

FEASIBILITY STUDY

Widening of NC 54 from I-40 to NC 55

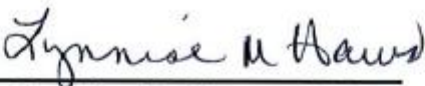
Durham County

Division 5

FS-1005C (U-5324)



**Prepared by the
Program Development Branch
N. C. Department of Transportation**


**Lynnise M. Hawes, P.E.
Feasibility Studies Engineer**

 
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Feasibility Studies Unit Head

Widening of NC 54 from I-40 to NC 55

Durham County

FS-1005C (U-5324)

I. General Description

This feasibility study describes the proposed widening of NC 54 from I-40 to NC 55, a distance of approximately 5.3 miles. The project location is shown on Figure 1. As part of the study, a four-lane divided cross-section on 130 feet of right of way was investigated.

This is the initial step in the planning and design process for this project and is not the product of exhaustive environmental or design investigations. The purpose of this study is to describe the proposed project including cost, and to identify potential problems that may require consideration in the planning and design phases.

II. Background

The purpose of this project is to improve the traffic safety and operations along NC 54.

NC 54 is designated as a minor arterial in the North Carolina Statewide Functional Classification System and as a major thoroughfare in the May 2009 Durham-Chapel Hill-Carrboro Metropolitan Organization 2035 Long Range Transportation Plan. NC 54 varies from a two-lane section to a four-lane section with pavement widths varying from 23 feet to 64 feet from edge of pavement to edge of pavement. Curb and gutter and shoulders are used along NC 54.

The following State Transportation Improvement Program (STIP) project is located within the project study area:

- EL-2921: Construct a multi-purpose trail (American Tobacco Rail Rail) from NC 54 to Chatham County line.

A NC 54/I-40 Corridor Study was complete by Durham-Chapel Hill-Carrboro Metropolitan Planning Organization in December 2011. The study provides a transportation-land use master plan along NC 54 from US 15-501 to I-40.

There are several bridges in the project study area. Please see attached Table 4 for detailed information.

III. Traffic and Safety

There are existing traffic signals located at the following intersections within the project study area:

- NC 54 and SR 2290 (Leigh Farm Road/Quadrangle Drive)
- NC 54 and NC 751 (Hope Valley Road)
- NC 54 and SR 1116 (Garrett Road)
- NC 54 and Highgate Drive/Rollingwood Drive
- NC 54 and SR 1118 (Fayetteville Road)
- NC 54 and SR 1106 (Barbee Road)
- NC 54 and Revere Road
- NC 54 and NC 55

The current year Average Daily Traffic (ADT) along NC 54 is estimated to range from 9,400 vehicles per day (vpd) to 25,700 vpd. For the design year 2035, the traffic volume along NC 54 is estimated to range between 15,300 vpd to 41,100 vpd. Truck traffic is estimated to be up to 3 percent of the daily traffic.

The existing segment of NC 54 operates at a level of service (LOS) F under current traffic volumes. With the proposed improvements, all intersections along NC 54 except for SR 1118 (Fayetteville Road) and NC 55 are projected to operate at a LOS D or better. In order to achieve a LOS D at these intersections, significant improvements well beyond the scope of this project are needed. The improvements to these intersections include, but may not be limited to additional through capacity on SR 1118 and NC 55.

Table 1. Level of Service Summary

Section	2012 Existing Conditions	2035 Existing Conditions	2035 Proposed Improvements
Section 1	E	F	C
Section 2	E	E	B
Section 3	E	E	B
Section 4	E	F	C

Table 2. Level of Service Summary

Intersection	2012 Existing Conditions	2035 Existing Conditions	2035 Proposed Improvements
SR 2290 (Leigh Farm Rd.)/ Quadrangle Dr.	F	F	C
NC 751	E	F	D
Highgate Dr.	C	D	B
Highgate Dr./Rollingwood Dr.	C	D	B
SR 1118 (Fayetteville Rd.)	E	F	F
SR 1106 (Barbee Rd.)	E	F	D
SR 1101 (Revere Rd.)	D	E	B
NC 55	F	F	F

Between 2007 and 2010, 392 crashes were reported along NC 54. The crash rate for NC 54 is 366.85 crashes per 100 million vehicle miles (crashes/100MVM) traveled. This rate is higher than the statewide rate of 303.18 crashes/100MVM and critical rate of 331.36 crashes/100MVM for two-lane undivided urban North Carolina route. There were 79 non-fatal injury crashes, 311 property damage only crashes, and 2 fatal crashes. The most prevalent types of crashes were Rear End (43%), Angle (26%), and Sideswipe (9%).

IV. Description of Alternatives

It is proposed to widen NC 54 from I-40 to NC 55, a distance of approximately 5.3 miles. The project location is shown on Figure 1. For evaluation purposes, the project was divided into four segments. The details of each are below:

SECTION 1: This section along NC 54 is from I-40 to NC 751 (Hope Valley Road), a distance of approximately 1.3 miles. Included in the costs below are the extension of Culvert Number 13 at New Hope Creek and the replacement of Bridge Number 41 over New Hope Creek with a 2000-foot long bridge.

Cross-section: Four-lane divided curb and gutter section, 85 feet from face to face of curb, with 12-foot travel lanes, a 23-foot raised grass median, 5-foot bicycle lanes, 15-foot berms, and 5-foot sidewalks on 130 feet of right of way.

With this proposed cross-section, it is anticipated that there will be zero (0) residences and zero (0) businesses relocated due to this project. The total cost of this section, including right of way, utility relocation, and construction, is estimated to be \$32,000,000.

Right-of-way.....	\$1,800,000
Utility Relocation.....	\$800,000
<u>Construction.....</u>	<u>\$29,400,000</u>
Total Cost (NC 54 - Section 1).....	\$32,000,000

In addition to the widening of NC 54, an additional 30 feet of right of way for transit pullouts at the following intersections are recommended and included in the costs shown above:

- NC 54 and SR 2290 (Leigh Farm Road)/Quadrangle Drive
- NC 54 and NC 751 (Hope Valley Road)

SECTION 2: This section along NC 54 is from NC 751(Hope Valley Road) to SR 1118 (Fayetteville Road), a distance of approximately 1.7 miles. Included in the costs below is the replacement of Culvert Number 46 at Third Fork Creek.

Cross-section: Four-lane divided curb and gutter section, 85 feet from face to face of curb, with 12-foot travel lanes, a 23-foot raised grass median, 5-foot bicycle lanes, 15-foot berms, and 5-foot sidewalks on 130 feet of right of way.

With this proposed cross-section, it is anticipated that there will be zero (0) residences and one (1) business relocated due to this project. The total cost of this section, including right of way, utility relocation, and construction, is estimated to be \$21,600,000.

Right-of-way.....	\$5,900,000
Utility Relocation.....	\$2,500,000
<u>Construction.....</u>	<u>\$13,200,000</u>
Total Cost (NC 54 - Section 2).....	\$21,600,000

In addition to the widening of NC 54, an additional 30 feet of right of way for transit pullouts at the following intersections are recommended and included in the costs shown above:

- NC 54 and NC 751 (Hope Valley Road)
- NC 54 and Highgate Drive
- NC 54 and SR 1118 (Fayetteville Road)

SECTION 3: This section along NC 54 is from SR 1118 (Fayetteville Road) to SR 1106 (Barbee Road), a distance of approximately 1.0 mile. Included in the costs below is the replacement of Bridge Numbers 307 and 308 over NC 54.

Cross-section: Four-lane divided curb and gutter section, 85 feet from face to face of curb, with 12-foot travel lanes, a 23-foot raised grass median, 5-foot bicycle lanes, 15-foot berms, and 5-foot sidewalks on 130 feet of right of way.

With this proposed cross-section, it is anticipated that there will be three (3) residences and one (1) business relocated due to this project. The total cost of this section, including right of way, utility relocation, and construction, is estimated to be \$33,600,000.

Right-of-way.....	\$2,500,000
Utility Relocation.....	\$10,700,000
<u>Construction.....</u>	<u>\$20,400,000</u>
Total Cost (NC 54 - Section 3).....	\$33,600,000

In addition to the widening of NC 54, an additional 30 feet of right of way for transit pullouts at the following intersections are recommended and included in the costs shown above:

- NC 54 and SR 1118 (Fayetteville Road)
- NC 54 and SR 1106 (Barbee Road)

SECTION 4: This section along NC 54 is from SR 1106 (Barbee Road) to NC 55, a distance of approximately 1.3 miles. Included in the costs below is the extension of Culvert Number 51 at Northeast Creek.

Cross-section: Four-lane divided curb and gutter section, 85 feet from face to face of curb, with 12-foot travel lanes, a 23-foot raised grass median, 5-foot bicycle lanes, 15-foot berms, and 5-foot sidewalks on 130 feet of right of way.

With this proposed cross-section, it is anticipated that there will be zero (0) residences and one (1) business relocated due to this project. The total cost of this section, including right of way, utility relocation, and construction, is estimated to be \$30,600,000.

Right-of-way.....	\$3,200,000
Utility Relocation.....	\$12,600,000
<u>Construction.....</u>	<u>\$14,800,000</u>
Total Cost (NC 54 - Section 4).....	\$30,600,000

In addition to the widening of NC 54, an additional 30 feet of right of way for transit pullouts at the following intersections are recommended and included in the costs shown above:

- NC 54 and SR 1106 (Barbee Road)
- NC 54 and Revere Road
- NC 54 and NC 55

V. Community Issues

A detailed investigation was not conducted for this feasibility study, no impacts to schools or community facilities are anticipated with this project.

A portion of the project study area crosses a land trust priority area, lands managed for conservation and open space, and federal owned game lands.

Several trails cross NC 54, including Northeast Creek Trail (proposed), Herndon Creek Trail (proposed), Crooked Creek Trail (proposed), Third Creek Trail Extension (proposed), and American Tobacco Trail. Please see attached maps from the 2011 Durham Trails and Greenways Master Plan.

Maps at the Survey and Planning Branch of the North Carolina State Historic Preservation Office were used to determine if any historic properties on the National Register of Historic Places (NRHP) or state study lists exist within the proposed project corridor. Leigh Farm Park located north of NC 54 was found to be potentially historic property.

Pedestrian accommodations at major intersections should be carefully considered during later planning and design stages.

VI. Natural Environment Issues

The following is a preliminary review of environmental issues that might have a potential impact to the project. The information obtained for the environmental screening is from a Geographic Information System (GIS) database. The purpose of the environmental screening is to identify potential environmental issues early in the process.

Stream Classification

The proposed project study area is located in the Cape Fear River Basin. NC 54 crosses several water bodies in the project corridor. New Hope Creek, Third Fork Creek, and Northeast Creek have a stream classification of WS-IV NSW. These water bodies will likely need to be surveyed and have the appropriate coordination with the North Carolina Department of Environment and Natural Resources (NCDENR) and the U.S. Army Corps of Engineers (USACE) during any environmental document study.

The proposed project study area is located in a water supply watershed.

The City of Durham Public Works Department, Stormwater Division is conducting basin area studies of the Northeast Creek and Third Fork Creek. To protect water quality in these areas, the project design should treat stormwater through best management practices.

Wetlands

NC 54 crosses wetlands associated with New Hope Creek, Third Fork Creek, and Northeast Creek. Permitting with the U.S. Army Corps of Engineers (USACE) will likely need to be obtained before construction of the project, and appropriate mitigation measures should be taken if deemed necessary. A portion of the project study area is located in a 100 and 500-year floodplains.

Threatened and Endangered Species

There were several Significant Natural Heritage Areas identified in the proposed project study area. Please see attached Table 5 for a comprehensive list. No threatened and endangered species were identified.

Any new bridge designs, culverts, and crossings should allow wildlife movement to occur within and between the Significant Natural Heritage Areas. Best management practices and low-impact designs should be utilized in these areas.

VII. Recommendations

Section 1: It was found that the four-lane divided curb and gutter section would be able to accommodate the projected 2035 design year traffic volumes at an acceptable level of service.

Section 2: It was found that the four-lane divided curb and gutter section would be able to accommodate the projected 2035 design year traffic volumes. All of the intersections except for the intersection with SR 1118 (Fayetteville Road) will operate at an acceptable level of service. Additional intersection improvements beyond the scope of this project would be required at SR 1118 to achieve a LOS D or better. These improvements include additional through lanes on SR 1118.

Section 3: It was found that the four-lane divided curb and gutter section would be able to accommodate the projected 2035 design year traffic volumes at acceptable level of service.

Section 4: It was found that the four-lane divided curb and gutter section would be able to accommodate the projected 2035 design year traffic volumes. All of the intersections except for the intersection with NC 55 will operate at an acceptable level of service. Additional intersection improvements beyond the scope of this project would be required at NC 55 to achieve a LOS D. These improvements include additional through lanes on NC 55.

The total combined estimated cost for Section 1, Section 2, Section 3, Section 4, the extension of Culvert Number 13 at New Hope Creek, the replacement of Bridge Number 41 over New Hope Creek, the replacement of Culvert Number 46 at Third Fork Creek, the replacement of Bridge Numbers 307 and 308 over NC 54, the extension of Culvert Number 51 at Northeast Creek, and the recommended additional right of way for transit pullouts is \$117,800,000. It is anticipated that a total of three (3) residences and three (3) businesses will be relocated along NC 54. Please see Table 3 for a comprehensive breakdown of these sections and costs.

Table 3. Project Cost

Section	Right of way Cost	Utility Relocation Cost	Construction Cost	Total Cost	Residences Relocated	Businesses Relocated
Section 1	\$1,800,000	\$800,000	\$29,400,000	\$32,000,000	0	0
Section 2	\$5,900,000	\$2,500,000	\$13,200,000	\$21,600,000	0	1
Section 3	\$2,500,000	\$10,700,000	\$20,400,000	\$33,600,000	3	1
Section 4	\$3,200,000	\$12,600,000	\$14,800,000	\$30,600,000	0	1
Total project cost	\$13,400,000	\$26,600,000	\$77,800,000	\$117,800,000	3	3

VIII. Other Alternatives Considered

- The replacement of Bridge Number 41 over New Hope Creek with a 166-foot long bridge in Section 1. The estimated total cost for this alternative is \$101,800,000, which is a \$16 million reduction in the construction cost.
- A four-lane divided curb and gutter section, 79 feet from face to face of curb, with 12-foot inside travel lanes, 14-foot outside travel lanes, a 23-foot raised grass median, 5-foot sidewalks, and 15-berms on 130' right of way. The estimated total cost for this alternative is \$110,200,000, which is \$7.6 million reduction in the construction cost.

- A four-lane divided curb and gutter section, 81 feet from face to face of curb, with 11-foot travel lanes, a 23-foot raised grass median, 5-foot bicycle lanes, 5-foot sidewalks, and 15' berms on 130' right of way. The estimated cost for this alternative is \$116,100,000, which is a \$1.7 million reduction in the construction cost.
- A four-lane divided curb and gutter section, 75 feet from face to face of curb, with 12-foot travel lanes, a 23-foot raised grass median, a 5-foot sidewalk, a 10-foot multi-use path, and 15-foot berms on variable width right of way. The **construction cost** for this alternative is estimated to be \$69,500,000. However, the actual right of way and utility relocation costs are contingent upon actual placement of the multi-use path. Until the actual decision on the placement of the multi-use path is made, a final determination of the anticipated right of way cost increase is not available.

Also investigated with this study, was a proposed grade separated pedestrian bridge at the intersection of the American Tobacco Trail and NC 54 (shown on Maps 8 and 15 of the 2011 Durham Trails and Greenways Master Plan). The cost of the proposed bridge is \$800,000, and is not part of the costs included above.

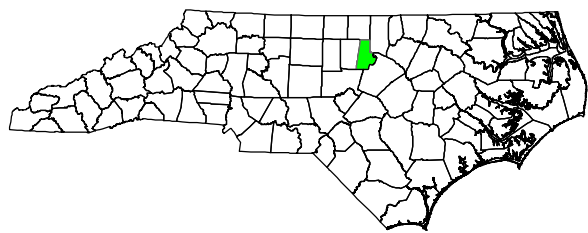
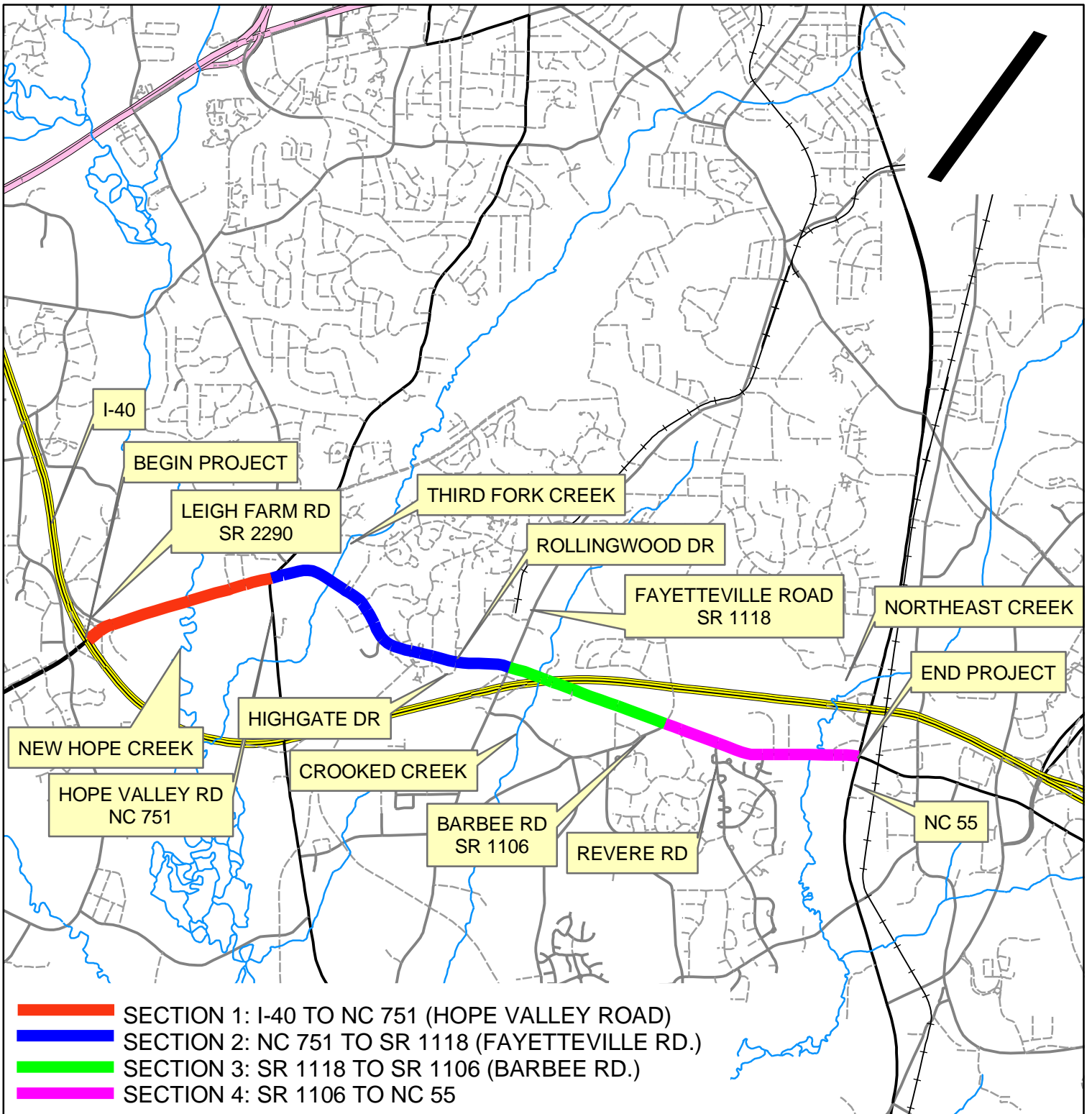
FS-1005C (U-5324): Proposed Widening of NC 54 from I-40 to NC 55

Table 4. Existing Bridge Information

Structure Number	Facility Carried	Feature Intersected	Structure Description	Structure Length	Vertical Clearance	Horizontal Clearance	Year Constructed	Sufficiency Rating
13	NC 54	New Hope Creek	Quadruple 8' x 11' RCBC	35'	N/A	24'	1928	79.5
41	NC 54	New Hope Creek	Reinforced concrete deck on prestressed concrete girders	166'	N/A	40'	1979	89.4
46	NC 54	Third Fork Creek	Quintuple 9' x 13' RCBC	51'	N/A	22'	1928	90.4
51	NC 54	Northeast Creek	Quadruple 11' x 12' RCBC	45'	N/A	25'	1974	79.5
307	I-40 WB	NC 54	Reinforced concrete deck on steel plate girders	287'	16'11"	63.3'	1986	95.8
308	I-40 EB	NC 54	Reinforced concrete deck on steel plate girders	291'	16'7"	63'	1986	84.7
314	NC 54	I-40	Reinforced concrete deck on steel plate girders	206'	16'7"	79.8'	1987	100.0

Table 5. Rare and Unique Natural Areas within the project corridor

Name	Area Type
Piedmont/Mountain Semipermanent Impoundment	Natural Community
Jordan Game Land	Natural Heritage Program Managed Area
New Hope Creek Bottomlands Forest RHA	Dedicated Nature Preserve, Significant Natural Heritage Area
New Hope Creek Floodplain Forest	Significant Natural Heritage Area, Macrosite
Third Fork Creek Wetlands	Significant Natural Heritage Area



NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
 PROGRAM DEVELOPMENT BRANCH

FS-1005C

NC 54

FROM I-40 TO NC 55

DURHAM COUNTY

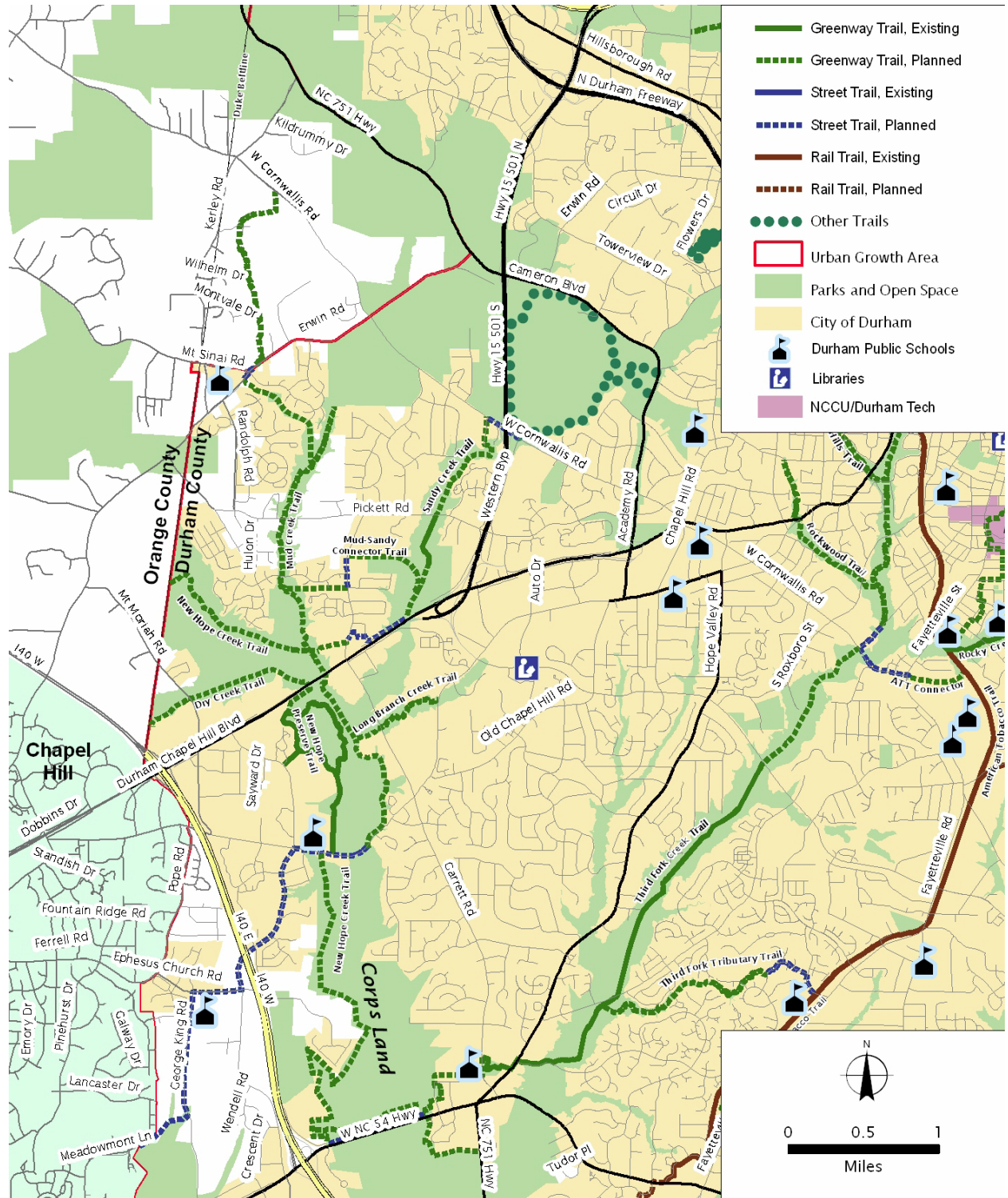
DIVISION 5

FIGURE 1

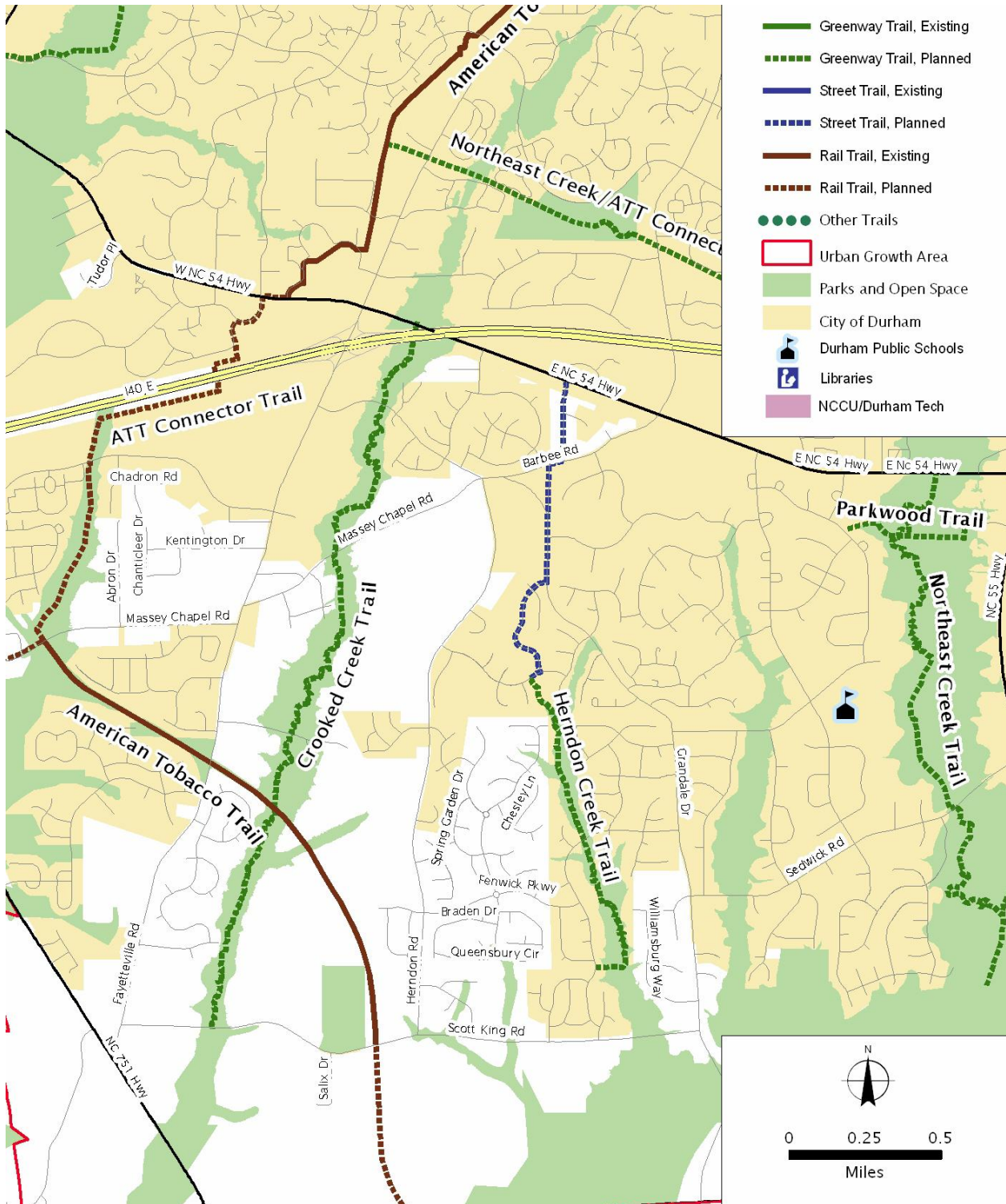
Appendix A: Durham Trails and Greenways Master Plan

Appendix B: City of Durham and Durham-Chapel Hill-Carrboro MPO
comments

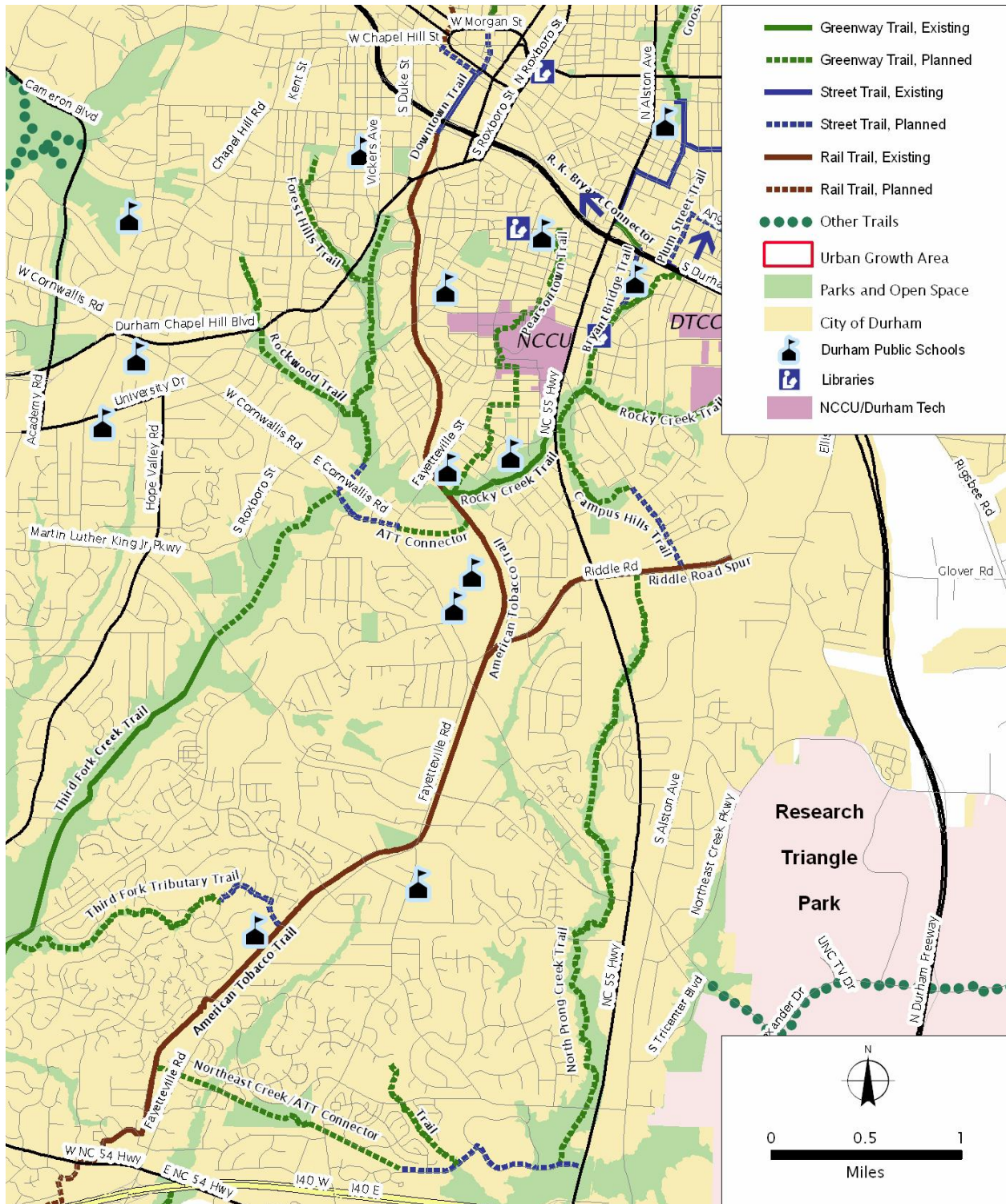
Map 5, New Hope Greenway



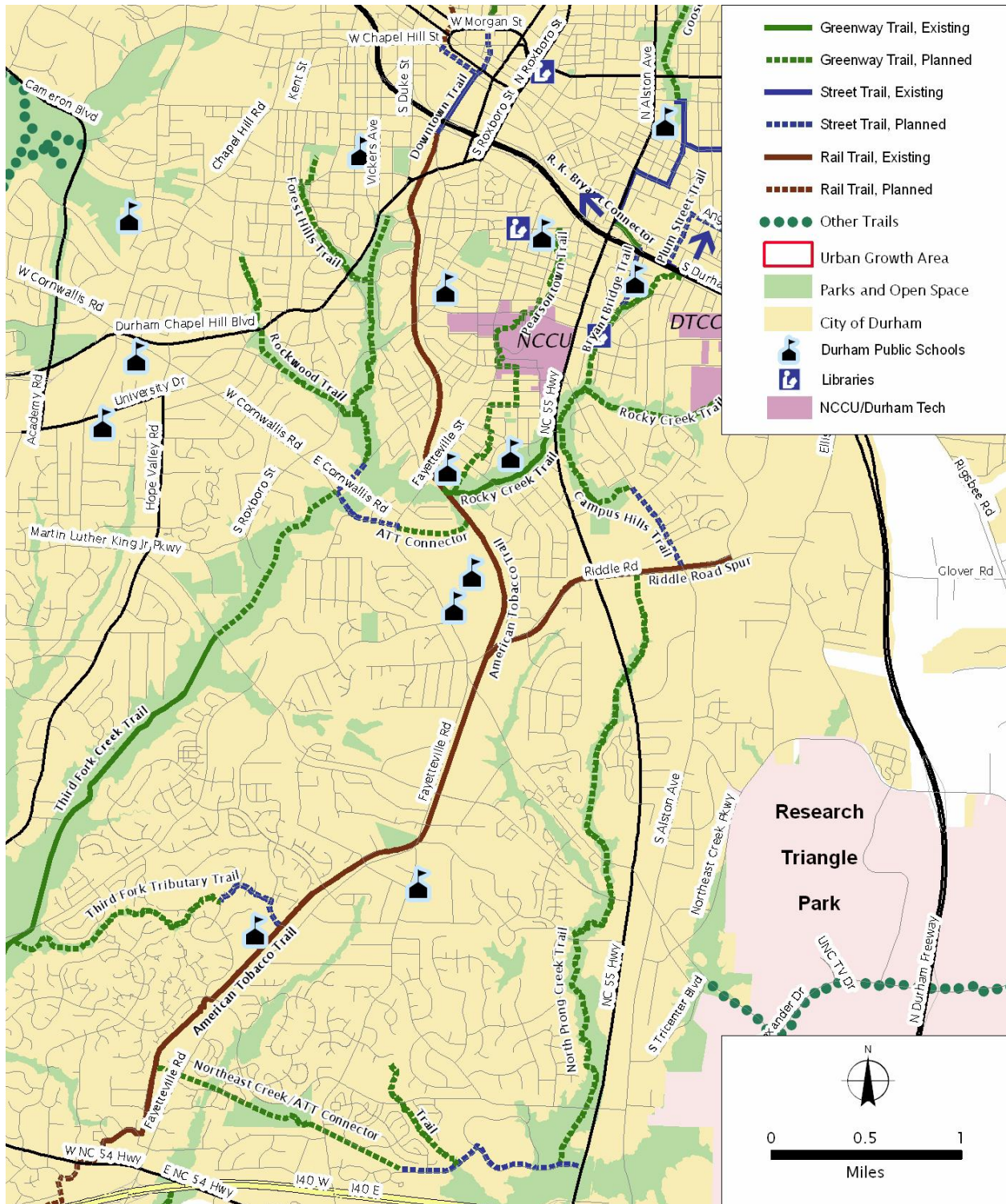
Map 8, Crooked Creek Greenway



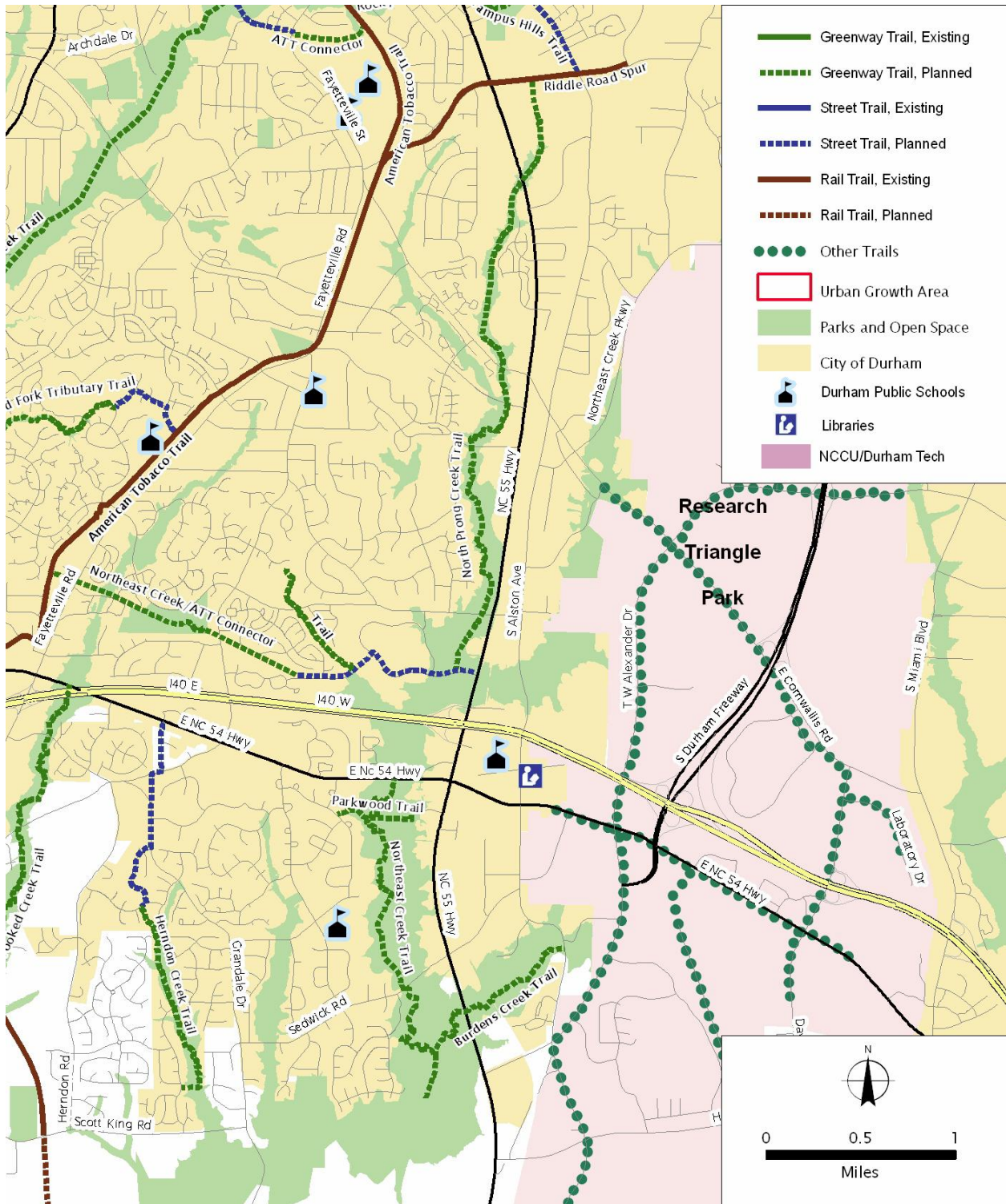
Map 9, North/South Greenway, Southern Section



Map 15, American Tobacco Trail Greenway



Map 16, Northeast Creek Greenway





January 30, 2012

Lynnise M. Hawes, P.E.
Feasibility Studies Unit
NCDOT Program Development Branch
1534 MSC
Raleigh, NC 27699-1534

Re: FS-1005C (U-5324), Widening of NC 54 from NC 55 to I-40 in Durham County

Dear Ms. Hawes:

I am replying on behalf of the City of Durham and the Durham-Chapel Hill-Carrboro (DCHC) MPO in response to your December 15, 2011 letter requesting comments on the feasibility study report for the above-referenced project. Comments are as follows:

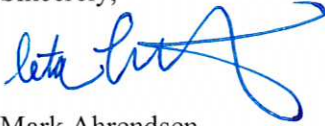
1. Both the City and MPO recognize the need for improvements, including additional roadway capacity, in the NC 54 corridor from I-40 to NC 55. NC 54 provides access to Research Triangle Park and is a parallel route to I-40. NCDOT's SPOT process ranked improvements to this section of NC 54 as the highest ranked project in the state in the Mobility/Regional/Highway category during the 2012-2018 TIP Prioritization process.
2. The report recommends a future cross-section for NC 54. Please document how this cross-section was identified in keeping with NCDOT's Complete Streets document. In particular, please include documentation on the development context of the corridor (including current and future land use) and how this context supports the recommended street type for each segment.
3. For the description of alternatives for Section 1 (page 3), the provision of a 23-foot median is not needed for the section of NC 54 that crosses the New Hope Creek bottomlands.
4. For the description of alternatives for Section 2 (page 4), Culvert #46 may need to be replaced rather than extended. This culvert may be undersized.
5. The City of Durham and DCHC MPO acknowledge and appreciate the provisions for bus transit within the NC 54 corridor. In addition to the improvements already noted in the report, please include transit pullouts at NC 54 and Highgate Drive (Section 2). In addition to pullout lanes we also request that the study include accommodations for transit users, including necessary right-of-way for shelters and safe pedestrian roadway crossings.

6. There is no reference in the report to the recently completed corridor study for NC 54 between I-40 in Durham and US 15-501 in Chapel Hill. The report needs to include a section highlighting the recommendations from that study, especially concerning recommendations at the I-40 interchange and bicycle-pedestrian movement across I-40 and along the corridor.
7. The City of Durham Public Works Department, Stormwater Division is conducting basin area studies of Northeast Creek and Third Fork Creek, both of which are in the NC 54 corridor. To protect water quality, the project design should treat storm water at its source through best management practices and other innovative strategies. Please include a discussion under the Community Issues section citing this study and noting that these best management practices will be followed.
8. The NC Natural Heritage Programs lists a number of significant sites in the NC 54 corridor, including Northeast Creek Floodplain Forest, New Hope Creek Floodplain Macrosite, New Hope Creek Bottomland Forest, and New Hope Creek Floodplain Forest (Lower). Any new bridge designs, culverts, and crossings should allow wildlife movement to occur within and between the sites. Erosion control methods should be best management practices and low-impact design as these areas are recognized under Durham's ordinance as areas to be protected.
9. Leigh Farm Park is a city park and historic site that is near the NC 54 corridor and is accessed from NC 54. Reference to this amenity should be made in the Community Issues section.
10. The needs of pedestrians at intersections should be carefully considered. Intersections that require pedestrians to cross six lanes of traffic (or more) are not desirable, and every effort should be made to carefully consider designs that reduce pedestrian crossing distance, provide refuge areas, and otherwise improve the safety and comfort of pedestrians. In particular, safer, less intimidating pedestrian crossings are needed at major intersections, including NC 55, Fayetteville Road, and Hope Valley Road. Please reference these pedestrian improvements within each relevant section of the report.
11. Several trails in adopted plans cross NC 54, including Northeast Creek Trail (proposed), Herndon Creek Trail (proposed), Crooked Creek Trail (proposed), Third Fork Creek Trail Extension (proposed), and American Tobacco Trail (construction bid opening on January 25, 2012). Adopted plans also include a trail that parallels NC 54 between Garrett Road and Leigh Farm Park, potentially passing through the NC 54 Waterfowl Impoundment area. These trails should be considered as part of the NC 54 improvements as provided in NCDOT's administrative guidelines to consider greenways and greenway crossings during the highway planning process. Grade separation at locations where these trails cross NC 54 should be considered as part of the study. For a link to the Durham Trails and Greenways Master Plan, please see the following link:
<http://durhamnc.gov/ich/cb/ccpd/Documents/Adopted%20Plans/Durham%20Trails%20and%20Greenways%20Master%20Plan%20and%20Appendices.pdf>
12. As an alternative to on-road bicycle lanes, a multi-use path should be considered along NC 54 due to the traffic volumes and speeds.
13. While the use of 14-foot wide outside travel lanes instead of dedicated bike lanes may save money, bike lanes are the "preferred option" per the "NCDOT Complete Streets Planning and Design Guidelines (January 2012 Draft)." Has the option of using 11-foot travel lanes (instead of 12-foot) been considered to reduce costs?

14. I-40 is a barrier to traffic movement in southwest Durham – forcing all traffic to cross I-40 on a handful of roadways. In order to relieve traffic congestion at major intersections along NC 54, it may be beneficial to add additional collector streets and /or bicycle-pedestrian crossings over I-40. Such crossings should be studied as part of the Comprehensive Transportation Plan planning process.
15. Durham has goals to reduce greenhouse gas (GHG) emissions and vehicle miles traveled (VMT). Improved street and non-motorized connectivity increases accessibility and route options, can reduce VMT and GHG emissions, can improve emergency response time, and reduce congestion at major intersections. The feasibility study should review opportunities for improved street and non-motorized connectivity in the NC 54 corridor. City of Durham and DCHC MPO staff may be able to assist with this review.
16. The American Tobacco Trail (ATT) crosses NC 54 within the study limits for this project. The report needs to show this crossing on all maps and should address safe crossing accommodations and appropriate signing for this important regional facility. Given the forecast traffic volumes for NC 54 and the regional significance of the ATT, please include an estimate for a grade separated crossing of the ATT crossing near Rollingwood Drive/Highgate Road intersection.
17. On page 2, under the Background section, a reference is made to the October 1991 Durham-Chapel Hill-Carrboro Urban Area Thoroughfare Plan. The most recent planning document for the MPO is the 2035 Long Range Transportation Plan; please reference in place of the Thoroughfare Plan.
18. On page 3 there is a discussion of level of service (LOS) for the identified segments of NC 54. Please identify which segments operate at which LOS and supplement with a table and/or map showing both intersection and segment LOS. Also in this section, there is mention of significant improvements needed to bring specific intersections up to a LOS D. Please specify the types of improvements needed, what improvements specifically will be implemented as a part of this project, whether there are currently improvements planned that are not a part of this project.
19. On page 3, please include cost estimates for both the 2000-foot bridge structure and for an additional berm width and shorter bridge.
20. Under the Recommendations section, please provide more details under the discussion for Section 2 and Section 4. In particular, please document current LOS, projected LOS with the project, and what additional improvements would be needed to bring Fayetteville Road (Section 2) and NC 55 (Section 4) up to LOS D.
21. On page 7, please clarify whether the decrease of \$7,600,000 includes right-of-way and construction.
22. Finally, given the significance of this corridor to the City of Durham and the DCHC MPO, we do believe that it would be beneficial to conduct a more comprehensive corridor study similar to the one recently conducted for the western portion of NC 54. This would allow for a more context sensitive analysis and design.

Thank you for the opportunity to comment. The City of Durham and DCHC MPO look forward to working with NCDOT as the project development process moves forward. In particular we expect that we will have opportunities to review and comment on more detailed roadway design plans at some point in the future. You can contact me at: mark.ahrendsen@durhamnc.gov or 919-560-4366 ext. 36410.

Sincerely,



for

Mark Ahrendsen
Director, Durham Department of Transportation
TCC Chair, Durham-Chapel Hill-Carrboro MPO

cc: Mayor William V. "Bill" Bell
Thomas J. Bonfield, City Manager
Lydia Lavelle, Carrboro Board of Aldermen, TAC Chair
Steve Medlin, City-County Planning Director
John Tallmadge, Triangle Transit