding signage
- How will the improvements be funded?
- Bus shelters should be provided at key stops along the corridor

In addition to gathering comments at the public portion of the charrette, the project team also conducted stakeholder interviews with individuals representing various interests along the corridor. Representatives from the City and County government, local SCDOT officials, land owners along the corridor, and constituents from the surrounding community were interviewed during the first two days of the charrette. These interviews allowed the stakeholders an opportunity to comment on corridor needs as well as identify characteristics they wanted the corridor to retain or acquire in the future. The information gained from the stakeholder interviews was directly applied to conceptual designs formed for the project, and was a critical element for developing the alternatives and recommendations. Comments from stakeholders include:

US 76/378-Dangerous and Congested.

THERE IS A NEED FOR A BEAUTIFUL BOULEVARD A GRASS MEDIAN AND CROSSWALKS .

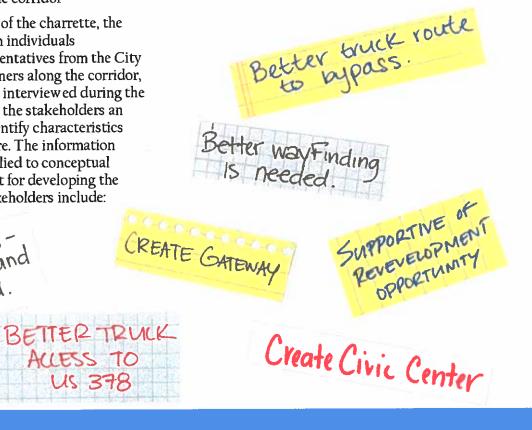
ALLESS TO

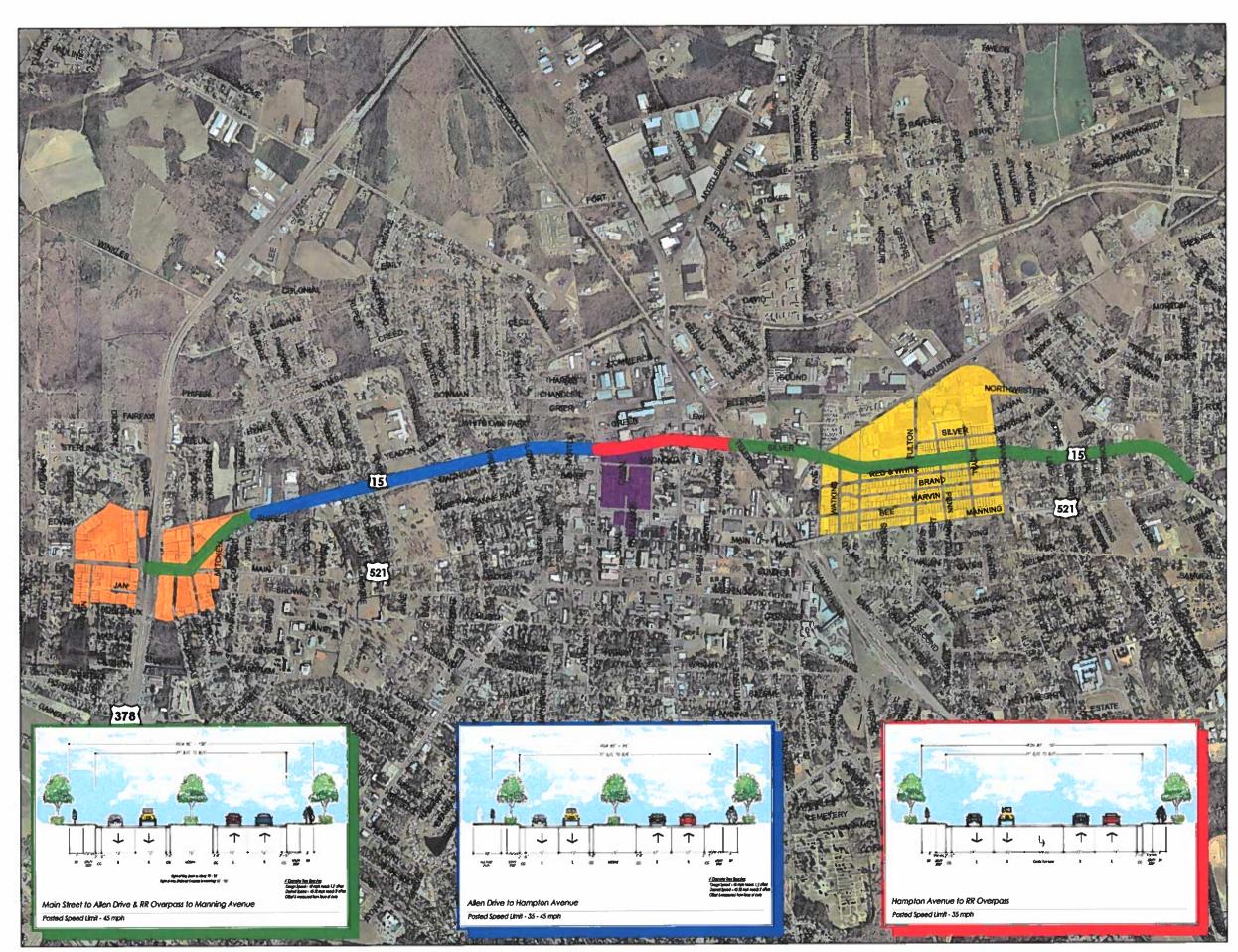
US 378





Stakeholder interviews





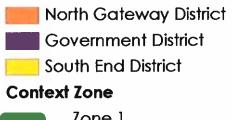
\*Context zone colors correspond to matching cross section color

D

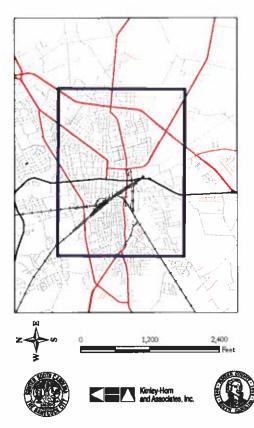
### Lafayette Drive Corridor Study

### Figure 1 - Context Zones

#### Focus Areas



zone i
Zone 2
Zone 3
Zone 4



### Lafayette Drive Corridor Study



The second day of the charrette focused on developing alternatives for the context zones and focus areas identified along the corridor. Constituents from the community were invited to visit throughout the day to observe the progress of the project team and to weigh in on any proposed improvements. In addition, members of the SUATS LRTP Transportation Planning Advisory Group (TPAG) were invited to view the plans in a pin-up session that evening. The general scope of the second day was to make sure that the proposed improvements were consistent with the vision of the surrounding community.

Project team work session



Final presentation to the public

The third day of the charrette focused on pulling together all of the comments and ideas to formalize a plan that follows sound engineering and urban design principles, is functional, and is implementable. A final presentation was delivered to community representatives at the South Hope Center. The presentation focused on the proposed improvements for each context zone and focus

area, including transportation design recommendations, streetscape design, development and redevelopment opportunities, and safety related improvements. Exhibits with conceptual design plans, computer images, and hand renderings were displayed. Following the presentation, the community representatives were invited to view the displays and a general question and answer session was conducted with the project team. Discussion topics included the proposed interchange with the US 378 Bypass, access management improvements along the corridor, phasing and implementation plans, and funding opportunities.

### **Existing Conditions**

Lafayette Drive (US 15) serves as a northsouth route through the City of Sumter, running parallel to Main Street (US 521) which passes through the heart of Downtown Sumter. These two routes are the primary north-south corridors serving the community. Outside of the city limits, these two facilities connect Sumter with

neighbor communities such as Summerton, Bishopville, and Manning.

Within the city limits, these roadways work together to enable traffic to travel through the community. While Main Street is a two-lane facility that directly serves downtown and surrounding residences, Lafayette Drive is a five-lane facility intended to move traffic through and around Sumter. Currently, both facilities experience higher than normal percentages of heavy vehicles traveling from the industrial parks south of

downtown to the US 378 Bypass, which leads to Interstate 95.

#### The existing cross section of Lafayette

Drive (US 15) is fairly consistent throughout the corridor. The facility is four lanes with a two-way center left turn lane for much of the corridor. In some locations, the center lane is converted to a concrete median with dedicated turn lanes. The entire corridor has curb and gutter on both sides of the roadway, and the majority of the corridor has sidewalks on both sides of the roadway, with a section having sidewalk on only one side. Land uses along the corridor include commercial, residential, industrial, institutional, and civic.



Lafayette Drive looking northbound near US 378



Lafayette Drive











## Lafayette Drive Corridor Study

#### **Traffic Volumes**

Daily traffic volumes along the Lafayette Drive corridor vary from approximately 14,500 vehicles per day to more than 19,100 vehicles per day. Large trucks constitute approximately 6 to 7% of the total traffic along the corridor. A tube count was conducted between Calhoun Street and Liberty Street along the corridor. Tube counts utilize a machine box counter and two pneumatic rubber tubes stretched across the roadway to estimate traffic volumes. Each time a set of axles crosses the pneumatic tubes the box registers a vehicle. The counter is even capable of distinguishing heavy vehicle traffic amongst a platoon of vehicles.

This tube count data, collected from February 21–22, 2007, includes bidirectional traffic for a 24-hour period. Based on the data collected from this tube count, the total traffic along the corridor was approximately 17,232 for the 24-hour analysis period. The tube counts confirmed the presence of heavy trucks along the corridor, comprising approximately 7.2% of the traffic. This total represents approximately 3.6% single unit trucks, 3.4% single trailer trucks, and 0.2% multi-trailer trucks.



Congestion on Lafayette Drive near Liberty Street

The study corridor has ten signalized intersections: North Pike, South Pike, Crosswell Drive, Loring Place, Calhoun Street, Hampton Avenue, Liberty Street, Fulton Street, Red Bay Road, and Manning Avenue.

Figure 2 highlights these signalized intersections, as well as average daily traffic volumes and high occurrence crash intersections.

#### Table 1 — Tube Count Traffic Summary

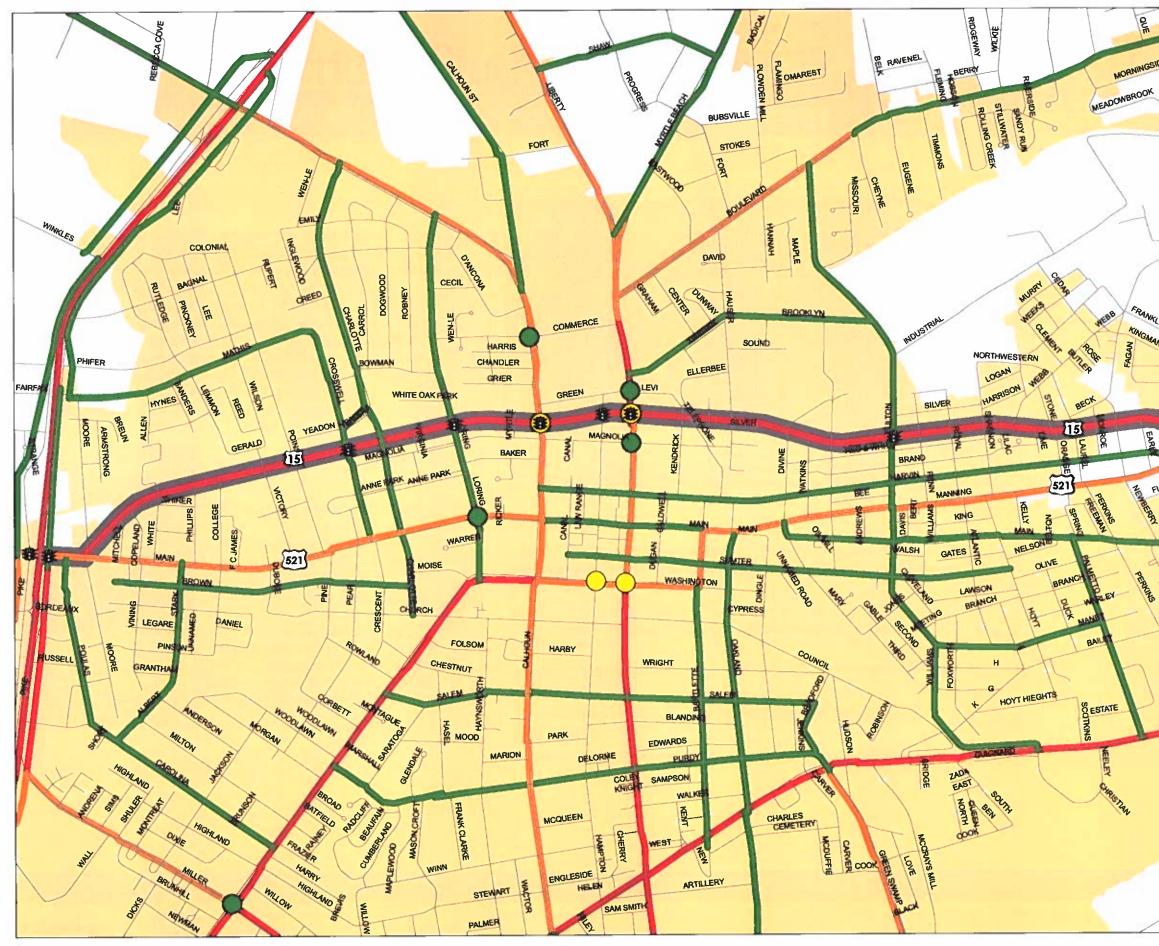
Cl	Description	Direction		Total	% of Total	Vehicle Grouping	% of Tota
Class		1	2	Vehicles	% 01 10tai	venicie Grouping	70 01 10ta
1	Motorcycles	43	36	79	0.46%		
2	Passenger Cars	6685	6886	13571	78.75%	Passenger Vehicles	92.32%
3	Pickups	1105	1154	2259	13.11%		
4	Buses	32	43	75	0.44%	Buses	0.44%
5	Single Unit Two-Axle	176	199	375	2.18%	Single Unit Trucks	
6	Single Unit Three Axle	78	77	155	0.90%		3.63%
7	Single Unit Four or More Axles	46	49	95	0.55%		
8	Four or Fewer Axle Single Trailer Truck	89	119	208	1.21%		
9	Five-Axle Single Unit Truck	125	117	242	1.40%	Single Trailer Trucks	3.39%
10	Six or More Axle Single Trailer Truck	62	72	134	0.78%	1	
11	Five or Fewer Axle Multi Trailer Truck	6	7	13	0.08%		
12	Six Axle Multi-Trailer Truck	0	0	0	0.00%	Multi-Trailer Trucks	0.23%
13	Seven or More Axle Multi Trailer Truck	14	12	26	0.15%		
	· · · · · · · · · · · · · · · · · · ·	-	Totals	17232	100.00%		100.00%

.413 1









+

•

-

 $\mathbf{r}$ 

11

11

C

U.

+

e!

lá

••

n

\_

10

Б

D

D

D

đ

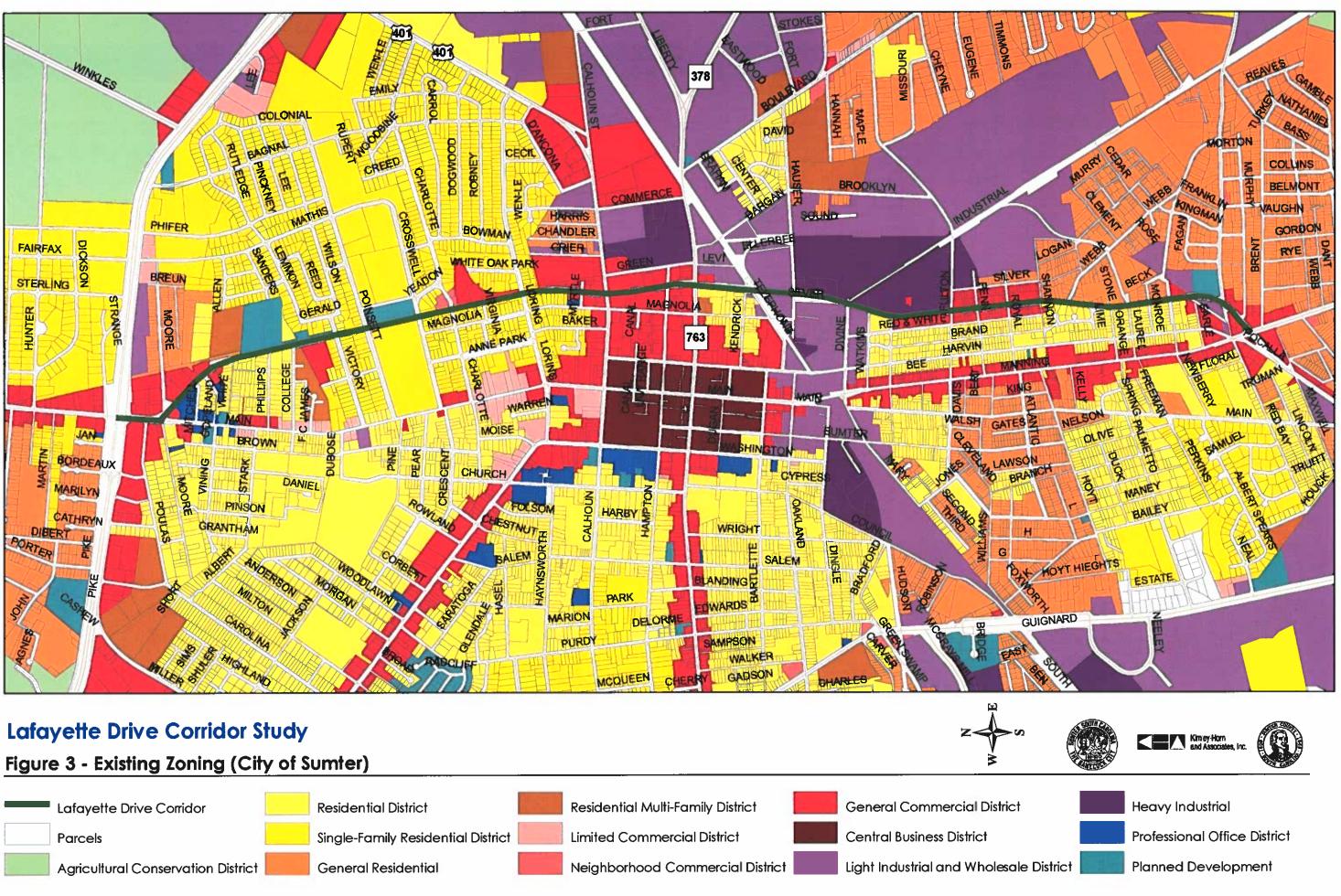


### Lafayette Drive Corridor Study

### Figure 2 -Existing Traffic & Crashes

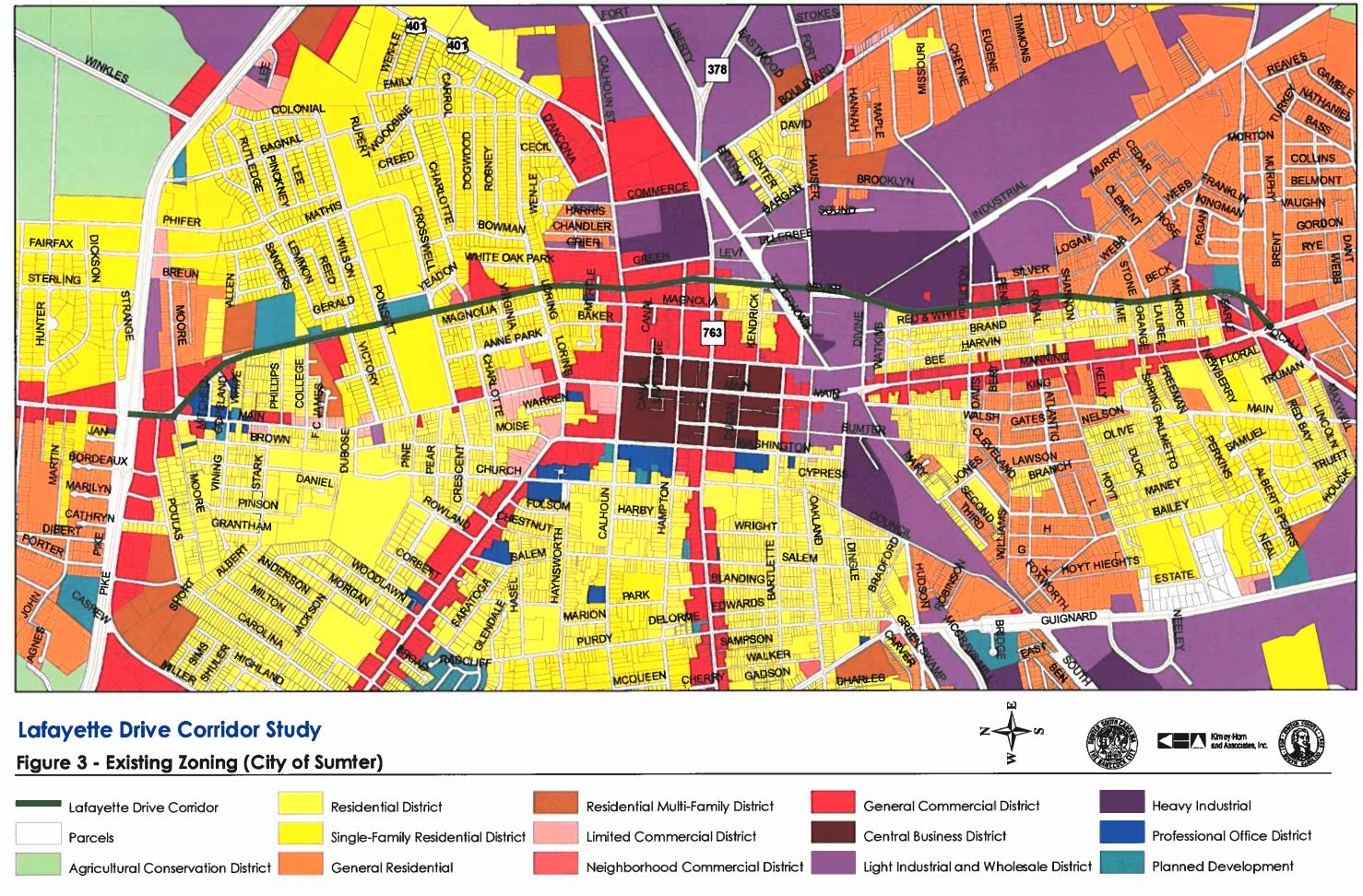
	City Limits
	Study Corridor
	Streets
-	•
	Traffic Signals
	Traffic Volume
	Less than 5,000 vehicles
	5,000 to 10,000 vehicles
	10,000 to 20,000 vehicles
	More than 20,000 vehicles
Cras	hes
0	7 to 10 crashes
$\bigcirc$	11 to 20 crashes
0	21 to 30 crashes
z	× 0 1,000 2,000











### Recommendations

The recommendations for the Lafayette Drive corridor are presented within two separate contexts. First, several recommendations are specific to the entire corridor. Second, each focus area has its own unique set of recommendations tailored to the nature and vision for that location.

#### **Comprehensive Recommendations**

Comprehensive recommendations for the entire corridor include implementing planted medians (and corresponding median openings), upgrades to existing traffic signals, potential future traffic signals, coordination between existing and proposed traffic signals, improvements to wayfinding and signage, and better delineation of US route designation. Figure 4 displays many of the access related elements (medians and median openings), as well as existing and potential new signals and the coordination zones for signalization.

Planted Median – Lafayette Drive is currently five lanes wide in most locations along the corridor. This laneage configuration is typically constructed to provide maximum access to parcels adjacent to the roadway. How ever, this type of cross-section has been found to create problems with both congestion and traffic safety. A solution to these issues is to install a median within most of the two-way center along the corridor, ultimately restricting access only to those points where traffic can be channeled through the use of traffic signals and intersection treatments.

A planted median should be constructed from South Pike to Liberty Street on the north end of the corridor, and from the terminus of the railroad overpass bridge to Manning Avenue on the south end of the corridor. The median openings should occur at intersections that provide access to major points of interest along the corridor. Cross access between adjacent businesses is recommended to provide additional internal circulation. Intersections proposed for median openings include:

- Westbound and eastbound ramps at proposed US 378 Bypass interchange
- Moore Street
- Mitchell Street
- White Street
- College Street
- Poinsett Drive
- Crosswell Drive
- Charlotte Avenue
- Calhoun Street
- Hampton Avenue
- Liberty Street
- Bee Street
- Fulton Street
- Royal Avenue
- Webb Street
- Laurel Street
- New berry Avenue
- Red Bay Road
- Manning Avenue

It is recommended that the median be landscaped to create a more aesthetically pleasing environment along the corridor. In addition, it has been found that a median planted with street trees is an effective traffic calming technique which will lead to low er speeds. Based on discussions at the design charrette, it is preferred that the street trees either be bald cypress or live oak, shown above.



- Li











Live Oak



### Figure 4 -Proposed Corridor Access Improvements

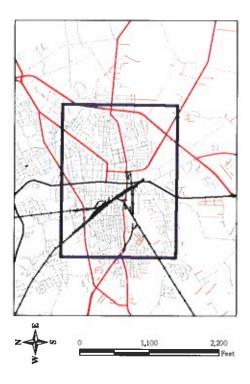
#### Access and Signal Features

- ----- Proposed Median
- Existing Traffic Signal
- Potential Future Traffic Signal
- Proposed Median Opening

#### Signal Coordination Zones



North Coordination Zone South Coordination Zone



Signal System Improvements – Lafayette Drive currently has ten existing traffic signals from North Pike to Manning Avenue. As grow th continues in and around the city, the strain on the corridor will continue and these traffic signals will play a vital role in the mobility of traffic along Lafayette Drive. One of the key recommendations for the corridor is developing proper coordination between the traffic signals to provide a synchronized signal system. This improvement will allow for enhanced traffic flow.

Based on Lafayette Drive's current signal locations and the man-made separation created by the railroad overpass, it was apparent that more than one zone for coordinating signals was needed. The north coordination zone extends from the North Pike to Liberty Street, while the south coordination zone extends from Bee Street to Manning Avenue.

An important requirement for synchronized signal systems is the maximum spacing between signalized intersections. For this analysis, it was assumed that the greatest distance between signalized intersections should be no more than half of a mile. With this criteria in mind, it is anticipated that two new signals may be needed in the future to create the minimum spacing required to coordinate the signal system. Based on traffic patterns, spacing requirements,

and perceived grow th, White Street to the north and Webb Street to the south are the two recommended locations.

As time and budget dictates, each existing signal should be upgraded to furnish the necessary equipment for synchronization. When each location is addressed, the updates should be consistent with those implemented in the central business district. This should include mastarm signal poles, LED signal heads, and improved pedestrian accommodations.



Central Business District signal features

Wayfinding and Signage – Based on the field review conducted by the study team, there appears to be some redundancy and confusion of the route designation for both the US 15 and US 521 corridors throughout the City. At various locations along Lafayette Drive signage exists for both US 15 and US 521, while the corridor should only be designated as US 15. In addition, a US 15 connector route that utilizes Guignard Drive is signed simply as US 15 — not as a connector route. The current route for US 521 uses much of the central business district to lead to points south of Sumter. The current route designation throughout the city is confusing and leads to a number of facilities being utilized as through truck routes, including those in both heavy commercial and residential districts.

This study recommends consolidating the current designations to provide one continuous truck route through the city, primarily using US 378 (with the improved access), as well as Lafayette Drive due to its capacity and geometrics, both satisfactory for carrying large volumes of heavy vehicles. Figure 5 represents the proposed configuration.

US 521 would use its existing alignment until reaching US 378, where it would share the alignment until reaching the proposed interchange with US 15. At this point, US 15 and US 521 would share the same alignment along Lafayette Drive, until reaching the intersection of Manning Avenue and Lafayette Drive, where the routes would assume their current alignment. The current US 521 corridor should then be transformed into a service route into the central business district, with truck access restricted to those making local deliveries. The primary truck route through Sumter would then become US 15/US 521, located on the Lafayette Drive corridor.

After redesignating the US 521 and US 15 connector routes, it is important that all additional signage be removed. This should help eliminate heavy vehicle traffic along these commercial corridors, as well as within the central business district.

From the US 378 Bypass, the proposed truck route should be clearly signed before the US 15/Main Street exit. One of the heavy vehicle related problems exists at the intersection of Liberty Street and Lafayette Drive, where turning vehicles damage intersection treatments. Truck traffic coming from the east would be restricted to local deliveries only. Through truck traffic would be required to use US 378 and US 15.

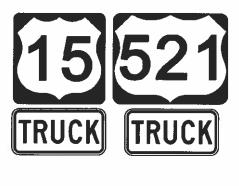
This goal will only be possible if the proposed interchange at the US 378 Bypass is completed. This recommendation, as well as other location specific improvements are discussed in the following section.

Kimley-Horn and Associates, Inc.





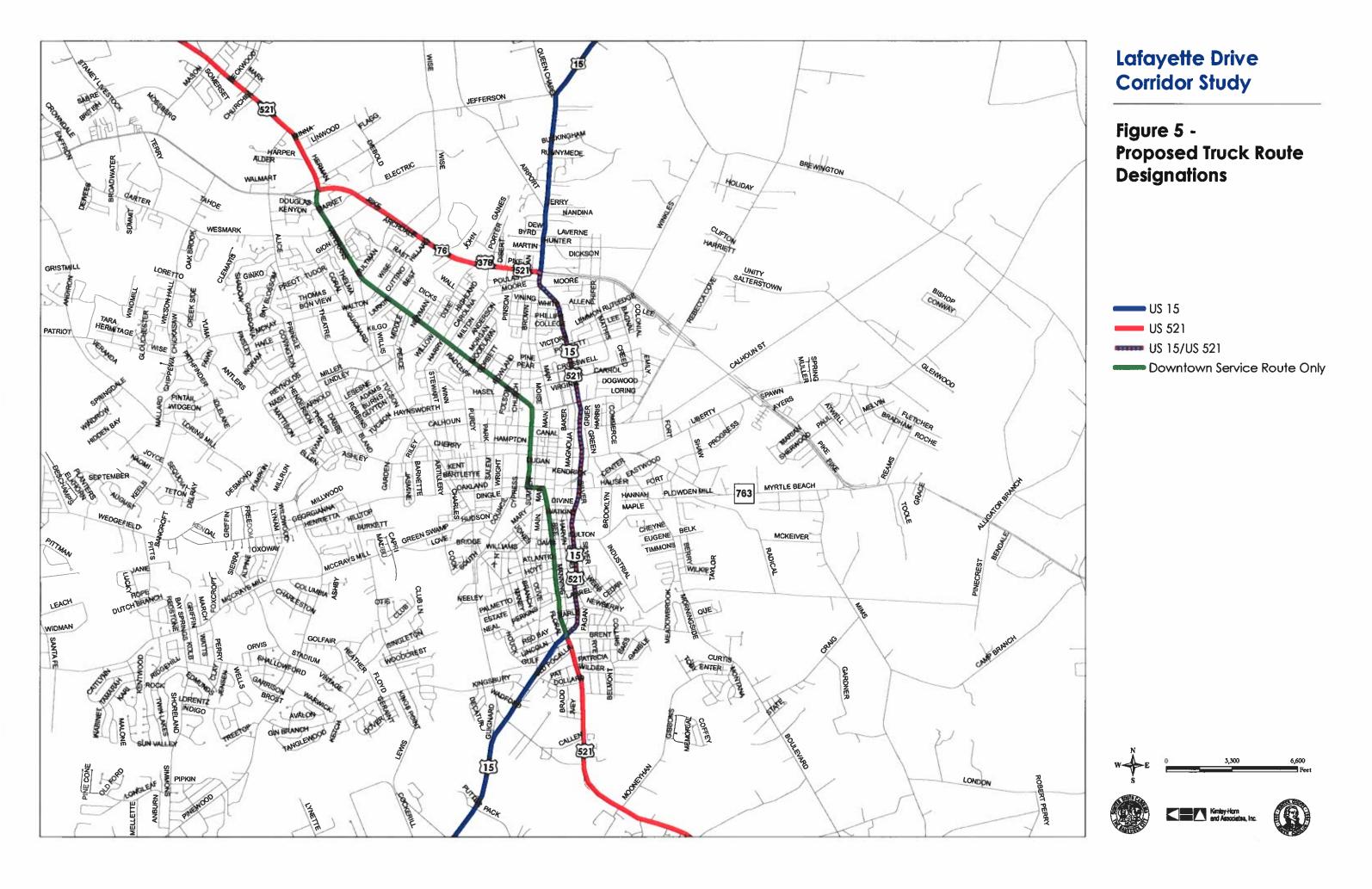








Potential Truck Route Signage



#### South Gateway District

The south gateway comprises the intersection of Lafayette Drive and Manning Avenue, as well as the adjacent parcels. Currently, this intersection is signalized with a free flow right-turn/frontage road that services traffic between southbound Manning Avenue and westbound Lafayette Drive. The surrounding land uses include an auto parts store, a service station with convenience store, self-service car wash, two used car lots, and an undeveloped corner adjacent to residential land uses.



Lafayette Drive looking northbound toward Manning Avenue

This location was identified in the crash analysis as the fifth worst intersection in the SUATS LRTP study area. As noted in the previous section, the proposed countermeasures include traffic signal upgrades, removal of the free flow rightturn lane/frontage road between the southbound and westbound movement, consolidation and/or relocation of driveways adjacent to the intersection, improved pedestrian amenities, and reconfiguring the alignment between the Manning Avenue approaches. Figure 6 shows a schematic description of the proposed improvements.

The drivew ay closure will occur primarily on the northeast quadrant at the service station and adjacent car wash. On the southern side of the service station parking lot, the drivew ay closest to the intersection should be closed, leaving one entrance on that approach. On the western side of the parking lot, the drivew ay should be delineated to create one two-way drivew ay, as opposed to a continuous opening the length of the parking lot. At the car wash, the entrance on Lafayette Drive should be closed, allowing for rear access from Red Bay Road. If possible, cross access should be created between the two parcels.

Improved pedestrian accommodations are proposed at the intersection, including brick paved crosswalks and pedestrian countdown signals. The signal upgrades at the intersection should be consistent with those found in the Central Business District, including mastarm signal poles and LED signal heads. In addition, the left-turn movements on both Lafayette Drive approaches should be modified to a protected/permitted phasing to provide safe passage to those vehicles making this movement. Finally, the signal should be timed in coordination with upstream signals, consistent with the corridor-wide recommendations.

The geometric changes at the intersection include removal of the free flow rightturn lane/frontage road between southbound Manning Avenue and westbound Lafayette Drive. The southbound approach would then contain a dedicated left-, a through-, and a dedicated right-turn lane. This would provide the optimal alignment with the southbound receiving lanes and no longer require a quick merge movement on the south side of the intersection. The northbound receiving lanes should be consolidated to one receiving lane to match the laneage on the northbound approach.

All of these recommendations are envisioned to provide enhanced mobility while addressing traffic safety. To create a true gateway, how ever, it will be necessary to implement features that announce arrival into Sumter, and welcome visitors to the Lafayette Drive corridor. The images below are renderings depicting gateway features that could be used at this location to signify entrance into Sumter. These gateway elements could be applied not only

at this location, but also throughout the city to create features that mimic those found in the new ly renovated central business district.



Potential Gateway Features













16



Proposed Roadway Improvements: 1. Upgrade traffic signal to include mastarm signal poles and protected/permitted phasing for left-turning vehicles on US 15 2. Move southbound Manning Avenue free flow right closer to intersection (remove two-way frontage road)

 Consolidate driveways on adjacent parcels
Upgrade pedestrian facilities to include crosswalks and pedestrian countdown signal heads.

-

Lafayette Drive Corridor Study Figure 6 - US 15 at US 521 (South) Proposed Improvements

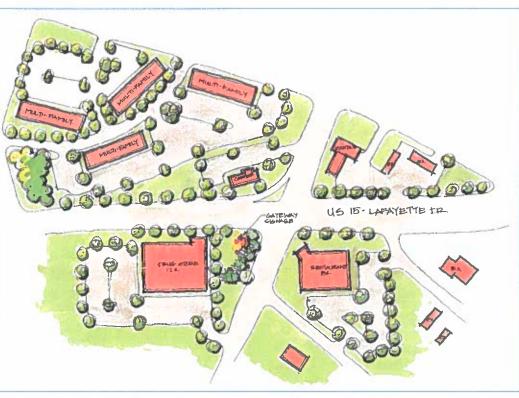


Paver Pedestrian Crosswall Driveway Closure

Median



As the improvements to the intersection are completed, opportunities for development and/or redevelopment may present themselves. With this in mind, the land uses found in the northwest, southwest, and southeast quadrants should be reevaluated to effectively support commercial node activity. The figure below provides an artist's rendering of potential redeveloped land uses including multi-family residential, drug store/pharmacy, a coffee house, and a family restaurant.



Lafayette Drive and Manning Avenue Redevelopment Opportunities

The photo and rendering below provides a before and after glimpse of the existing gateway location shown on the previous page. The rendering shows the proposed coffee house on the left side of the roadway and the proposed drug store on the right side of the roadway. At the intersection, a brick gateway feature announces entrance into Sumter, while street trees and landscaping provide enhanced aesthetics entering the corridor.



I afayette Drive and Manning Avenue Streetscape Features





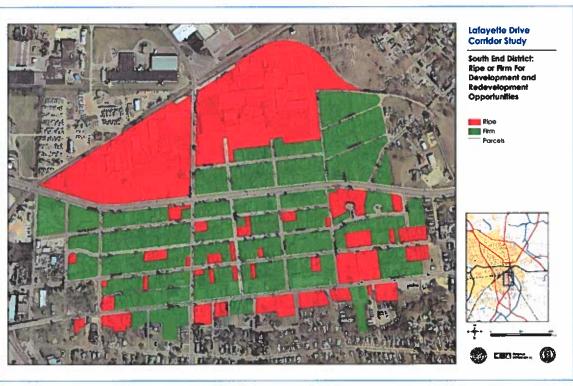






### South End District

The South End District is located south of the railroad overpass near Fulton Street and the site of the now defunct Sumter Cabinet Company facilities. The existing land uses are primarily residential and industrial, with a light mixture of commercial. In order to establish the true viability of the focus area, land uses along the corridor were evaluated to determine whether current usage was "ripe" or "firm" for redevelopment.



"Ripe or Firm" Analysis for the South End District

A land use was recognized as "firm" if it was a viable business, occupied residence, or historic structure. Alternatively, a land use was classified as "ripe" if it was vacant or unoccupied, a business in decline, or a land use was inappropriate for its surroundings. This assessment was conducted by the consultant team to help determine the scope and type of land use recommendations needed for the corridor and to identify opportunities for development and redevelopment.

Kimley-Horn and Associates, Inc.

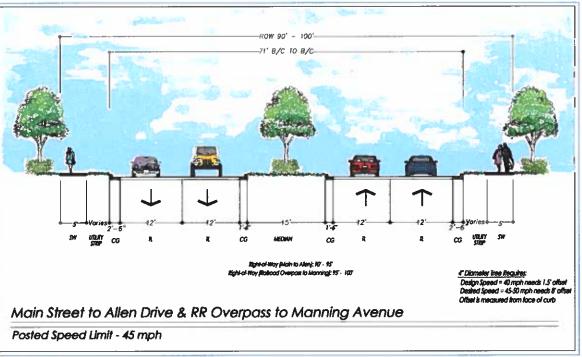


This analysis determined that most of the residential parcels could be considered "firm." Some parcels, however, are in disrepair either due to negligence or fire damage and should be considered "ripe" for redevelopment. In addition, the non-operational Sumter Cabinet Company facility sits on the two largest parcels in the focus area, and is considered "ripe" for redevelopment. Potential redevelopment opportunities include mixed-use residential and commercial.

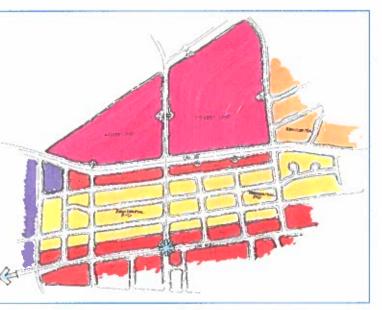
The above figure is an artist's rendering of potential future zoning for the focus area. As mentioned, the two largest parcels should be considered for mixed-use development, while the existing residential directly adjacent to both Lafayette Drive and Manning Avenue should be considered for conversion to general commercial. The interior parcels would remain zoned as residential.

The typical cross section in the vicinity of this focus area includes four travel lanes with a raised planted median with street trees. Median openings, discussed in a previous section, will be placed strategically to allow access to and from major roadways. These median openings should be designed with dedicated left-turn lanes to allow for proper storage of turning vehicles without

impeding traffic flow along the corridor. The typical section also should have curb and gutter on both sides of the roadway, as well as sidewalk on both sides of the roadway. All of the aforementioned elements should fit within the existing right-of-way of Lafayette Drive. Outside of the existing right-of-way, it is proposed that street trees be planted to enhance the aesthetics along the corridor.







Potential future zoning for redevelopment of the South End District

19

### Lafayette Drive Corridor Study

#### **Government District**

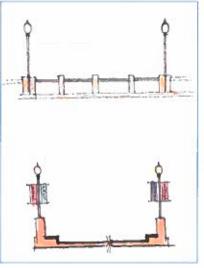
The Government District extends between Calhoun Street and the northern terminus of the railroad overpass. The major intersections along Lafayette Drive within this focus area include Calhoun Street, Hampton Avenue, and Liberty Street. The land uses in this focus area include residential, commercial, civic, and institutional. The Library, Chamber of Commerce, Court House, County Office Complex, Law Center, and City Hall facilities are some of the key activity centers and points of interest within this area.

The gateway into this district is the railroad overpass connecting the northern section of Lafayette Drive with the South End District. Under existing conditions, the overpass is a conventional structure with the sole purpose of providing passage over the railways. When traveling the corridor, passing over the structure seems to symbolize a transition from one side of town to the other. Considering this transition, the structure should be improved aesthetically as a gateway feature, using specific elements to announce entrance into downtown Sumter. A few examples of these elements might be pedestrian lighting and decorative flags commemorating Sumter's history. The artists rendering below depicts the transition from conventional overpass to gateway structure.



Lafayette Drive (NB) at Railroad **Bridge** 

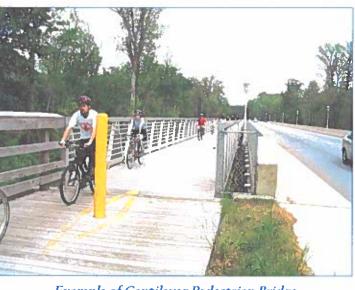






Potential Bridge Gateway *Elements: 1) I ighting* enhancements (Left), 2) New signage using Iris theme (top), 3) Potential gateway column

In addition to creating a gateway feature along the overpass, it also is important to create an environment that is traffic-friendly, including both pedestrian and bicycle mobility. The current sidewalks on the structure do not provide a safe path for pedestrian or bicycle traffic. A cantilever bridge addition will allow safe passage for both pedestrians and bicyclists, and will promote connectivity between the north and south areas of Lafavette Drive. The picture to the right provides and example of this type of treatment.











Example of Cantilever Pedestrian Bridge



Within this focus area, the overarching recommendation formed during the design charrette was to create better connections between the Government District and the Central Business District. To create the feeling of a fullyconnected downtown, the design concepts from the newly renovated downtown should be implemented in the Government District, including mastarm traffic signals, brick paver intersection treatments, street trees, and median treatments. The figure to the right provides an artist's plan view rendering of the proposed improvements superimposed over existing aerial photography.

The photo and rendering below provide a before and after glimpse of what the intersection of Liberty Street and Lafayette Drive might look like when these improvements have been implemented.

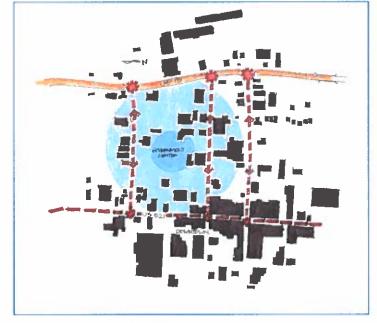


Intersection improvements at Lafayette Drive and Liberty Street



Potential streetscape enhancements in the Government District

With these recommended improvements in place, the downtown core should expand between Lafayette Drive and Manning Avenue, merging the Central Business District with the Government District. Calhoun Street, Hampton Avenue, and Liberty Street would serve as vital connections between Lafayette Drive and Manning Avenue. Development along Lafayette Drive will need to be reevaluated to determine if it fits the nature of the surrounding environment.



Central Business District "Activity Node" with the Government District









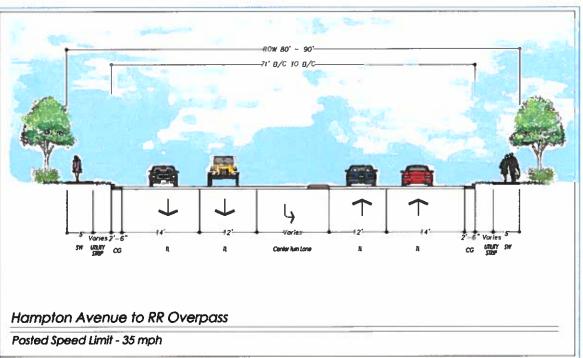
# Lafayette Drive Corridor Study

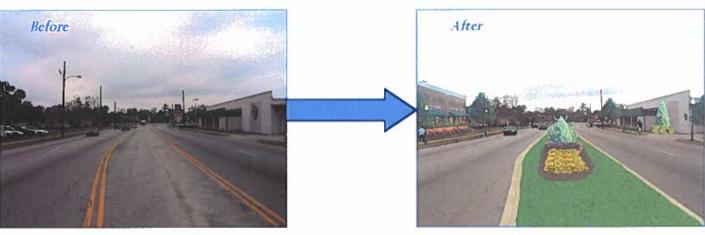
As businesses come and go along Lafayette Drive in this focus area, it will be important to match the land use with the vision for the corridor. With that in mind, several redevelopment opportunities already exist within this focus area. For example, the large parking lot adjacent to the civic buildings is often underutilized, and it could be redeveloped to contain additional office space for the Government District. The artist's rendering below provides a glimpse of the transition from large parking lot to a general office building which enhances curb appeal along the corridor.



In an effort to control access and enhance mobility, it may be necessary to consolidate and/or relocate driveway access along Lafayette Drive. In particular, the Piggly Wiggly shopping market and the various fast food restaurants may need to close one or more driveways directly adjacent to the corridor. To successfully implement this access strategy, it will be necessary to better promote cross access between parcels, as well as provide adequate side street and rear access to these businesses.

The typical section within the focus area will play a significant role in establishing the character of the corridor. With the exception of the median, the proposed cross section through this area should make use of the existing roadway features. In those locations where a concrete median is already established and wide enough to sustain plant life, the median should be transitioned to a raised, planted median. The remaining features should remain constant — such as the four travel lanes, curb and gutter on both sides of the roadway, and sidewalks on both sides of the roadway. Outside of the existing right-of-way, it is proposed that street trees be planted to enhance the aesthetics along the corridor. The rendering below provides a before and after glimpse of how the corridor might look with these cross section elements in place.





Lafayette Drive near Piggly-Wiggly looking northbound









Addition of median and streetscape elements

### **Learning District**

The Learning District extends north from Calhoun Street to Allen Drive. The existing land use in this focus area is primarily residential with a light mixture of commercial and institutional. Several key land uses found in this district include Crosswell Drive Elementary School, Crosswell Children's Home, and Crosswell



Park. No overarching land use or development/redevelopment recommendations were associated with this focus area. The primary recommendation for this area is the typical section along with the addition of pedestrian and bicycle related elements outside of the existing right-of-way.

An abandoned rail corridor lies along the eastern side of the existing Lafayette Drive corridor. Based on the presence of worn paths found along the corridor, it is obvious that the land is used as a pedestrian and bicycle corridor. Sidewalk also currently exists on either end of the focus area, creating a need for additional pedestrian connectivity and continuity. To

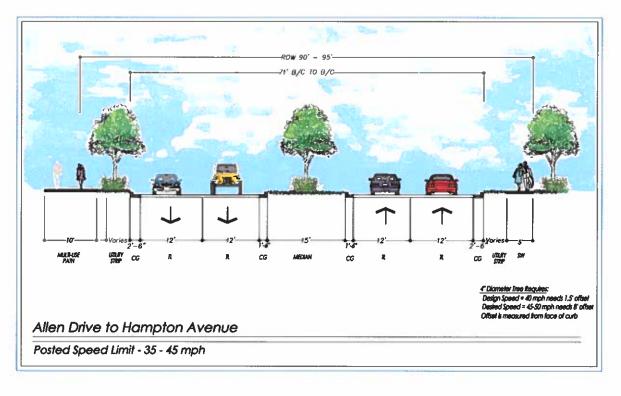
Presence of worn paths along Lafayette Drive

create a facility that is viable for both pedestrian and bicycle use (for all levels of user), a multi-use path is recommended for construction in the abandoned rail corridor, outside of the existing right-of-way.

The typical section for this stretch of Lafayette Drive includes four travel lanes and a raised planted median with street trees. Median openings discussed in a previous section will be placed strategically to allow access to and from major roadways. These median openings should be designed with dedicated left-turn lanes to allow for proper storage of turning vehicles without impeding traffic flow along the corridor. The typical section should also have curb and gutter on both sides of the roadway, as well as sidewalk on both sides of the roadway. All of the aforementioned elements should fit within the existing right-of-way of Lafayette Drive. Outside of the existing right-of-way, it is proposed that street trees be planted to enhance the aesthetics along the corridor, in addition to the construction of the aforementioned multi-use path. The photo simulation on the following page provides the steps needed to transition Lafayette Drive from a five-lane thoroughfare into a four-lane median divided boulevard.



Typical multi-use path adjacent to roadway











### Creating a Boulevard...



Lafayette Drive looking northbound



Introduction of landscaped median with pocket left turn lanes





Pocket park on right side of roadway



Plant street trees on both sides of roadway







Construction of multi-use path on left side of roadway

24

### North Gateway District

The North Gateway District extends from the intersection of Main Street and Lafayette Drive to the US 378 Bypass. The emphasis for this focus area was to promote mobility and reduce congestion by creating a simpler and safer route onto the US 378 Bypass. A byproduct of this goal was to reestablish this location as a gateway into downtown Sumter through the use of streetscape and focused development and redevelopment.

The current entrance and exit configuration at the US 378 Bypass is an awkward right-in/right-out movement onto the Pike frontage road system that parallels the bypass. The current configuration leaves little room for vehicle storage under congested conditions, undesirable turning radii, and creates unsafe spillover onto both



Entrance/Exit Ramp onto US 378

the frontage roads and the bypass. In addition, very little distance is provided for acceleration and deceleration movements when entering and exiting the freeway. The combination of these factors effectively prohibits heavy vehicles from making this movement, rendering the bypass virtually underutilized. The figure to the right provides the existing configuration of the US 378 Bypass and the frontage road system.

The recommendations proposed in this plan intend to create an easily accessible freeway that promotes travel to and from downtown Sumter on both the Main Street and Lafavette Drive corridors. The improved ramps should limit driver confusion and provide a more convenient point of access for heavy vehicles traveling from the industrial parks south of downtown. The ramps also should provide adequate acceleration and deceleration distance, based on guidelines proposed by both SCDOT and the American Association of State Highway and Transportation Officials (AASHTO).

Figure 7 provides a plan view of the proposed interchange improvements.



Lafayette Drive at US 378 Bypass - Existing Conditions









The entrance and exit ramps are set up in a simple diamond configuration, with the deceleration lanes approximately 450 feet long and the acceleration lanes approximately 1,000 feet long. In order to provide adequate spacing for the ramps, it will be necessary to reroute the frontage roads away from the ramp termini.

When rerouting the frontage roads, special attention was paid to maintaining the integrity of existing parcels adjacent to the bypass, including using existing roadway alignments wherever possible. The South Pike frontage roads will utilize Poulos Street in the southwest quadrant and Moore Street in the southeast quadrant. The North Pike frontage road will make use of portions of Strange Street and portions of the abandoned rail alignment in the northeast quadrant. In the northwest quadrant, the North Pike frontage road will utilize portions of Jan Avenue.

The intersection of Main Street and Lafayette Drive also poses congestion problems under current conditions. The design of the intersection with the current skew presents a safety problem for drivers and pedestrians. The heaviest movements in the peak hour are right turns from Lafayette Drive onto northbound Main Street; left-turning movements onto Lafayette Drive from southbound Main Street; and through movements northbound and southbound on



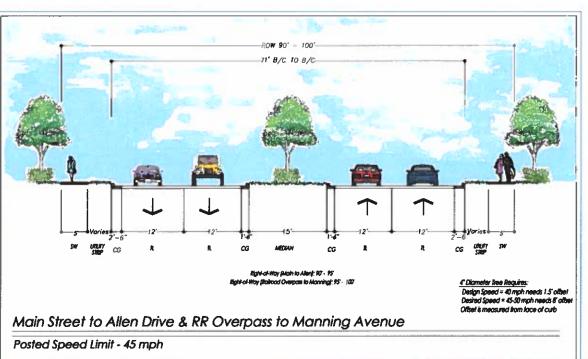
Congestion at Lafayette Drive and South Pike Frontage Road

Main Street. The proposed treatment at this location includes realigning the intersection to make Lafayette Drive the predominant through movement, shifting traffic from the two-lane Main Street to the four-lane Lafayette Drive. The additional laneage should reduce congestion at this location and at locations farther along the corridor. Vehicles that still prefer to make the trip into downtown from the bypass will have a free flow right turn allowing them to make the movement with little conflict.

Under this plan, several secondary roads also will need to be rerouted to create the new intersection. In particular, Moore Street in the southwest quadrant will

end before reaching Main Street, becoming a cul-de-sac. To provide access to and from those residences, a new connection between Poulos Street and Moore Street will need to be created.

The roadway features in this location will be similar to those found in the South End District. The proposed typical section will include four travel lanes with a planted median containing street trees. The existing curb and gutter and sidewalks will remain in place on both sides of the roadway. All of theses elements will be contained in the existing right-of-way. Outside of the existing right-of-way, it is proposed that street trees be planted to enhance the aesthetics of the corridor. The rendering below provides a before and after glimpse of what the intersection might look like with the proposed realignment and streetscape elements in place.





Streetscape improvements at Lafayette Drive and Main Street







27



#### "Ripe or Firm" Analysis for the North Gateway District

Once the realignment of ramps and roadways is complete, it is expected that several development and redevelopment opportunities will arise. Another "ripe" or "firm" analysis was conducted in this focus area, specifically focusing on the parcels in the quadrants adjacent to the proposed interchange. Based on this analysis, the following conclusions were drawn:

- In the southeast quadrant, a majority of the parcels were ripe for redevelopment, including existing commercial, industrial, and residential land uses.
- In the southwest quadrant, a majority of the parcels can be considered firm. The primary land uses of these parcels include residential and a large automotive dealership. Several parcels (some undeveloped) along the existing frontage roads and Main Street are ripe for development and/or redevelopment.

- In the northwest quadrant the parcels along US 15 are ripe for redevelopment, while the residential and church uses should be considered firm.
- In the northeast quadrant, a majority of the parcels are ripe for redevelopment, primarily industrial with a small mixture of residential land uses.

The figure to the right is an artists rendering of the proposed future zoning plan. Based on the results of the "ripe" and "firm" analysis, the following recommendations were made:

- In the southeast quadrant, the land uses should include retail office/mixture, professional office, light industrial, and general residential.
- In the southwest quadrant, the land uses should include primarily general commercial and residential north of the reconfigured Main Street/Lafayette Drive intersection, with general commercial and professional office to the south.
- In the northwest quadrant, the land uses should include general commercial and civic in the redeveloped parcels with a mix of existing residential.
- In the northeast quadrant, the land use should be general commercial.

**Figure 8** is an overlay of the proposed development structure on top of the conceptual rendering of the

recommended interchange. Those land uses that were considered "firm," such as existing residential, are shown in their existing state, while the proposed new development is shown as an artist's rendering.



Potential future zoning for redevelopment of the North Gateway District













The following images provide a three dimensional perspective of the proposed development structure. This technique provides a street level glimpse of what the corridor might look like at full build-out of the recommended improvements.



Oblique angle of I afayette Drive (looking southbound) after redevelopment



----

Oblique angle of Lafayette Drive (looking northbound) after redevelopment











### **Implementation Plan**

Completion of this study symbolizes an important step towards implementing mobility, safety, and aesthetic improvements along the Lafayette Drive corridor. Most of the recommendations outlined in this report will require limited amounts of right-of-way for dedicated improvements. The nature of the recommendations does not require that all improvements are completed in unison. This should allow the City the flexibility to implement in several phases while employing multiple funding sources to complete the project.

Many citizens expressed frustration during the charrette process over the lack of funding sources and time for implementation of the proposed improvements. Unfortunately the planning, design, and construction of publicly-funded transportation projects typically takes ten years in environmentally sensitive areas. Local, State, and private partnerships offer strategic advantages to implementing improvements on a timely basis. The purpose of this implementation plan is to recognize these challenges and suggest strategies to address each challenge. Following are general recommendations and action strategies offered by the consultant.

### **General Recommendations**

The following recommendations apply to the overall vision for the corridor as expressed by the local citizenry, stakeholders and elected officials. These recommendations can be initiated throughout the planning process and prior to any physical infrastructure improvements.

- Use this plan as a tool to review proposed development projects and plans as they locate and are implemented within the corridor.
- Integrate future bikeways, greenway, and trail networks (i.e., Osgood Canal greenway) with the Lafayette Drive corridor study to create an interconnected network.
- Avoid and/or minimize impacts to culturally sensitive areas to preserve community character and cultural environment.
- As the transportation corridor is improved and expanded minimize impacts that negatively effect the character and integrity of adjacent neighborhoods by introducing gateways or traffic calming improvements.

- Promote alternative modes of transportation through better street design and developer participation.
- Promote interconnectivity and cross-access between existing and proposed developments.

#### **Site Access Mitigation Measures**

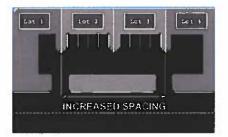
Many of the recommendations in this report require the closure and/or consolidation of existing driveways for successful implementation. Site driveways should be configured to minimize negative effects of traffic flow along the corridor. For new developments this can be accomplished through good site design and by limiting the number of new access points along the roadway. For existing sites it may be necessary to close one or more driveways to consolidate the flow of traffic to and from the development. This can be accomplished by promoting interconnectivity and cross-access between existing and proposed developments. Additional tools include:

- Driveway throat length—is the distance from the edge of the public street to the first internal site intersection. An adequate separation should be provided (minimum 200 feet) to prevent internal site operations from affecting an adjacent public street.
- Number of driveways—in many cases, new development occurs adjacent to an existing site or adjacent to another new development. In these cases, driveway permit applicants should be encouraged to seek cross access easements/agreements (from an existing adjacent property) or coordinate with an adjacent proposed development to create interconnected internal circulation systems and shared-use external driveways.
- Driveway placement/relocation—driveways located in proximity to intersections create and contribute to operational and safety issues. These include intersections and driveway blockages, increased points of conflict, frequent/unexpected stops in the through travel lanes, and driver confusion (as to where vehicles are turning). Driveways in proximity to intersections should be relocated or closed, as appropriate.
- Signalization—the volume of traffic attracted to some site driveways is more than can be accommodated acceptably under an unsignalized condition. Delays for minor street movements as well as left-turn movements on the main street may create or contribute to undue delays on









Appropriate driveway spacing

the major roadway and numerous safety issues. The installation of a traffic signal at appropriate locations can mitigate these types of issues without adversely affecting the operation of the major roadway.

#### **Right-of-Way Requirements**

Generally, the recommendations presented herein can be accomplished within available right-of-way, with three exceptions.

- The proposed North Gateway District improvements at the US 378 Bypass impact several businesses and residences, most of which are dilapidated or improperly used. These improvements include the interchange entrance and exit ramps, the re-routing of the Pike frontage road system in the vicinity of the ramps, and the realignment of the intersection of Lafayette Drive and Main Street.
- The proposed South Gateway District improvements at the intersection of Lafayette Drive and Manning Avenue will require some additional right-ofway in the northwest quadrant for the construction of a free-flow right turn lane. However, the current free-flow right turn/frontage road that currently exists will be removed providing additional right-of-way that could revert back to existing property owners.
- The third exception involves the planting of street trees and the implementation of the multi-use path (between Calhoun Street and US 378) along the corridor outside of the existing right-of-way. These improvements would not necessarily require additional right-of-way to be purchased by the City, but rather would require an agreement between the City and the adjacent land ow ners allowing the City to utilize this portion of the property. The concession should require the City to maintain the facilities after their implementation.

### **Probable Construction Costs**

As part of the corridor planning process, probable cost estimates were developed for each of major elements of the corridor improvements. These cost estimates were prepared in year 2006 dollars and do not include right-of-way costs. The probable construction cost figures are based on unit cost values provided by SCDOT. The total probable construction cost for the redesign, access management and streetscape improvements for the project is approximately \$17,750, 000. The cost associated with redevelopment activities is not included in this estimate. The total cost estimate for each element included the following categories:

- Roadway and pavement
- Landscaping
- Traffic signal upgrades
- Pedestrian level improvements
- Design services
- Contingency

A summary of construction by phased improvement is provided in subsequent sections.

### **Responsible Agencies**

The agency responsible for the implementation of the recommended corridor improvements also was identified. Some of the proposed improvements along the study corridor cross over right-of-way that is owned by different public and private agencies. Some improvements will occur as a result of development and redevelopment opportunities along the corridor. The majority of responsibility for implementing the Lafayette Drive Corridor Improvements will be a coordinated effort between SCDOT and the City of Sumter.

### **Construction Phasing**

The timeframe needed for implementation was a consideration for the corridor study. Factors that can affect the timeframe may include:

- 🔹 Funding availability
- Permitting
- Right-of-way acquisition
- Public support or opposition

With this in mind, not all of the improvements can be made at one time. When preparing construction documents for the recommended improvements, City officials may still want to consider design treatments for select intersections (such as curb-casing around corners) to protect their investment from heavy







truck traffic that remains in the corridor for serving local destinations (e.g., delivery trucks for downtown businesses) after designation of the alternative route.

The following information provides the proposed timeframe of implementation. The timeframe of project recommendations is addressed in three phases. Projects in Phases I and II are identified for short to mid-term implementation prior to 2012. Phase III projects are identified for long-range implementation and may require investment by the development community.

#### Phase I — Short-Term Improvements

- South Gateway District (Lafayette Drive at Manning Street) — construct new free flow right turn lane. Remove frontage road. Implement streetscape improvements. Gateway features. Probable construction cost is \$400,000.
- Signal System Improvements Improve existing signals to mastarm configuration. Improve pedestrian signals at all intersections. Two new signals at White Street and Allen Drive. Upgrade signal system to progression-controlled fiber optics. Two independent systems can be created; Section 1 is from Manning Avenue to Fulton Street, Section 2 is from Liberty Street to US 378 ramps. Probable construction cost is \$2,300,000.
- Multi-use Path Improvements construct a 10' multi-use path from Calhoun Street to the US 378 Bypass. This improvement includes utilizing the existing underpass for the abandoned rail line located at US 378. Probable construction cost is \$650,000.
- Streetscape Improvements (Liberty Street and Calhoun Street) — construct streetscape improvements including roadway, curb and gutter, landscaping, gateway, plantable verge areas, street trees, crosswalks and sidewalks.

Probable construction cost \$570,000.

 R/R Bridge Gateway Treatments — construct gateway treatments, including ornamental features, community flags/logo, street lighting and signage. Probable construction cost \$350,000.

#### Phase II — Mid-Term Improvements

- Median Treatment Phase 1 (from Manning Street to Hauser Street) — install plantable median with recommended trees, shrubs and greenery. Probable construction cost is \$738,000.
- Median Treatment Phase II (from Calhoun Street to US 378) install plantable median with recommended trees, shrubs and greenery. Probable construction cost is \$869,000.
- Streetscape Improvements (Manning Avenue to US 378 excluding Government District) — construct streetscape improvements including roadway, curb and gutter, landscaping, plantable verge areas, street trees, crosswalks and sidewalks. Probable construction cost is \$5,350,000.

#### Phase III — Long-Term Improvements

- North Gateway District Improvements construct diamond interchange, realign service roads (Pike) and realign Main Street at Lafayette Drive. Other improvements include curb and gutter, landscaping, gateway treatments, plantable verge areas, street trees, crosswalks and sidewalks along Lafayette Drive. Probable construction cost is \$4,400,000.
- R/R Bridge Cantilever Pedestrian Bridge construct a cantilever bridge along the west side of the existing R/R bridge. Probable construction cost is \$2,100,000.

### Action Plan/Funding Strategies

A concurrent step to identifying the phasing of transportation system improvements along the Lafayette Drive corridor is to explore financing alternatives for the recommendations. How ever, a limited range of funding options is available to implement recommended improvements.

Although funds are limited and generally programmed well in advance, there are a few funding categories that are potential sources or financing for these improvements. Some funding options require local matching funds. Some of the traditional or "typical" funding categories include:























- C-Funds Funds allocated to each county by South Carolina Department of Transportation (SCDOT) for the purpose of transportation improvements; law requires that improvements be tied to transportation and that 25 percent of the funds be spent on the state highway system.
- Enhancements Environmentally-related activities that improve the transportation experience through landscaping, bicycle and pedestrian facilities, historic preservation, and other visual amenities related to the transportation system.
- Guide Share Funding available to each of the South Carolina Metropolitan Planning Organizations (MPO) and Councils of Governments (COG) for System Upgrade projects. This dollar amount is calculated by taking the MPO's and COG's specific proportion of the state population and applying it to the total available funds for System Upgrade projects. SCDOT is currently revisiting this formula, which may change in the near future.

Because the list of recommended improvements contains a variety of projects, it is recommended that the "typical" funding types be explored and exhausted for each individual improvement. For example, all sidewalk and gateway improvements should seek "enhancement" funds and all roadway improvements should seek State funds, at a minimum.

Public-private venture agreements also can be leveraged to implement a specific improvement, especially if there are identified benefits or incentives to both parties. The following list identifies "action items" that should be initiated by the City-County to begin the process of improving the Lafayette Drive corridor.

Ultimately, a new funding source may be needed to bring forward some or all of the mid- to long-term improvements like the US 378 interchange redesign. The City and County are currently evaluating the support for a new Sales Tax referendum in 2008. With this in mind, the US 378 interchange redesign would be a prime candidate for the Sales Tax based on the safety, access, mobility and economic development potential benefits received by the region.

#### **Priority Action Items**

 Pursue plan adoption by implementing agencies including the City and County of Sumter and the South Carolina Department of Transportation (SCDOT).

- Utilize the Transportation Plan Advisory Group (TPAG) to meet regularly and aid in the implementation process.
- Adopt a land development ordinance that requires developers to implement the "intent" of recommended improvements for the Lafayette Drive corridor, building in flexibility for access and design to fit their individual development schemes.
- Lobby SCDOT and members of the State legislature to include partial funding of improvements in the next Transportation Improvement Program (TIP) to design and implement.
- Pursue SCDOT STP-Enhancement grant funding to install bike lanes on existing facilities. These funds are administered through a grant program with a 20% local match requirement. More information is available on the SCDOT website http://www.scdot.org/community/tep.shtml
- Consider a transportation bond referendum, local impact fees, or vehicle registration fees to complete "gaps" along the corridor.
- Consider providing a tax incentive to existing property owners and developers located at the US 378 interchange (North Gateway District), the intersection of Lafayette Drive/Manning Avenue (South Gateway District), and the South End District for constructing service road access connections.
- Require dedication of connector street right-of-way for redevelopment or rezoning applications at the US 378 interchange (North Gateway District).
- Adopt a Corridor Overlay Zoning District. The overlay district should be implemented for the Commercial District situated at the US 378 interchange.
- Adopt a Government Corridor Overlay Zoning District (for the Government District near Liberty and Calhoun Streets) to regulate building frontage, setback requirements, etc. to support urban character and historic integrity of corridor.
- Conduct a market analysis for the City-County to determine strengths and w eaknesses of the local economy and to identify development and redevelopment opportunities.
- Adopt the Railroad Greenway Plan (along the abandoned Lafayette Drive rail line) to ensure quality bicycle and pedestrian connectivity along the corridor.









 Once the truck route re-designations are implemented, request that representatives for the SC State Highway Patrol regulate the proposed truck route.

### Conclusion

There are a variety of funding strategies to implement the recommended improvements for the Lafayette Drive corridor. These funding strategies include state and local monies, which are often limited or committed well into the future. Grant funding from the state typically requires a local match, but these monies may be used to cover many of the capital and operating expenses identified in the recommendations for the corridor. Some of the improvements will be made in partnership with the private sector.

An incremental funding approach would be possible, but is not as attractive because the full benefit of the collective improvements would not be realized for quite some time. Alternative funding sources for expediting construction include special assessments and/or a locally-adopted transportation bond.

One thing is certain, with the current transportation funding shortfall the most critical steps toward implementation will be carried by leaders identified within the community. In collaboration with state and local officials, their collective efforts will lead to a safe, aesthetically-pleasing gateway through the heart of Sumter.







