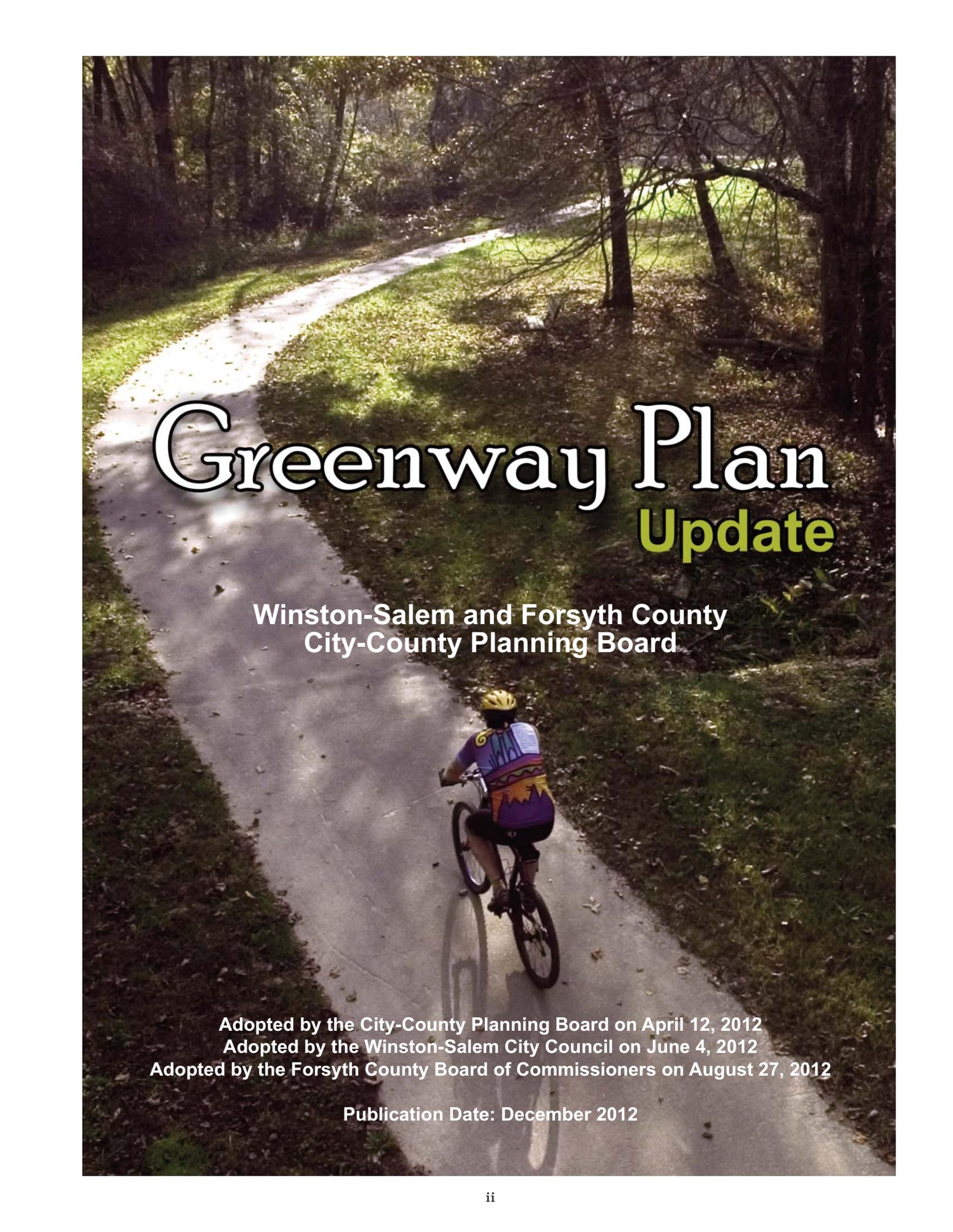




Greenway Plan Update

A photograph of a person riding a bicycle on a paved path that winds through a wooded area. The path is surrounded by green grass and trees, with sunlight filtering through the leaves. The person is wearing a purple and yellow cycling jersey and a yellow helmet.

Greenway Plan Update

Winston-Salem and Forsyth County
City-County Planning Board

Adopted by the City-County Planning Board on April 12, 2012
Adopted by the Winston-Salem City Council on June 4, 2012
Adopted by the Forsyth County Board of Commissioners on August 27, 2012

Publication Date: December 2012

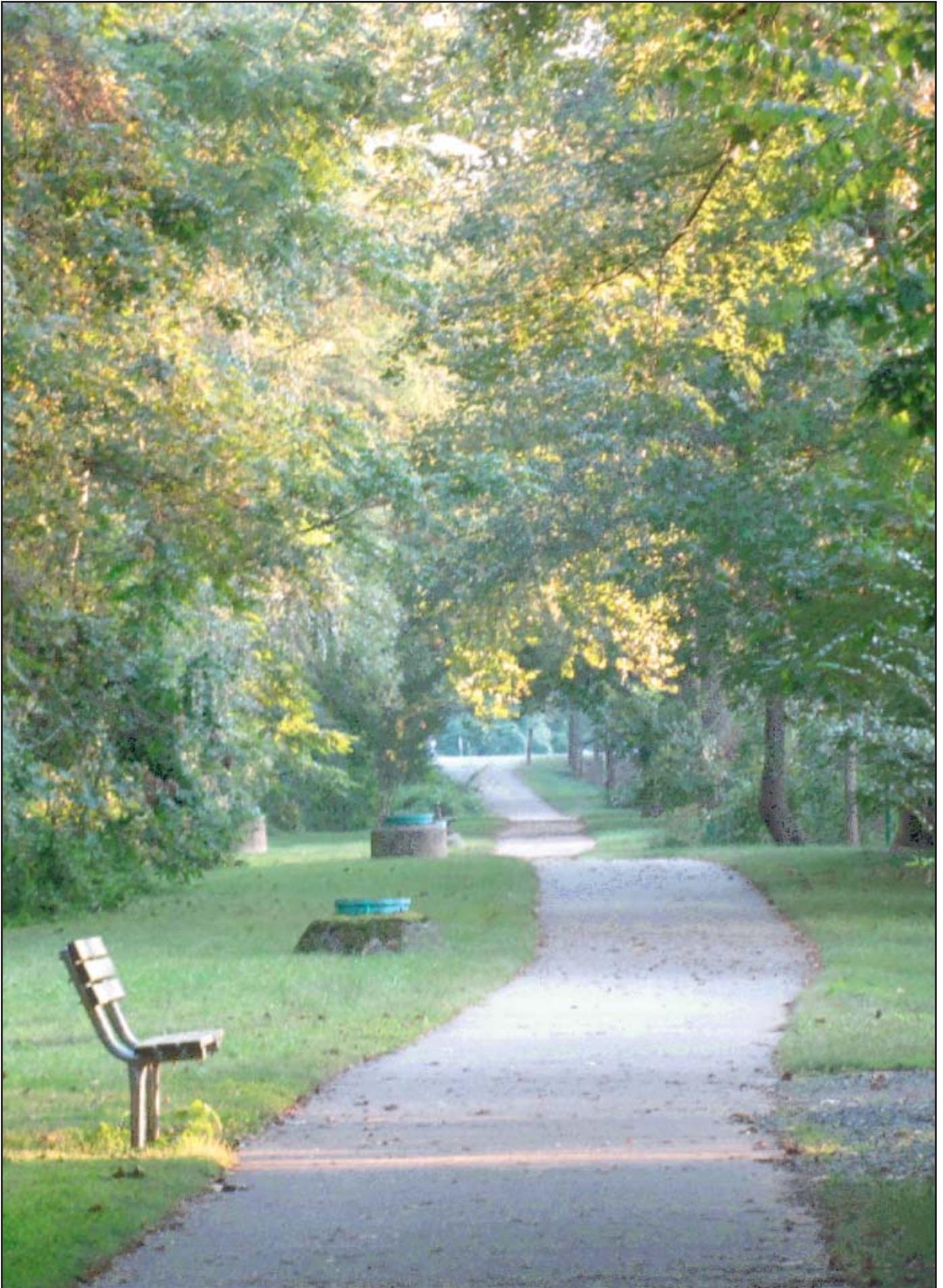


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Overview

History

Winston-Salem and Forsyth County have undertaken greenway planning and development since the 1980's. The City-County Planning Board first recognized the importance of greenways with the adoption of *Vision 2005, a Comprehensive Plan for Forsyth County, North Carolina* in 1987. With adoption of the 2001 *Legacy Development Guide*, Winston-Salem and Forsyth County reinforced the importance of greenways, not only for the conservation of natural areas and the creation of recreational opportunities for citizens, but also for the establishment of an active transportation network consisting of sidewalks, bikeways and greenways. *Legacy* further recommended the completion of a comprehensive open space, parks and greenway plan for Forsyth County.

To implement the recommendations of *Legacy*, the *Greenway Plan - Winston-Salem and Forsyth County 2015 (2002 Greenway Plan)* was developed and adopted by the Village of Clemmons, Town of Lewisville, City of Winston-Salem and Forsyth County in 2002. Prior to its adoption, 17 miles of greenways had been developed. Since the adoption of the 2002 *Greenway Plan*, 6 miles of greenway trails has been constructed establishing a network of over 23 miles of greenways.

Purpose of Update

This *Greenway Plan Update (Update)* continues the efforts started by the adopted 2002 *Greenway Plan* and expands on the recommendations laid out in the 2002 Plan. This Update is a companion document to the 2002 *Greenway Plan* and provides a prioritized system of proposed greenways for construction over the next ten to fifteen years. Connectivity, constructability, and evidence of public support were used to prioritize proposed greenways for future construction. Utilization of these three key ideas will aid in the implementation of the goals and objectives of the 2002 *Greenway Plan* and this Update.

This Update focuses on providing connectivity between existing greenways, sidewalks and bikeways, as well as neighborhoods, major destinations and community facilities. By establishing a connected system, the City and County will be able to implement the *Legacy* recommendation of establishing an active transportation network. By evaluating the constructability of proposed greenways, the City and County will be able to address potential engineering challenges early in the process and provide alternatives to those projects deemed

unfeasible, allowing for more efficient and effective implementation of construction goals. Lastly, by evaluating public support, the City and County will be able to focus resources on those projects that the public wishes to see built.

Goals and Objectives

The goal of this Update is to expand upon the existing network of greenways to create a greenway system that emphasizes connectivity within a larger transportation network, provides recreational opportunities for citizens, and protects the county's natural resources.

In addition to the seven objectives listed in the 2002 *Greenway Plan*, the goal of this Update is further expanded to include the following objectives:

1. To establish a method of review for proposed greenways that will identify construction challenges and community opportunities.
2. To create a prioritized system of proposed greenways that will aid in the efficient and effective allocation of resources and funding for greenway development.
3. To begin to shift from viewing greenways as merely a recreational and conservation amenity to viewing them as an important element of a broader multimodal transportation network.
4. To create a system of greenways that provides connections to sidewalks, bikeways, major destinations (retail centers, hospitals), employment centers, Downtown, and community facilities (libraries, schools and parks).

Process

The planning process was started in the fall of 2009 by the Bicycle-Greenway Planning Subcommittee of the Winston-Salem Urban Area Metropolitan Planning Organization (Subcommittee) with the goal of creating a new prioritization of the existing proposed greenways. It was determined prior to the start of the planning process that new greenway projects would not be considered with this Update. The Subcommittee spent the first several months reviewing the proposed greenways within the 2002 *Greenway Plan* and subsequent area plans to determine which greenway projects would complement the existing greenways, aiding in the establishment of a countywide network of greenways.

To compile the list of proposed priority greenways, the Subcommittee considered the recommendations of the 2002 *Greenway Plan*, development changes since 2002, and potential connections to existing greenways,



The Strollway

bike lanes and sidewalks. Projects that were listed as a “proposed priority trail” in the 2002 *Greenway Plan* for which design work and/or funding allocation had not begun were automatically selected for prioritization. Other projects that were shown as “other proposed trails” within the 2002 *Greenway Plan* were chosen by their potential to expand and connect the greenway network. In total, the Subcommittee selected 18 projects to be considered for prioritization.

- Blanket Bottom Creek Greenway Phase 1
- Brushy Fork Creek Greenway Phase 2
- Buena Vista Branch Greenway
- Grassy Fork Creek Greenway Phase 1
- Little Creek Greenway Phase 2
- Mill Creek Greenway North Phase 1
- Mill Creek Greenway South
- Muddy Creek Greenway Phase 2
- Muddy Creek Greenway Phase 5
- Peters Creek Greenway
- Salem Creek Greenway Extension
- Salem Lake Trail North
- Silas Creek Greenway North
- Strollway South
- Tomahawk Creek Greenway Phase 1
- Tomahawk Creek Greenway Phase 2
- Wake Forest Connector
- Waughtown Connector

The Subcommittee took a three-step approach to prioritizing the proposed greenways. The Subcommittee first evaluated the greenways on connectivity. Second, the City of Winston-Salem Engineering Department completed preliminary construction feasibility assessments on each of the proposed priority greenways to determine if each greenway could be constructed and to note any potential engineering issues. Lastly, eight public meetings were held throughout the county between January and March 2011 to inform the public

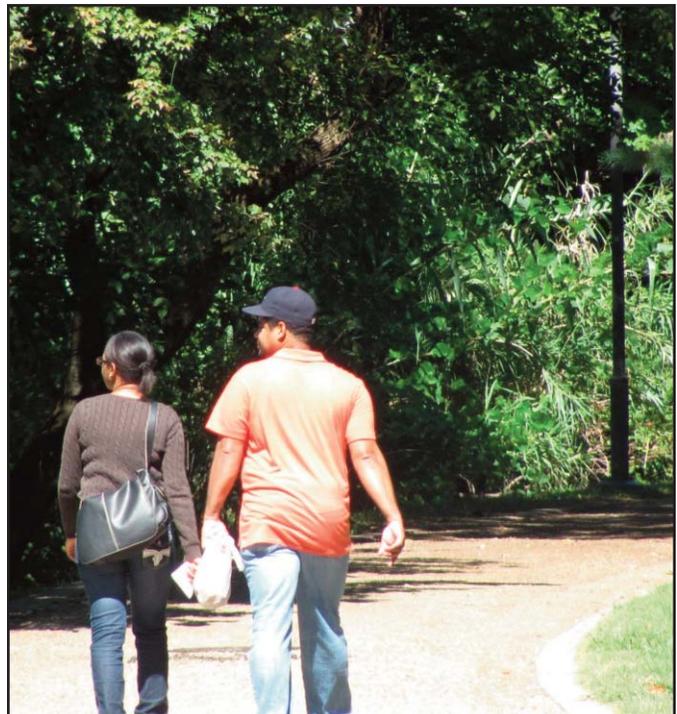
of the potential projects and to gather input. Notification of the meetings was provided in local newspapers, online, and through mailings. Surveys were made available to the public online and at meetings as a means of gathering input and gauging public support for each project. Additional information on connectivity and participation is included in **Appendix A**.

Connectivity

The idea of connectivity relates to how well each greenway project connects its users to potential destinations. Staff evaluated all proposed priority greenways for the Update and all other proposed greenways on the basis of connectivity. The evaluations looked at a greenway’s connectivity to destinations, including schools, libraries, hospitals, recreational facilities, retail centers, bike lanes and sidewalks, employments centers, Downtown, and neighborhoods. Further, the greenways were evaluated based on population demographics, acquired easements, and historic designation. Once the evaluations were completed, the proposed priority greenways were ranked individually by the Subcommittee on a one to ten scale, with ten providing the greatest connectivity. Connectivity scores are included in **Appendix A**.

Feasibility vs. Conceptual

For the 2002 *Greenway Plan*, no construction feasibility analysis was completed prior to identifying the proposed greenways. The greenways shown on the Greenway Plan Map were conceptual ideas. This lack of feasibility analysis has created situations where community-supported and funded greenways cannot be designed or built within a timely manner. Project construction has been halted for significant periods of time in order to



The Strollway

address engineering-related issues and site constraints. These problems limited the ability to implement a number of the recommendations of the 2002 *Greenway Plan*.

As part of this Update, staff determined that it was critically important to provide some form of construction feasibility analysis on the proposed priority greenway projects to help address some of the implementation issues that have arisen since the adoption of the 2002 *Greenway Plan*. During the summer of 2010, the City

Engineering Department performed a preliminary feasibility analysis for the proposed priority greenways. Items addressed by the preliminary analysis include ADA accessibility, topography, location of flood plain, potential wetland impacts, potential bridge installation, potential culvert installation, and road and railroad crossings. Scores were assigned to each proposed greenway based on the information gathered from the analysis. Seven of the proposed greenways were deemed unfeasible for construction through the analysis.





Greenway System

The overall greenway system is shown on **Map 1** of this Update.

Existing System

The existing greenway system contains over 23 miles of greenway trails. Existing greenways are shown as solid green lines on **Map 1**.

- Bethabara Trail..... 2.7 miles
- Bowen Branch Greenway..... 0.3 miles
- Brushy Fork Greenway..... 0.6 miles
- Gateway Commons Greenway..... 0.8 miles
- Muddy Creek Greenway..... 2.91 miles
- Newell/Massey Greenway..... 1.2 miles
- Peachtree Greenway..... 0.6 miles
- Salem Creek Greenway..... 5.2 miles
- Salem Lake Trail..... 7.0 miles
- Silas Creek Greenway..... 0.81 miles
- Strollway..... 1.2 miles

Furthermore, there are several greenway projects that are moving forward throughout the county. Projects that are currently in development but have yet to be constructed are shown on **Map 1** as “Programmed Greenways” with solid pink lines.

These projects include:

- Brushy Fork Greenway Extension
 - Lowery Street to Reynolds Park Road
- Kerners Mill Greenway
 - Oakhurst Street to Kilburn Way Lane
 - Hastings Hill Road to Kilburn Way Lane
- Little Creek Greenway
 - Little Creek Recreation Center to Atwood Road
- Muddy Creek Greenway Phase 3
 - Country Club Road to Phillips Bridge Road
 - This project is currently on hold due to easement acquisition issues.
- Piedmont Regional Greenway
 - Salem Lake Trail to Hastings Hill Road
- Reedy Fork Creek
 - E. Mountain Street to Triad Park
- Reynolds Pond
 - New Novant development in the Village of Clemmons
- Yadkin River Greenway Phase 1
 - Tanglewood Park to Valley View Drive and along US 158 from BB&T Soccer Park to eastern boundary of Tanglewood Park

Construction is anticipated to begin on the Little Creek Greenway, Kerners Mill Greenway, and the first phase of the Yadkin River Greenway in 2013. A construction timeline has not been established for the remaining projects, as they are currently in the design phase. Construction is also anticipated to begin on two neighborhood connectors, Cedar Trails and Lantern Ridge, in 2014. These neighborhood connectors will provide a connection to the Muddy Creek Greenway.

Information on other proposed greenways, shown as blue lines on **Map 1**, and potential greenway connectors, shown as orange dotted lines, is available in **Appendix B**.



Salem Lake Trail



LEGEND

TIER 1

- 2** Waughtown Connector
- 3** Salem Creek Greenway Extension
- 4** Muddy Creek Greenway Phase 2

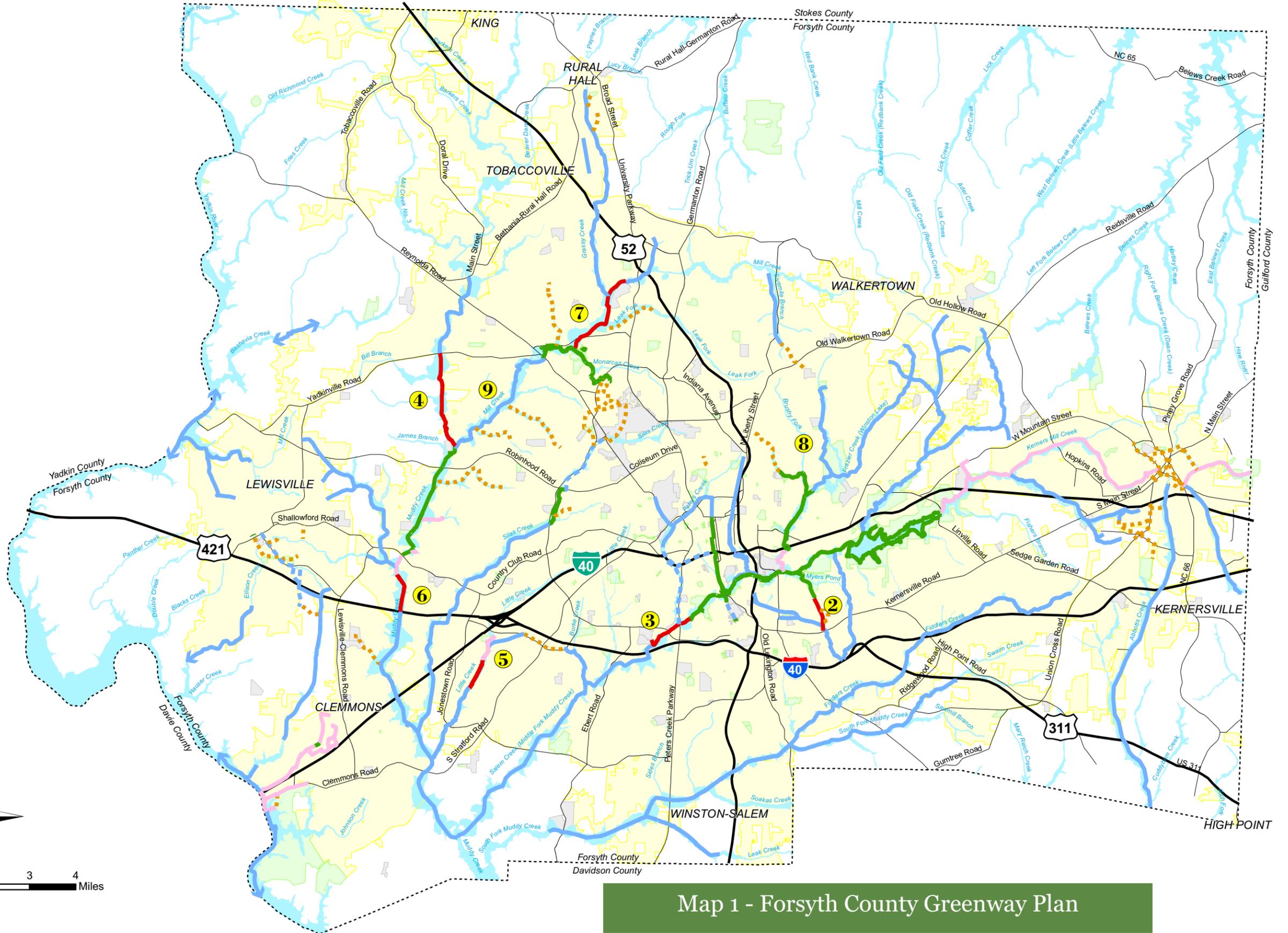
TIER 2

- 5** Little Creek Greenway Phase 2A
- 6** Muddy Creek Greenway Phase 5A
- 7** Mill Creek Greenway North Phase 1

TIER 3

- 8** Brushy Fork Greenway Phase 2
- 9** Mill Creek Greenway South

- Existing Greenways
- Programmed Greenways
- Proposed Priority Greenways
- Other Proposed Greenways
- Proposed Sidepaths/ On-Street Facilities
- Potential Greenway Connectors
- Schools/Colleges
- Parks
- Flood Zones



Map 1 - Forsyth County Greenway Plan

Priority Greenway Plan

The proposed priority greenways are placed into five different tiers. Staff determined the placement of each greenway by evaluating its connectivity ranking and the public's interest in and support of the project. Information

on the connectivity rankings and the survey and meeting results is located in **Appendix A**. Priority projects are shown as red lines on **Map 1**.

Table 1: Priority Greenway Tiers

Project Name	Location	Priority	Page	Map #
Waughtown Connector	Reynolds Park Road to Waughtown Street	Tier 1	10	2
Salem Creek Greenway Extension	Peters Creek Parkway at Silas Creek Parkway	Tier 1	10	3
Muddy Creek Greenway Phase 2	Jefferson Elementary School to Yadkinville Road	Tier 1	11	4
Little Creek Greenway Phase 2A	Atwood Road to Somerset Drive	Tier 2	15	5
Muddy Creek Greenway Phase 5A	Phillips Bridge Road to US 421	Tier 2	15	6
Mill Creek Greenway North Phase 1	Bethabara Trail to West Hanes Mill Road	Tier 2	16	7
Brushy Fork Greenway Phase 2	Waterworks Road to Crawford Park	Tier 3	20	8
Mill Creek Greenway South	Muddy Creek Greenway to Bethabara Trail	Tier 3	20	9
Wake Forest Connector	Bethabara Trail to Polo Road and Reynolda Road	Tier 3	21	1
Little Creek Greenway Phase 2B	Somerset Drive to Muddy Creek	Tier 4	24	1
Muddy Creek Greenway Phase 5B	US 421 to Stratford Road	Tier 4	24	1
Grassy Fork Creek Greenway Phase 1	NC 66/US 52 Ramp to Jackson Street	Tier 4	24	1
Salem Lake Trail North	Salem Lake Trail to Gaither Road	Tier 4	25	1
Tomahawk Creek Greenway Phases 1 and 2	Muddy Creek Greenway to the Town of Lewisville	Tier 5	25	See Text
Blanket Bottom Creek Greenway Phase 1	Joanie Moser Park to US 421	Tier 5	26	See Text
Silas Creek Greenway North	Robinhood Road to Reynolda Road	Tier 5	26	See Text
Buena Vista Branch Greenway	Silas Creek Greenway to Whitaker Elementary	Tier 5	26	See Text
Peters Creek Greenway	Silas Creek Parkway to Hanes Park	Tier 5	26	See Text
Strollway South	Main Street to Haled Street	Tier 5	27	See Text

Tier 1 – First Priority Projects

Projects listed within this tier have received the highest priority. Design work should be completed and construction should begin within the next five to seven years barring any unforeseen engineering or funding issues. Greenways within this tier are shown as red lines on **Map 1**. Individual maps of each project listed within this tier are provided.

Waughtown Connector (Map 2)

Start: Peachtree Greenway at Reynolds Park
End: Waughtown Street
Length: .85 miles

Description:

The Waughtown Connector begins at the end of the Peachtree Greenway within Reynolds Park. The greenway will proceed south through the former Piedmont Quarry site to Waughtown Street. The quarry site is now owned by the City.

Connections:

The greenway will connect the Waughtown Street area and surrounding neighborhoods to the Peachtree Greenway, Reynolds Park, and the William R. Anderson Jr. Recreation Center. The Peachtree Greenway connects to the Salem Creek Greenway providing access to Winston-Salem State University, Salem College, the Gateway YWCA, Downtown via the Strollway, Peters Creek Parkway, and the Salem Lake Trail. The greenway will also allow for access around the quarry providing the public with the opportunity for scenic views.

The City of Winston-Salem Recreation and Parks Department is currently undertaking a master plan for the quarry property with the goal of utilizing the property for a park. This master plan will be completed in late 2012 – early 2013.

Potential Issues:

As the greenway will pass through a former quarry site, topography and exposed rock are the greatest obstacles to construction. Furthermore, Duke Energy has a transmission right-of-way within the area. The best option for construction is for the greenway alignment to be placed within this right-of-way. However, this will require approval from Duke Energy.



Peachtree Greenway

Salem Creek Greenway Extension (Map 3)

Start: Salem Creek Greenway at Market Place Mall
End: Forsyth Technical Community College
Length: 1.17 miles

Description:

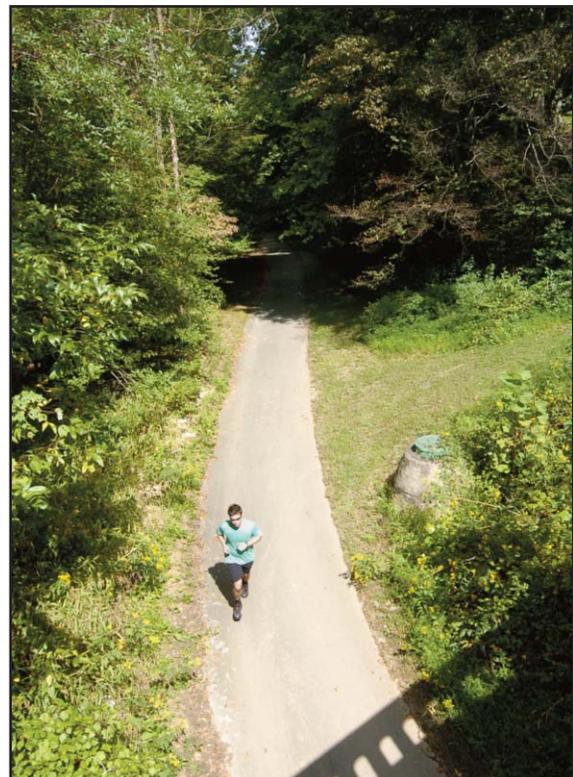
The Salem Creek Greenway Extension extends the western end of the Salem Creek Greenway at the Market Place Mall to Forsyth Technical Community College crossing both Peters Creek Parkway and Silas Creek Parkway.

Connections:

With the completion of the Salem Creek Greenway Extension, students of Forsyth Technical Community College and residents within the area will have a bicycle and pedestrian connection to Our Lady of Mercy Catholic School, Salem College, Winston-Salem State University, Old Salem Museums & Gardens, Downtown via the Strollway, Salem Lake and Trail and numerous neighborhoods.

Potential Issues:

The greatest obstacle to construction of the Salem Creek Greenway Extension will be providing safe crossings at Peters Creek Parkway and Silas Creek Parkway. Furthermore, there are some conflicts with existing development that will need to be addressed when designing the alignment of the greenway.



Salem Creek Greenway

Muddy Creek Greenway Phase 2 (Map 4)

Start: Existing Muddy Creek Greenway at Jefferson Elementary School
End: Yadkinville Road
Length: 1.67 miles

Description:

Phase 2 of the Muddy Creek Greenway would extend the existing greenway from Jefferson Elementary School to Yadkinville Road.

Connections:

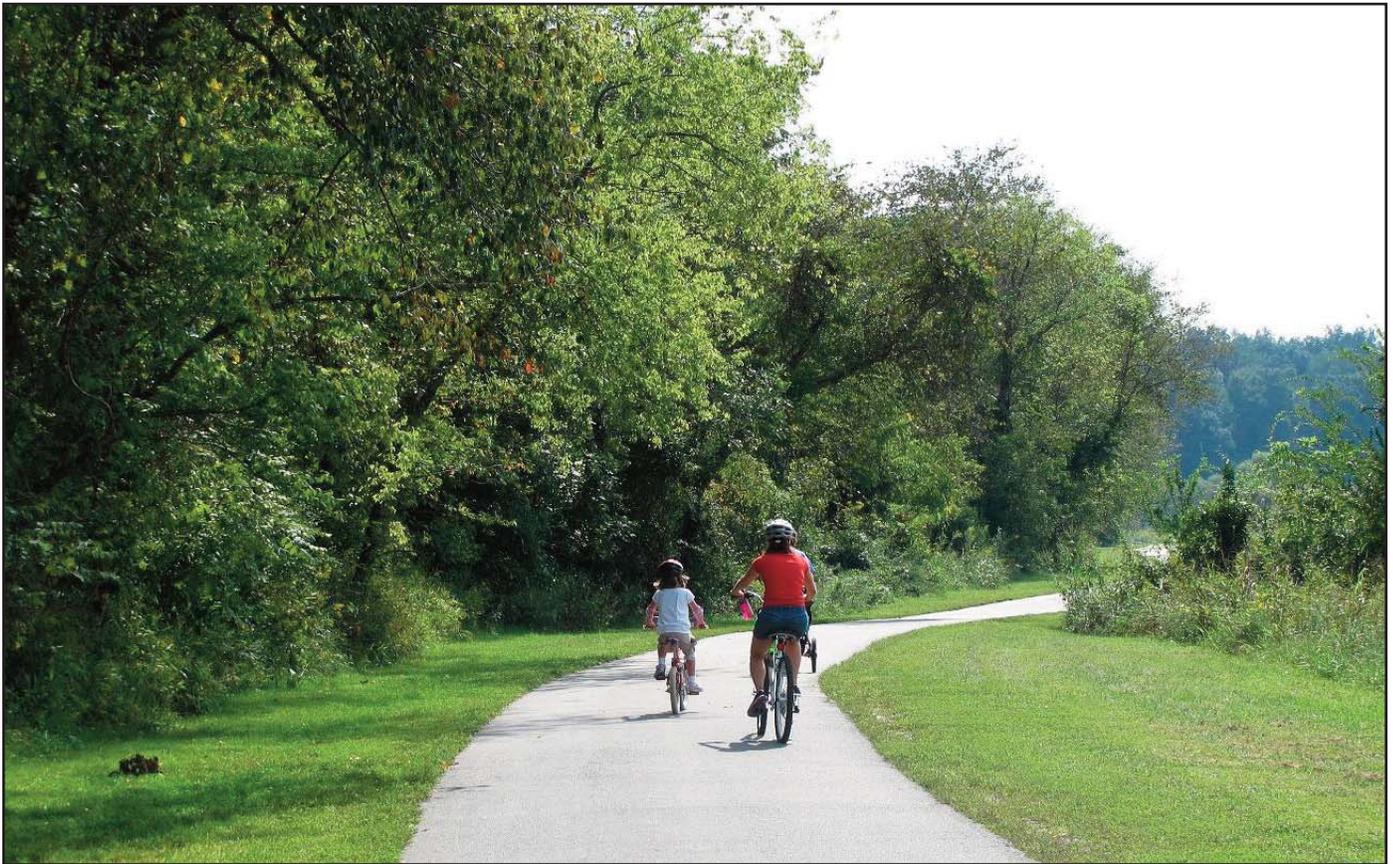
The greenway will connect approximately six separate neighborhoods and various residential lots to the existing Muddy Creek Greenway and Jefferson Elementary School, as well as, Meadowlark Elementary and Middle Schools and Jameson Park further south. Additionally, a small retail center is located approximately .3 miles west of the greenway along Yadkinville Road. Currently, sidewalks are proposed along this portion of Yadkinville Road. The existing Muddy Creek Greenway is heavily used by residents of both the city and county. With the development of this phase of the greenway, an addi-

tional 1.67 miles will be added to the popular greenway for a total length of 4.58 miles.

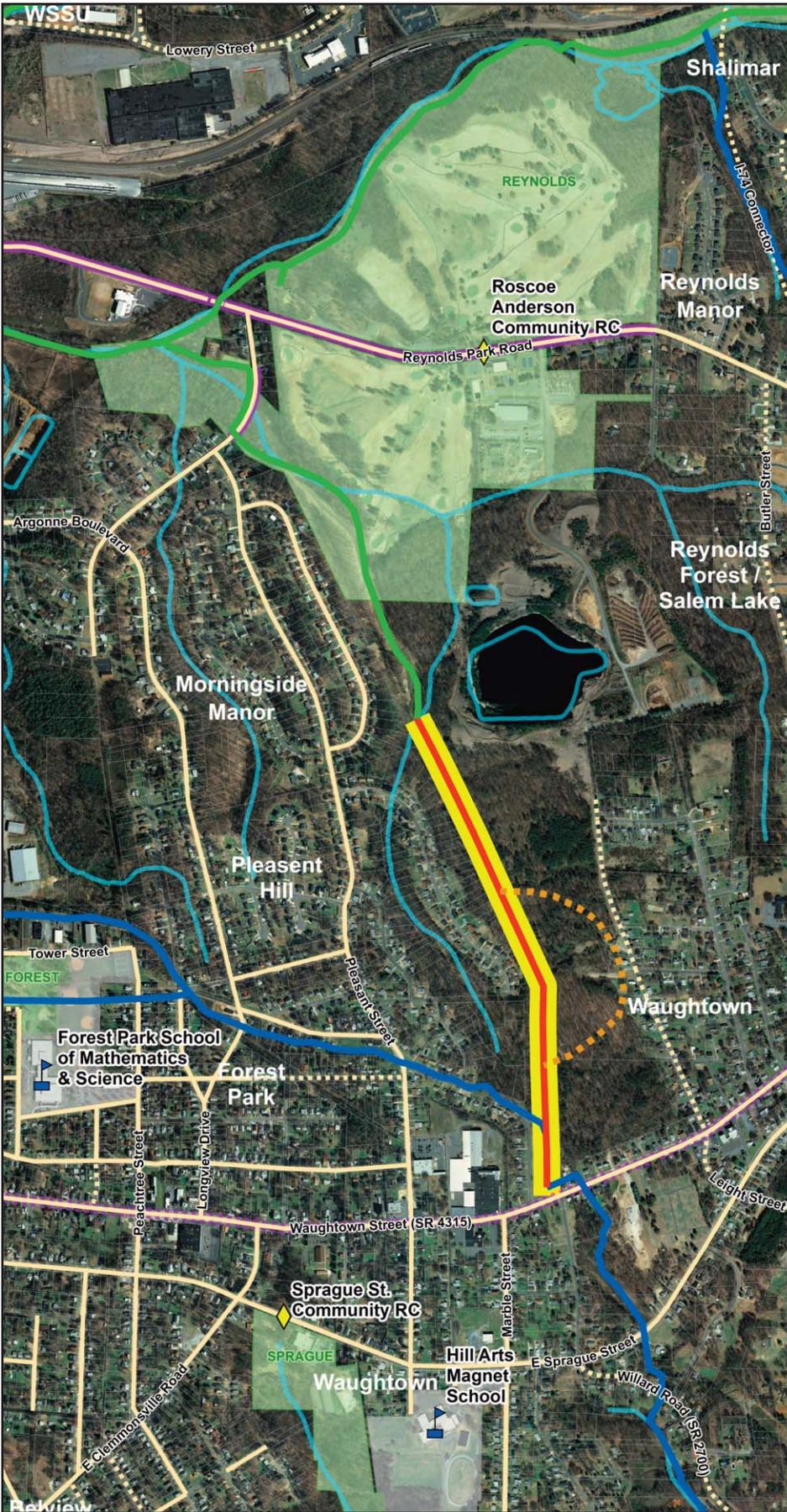
Potential Issues:

There are factors that will need to be considered when designing the alignment of the greenway. There are some topography issues along Muddy Creek. Farming operations in the agricultural tax deferral program currently exist at the northern end of the greenway phase and a private greenway system is located within the Summerfield neighborhood at the southern end of the greenway. Furthermore, during the public input sessions, some residents along Muddy Creek, particularly within the Brownstone neighborhood, expressed strong concerns about placing the greenway along the east side of the creek. It will be imperative that an alignment be created that addresses the concerns of the residents, as well as, the topography of the area and the existing farming operations.

As this phase will pass through City and County jurisdictions, funding and maintenance responsibilities will need to be addressed prior to construction of the greenway.



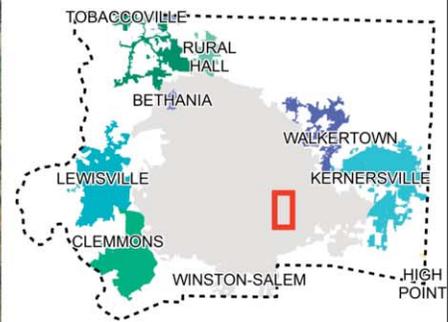
Muddy Creek Greenway



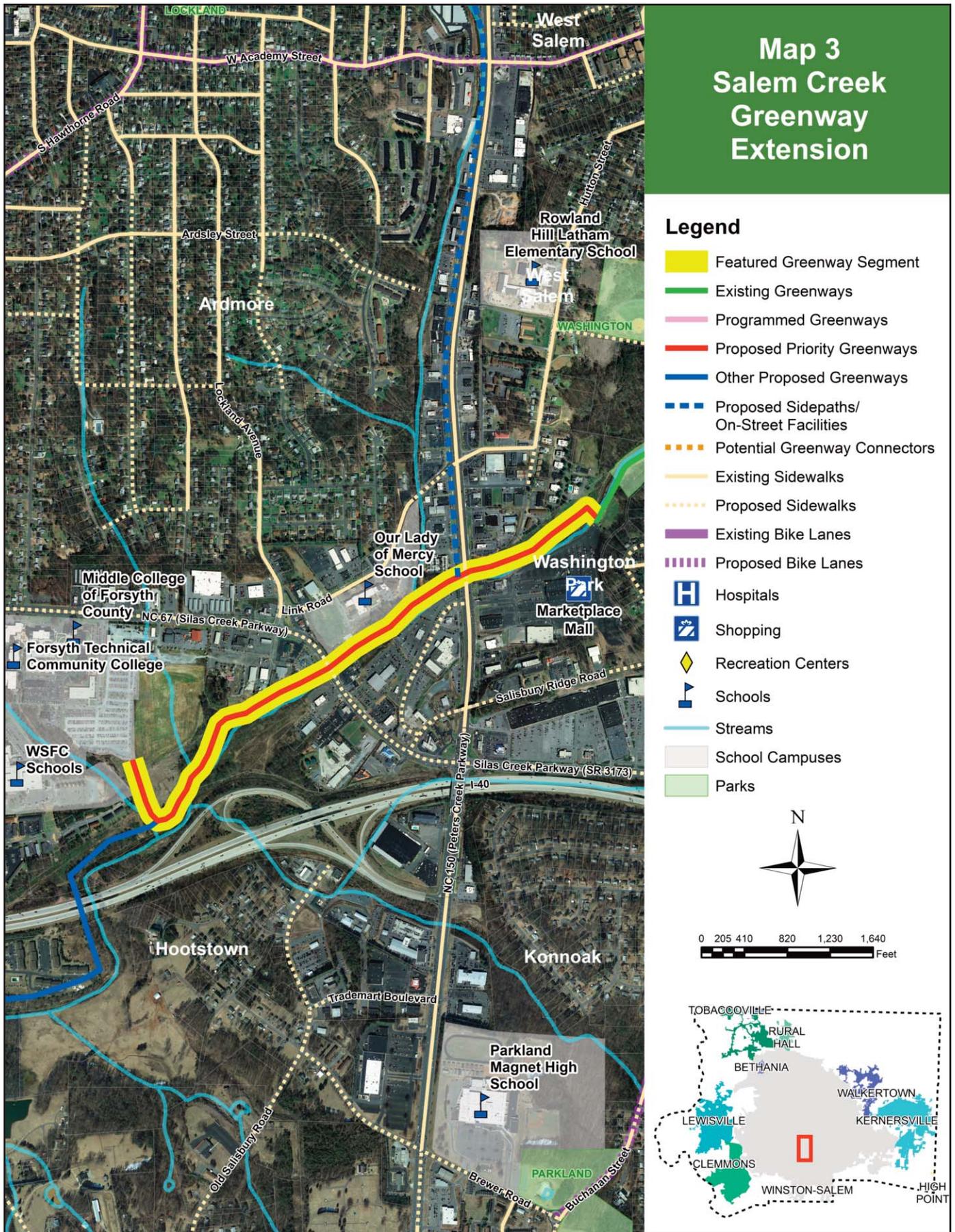
Map 2 Waughtown Connector

Legend

- Featured Greenway Segment
- Existing Greenways
- Programmed Greenways
- Proposed Priority Greenways
- Other Proposed Greenways
- Proposed Sidepaths/
On-Street Facilities
- Potential Greenway Connectors
- Existing Sidewalks
- Proposed Sidewalks
- Existing Bike Lanes
- Proposed Bike Lanes
- H Hospitals
- S Shopping
- ♦ Recreation Centers
- S Schools
- Streams
- School Campuses
- Parks



Maps are intended to show a general location for the proposed greenway and do not indicate which side of the creek the greenway will be placed. Details of the final alignment will be determined after further analysis has been completed on the greenway.

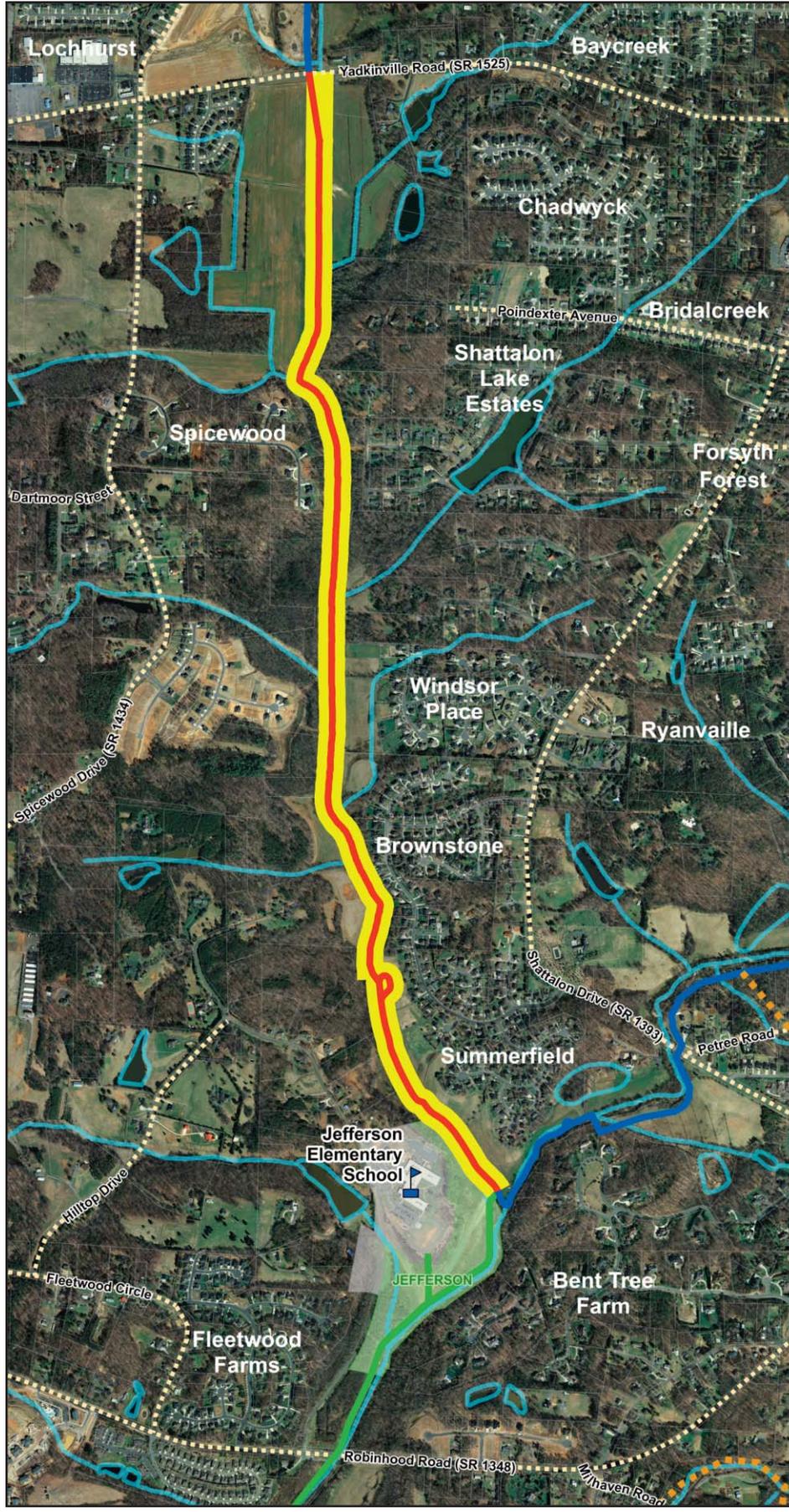
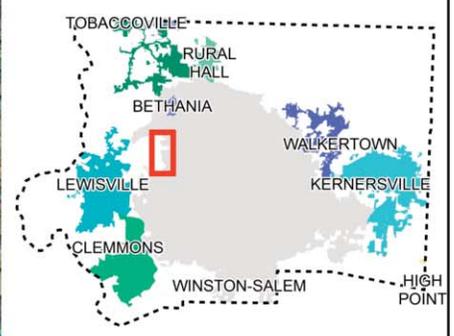


Maps are intended to show a general location for the proposed greenway and do not indicate which side of the creek the greenway will be placed. Details of the final alignment will be determined after further analysis has been completed on the greenway.

Map 4 Muddy Creek Greenway Phase 2

Legend

-  Featured Greenway Segment
-  Existing Greenways
-  Programmed Greenways
-  Proposed Priority Greenways
-  Other Proposed Greenways
-  Proposed Sidepaths/
On-Street Facilities
-  Potential Greenway Connectors
-  Existing Sidewalks
-  Proposed Sidewalks
-  Existing Bike Lanes
-  Proposed Bike Lanes
-  Hospitals
-  Shopping
-  Recreation Centers
-  Schools
-  Streams
-  School Campuses
-  Parks



Maps are intended to show a general location for the proposed greenway and do not indicate which side of the creek the greenway will be placed. Details of the final alignment will be determined after further analysis has been completed on the greenway.

Tier 2 – Secondary Priority Projects

Projects listed within this tier are secondary priority projects. Design work should be completed and construction could possibly begin within the next seven to fifteen years barring any engineering or funding issues. These projects could also be moved up in priority if first tier projects cannot be moved forward or if additional resources are identified. Greenways within this tier are shown as red lines on **Map 1**. Individual maps are provided for the projects listed in this tier.

Little Creek Greenway Phase 2A (Map 5)

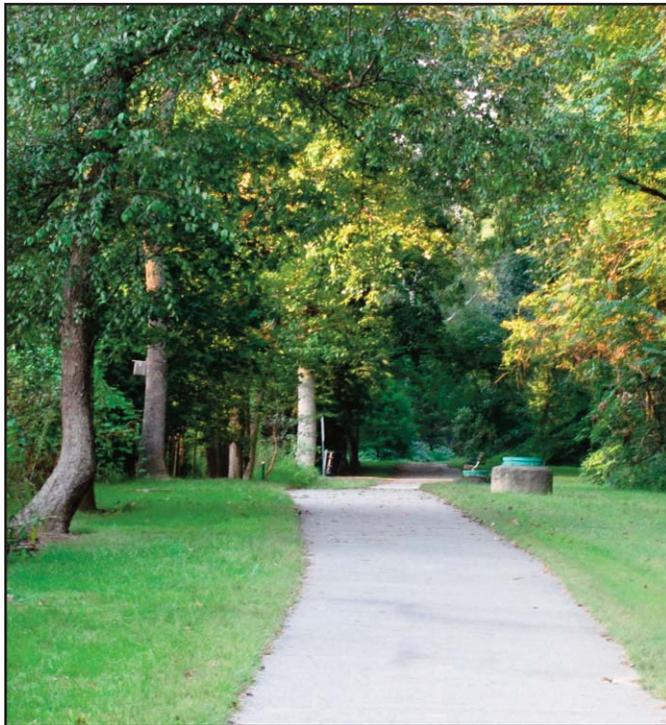
Start: Atwood Road
End: Somerset Drive
Length: .67 miles

Description:

The Little Creek Greenway Phase 2A begins at Atwood Road and runs south to Somerset Drive. Initially, the entire length of Phase 2, Atwood Road to Muddy Creek, was evaluated by staff. However, after reviewing the public comments that were received, it was determined that the phase should be split into two separate phases, Phase 2A and 2B, for prioritizing.

Connections:

This phase of the Little Creek will provide a connection for the residential neighborhoods around the Somerset Drive area to the Little Creek Recreation Center, the Shoppes at Little Creek and other retail and commercial businesses along Hanes Mall Boulevard. Combined with Phase 1 of the greenway, construction of this phase will provide approximately 1.3 miles of greenway for the residents of this area of Winston-Salem.



Silas Creek Greenway

Potential Issues:

During the public input sessions, concerns were expressed about the current flooding issues within the area and how a greenway may impact the flooding. Even though the majority of surveys submitted by residents along this segment of Little Creek did show support, there were some submitted surveys that did show a lack of support for construction of this greenway. Through the design phase, it will be imperative to work with the surrounding neighborhoods to address any concerns that they may have regarding the construction of the greenway. Furthermore, the design will need to address any flooding issues and physical obstacles such as existing fences.



Muddy Creek Greenway

Muddy Creek Greenway Phase 5A (Map 6)

Start: Phillips Bridge Road
End: US 421
Length: .8 miles

Description:

Phase 5A of the Muddy Creek Greenway begins at Phillips Bridge Road and extends south to the Ivy Stone neighborhood at US 421. Initially, staff evaluated the entire length of Phase 5, Phillips Bridge Road to Stratford Road. However, given the length of this phase and comments received from the public, it was determined that Phase 5 should be separated and prioritized as two different phases, 5A and 5B.

Connections:

This phase of the Muddy Creek Greenway will connect the neighborhoods along the creek to private recreation fields located at Phillips Bridge Road. Furthermore, it will provide residents within these neighborhoods access to the Muddy Creek Greenway system. Two neighborhoods expressed interest in having a neighborhood connector to the greenway. Lastly, this phase will continue to expand an extremely popular and heavily used greenway system for all residents of the city and county.

Potential Issues:

The construction of this phase of the Muddy Creek Greenway is dependent on the construction of Phase 3, Country Club Road to Phillips Bridge Road, of the greenway system. Currently, there is no timetable for the construction of Phase 3. It may be possible to build both phases concurrently, if the necessary right-of-way and funding can be obtained. Furthermore, the engineering analysis did show possible topographic issues and existence of wetlands. Both of these may limit where the greenway can be placed along the creek.

Mill Creek Greenway North Phase 1 (Map 7)

Start: Bethabara Trail
End: West Hanes Mill Road
Length: 2.15 miles

Description:

The Mill Creek Greenway North Phase 1 begins at the existing Bethabara Trail within Bethabara Park just south of Bethabara Road and extends north through the Hine and Sara Lee Soccer Complexes to West Hanes Mill Road.

Connections:

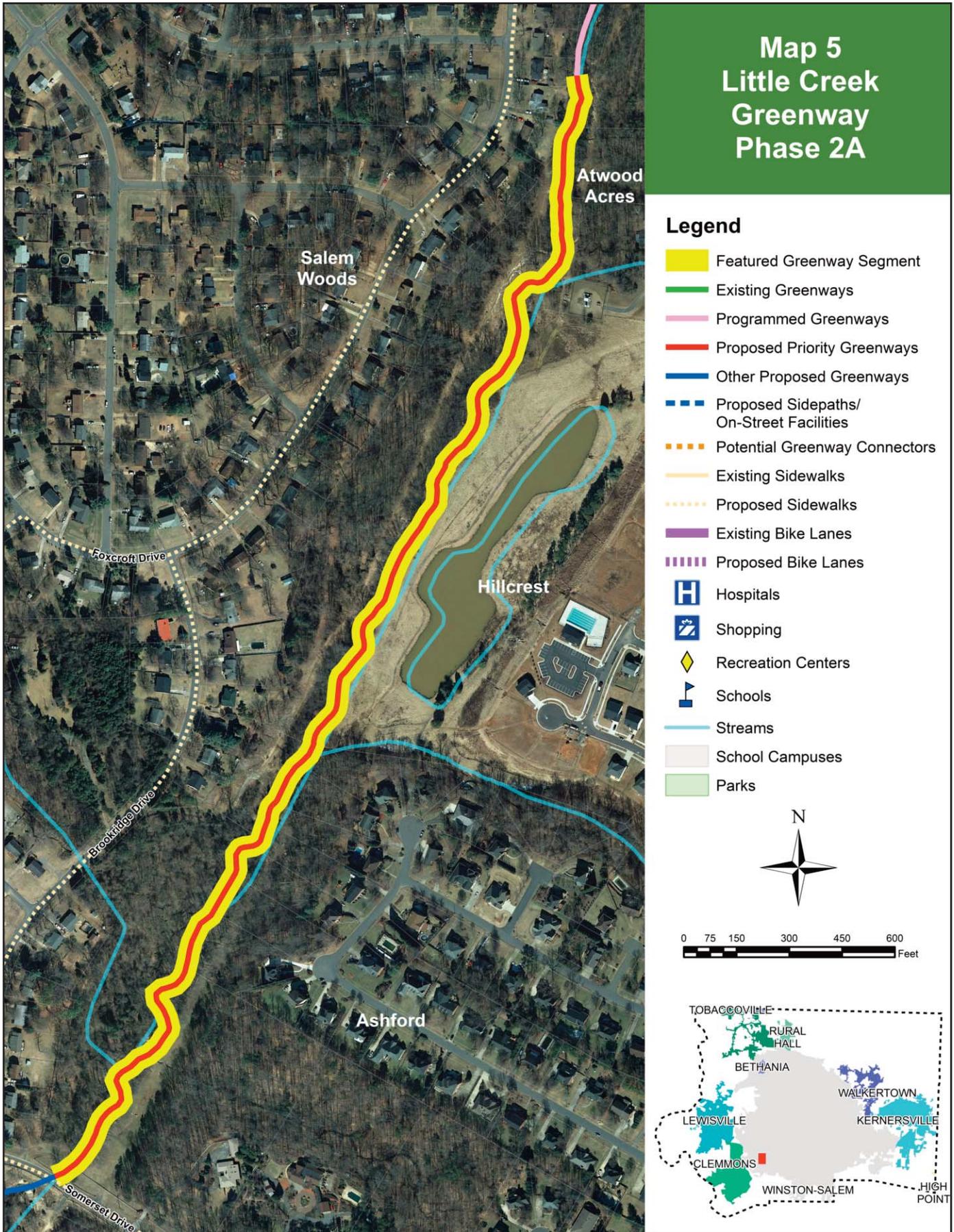
The majority of properties adjacent to the greenway are used for commercial or industrial purposes. However, there are residential neighborhoods located just west of Bethania Station Road and within the Bethabara area that this greenway will serve. Furthermore, the greenway will provide a pedestrian connection to Bethabara Park and Trail, the Hine and Sara Lee Soccer Complexes, and North Forsyth High School. In the future, sidewalks may be added along West Hanes Mill Road or the greenway could be extended to connect to SciWorks.

Potential Issues:

During the engineering analysis, it was noted that there was insufficient clearance underneath the bridge at Shattalon Drive requiring an at-grade crossing to continue to greenway to the Sara Lee Soccer Complex. Furthermore, there are possible conflicts with existing commercial development and existing wetlands that will need to be addressed prior to construction.



Newell/Massey Greenway



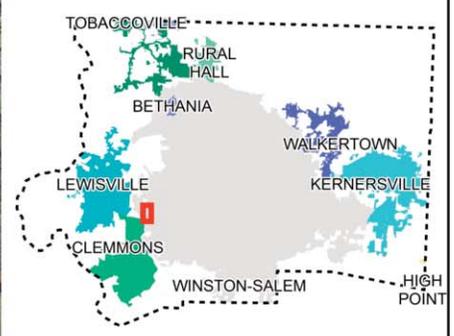
Maps are intended to show a general location for the proposed greenway and do not indicate which side of the creek the greenway will be placed. Details of the final alignment will be determined after further analysis has been completed on the greenway.

Map 6 Muddy Creek Greenway Phase 5A



Legend

- Featured Greenway Segment
- Existing Greenways
- Programmed Greenways
- Proposed Priority Greenways
- Other Proposed Greenways
- Proposed Sidepaths/
On-Street Facilities
- Potential Greenway Connectors
- Existing Sidewalks
- Proposed Sidewalks
- Existing Bike Lanes
- Proposed Bike Lanes
- Hospitals
- Shopping
- Recreation Centers
- Schools
- Streams
- School Campuses
- Parks

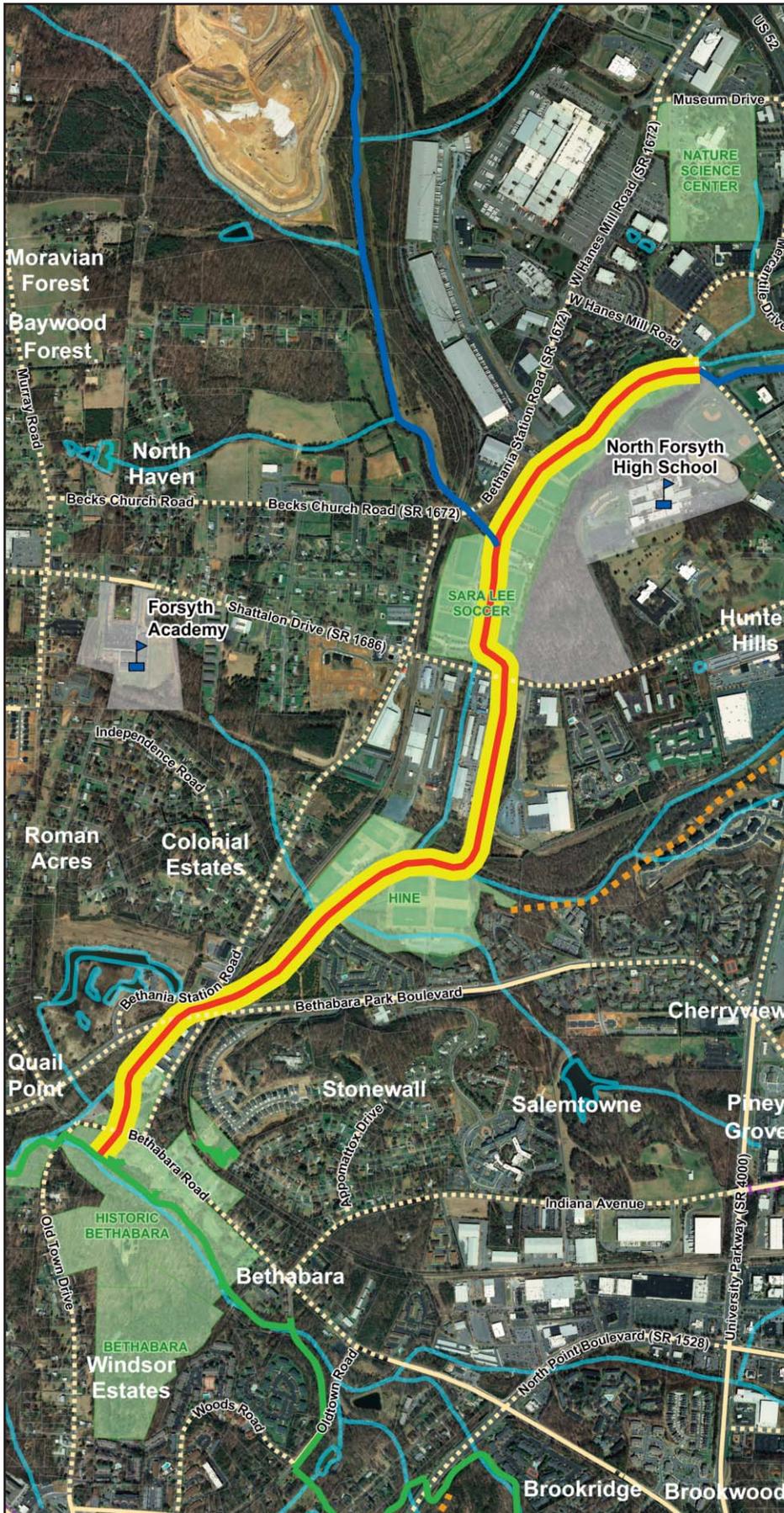
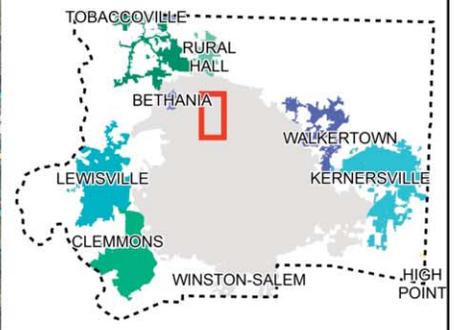


Maps are intended to show a general location for the proposed greenway and do not indicate which side of the creek the greenway will be placed. Details of the final alignment will be determined after further analysis has been completed on the greenway.

Map 7 Mill Creek Greenway North Phase 1

Legend

-  Featured Greenway Segment
-  Existing Greenways
-  Programmed Greenways
-  Proposed Priority Greenways
-  Other Proposed Greenways
-  Proposed Sidepaths/
On-Street Facilities
-  Potential Greenway Connectors
-  Existing Sidewalks
-  Proposed Sidewalks
-  Existing Bike Lanes
-  Proposed Bike Lanes
-  Hospitals
-  Shopping
-  Recreation Centers
-  Schools
-  Streams
-  School Campuses
-  Parks



Maps are intended to show a general location for the proposed greenway and do not indicate which side of the creek the greenway will be placed. Details of the final alignment will be determined after further analysis has been completed on the greenway.

Tier 3 – Needs Further Assessment

The projects listed within this tier require further assessment before any prioritization can take place. Further assessment is needed either to obtain a better understanding of the public's attitude toward the project or to provide a more comprehensive feasibility analysis of the project and its surrounding area. Greenway projects within this tier are shown as blue lines on **Map 1**. Individual maps are provided for Brushy Fork Greenway Phase 2 and Mill Creek Greenway South. An individual map for the Wake Forest Connector is not provided as a change to the scope of the project is recommended.

Brushy Fork Greenway Phase 2 (Map 8)

Start: Waterworks Road

End: Crawford Park

Length: 2.84 miles

Description:

Brushy Fork Creek Greenway Phase 2 will connect the northern terminus of the Virginia K. Newell/Ann Massey Greenway at Waterworks Road to Crawford Park.

During the public input sessions and through the surveys, staff could not gauge the overall public sentiment on this project. The survey results received from residents along the length of the greenway showed a mix of viewpoints ranging from highly supportive to highly unsupportive concerning the construction of a greenway. For this reason, it is recommended to hold off prioritizing this project until further work can be done within the community to obtain a better understanding of the com-



Brushy Fork Greenway

munity's views on the project and to address any concerns that the public may have about the greenway. It may be determined through further public comment that enhancement of on-road facilities (sidewalks and bike lanes) may be preferred by the community.

Connections:

Even with the mix of views from the public, staff believes that this greenway presents an opportunity to provide significant connectivity within northeast Winston-Salem. The greenway will provide the neighborhoods along Carver School Road and Walkertown Avenue with a connection to Crawford Park, Carver High School, the Helen W. Nichols Park, the Carl H. Russell Sr. Recreation Center, Winston Lake Golf Course, and the



Muddy Creek Greenway

Mill Creek Greenway South (Map 9)

Start: Muddy Creek Greenway

End: Bethabara Trail

Length: 3.41 miles

Description:

The south phase of the Mill Creek Greenway will connect the existing Muddy Creek Greenway at Jefferson Elementary School to the existing Bethabara Trail within Bethabara Park at Reynolda Road.

During the public input sessions and through the surveys, staff could not gauge the overall public sentiment on this project. The survey results received from residents along the entire length of the greenway showed a mix of viewpoints ranging from highly supportive to highly unsupportive concerning the construction of the greenway. For this reason, it is recommended to hold off prioritizing this project until further work can be done within the community to obtain a better understanding of the community's views on the project and to address any concerns that the public may have about the greenway.

Connections:

The south phase of the Mill Creek Greenway will connect multiple neighborhoods to the Muddy Creek Greenway, Jefferson Elementary School, and the Bethabara Park and Trail. If and when the Mill Creek Greenway North Phase 1 is built, residents within the area will also have a connection to the Hine and Sara Lee Soccer Complexes and North Forsyth High School. Furthermore, residents may also have a connection to Wake Forest University through the Wake Forest Connector.

Potential Issues:

The engineering analysis indicated that topography and wetland impacts are concerns that may limit the location of the greenway and will need to be addressed during the design phase. An at-grade crossing will be necessary at Shattalon Drive due to insufficient clearance under the bridge. Furthermore, two private greenway systems exist along the creek for a combined length of approximately 1.1 miles. Agreements will need to be made with both homeowners associations prior to construction of the greenway.

Wake Forest Connector

Start: Bethabara Trail
End: Polo Road and Reynolda Road
Length: 1.02 miles

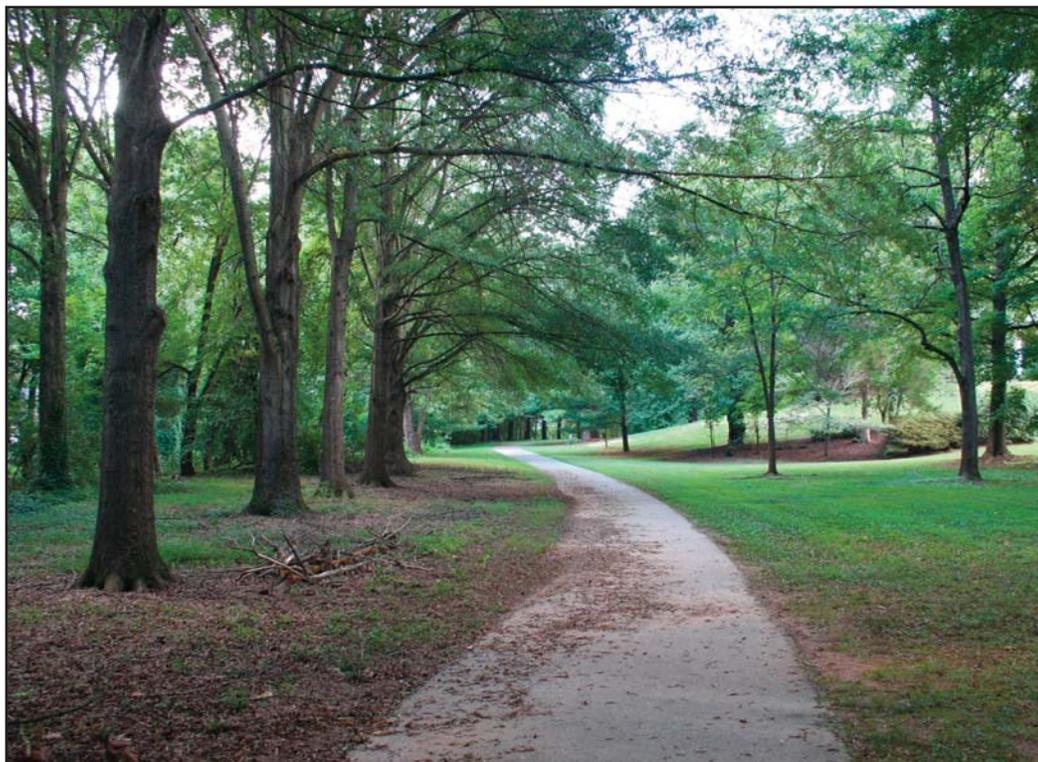
Description:

The Wake Forest Connector is a series of greenway connectors between Bethabara Trail, Wake Forest University, Polo Road, and Reynolda Road.

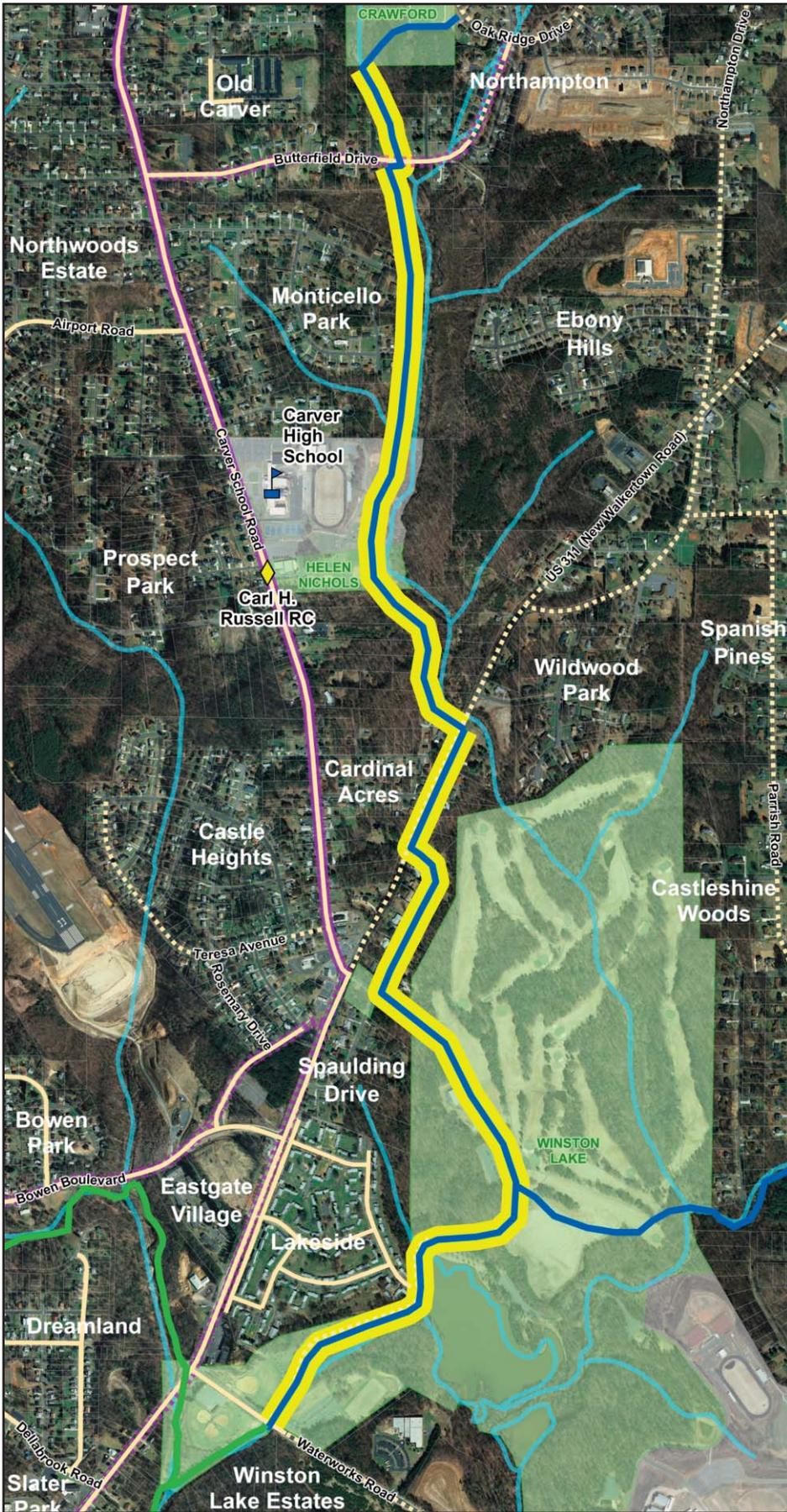
As the area within and around Wake Forest University has the potential for a high level of bicycle and pedestrian traffic, staff determined that it was best to complete a comprehensive feasibility analysis of bicycle, pedestrian, and transit connections between Bethabara Trail, Wake Forest University and the surrounding neighborhoods and businesses along Reynolda Road, Polo Road, University Parkway, and Coliseum Drive. Bicycle and pedestrian connections may be in the form of greenways, bikeways, and/or sidewalks. Furthermore, new opportunities for bicycle and pedestrian amenities may be uncovered through the future redevelopment of the Reynolds America Whitaker Plant site.

The Winston-Salem Urban Area Metropolitan Planning Organization (MPO) has allocated funding to complete the Wake Forest University Area Bike, Pedestrian, and Transit Study within the next couple of years. Once complete, recommendations of the study may move forward with funding and construction as resources become available, potentially within the next three to five years.

The City Engineering Department did note some minor topography issues and conflicts with existing development during their analysis of the original scope of the project. These issues, along with any other issues identified in the proposed feasibility study, will need to be addressed during the design of the project.



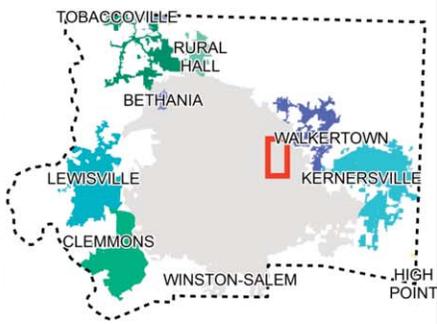
Silas Creek Greenway



Map 8 Brushy Fork Greenway Phase 2

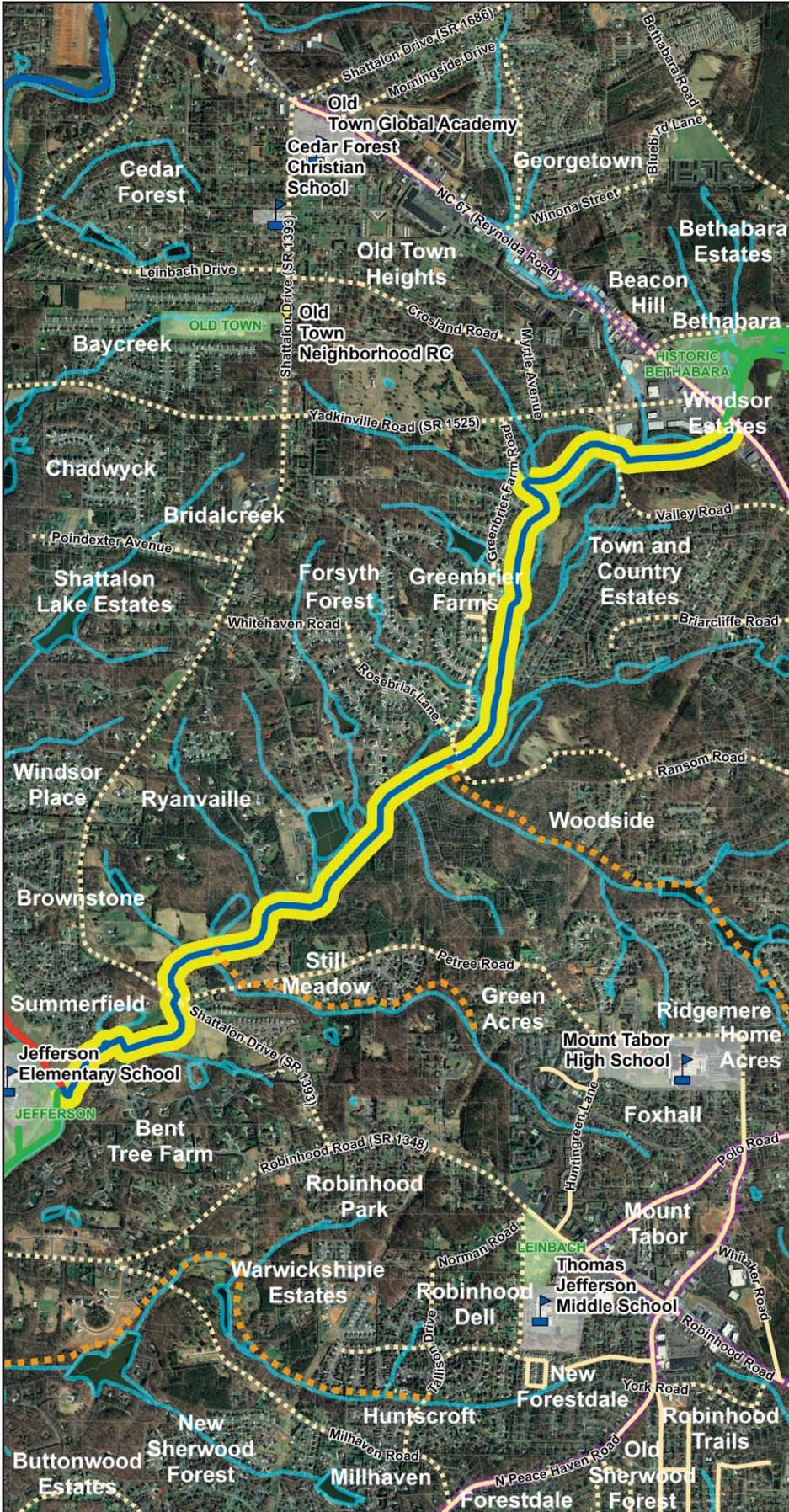
Legend

- Featured Greenway Segment
- Existing Greenways
- Programmed Greenways
- Proposed Priority Greenways
- Other Proposed Greenways
- Proposed Sidepaths/
On-Street Facilities
- Potential Greenway Connectors
- Existing Sidewalks
- Proposed Sidewalks
- Existing Bike Lanes
- Proposed Bike Lanes
- H Hospitals
- S Shopping
- Recreation Centers
- Schools
- Streams
- School Campuses
- Parks

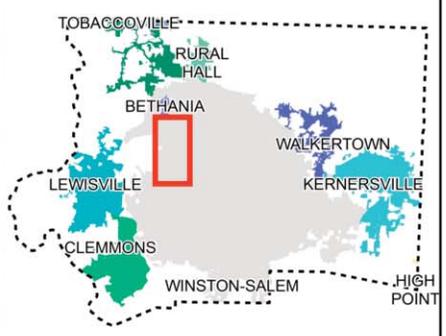


Maps are intended to show a general location for the proposed greenway and do not indicate which side of the creek the greenway will be placed. Details of the final alignment will be determined after further analysis has been completed on the greenway.

Map 9 Mill Creek Greenway South



- Legend**
- Featured Greenway Segment
 - Existing Greenways
 - Programmed Greenways
 - Proposed Priority Greenways
 - Other Proposed Greenways
 - Proposed Sidepaths/ On-Street Facilities
 - Potential Greenway Connectors
 - Existing Sidewalks
 - Proposed Sidewalks
 - Existing Bike Lanes
 - Proposed Bike Lanes
 - H Hospitals
 - S Shopping
 - Recreation Centers
 - S Schools
 - Streams
 - School Campuses
 - Parks



Maps are intended to show a general location for the proposed greenway and do not indicate which side of the creek the greenway will be placed. Details of the final alignment will be determined after further analysis has been completed on the greenway.

Tier 4 – Long Range Greenway Projects

Greenways listed within this tier represent projects that have been deemed long-range projects based on either feasibility or public comment. Design work and construction of these projects will likely not begin for at least fifteen years or more. Projects described in this tier are shown as blue lines on **Map 1**.

Little Creek Greenway Phase 2B

Start: Somerset Drive
End: Muddy Creek
Length: 1.87 miles

Description:

Phase 2B of the Little Creek Greenway will extend the greenway from Somerset Drive to Muddy Creek. Initially, the entire length of Phase 2, Atwood Road to Muddy Creek, was evaluated by staff. However, after reviewing the public comments that were received, it was determined that the phase should be split into two separate phases, Phase 2A and 2B, for prioritizing.

This phase of the greenway received a significant amount of negative comments from the public concerning the construction of the greenway. As much of the area along this section of the greenway is rural in character and given the negative public comments, it was determined that construction of this phase of the greenway is a long-range project.

As this phase will pass through City and County jurisdictions, funding and maintenance responsibilities will need to be addressed prior to construction of the greenway.



Bethabara Trail

Muddy Creek Greenway Phase 5B

Start: US 421
End: Stratford Road
Length: 4.04 miles

Description:

Muddy Creek Phase 5B begins at US 421 and extends south to Stratford Road. Initially, staff evaluated the entire length of Phase 5. However, given the length of this phase and comments received from the public, it was determined that Phase 5 should be separated and prioritized as two different phases, 5A and 5B.

This phase of Muddy Creek will provide residents of the Village of Clemmons and Forsyth County with a connection to the Muddy Creek Greenway system. After review of the public comments, staff could not gauge a clear level of support for construction of the greenway south of US 421. Given the other future phases of the Muddy Creek Greenway system that received more public support and have shown higher levels of connectivity, it was determined that this phase of the system will be a long-range project with future construction not likely to begin for at least fifteen years or more.

As this phase will pass through multiple jurisdictions, funding and maintenance responsibilities will need to be addressed prior to construction of the greenway.

Grassy Fork Greenway Phase 1

Start: NC 66 – US 52 ramp
End: Jackson Street
Length: 2.48 miles

Description:

The Grassy Fork Greenway system provides a connection between the Town of Rural Hall and the City of Winston-Salem. This phase of the greenway system extends from Covington Memorial Park in the north to the NC 66 – US 52 ramp in the south.

Through the engineering feasibility analysis, the City Engineering Department found numerous obstacles to construction of this phase. At the southern end of the phase and along Jackson Street, existing development encroaches toward the creek bank creating a conflict. Farther north there is severe topography to the west. Furthermore, there is a railroad line which limits construction on the east side of the creek. Lastly, a sewer outfall at Brightsfield Court poses a possible conflict. For these reasons, the Engineering Department deemed this phase of the greenway unfeasible for development.

During the planning process of this Update, an area plan for the Town of Rural Hall was started by the Planning Department and the Town of Rural Hall. The Rural Hall Citizens' Advisory Committee recommended that this phase of the greenway system remain in the area plan for future development in the event that an alternative

is found or conditions change. The Town of Rural Hall endorsed this recommendation in June 2011. The area plan was adopted by the Forsyth County Board of Commissioners in September 2011.

As it is the recommendation of the Town of Rural Hall, this project has been listed as a long-range project for possible future construction. Alternatives, such as sidewalks and sidepaths, may be considered in the future in lieu of a traditional greenway.

Salem Lake Trail North

Start: Salem Lake Trail

End: Gaither Road

Length: 2.29 miles

Description:

The Salem Lake Trail North extends north from the Salem Lake Trail to Gaither Road at the Forsyth County and Town of Walkertown border.

Through the engineering feasibility analysis, the City Engineering Department found numerous obstacles to construction of this greenway. Fill material will need to be added within the lake at both the railroad bridge and the Business 40 bridge in order to accommodate a greenway. The Engineering Department also noted severe topography between Business 40 and Old Greensboro Road. An at-grade crossing at Old Greensboro Road will be necessary as there is insufficient clearance under the Old Greensboro Road bridge for a greenway. Lastly, the Engineering Department noted that construction of the greenway would have serious wetland impacts requiring an individual permit. For these reasons, the Engineering Department deemed the greenway unfeasible for construction.

This phase of the greenway is listed as a long-range project, even though it was deemed unfeasible by the City Engineering Department, for two main reasons: the property is currently owned and maintained by the City of Winston-Salem and it provides a connection between the Salem Lake Trail and the Town of Walkertown. In the future, solutions to the obstacles listed may be found or the property may be recommended for an alternative recreational use that includes some form of trail or greenway.

Tier 5 – Alternative Recommendations

Projects listed within this tier represent projects where alternative recommendations are proposed in lieu of a traditional greenway. The majority of projects within this tier were deemed unfeasible by the City Engineering Department for various reasons.

Tomahawk Creek Greenway Phase 1 and Phase 2

Start: Muddy Creek Greenway

End: Town of Lewisville

Description:

The Tomahawk Creek Greenway system provides a connection from the Muddy Creek Greenway at Phillips Bridge Road to the Town of Lewisville at Conrad Circle and Joanie Moser Park.

Through the engineering feasibility analysis, it was determined that the western portion of Phase 1 was not feasible for construction. Although the other portions of the greenway were determined to be feasible, construction of the greenway would be challenging due to existing development. During the public input session and through the submitted surveys, it was clearly evident that the vast majority of residents along the greenway were not supportive of its construction.



Long Drive Sidepath

During the planning process for this Update, the Town of Lewisville began the planning process to establish a greenway and pedestrian connections plan for the Town. As part of the planning process, a steering committee of Lewisville residents was established to help oversee the creation of the plan.

The *Lewisville Greenway and Pedestrian Connections Plan* was received and accepted by the Lewisville Town Council in December 2011. The Lewisville plan removes the Tomahawk Creek Greenway system from Styers Ferry Road west and recommends various on-street and off-street facilities in its place. The recommendations include:

- Sidewalks along Shallowford Road, Styers Ferry Road, Lewisville-Clemmons Road, Woodview Ridge Trail, and Sequoia Drive;
- Greenway connecting Downtown to the Jack Warren and Joanie Moser Parks; and
- Greenway connecting Woodview Ridge Trail to Shallowford Road.

This *Greenway Plan Update* supports the recommendations of the *Lewisville Greenway and Pedestrian Connections Plan*, therefore, the original alignment of the Tomahawk Creek Greenway system west of Styers Ferry Road is removed from the Greenway Plan. The greenway recommendations as listed above are incorporated into this Update and shown on **Map 1: Forsyth County Greenway Plan**. Additional details on the *Lewisville Greenway and Pedestrian Connections Plan* recommendations can be found in **Appendix C**.

Blanket Bottom Creek Greenway Phase 1

Start: Joanie Moser Park
End: US 421

Description:

The Blanket Bottom Creek Greenway Phase 1 begins at Joanie Moser Park within the Town of Lewisville and extends south to US 421. The feasibility analysis completed by the City Engineering Department noted that the existing single barrel culvert under US 421 prevented the installation of the greenway. As such, the greenway was deemed unfeasible for construction.

The *Lewisville Greenway and Pedestrian Connections Plan* proposes various facilities that will allow for connections to the southern portion Blanket Bottom Creek leading into the Village of Clemmons. The recommendations include:

- Sidewalk and a pedestrian bridge along Reynolds Road;
- Sidewalk along Styers Ferry Road;
- A pedestrian bridge across US 421.

This *Greenway Plan Update* supports the recommendations of the *Lewisville Greenway and Pedestrian Connections Plan*; therefore, the original alignment for the Blanket Bottom Creek Greenway Phase 1 is removed

from the Greenway Plan. Additional details on the *Lewisville Greenway and Pedestrian Connections Plan* recommendations can be found in **Appendix C**.

Silas Creek Greenway North

Start: Robinhood Road
End: Reynolda Road

Description:

The Silas Creek Greenway North would extend the existing Silas Creek Greenway at Shaffner Park north to Reynolda Road adjacent to the entrance to Wake Forest University. However, the City Engineering Department deemed this greenway unfeasible for construction due to the existing interchange at Robinhood Road and Silas Creek Parkway, topography along the creek, and existing development.

A sidepath along Silas Creek Parkway may be a feasible alternative to a traditional greenway. Further analysis is needed to determine if a side path is a viable alternative. This project may be considered within the scope of the Wake Forest University Area Bike, Pedestrian, and Transit Study. As part of this Update, the original notation for the Silas Creek Greenway North is removed and replaced with a notation for consideration of an on-street facility.

Buena Vista Branch Greenway

Start: Silas Creek Greenway
End: Whitaker Elementary

Description:

The Buena Vista Branch Greenway would provide a connection from the Silas Creek Greenway at Shaffner Park to Whitaker Elementary School. However, given the location of the creek through an existing private golf course and its proximity to existing development, this greenway was deemed unfeasible for construction by the City Engineering Department.

The original alignment for the Buena Vista Branch Greenway is removed from this plan. In lieu of a traditional greenway, sidewalks along Yorkshire and Pine Valley Roads are recommended to provide a pedestrian connection between Shaffner Park, Whitaker Elementary School, and the surrounding neighborhoods. An existing tunnel connection under Silas Creek Parkway provides residents access to Sherwood Forest Elementary School, the western portion of Shaffner Park, and the Sherwood Forest neighborhood.

Peters Creek Greenway

Start: Silas Creek Parkway
End: Hanes Park

Description:

The Peters Creek Greenway begins at the intersection of Peters Creek Parkway and Silas Creek Parkway and extends north past Hanes Park to the Children's Home.

The City Engineering Department completed a preliminary feasibility analysis for the section from Silas Creek Parkway to Hanes Park. The analysis showed significant obstacles for construction including existing development and numerous culverts of varying lengths and conditions along the length of the section. For these reasons, the Engineering Department deemed this section of the greenway unfeasible for development. No analysis was completed on the northern portion of the greenway from Hanes Park to the Children's Home.

As part of the Update, the Peters Creek Greenway shown in the 2002 *Greenway Plan* from Silas Creek Parkway to Hanes Park is removed and replaced with a notation for an on-street facility. In lieu of a traditional greenway, sidewalks along Peters Creek Parkway and within the West End neighborhood leading to the park are recommended to provide pedestrian connections within the area. Areas where Peters Creek runs above ground could still be developed for park and/or open space, with or without adjacent trails. The portion of the greenway from Hanes Park to the Children's Home will remain in the Update as a long-range greenway project.

Strollway South
Start: Main Street
End: Haled Street

Description:

The southern portion of the Strollway would extend the existing Strollway south from Main Street through the University of North Carolina School of the Arts campus to Haled Street. The proposed location of the greenway is within a ravine located on the campus. As this is not a suitable location for a greenway, the City Engineering Department deemed this greenway to be unfeasible for construction.

The Strollway South shown in the 2002 *Greenway Plan* is removed and replaced with a notation for an on-street facility. In lieu of the greenway, it is recommended that the existing sidewalk be improved and the proposed bike lanes be built along Main Street.



The Strollway



Regional Connections and Urban Trails

As development of the Forsyth County greenway network continues into the future, consideration should be given to providing regional connections to the surrounding counties and urban connections from Downtown Winston-Salem to adjacent neighborhoods. These connections will provide residents additional recreational and transportation opportunities. Specific regional connections and urban trails of importance are described below.

Davidson County

The *Davidson County Master Greenway Plan* was adopted in 2009. The plan shows two possible regional connections between Davidson County and Forsyth County along Muddy Creek and Abbotts Creek.

The Davidson County plan recommends the construction of a greenway along Muddy Creek, in the western portion of the county, starting at its northern border and extending south to the Yadkin River. The proposed Davidson County Muddy Creek Greenway could connect to the existing and proposed Muddy Creek system in Forsyth County just south of the Village of Clemmons.

The Davidson County plan also proposes the construction of a greenway along Abbotts Creek, located in the eastern portion of the county, that will extend from the county's northern border to the Yadkin River. The proposed route for Abbotts Creek will also provide a connection around Lake Thom-A-Lex. A greenway along Abbotts Creek is proposed as a long-range project in the *2002 Greenway Plan* beginning in Downtown Kernersville and extending south to the Forsyth County border.

Yadkin River Greenway

In 2010, Davie and Forsyth Counties, along with the Town of Lewisville, the Village of Clemmons, the Town of Bermuda Run, and the MPO partnered to establish a plan for a multi-use greenway along the Yadkin River that would connect the municipalities. The proposed *Yadkin River Greenway Feasibility Study* was completed in summer 2011.

The study proposes a multi-use path along the east side of the Yadkin River providing a connection from Tanglewood Park to the Village of Clemmons and the Town of Lewisville. Consideration was given to connecting the proposed path with the proposed facilities recommended in the *Lewisville Greenway and Pedestrian Connections Plan*. A bicycle and pedestrian path is proposed along the west side of the Yadkin River connecting the Town

of Bermuda Run and the BB&T Soccer Complex to Davie County. Pedestrian bridges are proposed at two locations that will connect the municipalities on the east side of the Yadkin River to the west side.

Phase 1 of the greenway may begin in 2013. This phase will include the portion within Tanglewood Park and along US 158. The Village of Clemmons is currently working on securing easements along the portion of greenway within its boundary. The remaining phases of the greenway are considered mid to long-range projects with completion of the greenway in the next 20 to 30 years. Surveys received from the public as part of the study showed that though the general public was supportive, property owners directly impacted by the remaining phases of the greenway were strongly opposed the project.

Mountains-to-Sea Trail

The Mountain-to-Sea Trail is a State project that will provide a trail connection between Clingmans Dome in the Great Smoky Mountains to Jockey's Ridge on the Outer Banks. Trails are proposed throughout the Piedmont Triad that will connect Forsyth County to Stokes, Surry, Yadkin, and Guilford Counties.

A primary planned route along Muddy Creek, Salem Creek, and the Yadkin River will provide a connection to Yadkin, Surry, and Guilford Counties. An alternate planned route will provide a connection to Stokes and Guilford Counties along Mill Creek, Grassy Fork Creek, Belews Creek, and East Belews Creek. Currently, the focus is to complete the primary route of the trail system. A map of the proposed Mountains-to-Sea Trail can be found in **Appendix D**.



Salem Creek Greenway

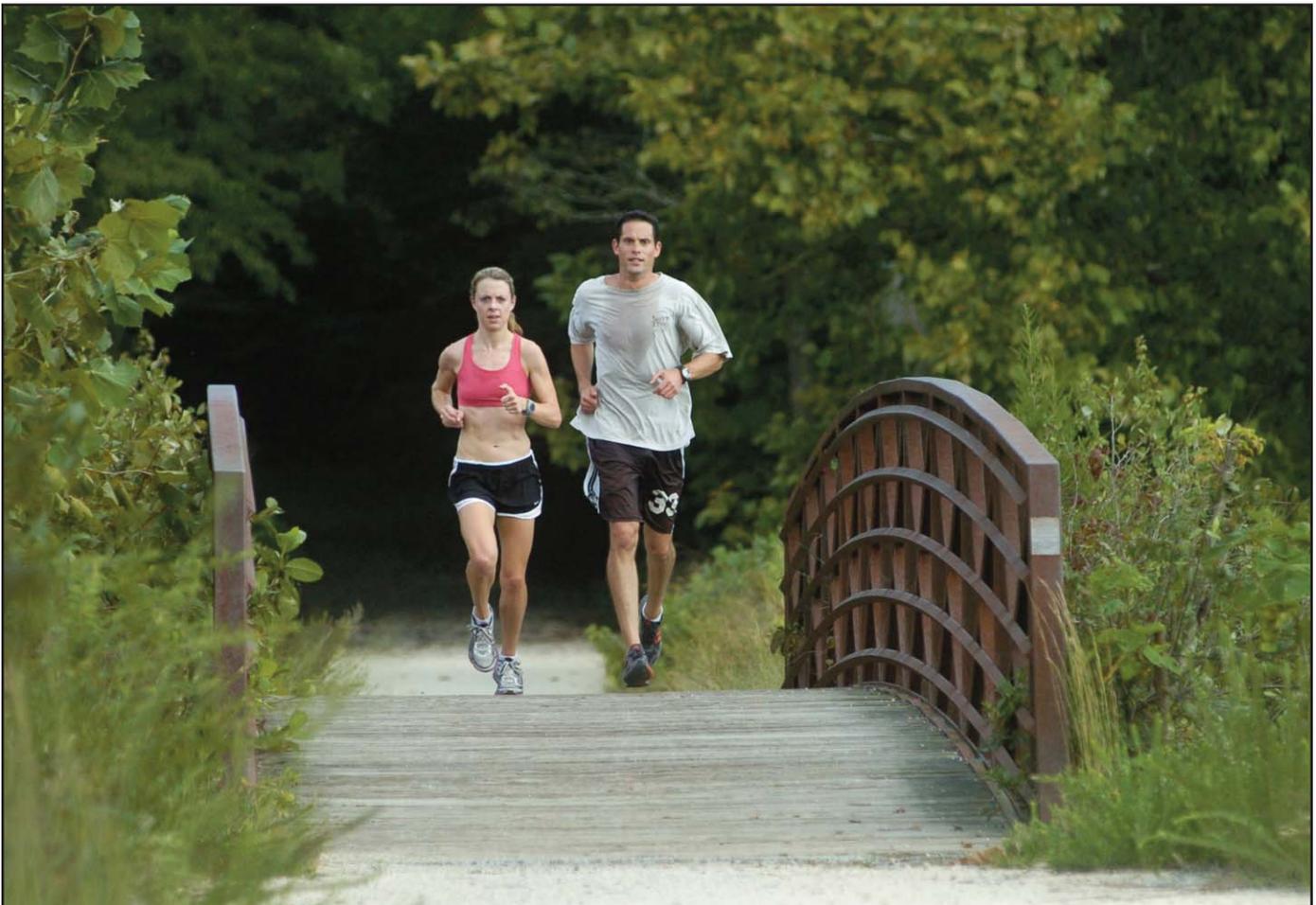
Piedmont Regional Greenway System

The Piedmont Regional Greenway System is an approximately 8.5 mile bicycle and pedestrian system consisting of greenways and sidewalks that will connect the City of Winston-Salem, Forsyth County, and the Town of Kernersville to Guilford County. The greenway begins at the eastern end of the Salem Lake Trail at Linville Road and continues east to Triad Park where it joins into the Guilford County greenway network.

Design work has begun on the first phase of the greenway between the Salem Lake Trail and Hastings Hill Road. Currently, there is no timeline for construction of this phase. The Town of Kernersville has begun design work on a portion of the greenway within their town limits, Kerners Mill Greenway, between Oakhurst Drive and Kilburn Way Lane. Construction is anticipated to begin in 2013. Furthermore, the Town has begun discussions on completing the two other phases of the system within its limits which will connect Hastings Hill Road to Kilburn Way Lane and Downtown Kernersville to Triad Park. A timeline for construction of these phases has not been established.

Piedmont Triad Research Park Urban Trail

The Piedmont Triad Research Park is located just east of Downtown Winston-Salem adjacent to US 52. Plans for the research park began in the early 1990's with the first building being occupied in 1994. The long-range plans for the park call for a 240-acre mixed-use park comprised of three districts that will extend from Salem Creek to Martin Luther King Jr. Drive. As part of these plans, an urban trail has been proposed. The trail will extend from the Salem Creek Greenway to Martin Luther King Jr. Drive with the majority of the trail utilizing the existing railroad corridor. The Winston-Salem Department of Transportation has proposed extending the trail further north to Twenty-Seventh Street to provide a pedestrian connection for residents in north Winston-Salem to Downtown.



Salem Lake Trail

Plan Recommendations and Action Plan

Policies and Action Agenda

The 2002 *Greenway Plan* proposed policies and recommended actions to ensure the continued expansion of the greenway system in the short- and long-term. The eight policies originally listed in Section VIII of the *Greenway Plan* are still valid for current and future greenway development. The recommended action agenda items listed with each policy are also valid with the following revisions and addition. See pages 32 and 33 of the 2002 *Greenway Plan* for the complete list of policies and action agenda items.

Policy 4:

- **Original Action Agenda Item:** Amend the *Unified Development Ordinances* (UDO), as necessary, to secure dedicated easements on all creeks with identified flood zones.
 - **Update:** A provision of the UDO currently exists allowing for the requirement of the dedication or granting of easements for greenways identified on the adopted *Greenway Plan*.
 - **Recommendation:** Remove Action Agenda Item
- **Original Action Agenda Item:** Establish and maintain a computerized database of all dedicated greenway easements.
 - **Update:** A computerized database has been established and is maintained by the City-County Planning Board.
 - **Revised Action Agenda Item:** “Maintain a computerized database of all dedicated greenway easements.”

Policy 6:

- Add Action Agenda Item: Establish design guidelines for the construction of greenways.

Policy 7:

- Original Action Agenda Item: Assist in the establishment of a countywide citizen-based organization dedicated to greenways and open space.

- **Update:** The Forsyth Greenway Connections and WS Greenways, citizen-based advocacy groups promoting greenways, have been established.
- **Revised Action Agenda Item:** “Continue to collaborate with the Forsyth Greenway Connections, WS Greenways, and other citizen-based organizations dedicated to greenways and open space.”

Action Plan

Since the adoption of the *Greenway Plan* in 2002, the City Engineering Department has taken on a major role in the design and construction of greenways. Furthermore, the MPO has hired a Bicycle and Pedestrian Coordinator. As such, revisions to the Action Plan listed in Section IX of the *Greenway Plan* are necessary to reflect this and to address the changes to the Action Agenda. Listed in **Table 2** are the revisions and additions to the existing Greenway System Action Plan. See pages 33 through 36 in the 2002 *Greenway Plan* for the complete Action Plan.

Implementation

After the adoption of the *Greenway Plan Update*, implementation will require a coordinated effort by multiple departments, as well as, among multiple local jurisdictions. The first step toward construction of the prioritized greenways will be to complete a detailed feasibility analysis that will address both engineering and right-of-way acquisition considerations in order to create an alignment. Right-of-way acquisition will be handled through a negotiation process with individual property owners. If through the analysis no alignment can be determined that addresses both engineering and right-of-way acquisition concerns, the project will be placed on hold until conditions have changed and the project can move forward. Once a feasible alignment has been designed, funding for the construction of the greenway will be sought. At this time, funding for the prioritized projects of the *Greenway Plan Update* has not been established. Construction will begin once funding and permits are in place.

Table 2: Changes to Greenway System Action Plan

Action Agenda Item	Responsibility	Time
1		Change to See Schedule
2	Add City Engineering Department and City Real Estate Department	
5	Add City Engineering Department	
8	Add City Engineering Department	
9		Change to Ongoing
13	Add City Engineering Department and Winston-Salem Department of Transportation	
14		Change to Completed
15		Change to Database completed, maintenance ongoing
16	Add City Engineering Department	
17		Change to Ongoing
20	Add City Engineering Department	
23	Add City Engineering Department	Change to Ongoing
25		Change to Organization established; local government assistance ongoing
29	Add Winston-Salem Department of Transportation	
32	Add City Engineering Department	
35 (NEW)- Establish design guidelines for greenway construction	City Engineering Department Winston-Salem Department of Transportation City-County Planning Board	Short-term

Appendix A: Connectivity Scores and Public Participation Results

Part of the initial evaluation of the proposed priority greenways was to rank each project on its connectivity. Each project was ranked individually on a one to ten point scale, with ten providing the greatest connectivity. The Subcommittee considered if projects provided a connection to various destinations, as well as, population demographics, acquired greenway easements, and historic designation when ranking the projects. **Table 3** shows the average connectivity score for each project.

To evaluate the public's interest and opinion of each project, eight public meetings were held between January and March 2011. Notification of the public meetings was posted on the City website, the County website, the City-County Planning Board website, and the City Facebook page. Furthermore, an ad announcing the meetings was placed in the *Winston-Salem Journal* four times, the *Winston-Salem Chronicle* twice, *Qué Pasa* twice, and once in the *Kernersville News*. Letters were sent to property owners within approximately 300 feet of the proposed greenway inform-

ing them of the upcoming meeting. Letters were also sent to neighborhood associations within the general vicinity of the proposed greenways where contact information was available. Lastly, Fox 8 News ran a story during the evening news prior to the first meeting. **Table 4** lists the meeting dates and locations for each of the eight public meetings.

In addition to providing comments during a meeting, citizens were able to provide input through a short survey. Surveys were available at each meeting and on the City-County Planning Board website. **Table 5** provides information on the participation at each meeting. **Tables 6 and 7** show the results from the survey.

For those individuals who responded "Other Communities Outside Forsyth County" in Question 4, some provided the communities in which they have used greenways. Communities listed included Greensboro/Guilford County/High Point, Raleigh, Cary, Boone, Asheville, Charlotte, Chapel Hill, Boston, Detroit, Chicago, and Virginia.

Table 3: Average Connectivity Score

	Average Connectivity Score *
Waughtown Connector	7.0
Salem Creek Greenway Extension	5.6
Brushy Fork Greenway Phase 2	7.0
Tomahawk Creek Greenway Phase 1	6.3
Tomahawk Creek Greenway Phase 2	4.6
Muddy Creek Greenway Phase 2	8.4
Muddy Creek Greenway Phase 5	7.1
Mill Creek Greenway Phase North 1	6.8
Mill Creek Greenway Phase South	7.6
Little Creek Greenway Phase 2A	7.3
Little Creek Greenway Phase 2B	5.9

*Out of a possible 10 points

Table 4: Public Meeting Dates

	Date	Location
Waughtown Connector	January 20, 2011	William R. Anderson Jr. Recreation Center
Salem Creek Greenway Extension	January 24, 2011	Southside Branch Library
Brushy Fork Creek Greenway Phase 2	January 25, 2011	Mazie S. Woodruff Center
Tomahawk Creek Greenway Phase 1 and 2	February 1, 2011	Lewisville Branch Library
Muddy Creek Greenway Phase 2	February 8, 2011	Old Town Elementary School
Mill Creek Greenway Phase North 1 and South	February 15, 2011	Bethabara Visitor Center
Muddy Creek Greenway Phase 5	February 22, 2011	West Forsyth High School
Little Creek Greenway Phase 2	March 1, 2011	Little Creek Recreation Center

Table 5: Participation Results

	Number of Letters	Number of Attendees	Number of Surveys Received	Percent of Total Surveys Submitted
Waughtown Connector	216	36	30	4%
Salem Creek Extension	134	25	56	8%
Brushy Fork Phase 2	501	53	46	6%
Tomahawk Creek	743	116	210	29%
Muddy Creek Phase 2	274	47	50	7%
Muddy Creek Phase 5	685	64	47	7%
Muddy Creek*	–	–	98	14%
Mill Creek	537	84	106	15%
Little Creek	458	41	53	7%
TOTAL**	3548	466	714	100

*These results are from surveys that did not specify a particular phase of the Muddy Creek Greenway.

**Included in the total but not listed in the table are approximately 3% of surveys that did not indicate a specific greenway.

Table 6: Survey Results Questions 1-3

	Question 1: I support greenway construction in Winston-Salem and Forsyth County.		Question 2: I support the construction of this greenway.		Question 3: If constructed, I will use this greenway.	
	Agree/ Strongly Agree	Disagree/ Strongly Disagree	Agree/ Strongly Agree	Disagree/ Strongly Disagree	Agree/ Strongly Agree	Disagree/ Strongly Disagree
Waughtown Connector	73%	27%	66%	30%	67%	34%
Salem Creek Extension	92%	7%	89%	11%	86%	9%
Brushy Fork Phase 2	56%	44%	56%	40%	46%	37%
Tomahawk Creek	51%	33%	17%	77%	26%	65%
Muddy Creek Phase 2	74%	16%	50%	46%	63%	23%
Muddy Creek Phase 5	63%	31%	51%	39%	56%	36%
Muddy Creek*	83%	15%	80%	19%	82%	17%
Mill Creek	61%	28%	43%	50%	50%	42%
Little Creek	56%	40%	54%	45%	53%	47%
TOTAL	63%	28%	–	–	52%	41%

Table 7: Survey Results Question 4: I have used greenways in... (more than one response could be chosen)

	Winston-Salem/ Forsyth County	Other Communities Outside Forsyth County	None of the Above
Waughtown Connector	63%	37%	37%
Salem Creek Extension	93%	77%	2%
Brushy Fork Phase 2	72%	33%	24%
Tomahawk Creek	56%	30%	36%
Muddy Creek Phase 2	70%	62%	18%
Muddy Creek Phase 5	49%	34%	43%
Muddy Creek*	91%	72%	6%
Mill Creek	78%	48%	17%
Little Creek	51%	40%	43%
TOTAL	68%	46%	25%

*These results are from surveys that did not specify a particular phase of the Muddy Creek Greenway.

**Included in the total but not listed in the table are approximately 3% of surveys that did not indicate a specific greenway.



Appendix B: Other Proposed Greenways and Greenway Connectors

Other Proposed Greenways

The proposed greenways listed below are shown as blue lines on **Map 1**.

Table 8: Other Proposed Greenways

Greenway Name	Location	Document/Plan
Abbotts Creek	Harmon Lane to Forsyth County – Davidson County border	2002 Greenway Plan
Bashavia Creek	Vienna-Dozier Road to Hunting Creek Drive (potential to extend east and west)	Lewisville Greenway and Pedestrian Connections Plan
Bath Branch	Stadium Drive to Salem Creek Trail	South Central Area Plan
Blanket Bottom Creek, Phase 2	US 421 to Lasater Lake	Clemmons Village Transportation Plan, 2002 Greenway Plan
Brushy Fork Creek, Phase 2 (see page 16)	Waterworks Drive to Crawford Park	East Northeast Area Plan, 2002 Greenway Plan
Ellison Creek	Dull Road to Woodford Road (potential to extend southwest)	Lewisville Greenway and Pedestrian Connections Plan, 2002 Greenway Plan
Fiddlers Creek	Old Lexington Road to Silver Creek Trail	South Suburban Area Plan, Southeast Suburban Area Plan
Five Mile Branch	Motor Road to Ozark Road	2002 Greenway Plan
Forest Plan	Waughtown Street to US-52	Southeast Area Plan
Forum Trail	Bethania-Rural Hall Road to Montroyal Road	Rural Hall Area Plan, 2002 Greenway Plan
Frazier Creek	Winston Lake Park to New Walkertown Road	Walkertown Area Plan
Grassy Fork Creek (see page 24)	Summit Street to Bethania Station Road	Rural Hall Area Plan (Phase 1), North Suburban Area Plan, 2002 Greenway Plan
Harmon Mill Creek	Long Walk Drive to Westside Road and Lavendar Lane	2002 Greenway Plan
Little Creek, Phase 2B (see page 24)	Somerset Drive to Muddy Creek	Southwest Suburban Area Plan, 2002 Greenway Plan

(...continued on page 38)

Table 8: Other Proposed Greenways (continued from page 37)

Greenway Name	Location	Document/Plan
Little Creek Tributary	Little Creek Greenway Phase 1 to Hanes Mall Boulevard	Southwest Suburban Area Plan, 2002 Greenway Plan
Lowery Creek	Gaither Road to Old Hollow Road	Walkertown Area Plan
Martin Mill Creek	Walkertown-Guthrie Road to West Mountain Street	Walkertown Area Plan
Mill Creek, Lewisville	Conrad Road to Conrad Sawmill Road and Grapevine Road to Deverow Court	Lewisville Greenway and Pedestrian Connections Plan, 2002 Greenway Plan
Mill Creek North, Phase 2	North Forsyth High School to E. Hanes Mill Road	North Suburban Area Plan, 2002 Greenway Plan
Mill Creek South (see page 17)	Jefferson Elementary School to Bethabara Trail	West Suburban Area Plan, 2002 Greenway Plan
Muddy Creek, Phase 4	Yadkinville Road to Bethania	West Suburban Area Plan, 2002 Greenway Plan
Muddy Creek, Phase 5B+ (see page 24)	US 421 to Salem Creek	Clemmons Village Transportation Plan, Southwest Suburban Area Plan, 2002 Greenway Plan
Northeast Creek (see Appendix B)	Phillips Bridge Road to Lewisville Vienna Road, Poplar Ridge Road, and Shamrock Trail Road	Lewisville Greenway and Pedestrian Connections Plan, 2002 Greenway Plan
Rocky Bottom Creek	Martin Mill Creek to Old Hollow Road	Walkertown Area Plan
Salem Creek, South	Forsyth Tech to Muddy Creek	Southwest Suburban Area Plan, 2002 Greenway Plan
Salem Lake Trail North (see page 25)	Salem Lake Trail to Gaither Road	Southeast Suburban Area Plan, 2002 Greenway Plan
Silas Creek, South	Existing Silas Creek Trail to Muddy Creek	Southwest Suburban Area Plan, 2002 Greenway Plan
Strollway North, Phase 2	8th Street to Northwest Boulevard	North Central Area Plan
South Fork Muddy Creek	Ebert Road to US 311	South Suburban Area Plan, Southeast Suburban Area Plan
Waughtown Connector, Phase 2	Waughtown Street to I-40	Southeast Area Plan
Waughtown Connector, Phase 3	I-40 to Salem Creek Trail	Southeast Area Plan
West Fork Deep River	E. Mountain Street to Forsyth County – Guilford County border	2002 Greenway Plan
Yadkin River (see page 29)	Western border of Forsyth County at the Village of Clemmons and Town of Lewisville (potential to extend north and south)	Clemmons Transportation Plan

Greenway Connectors

Greenway connectors consist of smaller neighborhood or sidewalk connections that allow access to the primary greenway trail system or provide a connection between greenways. The connectors are shown as orange dotted lines on **Map 1**.

Table 9: Greenway Connectors

Greenway Name	Location	Document/Plan
Bethabara Branch	Bethabara Trail to Shattalon Drive	2002 Greenway Plan
Bowen Branch	Bowen Branch Trail to Liberty Street	East Northeast Area Plan, 2002 Greenway Plan
Brenner Lake Branch	Mill Creek to Polo Road	West Suburban Area Plan, 2002 Greenway Plan
Buena Vista Branch	Silas Creek Trail to Pine Valley Road	Greenway Plan Update (in lieu of traditional greenway)
Downtown Lewisville	Shallowford Road to Joanie Moser Park	Lewisville Greenway and Pedestrian Connections Plan
Hanes Mall	Hanes Mall Boulevard	Southwest Suburban Area Plan, 2002 Greenway Plan
Leak Fork	Mill Creek to Elm Drive	2002 Greenway Plan
Lime Street	Twenty-Fourth Street to Twenty-Seventh Street	North Central Area Plan
Milhaven Creek	Muddy Creek Greenway to Sally Kirk Road	West Suburban Area Plan, 2002 Greenway Plan
Motor Road	Five Mile Branch to Brushy Fork	Northeast Suburban Area Plan, 2002 Greenway Plan
Muddy Creek Tributary	Muddy Creek to West Forsyth High School	Clemmons Village Transportation Plan
Petree Creek	Mill Creek to Woodside Drive	West Suburban Area Plan, 2002 Greenway Plan
Styers Ferry Road, South	Reynolds Road to proposed Blanket Bottom Creek Greenway	Lewisville Greenway and Pedestrian Connections Plan
Wake Forest	Wake Forest University and surrounding area	2002 Greenway Plan
Waughtown Connector Loop	Waughtown Connector	Southeast Area Plan
Woodview Ridge Trail	Shallowford Road to Woodview Ridge Trail	Lewisville Greenway and Pedestrian Connections Plan

Appendix C: Lewisville Greenway and Pedestrian Plan

Lewisville Greenway and Pedestrian Connections Plan

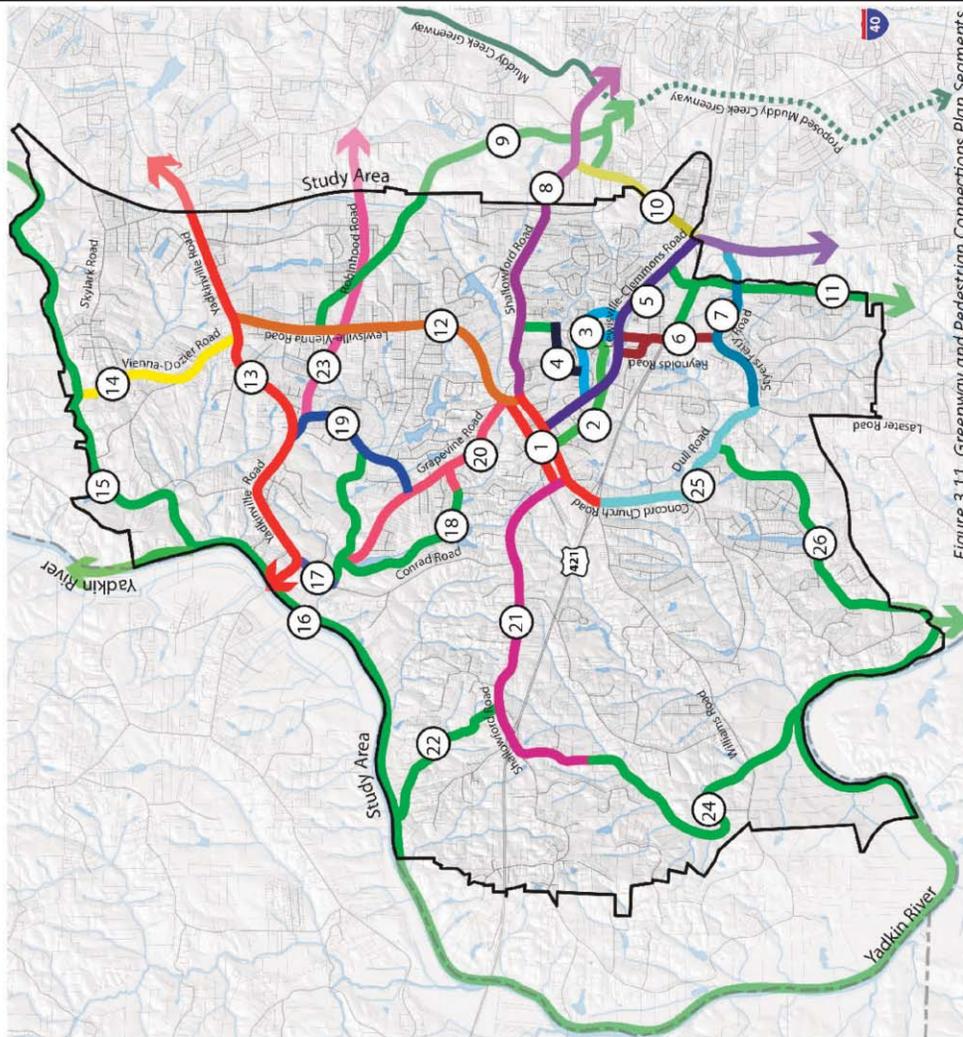
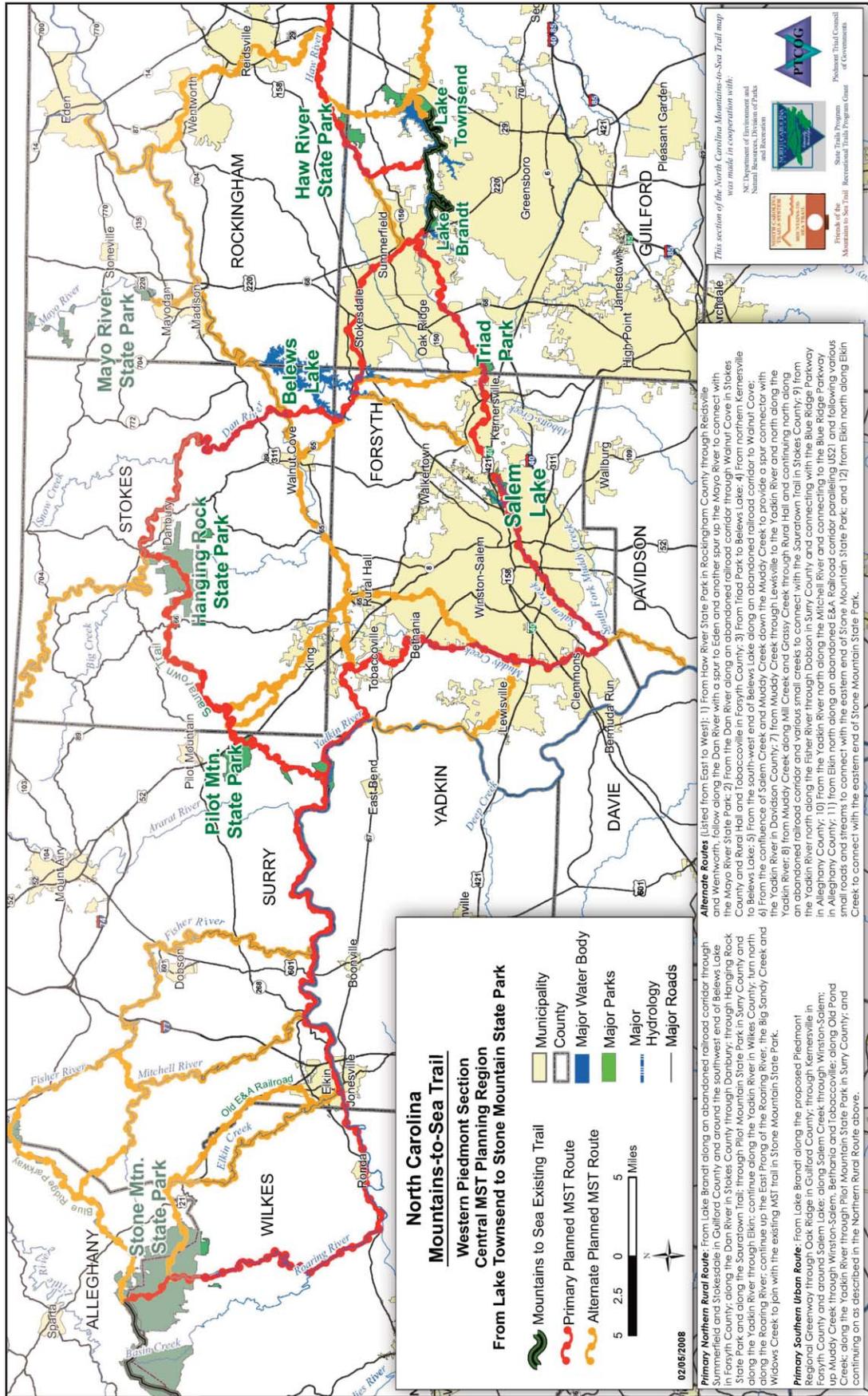


Figure 3.11, Greenway and Pedestrian Connections Plan Segments
Not to Scale

Greenway and Pedestrian Connections Plan Segments

- #1 - Shallowford Road/Future Great Wagon Road
- #2 - Downtown Greenway Connector
- #3 - Sequoia Drive
- #4 - Woodview Ridge Trail
- #5 - Lewisville-Clemmons Road
- #6 - Reynolds Road
- #7 - Styers Ferry Road - South
- #8 - Shallowford Road
- #9 - Northeast Creek Greenway
- #10 - Styers Ferry Road - North
- #11 - Blanket Bottom Creek Greenway
- #12 - Lewisville-Vienna Road
- #13 - Yadkinville Road
- #14 - Vienna-Dozier Road
- #15 - Bashavia Creek Greenway
- #16 - Yadkin River Greenway
- #17 - Conrad Road
- #18 - Mill Creek Greenway
- #19 - Conrad-Sawmill Road
- #20 - Grapevine Road
- #21 - Shallowford Road
- #22 - Yadkin River West Greenway
- #23 - Robinhood Road
- #24 - Panther Ridge Creek Greenway
- #25 - Concord Church Road & Dull Road
- #26 - Ellison Creek Greenway

Appendix D: Mountains-to-Sea Trail





Acknowledgements

Winston-Salem City Council

Allen Joines Mayor	Denise D. Adams North Ward	Molly Leight South Ward	James Taylor Jr. Southeast Ward
Vivian H. Burke Mayor Pro Tempore, Northeast Ward	Dan Besse Southwest Ward	Wanda Merschel Northwest Ward	Lee Garrity City Manager
	Robert C. Clark West Ward	Derwin L. Montgomery East Ward	

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Margaret Bessette, AICP Kirk Bjorling	Tim Grant Mike Hall	Lynne Mitchell, MS, RN, LDN	Scott Snow Mae Thompson
Kevin Bowers Matthew Burczyk, AICP	Frank James Andrea Keyser, P.E.	Marty Myers, AICP Robert Prestwood, P.E.	Brian Ulrich, P.E. Darrell Walker
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For more information about the

The Greenway Plan **Update**

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