# sc route 418 corridor plan city of fountain inn, south carolina fountain inn, south carolina



### summary report

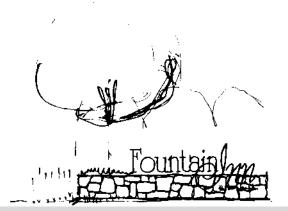
prepared by

seamonwhiteside+associates alta planning and design harpe consulting sprague & sprague engineering











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# FOUNTAIN INN FORWARD

### TOP TEN NEXT STEPS

The Planning Team developed the following list of implementation/ action items that the City should undertake to begin implementation of the Master Plan. Fulfillment of the following ten items will not complete plan implementation, but will focus the City's short term (5year) efforts in the right direction. The Top Ten implementation Steps as prioritized by the community are:

- Concentrate on Main Street Phase 1 Improvements
   (Fairview to Jones)
- 2. Adopt Central Business District and Signage Guidelines
- 3. Develop a Clear Structure for Economic Development
  Efforts
- Install New Gateways on Main, Fairview, and McCarter Streets
- Develop a Matching Fund to Encourage Downtown Building Improvements
- Leverage Existing Regional Economic Development Initiatives for Support and Funding
- 7. Make Improvements to City and Woodside Parks
- Implement Standards to Improve New Housing Developments
- 9. Implement a Communications and Marketing Strategy
- Explore Open Space Opportunities as Part of New Residential Developments

### previous studies

### goal statement |

"The Corridor Study for SC 418 will focus on sidewalk, bicycle, and beautification improvements to improve transportation systems and spur community revitalization." - taken from the original request for qualifications

SC 418 Corridor serves a multitude of functions: it is the "front door" for Fountain Inn from I-385; it serves as a major traffic-carrying conduit; and it is the main travel conduit between Greenville and Fountain Inn, providing access to the Interstate. For the corridor to effectively perform its varying roles it can neither be geared toward moving as much traffic as quickly as possible at the expense of other modes or activities; nor can it be geared completely toward pedestrian movements with no regard to commuter traffic. Rather, the goal of the SC 418 Corridor Study will be to strike a balance among mobility, safely, and livability, giving equal billing to all modes of transportation, whether personal motor vehicle, public transit vehicle, bicycles, or pedestrians. It is finding this appropriate balance point that will insure the success of the corridor in fulfilling all of these roles while fostering healthy environment for sustainable economic growth. Streetscape components will help create a sense of gateway for the community and identity the roadway as welcoming for all users, whether on foot, bike, or in a car.

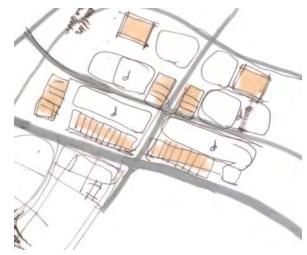
### charrette]

"An intensive design process that involves the collaboration of all project stakeholders at the beginning of a project to develop a comprehensive plan or design."

-http://commpres.env.state.ma.us/content/glossary.asp -

On March 1 and 2, 2010 designers from SeamonWhiteside+Associates, Alta Planning and Design, and Harpe Consulting held a charrette at the City of Fountain Inn Council Chambers. The following notes were taken during a brainstorming meeting with Mayor Gary Long, Eddie Case, Van Broad, and Dan Powell. Objectives were developed and priority areas were identified during this meeting. Conceptual design ideas were explored on site and have been further refined for this report.







### charrette worksession agenda

### monday, march 1, 2010

10:00 am Arrive in Fountain Inn/Setup in Conference Room

10:00 am Tour and Photograph SC Route 418 Corridor (Design Team)

12:00 pm Lunch

1:00 pm Site Analysis and Concept Diagrams (Design Team)

4:00 pm Client Review and Wrap-Up (Design Team)

5:00 pm Public Workshop Prep

6:00 pm Public Workshop – City Hall

### tuesday, march 2, 2010

8:00 am Arrive in Fountain Inn

8:00 am Setup in Conference Room/Breakfast

8:30 am Refocus from Public Workshop (Design Team)

9:30 am Concept Refinement (Design Team)

11:00 pm Client Review and Wrap-Up (Design Team)

12:00 pm Depart for Greenville



### participants |

### city of fountain inn

mayor gary long
jay thomason, city council
celia tuttle, city council
rose ann woods, city council
erick chapman, city council
berry woods jr, city council
matthew king, city council
eddie case, city administrator
van broad, economic development
chris barrineau, parks and recreation director
roger case, zoning administrator

### greenville county

dan powell, greenville county planning commission

### public participants

j. hastings
mike woods
bobby + kay mckelvey
bob + kathy malcoml
rod + donna brown
nate cary
jack west
jeff + julie chalmers
jeff reeves
ray ledford
jim + terri giraid
kelly colvin
eleanor dunlap
mark willis
suzanne long

### design consultants

alta planning and design harpe consulting sprague & sprague engineering







### charrette | participants

# existing conditions |

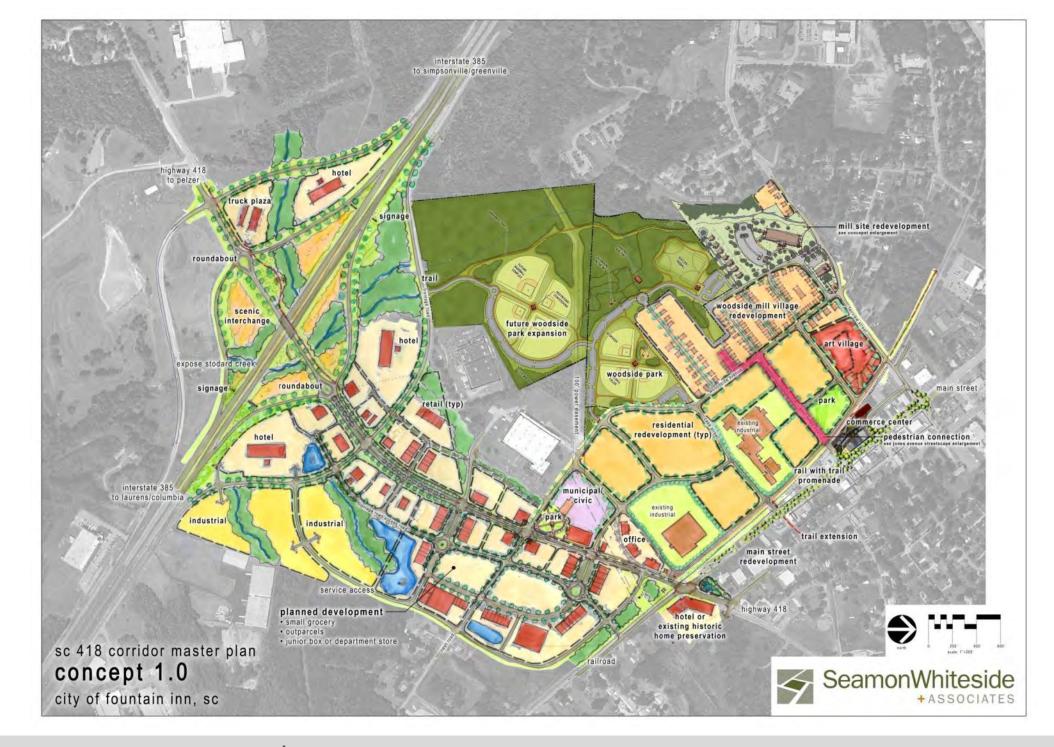
A photographic inventory was made of existing corridor conditions. The following images highlight potential constraints and document future opportunities.







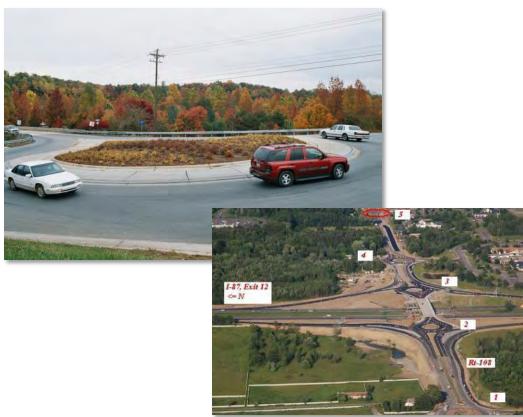


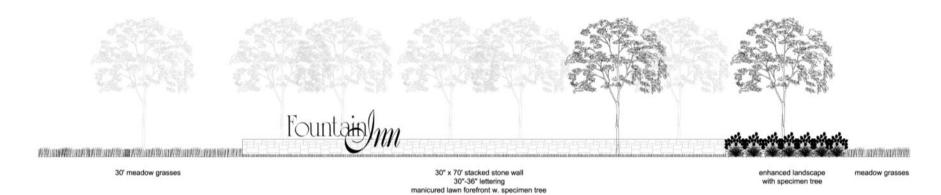


# conceptual master plan



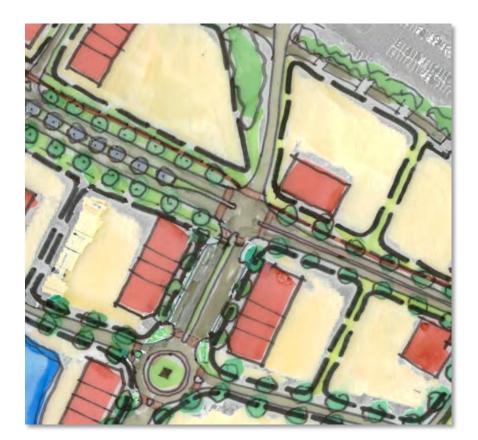






meadow behind existing trees in background

# conceptual master plan | scenic interchange







# conceptual master plan | highway 418 corridor



### final corridor concept

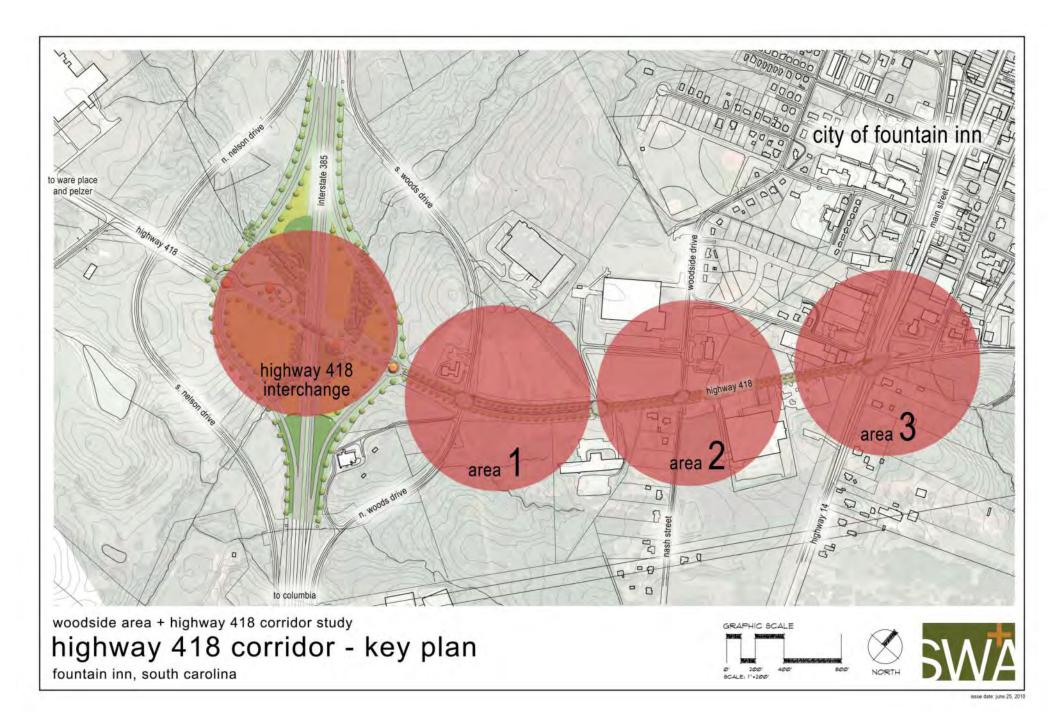
Final recommendations for the SC Route 418 corridor are summarized in the following exhibits. The plan takes into account comments from two public workshops and input from the City of Fountain Inn and Greenville County. In addition, input from SW+A consultants Sprague and Sprague and Alta Planning, as well as SCDOT were incorporated into the final concept.

During preliminary meetings, the South Carolina Department of Transportation suggested that they would consider roundabouts at the interchange based upon the results of a required traffic study. Pedestrian connectivity was not proposed across the overpass as there are currently no plans for widening this bridge to accommodate other modes of transportation. The Highway 418 interchange would be a candidate for SCDOT's Adopt-an-Interchange Program where the agency provides matching funds for limited landscape improvements. Natural stone walls and columns and revealed views to Stodard Creek reinforce Fountain Inn's historic significance. Two-rail fences and planned native grass and wildflower meadows borrow from unique rural details of the place.

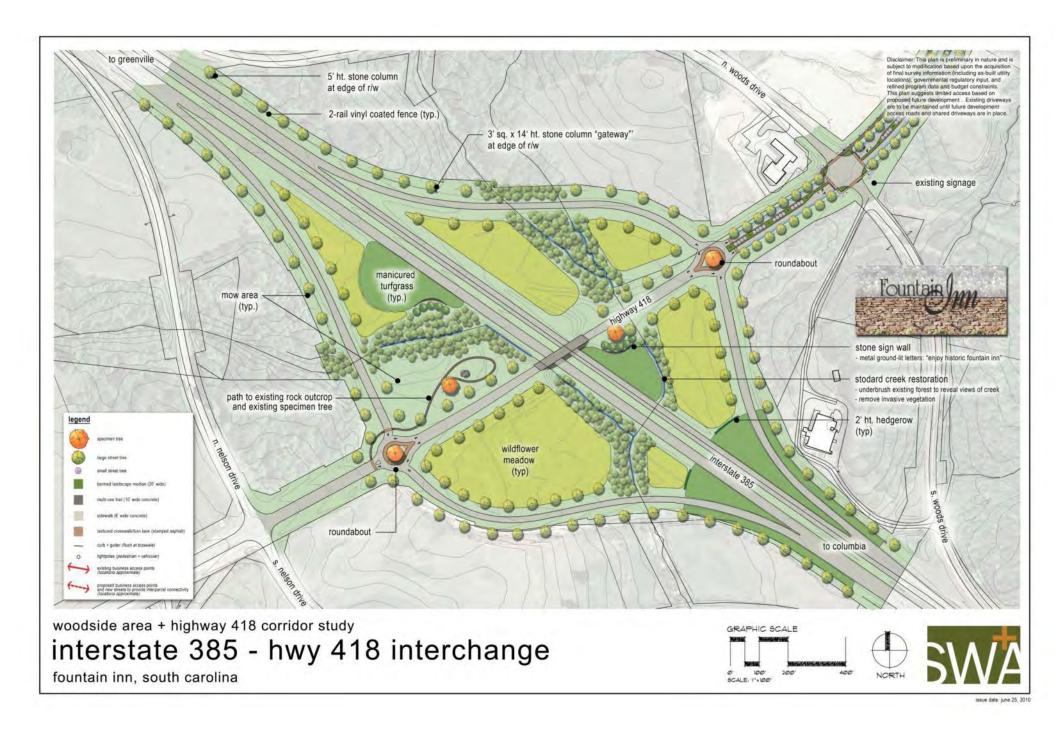
Limited access to existing and future development parcels along the Highway 418 corridor study area is proposed with the introduction of parallel access roads providing inter-parcel connectivity. The development of an overlay district or inclusion of the corridor study area into the CBD is necessary to ensure that future development along the corridor supports the development of Highway 418 as a complete street. Median and shoulder widths are designed to accommodate acceleration and deceleration lanes at mid-block access points as needed. Right-in and right-out access points are encouraged between existing and proposed "primary" intersections as needed. A 10' wide multi-purpose path links future development along I-385 with downtown, providing a safe route for pedestrians and bicyclist travelling the corridor.

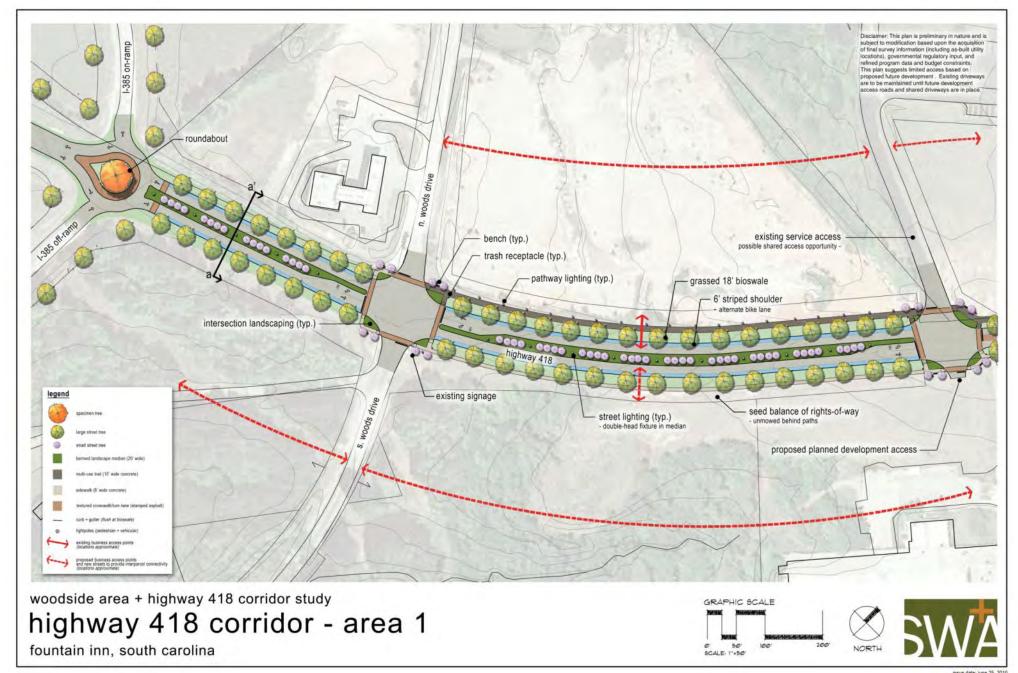
Flush curb conditions along the more suburban portion of Highway 418 between Nash and the interchange allow stormwater to pass into bio-swales for water quality treatment and infiltration while curb & gutter with curb inlets are proposed from Nash to Main Street to reinforce the intentional transition from suburban to urban street.

## final corridor concept

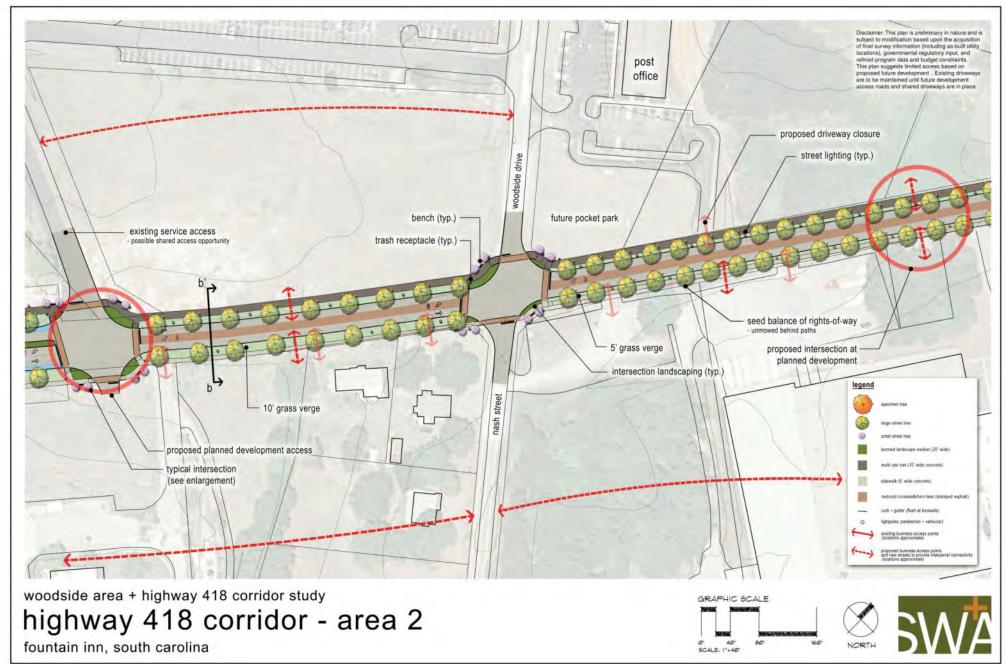


# final corridor concept | key plan

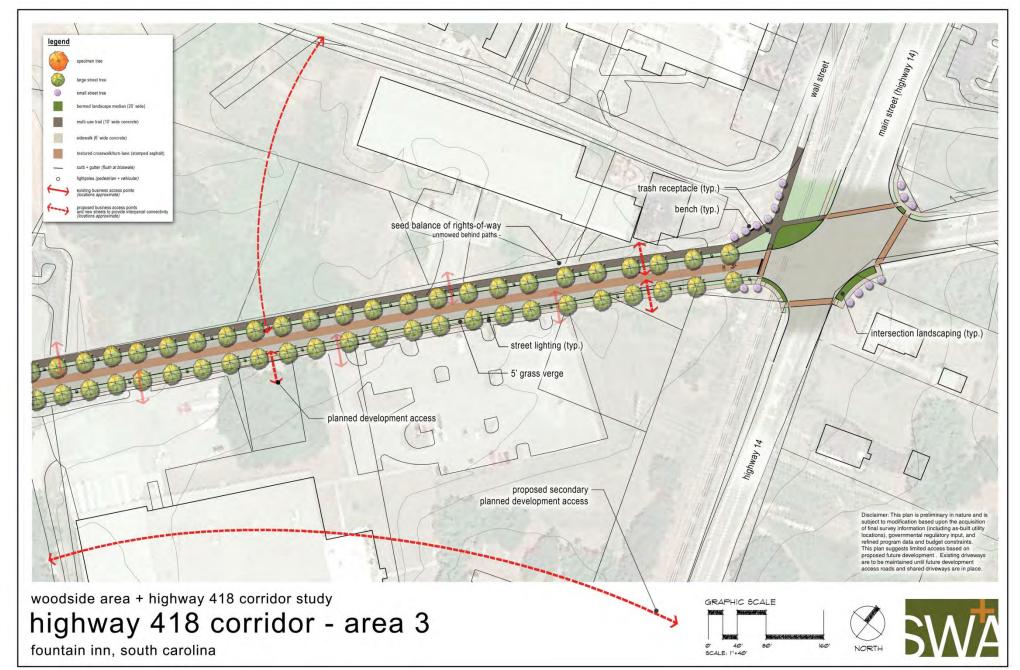




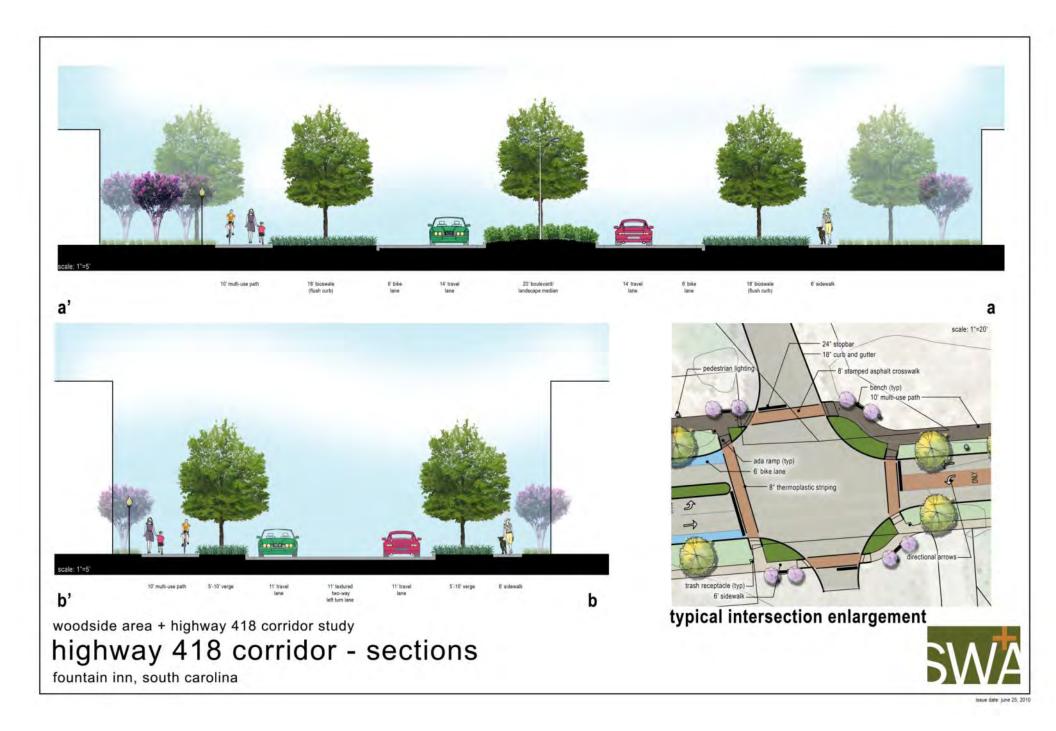
issue date, jurie 20, 201



issue date: june 25, 2010



issue date: june 25, 2010



# final corridor concept | sections

### streetscape imagery















banner





stamped asphalt median plainwell bench and litter receptacle

willow oak

interchange imagery



live oak (roundabout)



scarlet oat (shoulders)



korean boxwood hedge

woodside area + highway 418 corridor study

highway 418 corridor - imagery

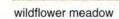
fountain inn, south carolina



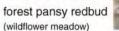
dogwood (wildflower meadow)











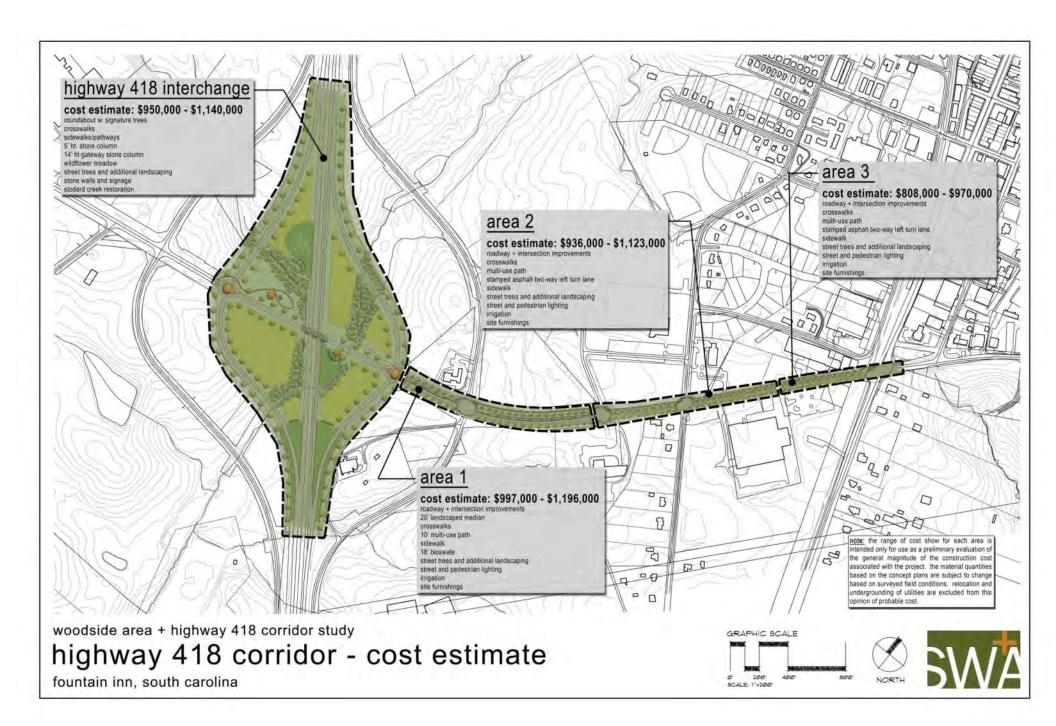


stone sign wall and column



2-rail fence





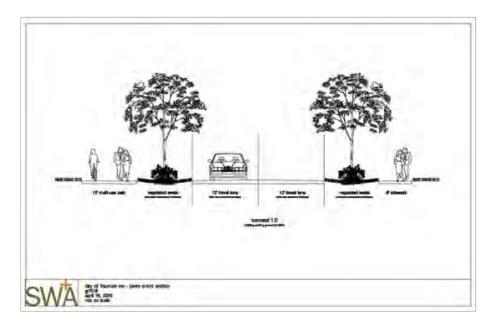
# appendices |

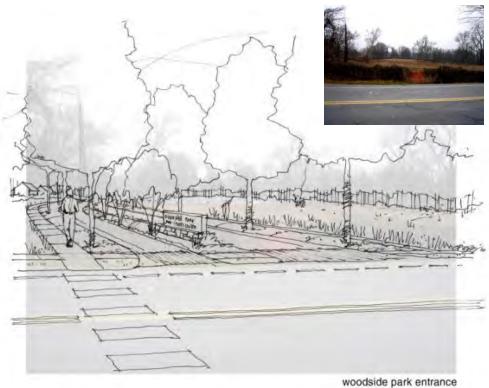
At the request of Dan Powell, SW+A prepared additional exhibits (pages 8.1 - 8.5) to support several grant applications being pursued by Greenville County on behalf of the City of Fountain Inn.

Meeting minutes prepared by SW+A's traffic engineer, Sprague and Sprague, are found on page 8.6 and plans for interchange improvements currently under construction are shown on page 8.7.



# WOODSIDE PARK-FAIRVIEW PARK GREENWAY FOUNTAIN INN, SOUTH CAROLINA

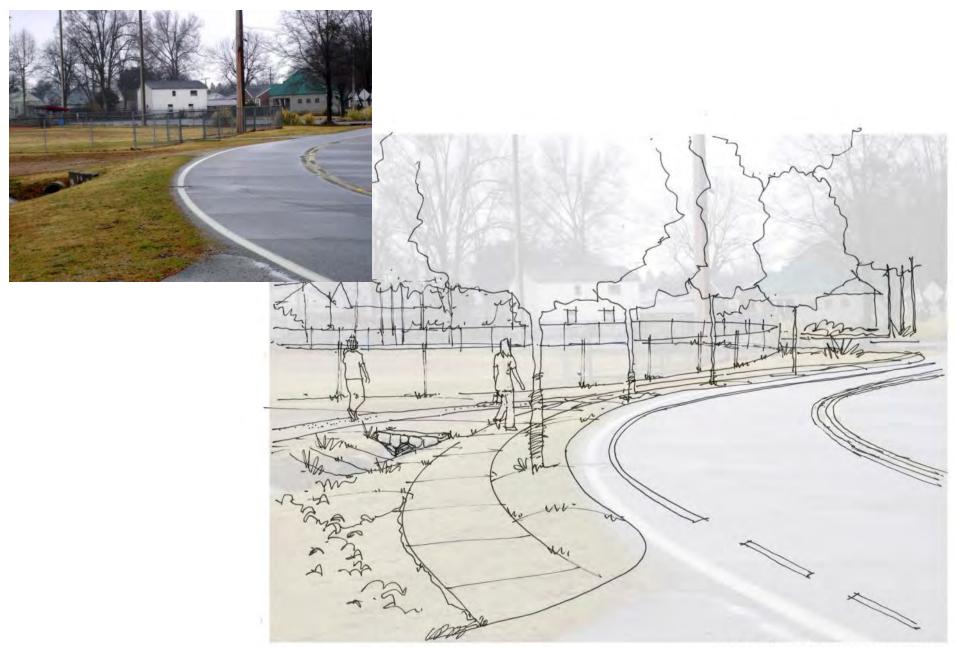






# appendices | woodside park entrance + connector trail





woodside park trail improvements



appendices | mount zion greenway

sc route 418 corridor plan – summary report city of fountain inn, south carolina

SC 418 Plan

Gaye Sprague meeting with SCDOT 3/9/10

Purposes:

- To determine if SCDOT has any plans in the study area between the interstate and SC 14
- To determine if SCDOT has received any complaints over the years regarding that section of roadway

To get input regarding traffic questions from the city/consultant

Attending - SCDOT: Eric Dillon, Craig Nelson, Dana Lowery, George Radler (all with District Traffic Engineering), S & S: Gaye Sprague

- DOT has plans to raise the 418 bridge over 385 and do minor improvements to the ramps, am picking up the plans today, 3/12)
- DOT District Traffic cannot remember any complaints in this section of SC 418.
- The railroad crossing presents a challenge in signal operation, but they cannot remember an
  citizen complaints.
- What travel lane cross section would be acceptable in this section? Depends on the Intens of the development planned. (See notes at end regarding information gathered after this meeting.) The two-lane bridge over 385 will pose a challenge in any changes to the cross section in the vicinity of the interchange, including any signalizations which would need left turn lanes on 418.
- What bike accommodations would be acceptable? Multi-use paths would of course be
  acceptable as long as designed correctly away from the travel lanes. Bike lanes must meet
  SCDOT minimums, but they would prefer 5' on a road like this.
- Signage DOT follows the MUTCD regarding directional signs. DOT also has guidelines regarding wayfinding signs that are the property of local governments. Those guidelines are attached.
- Are there restrictions as to bicycle accommodation on a frontage road, especially where their is no physical barrier between the interstate and the frontage road? DOT does not know of any stated restrictions other than the usual regarding lane widths, shoulder widths, bike lane widths, etc. However, where there are obvious safety issues, bicycle issues should be considered even more carefully than usual.
- How low can speed limit be posted? The speed limit needs to be appropriate for the conte of the road and the existing speed on the road. DOT likes to design five miles per hour high than posted speed. They recognize that an area can become much more urbanized, and a speed of 30 may be appropriate in that urban setting instead of the 40 or 45 which may be appropriate for a more suburban setting.
- How narrow will they allow travel lanes to be? While in some urban settings, DOT may alk a lane width as low as 10', that width is not likely on a segment like this that provides a direct link to the interstate and we know does and will have truck traffic. The minimum here is probably 11', but other factors such as truck turn radii and matching existing cross sections where changes and will be factors.
- What pedestrian accommodations will be allowed at signalized intersections? Pedestrian signals absolutely should be provided, but pedestrian refuge islands are generally not need when there are pedestrian signals which give pedestrians enough time to cross entire legs to the intersection. In some right turn cases, islands may make sense. The need for large corner radii (which in turn leads to the need for pedestrian refuge (slands) will be determined by the design vehicles which do and will make that movement. Documentation will be need if lower corner radii are proposed. In a corridor such as this, any request for midblock crossings will receive very careful scrutiny.

SC 418 Plan Gaye Sprague meeting with SCDOT 3/9/10. Page 2

- Has Craig heard anything on the City's request regarding signage? Craig sent the City's
  information to Tony Shepard in Columbia. Craig owes a call to the City Attorney to share the
  attached internal memo about DOT's requirements for wayfinding signs. In general, DOT is
  suggesting that they and the City start with SCDOT directional signing to determine what can
  be done with that kind of signing, and then everybody can move to the next step of City
  provided wayfinding.
- Does DOT have any thoughts about the City's plans for Main Street? DOT will need to see analyses regarding any potential changes in traffic flow on Main. They have not seen the traffic study conducted by URS as part of the Urban Collage master planning process. The information they need is located on the City's website under Economic Development in the SHORTER version of the master plan. The traffic analysis is the last 10 or 15 pages of the shorter version. I have not reviewed the document except to see that it does include capacity analyses, and that is the kind of information DOT will need to review. I would suggest that somebody print it out in color and get it to Eric with a transmittal letter explaining what you are planning to do. Because Main Street is an SC route, the DOT review will probably have to go to Columbia so the sooner you can get that process started, the better.

After Meeting:

- Keith Brockington with the Greenville County Planning Department supplied this information:
   SC 418 between I-385 and SC 14
  - 2005 transportation model base volume = 8,833
  - 2030 transportation model projected volume with all long range transportation plan projects = 14,139
  - 2030 transportation model projected volume withOUT the long range transportation plan projects = 16,239
  - 2008 SCDOT count = 8,700
  - Historic maximum SCDOT count = 9.400 in 2007

Gaye's note: These are all volumes that can GENERALLY be accommodated with a threelane road. Therefore, unless some unusually intense land use is planned/comes along in this area that the model would not have accounted for, it is likely that a three-lane cross section will be sufficient through 2030.

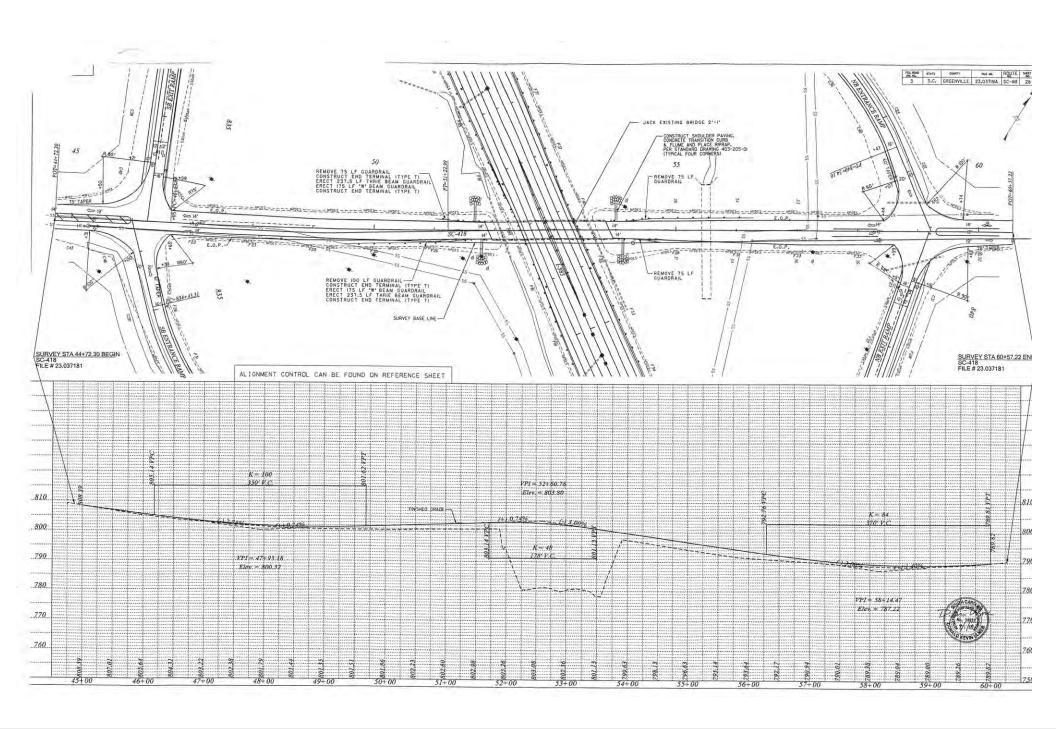
Chief Morton was helpful in supplying accident data for SC 418 in the City which show the date, time, and location of the accidents. If anyone wants me to, I can go through and see if there are any patterns by time of day, but without looking at the individual accident reports, I will not be able to identify any accident patterns by type of accident. I can, however, make one general observation: there are more accidents listed at McCarter/Nash than I would have expected. If we want to look into that further, and if the Chief could pull the individual accident reports, I would be glad to show somebody how to do a collision diagram to see what's going on there. (Of course, I would be glad to do the diagram, but I know we need to keep my hours down, and the task may require several hours.)

 The Chief expressed a concern about the speed on this section as drivers go from rural areas with higher speeds and then approach downtown with its lower speeds.

GGS 3/12/10

Attachment: SCDOT Wayfinding Signing Guidelines

### traffic engineering notes



# **SCDOT** hwy. 418 interchange improvements

# top 10 projects | fountain inn bicycle and pedestrian connectivity study

The following "Top 10 Priority Project List" was formed from the Bicycle and Pedestrian Connectivity Study and should be used a resource to prioritize implementation.

# Top 10 Projects.....

# Fountain Inn Bicycle and Pedestrian Connectivity Study



## WOODSIDE AVENUE (SIDEWALK)

Woodside sidewalks will provide vital connections for pedestrians both to Woodside Park and along Fairview Street (connection to Fountain Inn Elementary School). This sidewalk, coupled with native plantings and bio-retention swales will create a more accessible, educational park. Additional site furnishings provide opportunities for pedestrians to enjoy the parks added features. Provide sidewalk connectivity from Woodside Park to Highway 418, where sidewalks are lacking.

### Fountain Inn



### Safe Routes to School

### Streets included in safe route consideration

Jones Street

Wall Street

Ellison Street

Shaw Street

Case Street and Bates Street

Woodside Avenue

Case Lane

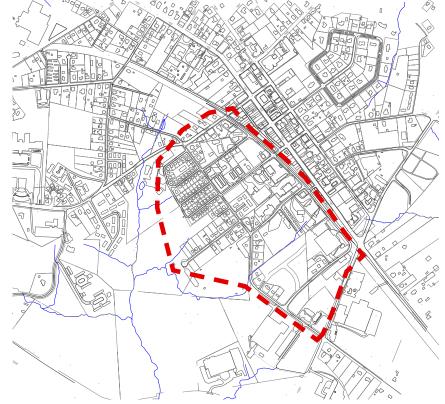
First thru Fifth Street

### **Woodside Avenue**

Of all the streets in the definted area (see map to the right), Woodside Avenue provided the safest route. Woodside is currently a two lane road that's properly lined with curbs. Sidewalks are detached at parts of the road and attached to other portions but do not extend the entire length of the road. There are no street trees and minimal lighting.

### Recommendations

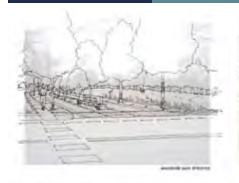
Roughly 6,000 linear feet of five foot detached concrete sidewalk with six inch curb, a five foot planting buffer on both sides with 215 street trees 30 foot on center. Roughly 35 proposed street lights 150 feet on center. Also 6,500 feet of proposed bicycle lanes five feet wide on both sides of Woodside Avenue. This proposed route is diplayed in the map on the next page.



The map above helps identify our concentrated section of Fountain Inn. The dotted, red line outlines the boundaries of the area studied in this document.

### **WOODSIDE PARK GREENWAY**

Through the proposed project, Fountain Inn will improve upon and expand an existing trail segment that will link two city parks - Fairview Street Park and Woodside Park. Connecting these two existing parks will provide increased accessibility and encourage use of already existing natural and recreational assets in the community. Funding for this project will be used toward the construction and completion of a 2,625 foot long portion of a larger city and county-wide Greenway and Recreational Trail, central to Fountain Inn's residential neighborhoods, and that will eventually be connected to the downtown economic and cultural center of the community, Fountain Inn Elementary School, the Shaw Street Community Center, and the Senior Activity Center, creating a comprehensive, connected trail way throughout the community. The 12- foot wide (ADA - compliant) paved trail will be multi-use for hikers, walkers, strollers, and bicyclists including trail/mountain bike users. The trail will be accessible to the public and will be developed in such a way that encourages special populations to access and utilize the recreational opportunities Fountain Inn has to offer. Its location and ADA compliance will make it easily accessible to special needs groups, Seniors, low-to-moderate income neighborhoods (Woodside Mill), school-age children and their families.











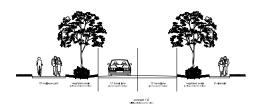






## JONES STREET (MULTI-USE PATH)

A Jones Street multi-use path will provide connectivity from Downtown Fountain Inn to the Woodside Greenway and Woodside Park. This 8'-10' sidepath is essential for creating a continuous network of bike/pedestrian paths throughout the city. These ADA accessible paths provide strong connections from multiple parks, future planned developments, outgoing bike lanes/routes/boulevards, etc. This path is separated from vehicular travel to improve and safety and because of anticipated higher than normal traffic volumes.











View from Jones Street (Depot Street) Multi-use path will connecto to Farmer's Market.

# MT. ZION GREENWAY

The 2600' foot long Greenway and Recreational Trail central to the Fountain Inn's residential neighborhoods will begin at Mount Zion Church and connect to the Woodland Drive neighborhood. The ten foot wide (ADA) paved trail will be multi-use for hikers, walkers, accessible to special needs groups, and bicyclists including trail/mountain bike users. The parking area provided by Mount Zion Church is accessible for individuals including all special-needs groups to park and enjoy the trail.











### **BIKE ROUTE NETWORK**

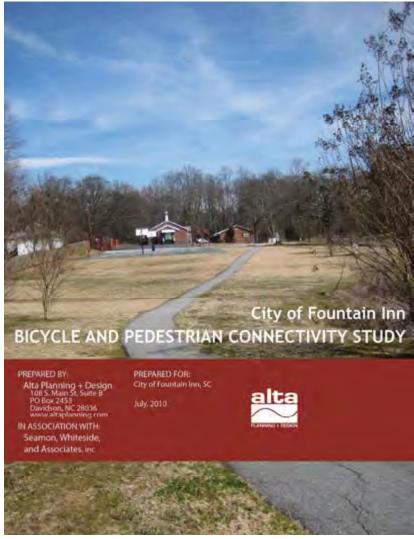
Shared roadways and bicycle boulevards serve a variety of purposes throughout Fountain Inn. Because of Fountain Inn's low vehicular speed and low traffic volumes (secondary streets), their streets are ideal for bike route signage. This signage will allow for safe bicycle travel paralleling major vehicular streets. This is the lowest cost of creating bicycle friendly communities through new signage, pavement markings, striping, etc. The new signage would indicate to cyclist the direction of travel, location of key destinations, riding time/ distance, etc.









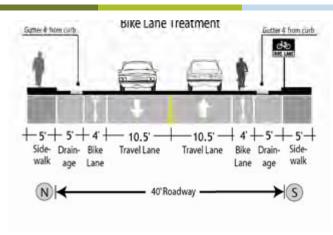


### **QUILLEN ROAD BIKE LANE**

Quillen Road is a vital connection in the inter-connectivity of bicycle travel in Fountain Inn. Through a 'road diet' Quillen Road will be retrofitted to provide adequate stormwater drainage and bicycle travel. The 11.5' travel lane will be reduced to 10.5'. The 8' drainage area (existing gutter 4' from face of curb) will be restriped to have 5' drainage and 4' bike lane. The 40' roadway width is maintained with no additional rights-of-way needed.









Existing Sidewalk

Safest Route to School

Bike Route

### **SC 418 GREENWAY**

The 418 Greenway is essential in providing bicycle/pedestrian connectivity to the retail opportunities along the Interstate 385 interchange. This 8'-10' sidepath would flank the Northside of SC 418 with a 18' bioswale buffer. Also, this multi-use path provides outgoing connections to Nash Street, Woodside Avenue (connection to Fairview Street) and to future retail Planned Developments.





### RAIL WITH TRAIL STUDY

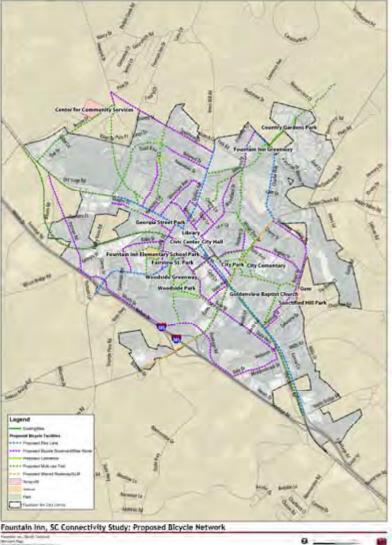
Rails-with-Trails projects typically consist of paths adjacent to active railroads. A further feasibility study is needed to provide opportunities and constraints for construction. The existing active railroad is highly active, although low speeds and curving rail lines make this track desirable for rail-with-trail. Fencing would be provided to discourage trespassing.





Map 3. Proposed Bicycle Network

Recommended Network | 21



### MAIN STREET BIKE LANES

Designed exclusively for bicycle travel, Bike Lanes along Main Street would separate the cyclist from vehicular travel and pedestrian congestion. These bike lanes would connect the SC 418 proposed multi-use path, Downtown Fountain Inn, Fountain Inn Civic Center, Fairview Street (connections to Fairview Elementary) and other outgoing bike routes/boulevards. These bike lanes are essential for North/South connections and further development of inter-city connectivity.



Fountain Inn, South Carolina









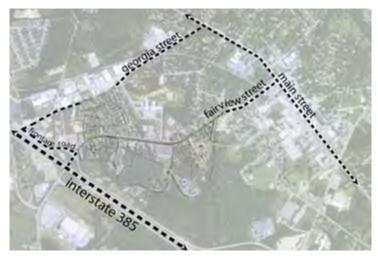
### **FAIRVIEW STREET**

Fairview Street is a collector road linking downtown to Interstate 385. Fairview Street also links Highway 418 via Fairview Street Extension. While the right-of-way is wide on Fairview Street, the current stretch between the Elementary School and Downtown has valley gutter between the sidewalk and edge of travel lane. Bike lanes along Fairview Street would help separate the cyclist from vehicular travel and congestion. Bike lanes will provide direct connections to multi-use trails, commercial corridors, and other key destinations. In addition to adding bike lanes current parallel sidewalks should be improved to include a greater separation between the pedestrian and vehicular travel lanes. The bike lanes may help in this effort to provide an addition buffer, however should be while marked. Crosswalks should be installed at key points, ample lighting, gaps completed where sidewalks are lacking, and sight distance improved.





# 



Patton Street Old Fairview Road Alice Street

Coleman Street Armstrong Apartments Georgia Street

Fairview Street, between Frontage Road and Armstrong Apartments

