

ACCESSIBILITY AUDIT CHAPEL HILL TOD PLANNING & UDO VISIONING STUDY



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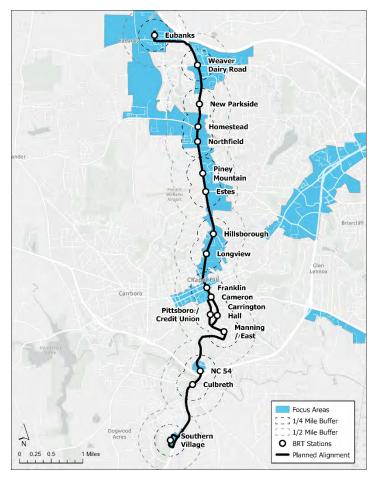
CHAPTER 1: INTRODUCTION

STUDY OVERVIEW

The focus of the transit-oriented development (TOD) and focus area accessibility audit was to improve connections for walking, rolling, and bicycling within the first/last mile of the future bus rapid transit corridor as well as two key redevelopment areas of the town. Building upon several existing plans, this study aligns with the town's goal of increasing pedestrian, bicycle, and transit modeshare (to 35% by 2025) while producing a set of recommended improvements to the sidewalk and bike network to ensure the future transit line is fully utilized via direct and accessible multimodal routes.

North-South Bus Rapid Transit Project

The North-South (N-S) Bus Rapid Transit (BRT) project spans 7.3 miles and 17 stations along Martin Luther King Jr.



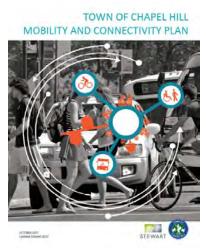
Boulevard, Columbia Street, and US Highway 15-501. The BRT line will interconnect Chapel Hill's major destinations of downtown and the University of North Carolina with key residential and commercial areas from the northern to southern border of the town. The planning, design, and implementation of the project was closely coordinated with this accessibility study of station areas though was not directly included within the scope of this specific project.

STUDY PROCESS

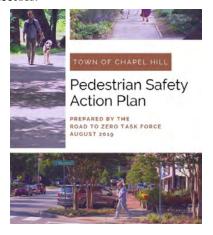
The study included existing conditions analysis (existing transportation network, land use, and crash history), gap and deficiencies identification via an in-person audit and stakeholder engagement, and recommended improvements to fully leverage this historic investment in high-quality transit for Chapel Hill. Walk and bikesheds were developed to demonstrate the actual distance someone walking, or bicycling could travel in five, ten, and 15 minutes via the existing sidewalk, sidepath, and greenway network. Gaps and recommendations were produced within the ten-minute walksheds to ensure accessible routes for those of all ages and abilities are available to each of the 17 future stations and within two key focus areas of the town. Key existing conditions maps can be found in the Appendix A.

PREVIOUS PLANNING EFFORTS

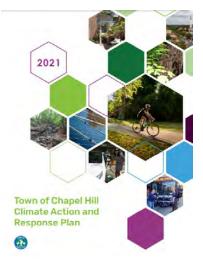
Several planning efforts were recently completed along or near the corridor. To ensure this study aligns with identified goals and decisions made in previous plans, the project team will integrate relevant information into the study recommendations. Key details of recommended projects from each plan can be found in the Appendix.



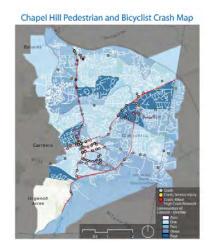
Sets the stage for the buildout of a comprehensive transportation system that follows Complete Street best practices. Specific recommended infrastructure improvements that impact this study include those along Martin Luther King Jr. Boulevard, US Highway 15-501, and greenway connectors.



Identifies applicable infrastructure projects within the study areas for coordination an review.



Identifies goals for increased modeshare of walking, bicycling, and transit use which this study directly supports via infrastructure recommendations.



Provides background on safety issues within the areas of study and supports the identification of gaps and deficiencies produced by this study.

STAKEHOLDER ENGAGEMENT/AUDIT

Several rounds of stakeholder engagement were completed via in-person and virtual meetings with town staff, advocates, and key stakeholders from the broader community. At each milestone, the study team presented analysis and finding, and invited opportunities for feedback. A key milestone in the study process was walking audits conducted in-person by the study team and in coordination with key stakeholders to learn about the station areas and issues directly from those most familiar with the town.

Audit Process

The walking audits were completed on April 14 and 15 2022 by the study team in coordination with key stakeholders and split into north and south portions over the course of two days. A total of ten stakeholders participated in the walk audits and review of all station areas. A handheld geospatial device was used to collect gaps, deficiencies, and comments in real-time, and have all that data uploaded to an online map for distribution to town staff.



CHAPTER 2: STATION/FOCUS AREA REVIEW, GAP ANALYSIS, AND RECOMMENDATIONS

The following section provides high-level background of the context and existing conditions surrounding each station, the gaps and deficiencies found via the in-person audit, and recommended improvements to enhance walking, rolling, and bicycling to/from each future BRT station. For each station area and focus area, maps and tables were developed to show gaps and list recommendations. These maps are included in Appendix B.

Of note, it was assumed that sidepaths will be constructed along both sides of Martin Luther King Jr. Boulevard and US Highway 15-501 for the entirety of the BRT route and excluding site-constrained locations such as downtown Chapel Hill. It is recommended that this infrastructure be constructed as a part of the N-S BRT project.

EUBANKS

Existing Conditions

The Eubanks Station area is the northernmost terminus of the proposed Bus Rapid Transit line. This is an established bus park and ride parking lot serving the northern reaches of Chapel Hill. The station is adjacent to a large, denser apartment complex in addition to townhomes and single-family residential. Developable land still exists surrounding much of the station. A coffee shop and fast-food restaurant also exist within walking distance.

Audit Findings - Gaps and Deficiencies

Three gaps in the existing sidewalk network were identified during the audit on Carraway Crossing and the north side of Eubanks Road.

- Sidewalk gap (1): On Carraway Crossing, the existing sidewalk abruptly ends between Carraway
 Crossing Village and Northwood Drive, as well as some missing minor connections or curb ramps
 within the Carraway Crossing Village site to facilitate east-west travel between Eubanks Station and
 commercial destinations east.
- Sidewalk gap (2): On the north side of Eubanks Road from the southwest corner of the park and ride to Rex Road which includes commercial businesses.
- Sidewalk gap (3): On the north side of Eubanks Road from Village Center Drive to Martin Luther King Jr. Boulevard. In addition to the sidewalk, no crossing of Eubanks Road exists between Northwood Drive and Martin Luther King Jr. Boulevard. It was observed during the audit that a Starbucks employee and that person's family were trying to cross Eubanks Road at Village Center Drive to access a bus stop on the south side of Eubanks Road.

Recommended Improvements

- Sidewalk gap (1): Extend sidewalk on the south side of Carraway Crossing 250 linear feet to connect with Northwood Drive.
- Sidewalk gap (2): Extend sidewalk on the north side of Eubanks Road 450 linear feet to connect with Rex Road.

 Sidewalk gap (3): Extend sidewalk on the north side of Eubanks Road 925 feet to connect with Martin Luther King Jr. Boulevard. In conjunction, add an enhanced crosswalk with Rectangular Rapid Flashing Beacons (same design as the crossing at Carraway Crossing immediately to the west).

WEAVER DAIRY ROAD

Existing Conditions

The Weaver Dairy Road Station area is located at a major intersection and surrounded by apartment buildings, single-family homes, and low-density commercial and retail. It is a key bicycle corridor interconnecting east and west areas of Chapel Hill.

Audit Findings - Gaps and Deficiencies

One gap and one sidewalk upgrade were identified during the audit on the north sides of Weaver Dairy Road and Westminster Drive.

- Sidewalk gap (4): On Weaver Dairy Road abruptly ends along the north side and immediately west of Martin Luther King Jr. Boulevard.
- Sidewalk gap (5): On the north side of Westminster Drive several sections of sidewalk are in disrepair and not accessible to those of all abilities.

Recommended Improvements

- Sidewalk gap (4): Extend sidewalk on the north side of Weaver Dairy Road 2,110 linear feet to connect with a future Butterfield Court. This recommendation is dependent upon that roadway connection being completed.
- Sidewalk upgrade (5): Reconstruct 380 linear feet of sidewalk on the north side of Westminster Drive.

NEW PARKSIDE

Existing Conditions

The New Parkside Station area is primarily single-family homes, in addition to some townhomes, offices, and part with sports facilities.

Audit Findings - Gaps and Deficiencies

Three sidewalk gaps were identified during the audit along New Parkside Drive, Stateside Drive, and Dixie Lane.

- Sidewalk gap (6): On New Parkside Drive no sidewalk is present along the south side to connect with existing sidewalk and ADA-compliant curb ramp crossing at New Stateside Drive. The sidewalk is not accessible along the north side today due to a missing curb ramp at New Stateside Drive. In addition to the sidewalk, no crossing of Martin Luther King Jr. Boulevard exists at New Parkside Drive.
- Sidewalk gap (7): On Stateside Drive no sidewalk exists today. In addition to the sidewalk, no crossing of Martin Luther King Jr. Boulevard exists at Stateside Drive.
- Sidewalk gap (8): On Dixie Lane no sidewalk exists today. In addition to the sidewalk, no crossing of Martin Luther King Jr. Boulevard exists at Dixie Lane.

Recommended Improvements

- Sidewalk gap (6): Extend sidewalk on the south side of New Parkside Drive 750 linear feet to connect with existing sidewalk that is ADA accessible at New Stateside Drive. Construct a corresponding enhanced pedestrian crossing of Martin Luther King Jr. Boulevard at the New Parkside Drive intersection.
- Sidewalk gap (7): Construct a sidewalk along one side of Stateside Drive minimum of 700 linear feet.
 Construct a corresponding enhanced pedestrian crossing of Martin Luther King Jr. Boulevard at the Stateside Drive intersection.
- Sidewalk gap (8): Construct a sidewalk along one side of Dixie Lane minimum of 660 linear feet.
 Construct a corresponding enhanced pedestrian crossing of Martin Luther King Jr. Boulevard at or near the Dixie Lane intersection.

HOMESTEAD

Existing Conditions

The Homestead Station area is primarily townhomes, in addition to some retail and a church. A homeless support services facility is planned in the northwest quadrant of the intersection.

Audit Findings - Gaps and Deficiencies

One bicycle gap was identified along Homestead Road.

 Bicycle gap (9): On Homestead Road no on-road bicycle facilities exist and are important for implementation until a sidepath is constructed in the long-term.

Recommended Improvements

Bicycle gap (9): Construct an on-road, dedicated bicycle facility of at least 2,500 linear feet.

NORTHFIELD

Existing Conditions

The Northfield Station area includes a large apartment complex, single-family homes, a mobile home community, and low-density retail.

Audit Findings - Gaps and Deficiencies

Three sidewalk gaps were identified along Northfield Drive, Taylor Street, and Critz Drive.

- Sidewalk gap (10): On Northfield Drive no sidewalk is present along the south side though this is dependent upon development.
- Sidewalk gap (11): On Taylor Street no sidewalk exists today.
- Sidewalk gap (12): On Critz Drive no sidewalk exists today. In addition to the sidewalk, no crossing
 of Martin Luther King Jr. Boulevard exists in the vicinity.

Recommended Improvements

• Sidewalk gap (10): Extend sidewalk on the south side of Northfield Drive a minimum of 500 linear feet though this recommendation is dependent upon future development of the area.

- Sidewalk gap (11): Construct a sidewalk on one side of Taylor Street 1,350 liner feet to connect with
 the existing goat path at Lake Ellen (which should also be upgraded to extend connections further
 east into the other neighborhoods).
- Sidewalk gap (12): Construct a sidewalk on one side of Critz Drive 400 linear feet to Windsor Circle.
 Construct a corresponding enhanced pedestrian crossing of Martin Luther King Jr. Boulevard at Critz Drive, Ashley Forest Road, or in between the two.

PINEY MOUNTAIN

Existing Conditions

The Piney Mountain Station area primarily includes townhomes to the east and the largest tract of developable land in Chapel Hill to the west (the old airport).

Audit Findings - Gaps and Deficiencies

One sidewalk/bicycle gap was identified along Piney Mountain Road west of Martin Luther King Jr. Boulevard and one sidewalk gap along Shorewood Drive.

- Sidewalk/bicycle gap (13): No facility for walking or biking exists along Piney Mountain Road to access the nearby park and trails.
- Sidewalk gap (14): On Shorewood Drive no continuous sidewalk connection exists.

Recommended Improvements

- Sidewalk/bicycle gap (13): Construct a sidewalk and on-road bicycle facility 1,500 linear feet to connect Martin Luther King Jr. Boulevard with the adjacent park and trails.
- Sidewalk gap (14): Construct a continuous sidewalk on one side of Shadowood Drive 350 linear feet.

ESTES

Existing Conditions

The Estes Station area is low density with some University of North Carolina facilities and a church. Ongoing mixed-use redevelopment is occurring in this area.

Audit Findings - Gaps and Deficiencies

Two sidewalk/bicycle gaps were identified along Estes Drive.

- Sidewalk/bicycle gap (15): East of Martin Luther King Jr. Boulevard non-compliant sidewalk exists and no bicycle facility.
- Sidewalk/bicycle gap (16): West of Martin Luther King Jr. Boulevard no sidewalk or bicycle facility exists.

Recommended Improvements

- Sidewalk/bicycle gap (15): Construct a sidewalk and bicycle facility on Estes Drive east at least 1,500 linear feet.
- Sidewalk/bicycle gap (16): Construct a sidewalk and bicycle facility on Estes Drive west at least 700 linear feet.

HILLSBOROUGH

Existing Conditions

The Hillsborough Station area is a mixture of uses including a variety of housing densities (single-family, townhome, and apartments), offices, retail/restaurants, and University of North Carolina facilities. The Bolin Creek Greenway is also immediately adjacent to the proposed station and a key multimodal connection.

Audit Findings - Gaps and Deficiencies

Two sidewalk gaps were identified along Barclay Road and Mt. Bolus Road, two sidewalk gaps and/or areas of non-ADA compliance along Bolinwood Drive and Hillsborough Street, and a missing access point to the Bolin Creek Greenway.

- Sidewalk gap (17): On Barclay Road no sidewalk exists. In addition to the sidewalk, no crossing of Martin Luther King Jr. Boulevard exists in the vicinity.
- Sidewalk gap (18): On Mt. Bolus Road no sidewalk exists.
- Sidewalk gap (19): On Bolinwood Drive potential areas of non-ADA compliance exist and should be further reviewed.
- Greenway gap (20): No dedicated bike access (curb cut) from Martin Luther King Jr. Boulevard to the greenway and narrow sidewalk access to the greenway on the west side. Lack of stairway access on west side as well which limited pedestrian opportunities to leverage the grade separated undercrossing directly.
- Sidewalk gap (21): On Hillsborough Street no dedicated sidewalk on the north side at the gas station
 and sections of potentially non-ADA compliant sidewalk driveway crossings for further review on
 both sides of the corridor.

Recommended Improvements

- Sidewalk gap (17): Construct a sidewalk along one side of Barclay Road 3,500 linear feet. Construct a corresponding enhanced pedestrian crossing of Martin Luther King Jr. Boulevard at Barclay Road.
- Sidewalk gap (18): Construct a sidewalk on one side of Mt. Bolus Road at least 1,200 linear feet.
- Sidewalk gap (19): Improve sidewalk quality on Bolinwood Drive to ensure ADA-compliance.
- Greenway gap (20): Add curb cut access from Martin Luther King Jr. Boulevard for bicycles, construct a stairwell on the west side for pedestrians mimicking what already exists on the east side, and widen the west side access sidewalk to a sidepath to remove conflicts between pedestrian and bicyclists leverage the undercrossing.
- Sidewalk gap (21): Improve sidewalk quality on Hillsborough Street to ensure ADA-compliance.

LONGVIEW

Existing Conditions

The Longview Station area includes primarily medium-density townhomes and higher density apartment buildings.

Audit Findings - Gaps and Deficiencies

Two sidewalk gaps were identified along Longview Street and N. Columbia Street.

- Sidewalk gap (22): On N. Columbia Street construct and improve the sidewalk to fill gaps and achieve ADA-compliance.
- Sidewalk gap (23): On Longview Street construct sidewalk to fill gap.

Recommended Improvements

- Sidewalk gap (22): Improve sidewalk quality and fill sidewalk gaps N. Columbia Street to ensure ADA-compliance.
- Sidewalk gap (23): On Longview Street construct a sidewalk 350 linear feet.

FRANKLIN

Existing Conditions

The Franklin Station area is centrally located adjacent to the University of North Carolina campus. It is an area that is utilized heavily by pedestrians and bicyclists. The pedestrian network in this area is largely intact, with few streets lacking sidewalks on both sides. The area contains a mix of services and housing that cater to the University including student housing, apartments, restaurants, and retail stores.

Audit Findings - Gaps and Deficiencies

Four gaps in the existing sidewalk network were identified during the audit on Stevens Street, North Street, and Pritchard Avenue.

- Sidewalk gap (24): On Stephens Street, the existing sidewalk extends approximately 30 feet from the intersection with Martin Luther King Jr. Boulevard on the north side. No additional sidewalk is located on Stevens Street.
- Sidewalk gap (25): At the corner of North Street and Henderson Street curb ramps are blocked by an
 insurmountable curb and are inaccessible.
- Sidewalk gap (26): There are no sidewalks on either side of North Street between Henderson Street and Martin Luther King Jr. Boulevard.
- Sidewalk gap (27): There are no sidewalks on either side of Pritchard Avenue between Carr Street and East Rosemary Street.

Recommended Improvements

- Sidewalk gap (24): Extend sidewalk on the north side of Stephens Street 500 linear feet to connect Martin Luther King Jr. Boulevard with North Columbia Street.
- Sidewalk gap (25): Reconstruct sidewalk curb ramps on the west side of Henderson Street at North Street to compliance to improve pedestrian accessibility.
- Sidewalk gap (26): Install a sidewalk on the north side of North Street between Henderson Street and Martin Luther King Jr. Boulevard to provide pedestrian access.
- Sidewalk gap (27): Install a sidewalk on the east side of Pritchard Avenue between Carr Street and East Rosemary Street to improve pedestrian access.

CAMERON

Existing Conditions

The Cameron Station area is in the heart of the University of North Carolina community and serves as a main entrance to campus at East Cameron Avenue. The proposed station will be located on South Columbia Street on the north side of West Cameron Avenue. The area includes single family housing, campus buildings including dormitories, University offices, bed and breakfast and hotels, and fraternity and sorority houses. West Cameron Avenue is a one-way street between Columbia Street and Pittsboro Street.

Audit Findings - Gaps and Deficiencies

There are seven gaps and deficiencies identified in the Cameron Station area that include impacts to the sidewalk network and bike lanes.

- Sidewalk deficiency (28a): The sidewalk on the north side of Cameron Avenue is made of brick and
 has several missing or uneven individual bricks. The sidewalk is also elevated above street level,
 posing challenges to grades at crossing locations.
- Sidewalk deficiency (28b): The sidewalk on the south side of Cameron Avenue is made of brick and
 is elevated above street grade. There are three large specimen trees with trunks growing immediately
 adjacent to the sidewalk that are causing issues with root flare and brick displacement.
- Bike lane gap (28c): The bike lanes that extend from the west along West Cameron Avenue stop
 abruptly at Pittsboro Street, creating a one block gap between Pittsboro Street and Columbia Street
 to connect bicycle facilities with the heart of campus.
- Sidewalk deficiency (29): The sidewalk along Mallette Street between Dawson Alley and West Franklin Street is narrow and obstructed by utility poles. The walk surface is brick.
- Sidewalk gap (30): The sidewalk along Wilson Street is inconsistent and is in poor condition where it does exist. There are no pedestrian curb ramps present.
- Sidepath gap (31): There is no perpendicular crossing for bicycles over the railroad at Cameron and Merritt Hill Road.
- Sidepath gap (32): There is no dedicated bicycle facility on the eastbound side of Cameron Avenue, though it is clearly well used.

Recommended Improvements

- Sidewalk deficiency (28a): Redesign the sidewalk along the north side of West Cameron Avenue using concrete to provide an accessible walkway.
- Sidewalk deficiency (28b): Redesign the sidewalk along the south side of West Cameron Avenue using concrete to provide an accessible walkway. This may impact specimen trees which are causing the surface of the sidewalk to break.
- Bike lane gap (28c): Install 380 linear feet of Bikeable Road Conversion along West Cameron Avenue between Pittsboro Street and campus.
- Sidewalk deficiency (29): Install 250 linear feet of new sidewalk on the east side of Mallette Street that is wide enough for pedestrian access around the utility poles.
- Sidewalk gap (30): Install 400 linear feet of sidewalk to replace the inconsistent existing sidewalk to create continuous pedestrian access.

- Sidepath gap (31): Re-align the bike lane to approach the railroad crossing at a perpendicular angle.
- Sidepath gap (32): Install 2,000 linear feet of bike lane or a Bikeable Road Conversion along the south side of West Cameron Avenue.

PITTSBORO/CREDIT UNION

Existing Conditions

The Pittsboro Station area is located in an area that is mixed single family residential housing and University offices and buildings. The proposed station is situated between a credit union and the UNC School of Social Work. This area is used heavily by students, faculty, and staff, as well as local residents.

Audit Findings - Gaps and Deficiencies

Two sidewalk gaps were identified in the area around Pittsboro Station. They include:

- Sidewalk gap (33a): Gaps in the existing sidewalk along West University Drive between Pittsboro Street and Briar Bridge Lane.
- Sidewalk gap (33b): No sidewalk exists along the south side of Vance Street, though a well-worn goat
 path exists in this location, extending to Ransom Street.
- Sidewalk gap (33c): A well-worn goat path exists along the east side of Ransom Street.

Recommended Improvements

- Sidewalk gap (33a): Install 450 linear feet of sidewalk along West University Drive between Pittsboro Street and Briar Bridge Lane.
- Sidewalk gap (33b): Install 700 linear feet of sidewalk along the south side of Vance Street between Pittsboro Street and Ransom Street.
- Sidewalk gap (33c): Install 430 linear feet of sidewalk along Ransom Street.

CARRINGTON HALL

Existing Conditions and Audit Findings

The Carrington Hall Station area is centrally located on the UNC Medical Center campus and has a well-established pedestrian network in place. There were no gaps or deficiencies identified at the Carrington Hall Station area.

MANNING / EAST

Existing Conditions and Audit Findings

The Manning/East Station area is located in an area of the UNC Medical Center campus that is undergoing expansion. The area has a well-established network of sidewalks providing adequate pedestrian mobility. There were no gaps or deficiencies identified at the Manning/East Station area.

NC 54

Existing Conditions

The NC-54 Station area is characterized by a four-lane highway and the Morgan Creek Ravine that both extend under South Columbia Street. The area is surrounded by single-family homes but has apartment complexes interspersed with trails and parks. The Morgan Creek Trail extends alongside Morgan Creek and establishes a major pedestrian and recreation corridor.

Audit Findings - Gaps and Deficiencies

There are four gaps and deficiencies identified in the NC 54 Station Area that impact pedestrian and bicycle movement. These include:

- Sidewalk gap (34): There is no sidewalk present on the west side of South Columbia Street between Purefoy Road and the NC 54 intersection, though a goat path is present indicating a desirable location for pedestrian use.
- Sidewalk gap (35): There is no sidewalk on either side of Purefoy Road east of South Columbia Street.
- Sidewalk Deficiency (36): The sidewalk on the east side of South Columbia Street between Purefoy Road and NC 54 is less than four-feet wide and is non-compliant.
- Sidewalk gap (37): There is no sidewalk on the east side of South Columbia Street at the NC 54 offramp extending south to Mt Carmel Road.

Recommended Improvements

- Sidewalk gap (34): Extend the sidewalk 500 linear feet on the west side of South Columbia Street between Purefoy Road and the NC 54 intersection.
- Sidewalk gap (35): Extend at least 650 linear feet of sidewalk on both sides of Purefoy Road east of South Columbia Street.
- Sidewalk Deficiency (36): Reconstruct 500 linear feet of sidewalk on the east side of South Columbia Street between Purefoy Road and NC 54 to six feet wide.
- Sidewalk gap (37): This issue will be resolved with a new compliant sidewalk on the west side. Once completed, install signage and barriers to keep pedestrians from walking on the east side.

CULBRETH

Existing Conditions

The Culbreth Station area is defined by the connection to the Morgan Creek Trail and is surrounded by single family houses. Culbreth Middle School and Mi Escuelita Spanish Immersion Preschool are located along Culbreth Road on the west side of South Columbia Street.

Audit Findings - Gaps and Deficiencies

There are five deficiencies and gaps in the sidewalk and sidepath network in the Culbreth Station area. These include:

- Sidewalk Deficiency (38): There is a non-compliant sidewalk that is less than four feet wide on Culbreth Road between the middle school entrance and Culbreth Park Drive.
- Sidepath Deficiency (39): There is no curb cut from the bike lane on South Columbia Street to access the Morgan Creek Trail at the trail access on the north side of Culbreth Road.
- Sidepath Deficiency (40): There is no access to the Morgan Creek Trail access path from South Columbia Street on the south side of Culbreth Road. Cyclists must cut into Culbreth Road to access the sidepath.
- Sidewalk gap (41): There is no sidewalk on either side of Mt. Carmel Church Road on the east side of South Columbia Street.
- Sidepath gap (42): There is no sidepath connection on the east side of the Morgan Creek Bridge on South Columbia Street.

Recommended Improvements

- Sidewalk Deficiency (38): Widen 400 linear feet of sidewalk on Culbreth Road between the middle school entrance and Culbreth Park Drive.
- Sidepath Deficiency (39): Install an accessible curb cut from the bike lane on South Columbia Street to access the Morgan Creek Trail at the trail access on the north side of Culbreth Road.
- Sidepath Deficiency (40): Install an accessible access to the Morgan Creek Trail from South Columbia Street on the south side of Culbreth Road.
- Sidewalk gap (41): Construct 650 linear feet of sidewalk on one or both sides of Mt. Carmel Church Road on the east side of South Columbia Street.
- Sidepath gap (42): Widen bridge to accommodate pedestrians or facilitate all pedestrian activity on the west side of the bridge.

SOUTHERN VILLAGE

Existing Conditions

The Southern Village Station area is the southern terminus of the proposed Bus Rapid Transit line. This is an established bus park and ride parking lot serving the southern reaches of Chapel Hill. The station is surrounded by single-family houses and Southern Village, a mixed-use development with several varieties of housing, restaurants, and retail. Mary Scroggs Elementary School is located west of the station location, and the Southern Community Park is just to the south of the station.

Audit Findings - Gaps and Deficiencies

Two sidewalk gaps and deficiencies were identified at the Southern Village Station area. These include:

- Sidewalk deficiency (43): There is a noncompliant sidewalk connection across Sumac Road on the north side of the bus station terminal that forces pedestrians and wheeled users to utilize the roadway instead of the sidewalk.
- Sidewalk gap (44): There is no sidewalk on the west side of Sumac Road south of the bus terminal.

Recommended Improvements

Sidewalk deficiency (43): Reconstruct the sidewalk pedestrian ramps at the Sumac Road pedestrian
crossing on the north side of the bus station terminal.

 Sidewalk gap (44): Install 1,000 linear feet of sidewalk on the west side of Sumac Road south of the bus terminal.

NC 54 FOCUS AREA

Existing Conditions

The NC 54 Focus Area is located on the south side of Raleigh Road/NC 54 from Fordham Boulevard to the city limits, just west of Downing Creek Parkway, a distance of approximately 1.6 miles. It extends south to Prestwick Road and includes a mix of residential and mixed development land use on the west and single-family homes on the east.

The NC 54 Focus Area includes sporadic sidewalk development that is primarily located adjacent to multiuse, East 54 development and along Prestwick Road. On the south side of Raleigh Road, 1-mile-long multiuse sidepath exists between Hamilton Road and Barbee Chapel Road.

Audit Findings - Gaps and Deficiencies

Six gaps were identified in the NC-54 Focus Area. Four are sidepath gaps and two are gaps in the sidewalk network. The gaps include:

- Sidepath gap (1): There is no sidepath along the north side of NC 54/Raleigh Road from Barbee Chapel Road west to Fordham Boulevard.
- Sidepath gap (2): There is no sidepath along the south side of NC 54/Raleigh Road from Hamilton Road west to Fordham Boulevard.
- Sidewalk gap (3): There is no sidewalk connection to Finley Golf Course Road on the south side of Prestwick Road.
- Sidewalk gap (4): There is no sidewalk on the east side of Barbee Chapel Road north of Spring Meadow Drive.
- Sidepath gap (5): The existing sidepath along the north side of NC 54/Raleigh Road ends just east of East Barbee Chapel Road.
- Sidepath gap (6): The existing sidepath along the south side of NC 54/Raleigh Road ends 640 linear feet east of East Barbee Chapel Road.

Recommended Improvements

Constructing key sidewalk and sidepath segments will improve pedestrian and bicycle circulation opportunities within the NC 54 Focus Area. Recommended improvements include the following:

- Sidepath gap (1): 2,553 linear foot sidepath extension along the north side of Raleigh Road from Barbee Chapel Road to Fordham Boulevard.
- Sidepath gap (2): 970 linear foot sidepath extension along the south side of Raleigh Road from Hamilton Road to Fordham Boulevard.
- Sidewalk gap (3): 396 linear foot sidepath extension along the south side of Prestwick Road to connect with Finley Golf Course Road.
- Sidewalk gap (4): 1,546 linear foot sidewalk extension along the east side of Barbee Chapel Road from Spring Meadow Drive to Raleigh Road. This would allow for improved pedestrian access.

- Sidepath gap (5): 1,860 linear foot sidepath extension along the north side of Raleigh Road to Downing Creek Parkway.
- Sidepath gap (6): 1,740 linear foot sidepath extension along the south side of Raleigh Road to just west of Littlejohn Road.

15-501 FOCUS AREA

Existing Conditions

The 15-501 Focus Area is located in northeast Chapel Hill and is centered on 2.5 miles of Durham-Chapel Hill Boulevard/Fordham Boulevard. The focus area's northeast boundary is the city limit line at Interstate 40, and on the southwest the boundary is just south of South Estes Drive.

The 15-501 Focus Area includes pockets of existing sidewalk that are associated with newer development. Lower Booker Creek Trail follows Booker Creek and enters the focus area from the north, extending to East Franklin Street. Booker Basin Park includes a small network of trails, and there are two dedicated bike lane facilities, with one on Sage Road on the north side of the focus area, and a second on Legion Road on the south side of the focus area.

Audit Findings - Gaps and Deficiencies

Fifteen gaps were identified in the 15-501 Focus Area. Twelve are trail gaps and three are gaps in the sidewalk network. Significant construction is occurring in the area, which may impact the gaps listed below, as some may have been addressed during recent projects.

- Sidepath gap (10): There is no sidepath along the east side of Eastowne Drive from Durham-Chapel Hill Boulevard to Old Chapel Hill Road.
- Sidepath gap (11): There is no sidepath along the north side of Old Chapel Hill Road from Pope Road west to Scarlett Drive.
- Sidewalk gap (12): No sidewalk on the south side of Fordham Boulevard Service Road from Old Durham Road to frontage road.
- Sidewalk gap (13): No sidewalk on the east side of Scarlett Drive from Old Durham Road to Legion Road Extension.
- Sidepath gap (14): There is no sidepath on the north side of Legion Road from Scarlett Drive to Jackie Robinson Street.
- Sidepath gap (15): There is no sidepath along the north side of NC 501/Durham-Chapel Hill Boulevard from I-40 to Erwin Road.
- Sidepath gap (16): There is no sidepath along the south side of NC 501/Durham-Chapel Hill Boulevard from I-40 to Eastowne Drive.
- Sidepath gap (17): There is no sidepath along the south side of NC 501/Durham-Chapel Hill Boulevard from 430 linear feet west of Eastowne Drive to Greenfield Commons.
- Sidepath gap (18): There is no sidepath east of Europa Drive on the south side of Durham-Chapel Hill Boulevard.
- Sidepath gap (19): There is no sidepath on the south side of the Service Road between Europa Drive and Novus Lane.

- Sidewalk gap (20): No sidewalk on the west side of Cosgrove Avenue between Turvey Court and Cosgrove Avenue.
- Sidepath gap (21): There is no sidepath on the west side of East Franklin Street from Eastgate Crossing to Dickerson Court.
- Sidepath gap (22): There is no sidepath on the north side of South Estes Drive from East Franklin Street to Fordham Boulevard.
- Sidepath gap (23): There is no sidepath on the west side of Fordham Boulevard from Ephesus Church Road to South Estes Drive.
- Sidepath gap (24): There is no sidepath on the east side of Fordham Boulevard from Ephesus Church Road to South Estes Drive.

Recommended Improvements

- Sidepath gap (10): Construct 1,635 linear feet of sidewalk on east side of Eastowne Drive.
- Sidepath gap (11): Construct 4,970 linear feet of sidewalk along the north side of Old Chapel Hill Road from Pope Road west to Scarlett Drive.
- Sidewalk gap (12): Construct 180 linear feet of sidewalk on the south side of Fordham Boulevard Service Road from Old Durham Road to frontage road.
- Sidewalk gap (13): Construct 440 linear feet of sidewalk on the east side of Scarlett Drive from Old Durham Road to Legion Road Extension.
- Sidepath gap (14): Construct 1,110 linear feet of sidepath on the north side of Legion Road from Scarlett Drive to Jackie Robinson Street.
- Sidepath gap (15): Construct 6,174 linear feet of sidepath along the north side of NC 501/Durham-Chapel Hill Blvd. from I-40 to Erwin Road.
- Sidepath gap (16): Construct 2,429 linear feet of sidepath along the south side of NC 501/Durham-Chapel Hill Blvd. from I-40 to Eastowne Drive.
- Sidepath gap (17): Construct 2,322 linear feet of sidepath along the south side of NC 501/Durham-Chapel Hill Blvd. from 430 LF west of Eastowne Drive to Greenfield Commons.
- Sidepath gap (18): Construct 360 linear feet of sidepath on the south side of Durham-Chapel Hill Boulevard east of Europa Drive.
- Sidepath gap (19): Construct 1,090 linear feet of sidepath on the south side of the Service Road between Europa Drive and Novus Lane.
- Sidewalk gap (20): Construct 180 linear feet of sidewalk on the west side of Cosgrove Avenue between Turvey Court and Cosgrove Avenue.
- Sidepath gap (21): Construct 4,540 linear feet of sidepath on the west side of East Franklin Street from Eastgate Crossing to Dickerson Court.
- Sidepath gap (22): Construct 3,080 linear feet of sidepath on the north side of South Estes Drive from East Franklin Street to Fordham Boulevard.
- Sidepath gap (23): Construct 4.027 linear feet of sidepath on the west side of Fordham Boulevard from Ephesus Church Road to South Estes Drive.
- Sidepath gap (24): Construct 4,130 linear feet of sidepath on the east side of Fordham Boulevard from Ephesus Church Road to South Estes Drive.

CHAPTER 3: EQUITABLE TRANSIT ORIENTED DEVELOPMENT

Equitable TOD (eTOD) is a development that enables all people regardless of income, race, ethnicity, age, gender, immigration status or ability to experience the benefits of dense, mixed-use, pedestrian-oriented development near transit hubs or stations.

When centered on racial inclusion and community wealth building, Transit Equity can be a driver of positive transformation for more vibrant, prosperous, and resilient neighborhoods connected to opportunities throughout the city and region. Adding equity lens to TOD planning promotes health and lowers negative economic impacts on current residents through possible displacement because of gentrification.

Chapel Hill is committed to creating a roadmap, with future actions and policies to advance racial equity, community wealth building, climate resilience and public health goals through this and future TOD projects.

OVERLAY OF EQUITY ON ACCESSIBILITY RECOMMENDATIONS

The purpose of overlaying equity to accessibility recommendations is to add layer to accessibility/mobility analysis with equity lens. It is intended to help Chapel Hill's commitment in creating a roadmap, with future actions and policies to advance racial equity, community wealth building, climate resilience and public health goals through this and infrastructure projects.

The benefits: When centered on racial inclusion and community wealth building, Transportation Equity can be a driver of positive transformation for more vibrant, prosperous, and resilient neighborhoods connected to opportunities throughout the city and region. Another benefit is to outline mobility/infrastructure recommendations to build Town's capacity and future policies to support equitable projects and developments.

IMPORTANCE OF EQUITABLE INVESTMENTS

The importance of equitably distributing the benefits of public transportation investments is key to accessing opportunities such as employment, education, and health care.

- It promotes fairness in mobility and accessibility to meet the needs of ALL community members.
- Through thoughtful policy decisions, investments and program placement that incorporate these
 equity values and recommendations, development occurring in transit-served locations can and
 should more effectively benefit all Chapel Hill residents, regardless of whether they reside near
 transit.

The recommendations of these equitable investments help achieve the Town's vision and other community goals set through planning effort and envisioned through public involvement. When centered on racial inclusion and community wealth building, Equity can be a driver of positive transformation for more vibrant, prosperous, and resilient neighborhoods connected to opportunities throughout the city and region. The recommendations, with equity lens, will support Town' community goals such as building inclusive, sustainable and competitive community – as outlined in "Complete Communities Mission Statement".

The recommendations also contribute to **Complete Streets** principals in design and improved safety for pedestrians and cyclists. Conducting Accessibility audits in April of 2022, the team heard of importance of having safe streets for pedestrians and cyclists, and well-designed /connected mobility infrastructure.

- Accessibly designed streets create greater opportunities and ease for pedestrians and those with disabilities, whether through wider sidewalks to accommodate wheelchairs or enhanced signaling for individuals with impaired vision or hearing.
- Emphasizing the importance of Complete Streets concept in designing streets so that all people —
 whether they are walking, bicycling, using public transportation, driving, or using mobility devices —
 can safely and easily get where they're going- improving health and safety of the community.

STRATEGIES FOR EQUITABLE TRANSPORTATION INVESTMENT

These are strategies as to how to achieve equitable investments and prioritize projects based on these principles.

- Improve pedestrian infrastructure in station areas and Focus Areas by prioritizing and targeting
 resources based on need, starting with current ADA project of inventory of current sidewalk
 infrastructure and with an equity lens.
- Improve visibility and accessibility of transit signage and wayfinding, especially for people with disabilities or for whom English is not their first language.
- Increase access to shared micro-mobility options, including bike-share and e-bikes easy access to transit for people walking, or that do not own car.
- Prioritize high-quality bicycle infrastructure to, from, and within station areas and Focus Areas consider bicycle and greenway network linkages to create direct routes to the stations and Focus
 Areas.
- Enhancing First and Last-Mile Connections to Transit focusing on intersection improvements in station areas will assist with safety and access for ALL Chapel Hill residents.
- Include an equity analysis and performance-based planning of future projects, which will assess the benefits and burdens of future transportation/infrastructure investment.

PROJECT PRIORITIZATION CHECKLIST AND RECOMMENDATIONS FOR EQUITABLE TRANSPORTATION INVESTMENTS

An equity strategy should outline how to prioritize the needs of people who have been marginalized from the transportation system and to repair past and current harms. The purpose should be achieving a transit system that provides service proportional to need—not "equal" service to all.

Equity holds different perspectives and priorities for everyone and anyone who will be part of this conversation. At its core, inequity exists when there are fundamental differences in access to opportunity, not just with respect to where you begin, but in your capacity to improve from that starting position. Age, gender, disability, and residency also can expand or constrain opportunities.

CHAPTER 3 – Equitable Transit Oriented Development

accommodate people with diverse needs and abilities

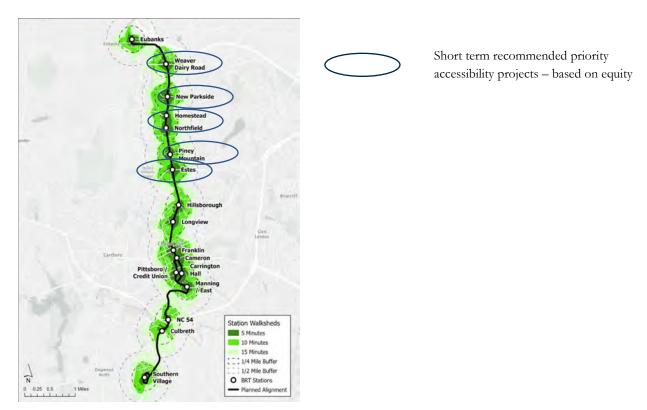
Recommended Checklist and criteria for determining project's Equity return in investment is based on Chapel Hill's sociodemographic data.

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u	Demographics, Income levels data
	Cost Burdened household data, vehicle ownership data
	Bike and Ped Crash Data
	Mobility Audit completed in April 2022
	Pedestrian and Bike Network gaps and barriers
	Studies previously done by Chapel Hill - Mobility and Connectivity Plan as a leading resource
	Easy access to service within 5–10-minute walk or bike ride
	Multi-modal connectivity, to and between, transit modes
	Incorporation of Complete Streets Principles
	Enhanced accessibility and universal design, ensuring that transportation systems and service

The recommendations are organized and based on gaps, barrier types, demographics data, cost burdened analysis and median income data with the goal to help Chapel Hill with **prioritization of projects** in future.

- Prioritizations are focused on populations along N-S BRT Corridor and Focus Areas with greater needs or preferences for bicycling and walking, including "last mile" trips to access transit.
- Prioritizations are recommended in areas of the N-S BRT corridor where many households have low
 rates of vehicle ownership and lower incomes, may need more transit service to link residents to jobs
 and services, as well as bike and pedestrian connections to transit.

The figure A shows that based on equity analysis and applying principles of equity checklist (presented above) the northern stations and station areas (Weaver Dairy Road., New Parkside, Homestead, Northfield, Piney Mountain and Estes) on N-S BRT corridor should be prioritized (short term) by implementing accessibility project and infrastructure improvements first.



CHAPTER 3 – Equitable Transit Oriented Development

Our final recommendation is to embed the Equity principles into Chapel Hill's revised LUMO and other planning processes.

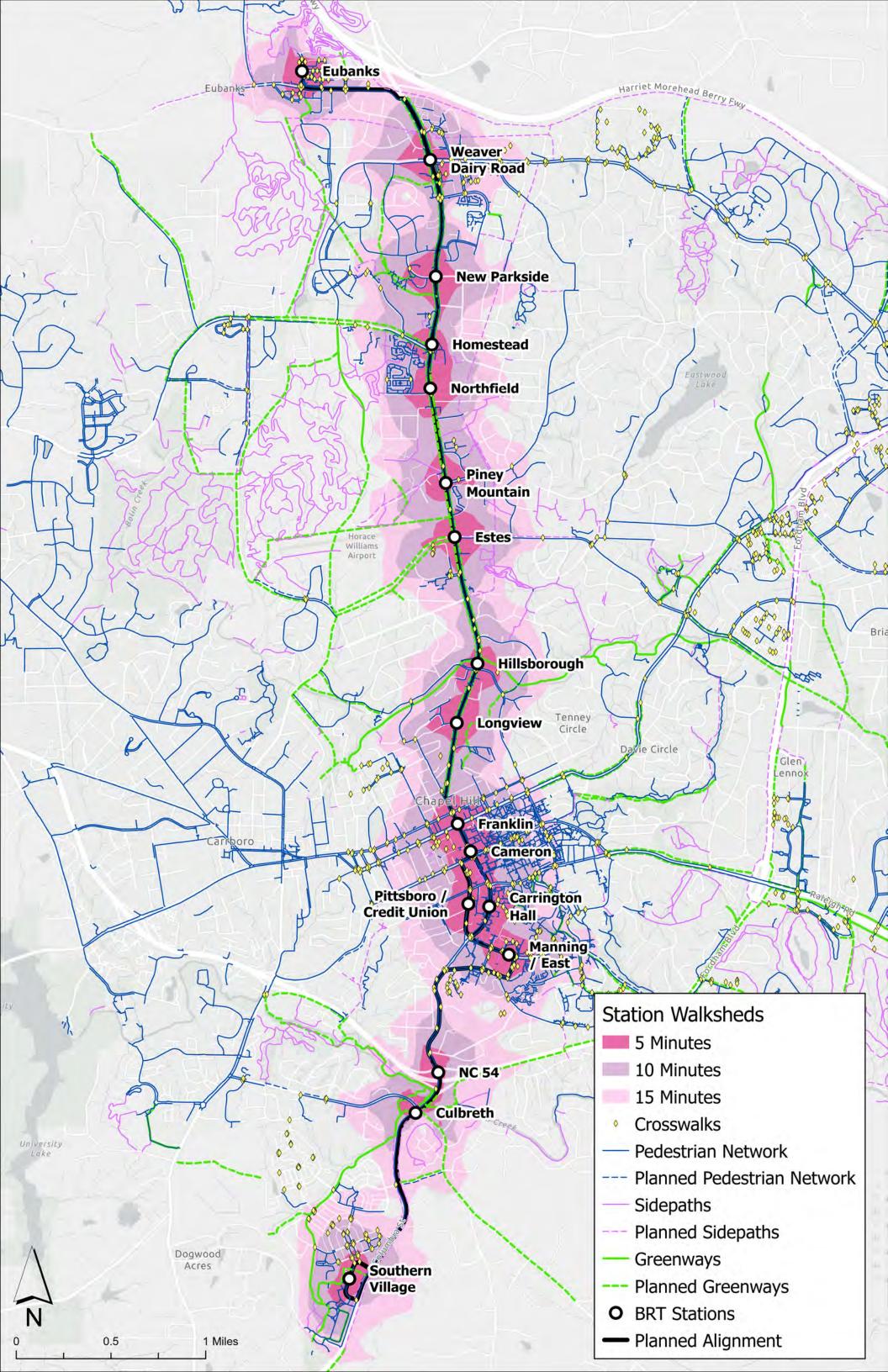
Recommendations to advance equity should be incorporated early in the LUMO Planning Process, from incorporating health and equity assessments to prioritizing transit investment and recognizing the specific opportunities near transit stations and focus areas.

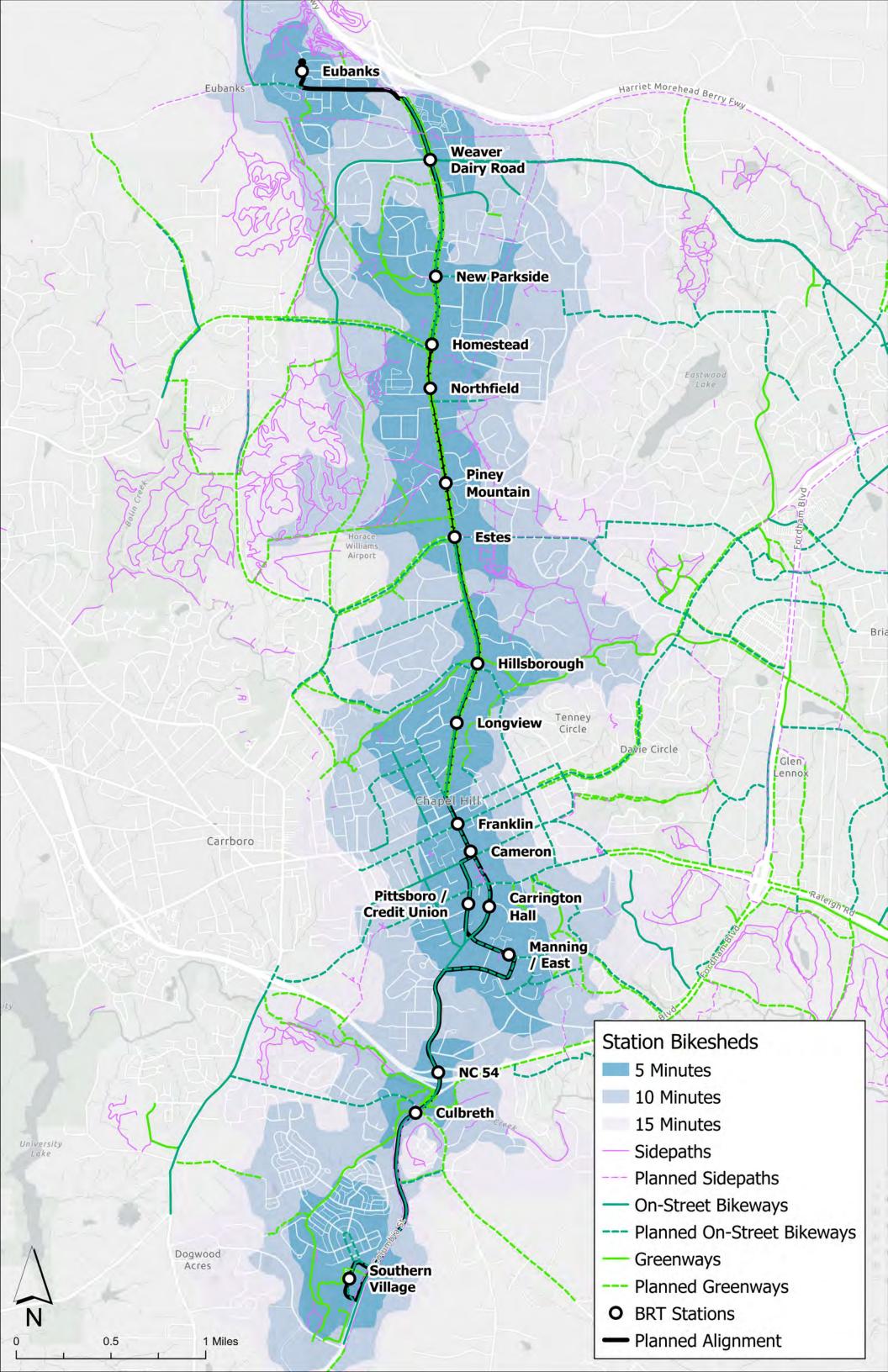
This can be implemented by:

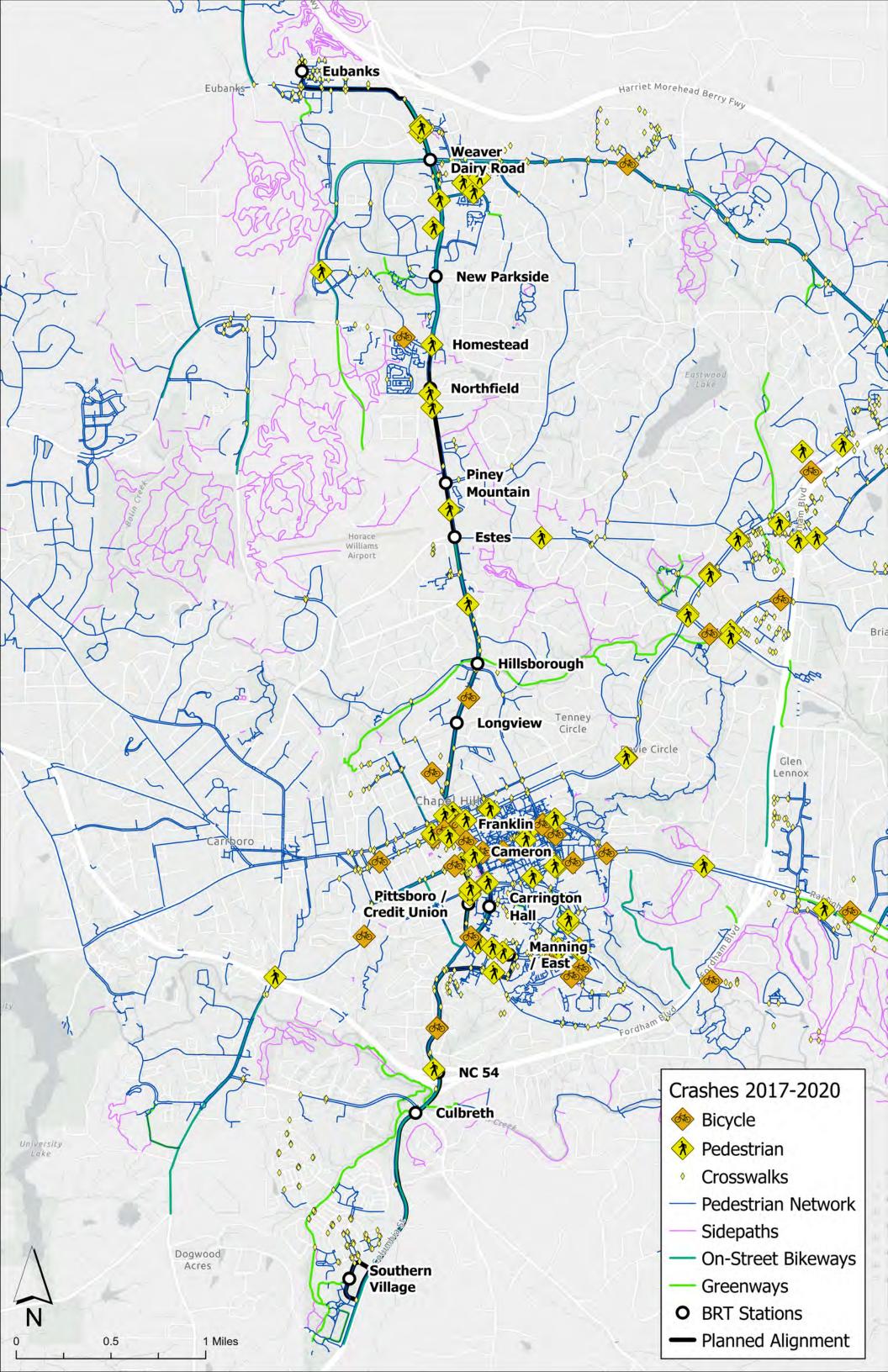
- Land Use & Zoning Develop a process for the town to conduct racial and health equity
 assessments on land use plans and zoning decisions. Establish LUMO regulations that
 adhere/commit to the goals of equity, resiliency and diversity and recognize the specific
 opportunities within TOD areas.
- Mobility Prioritize investments in walking, biking, rolling and general accessibility and connectivity, in LUMO updates.

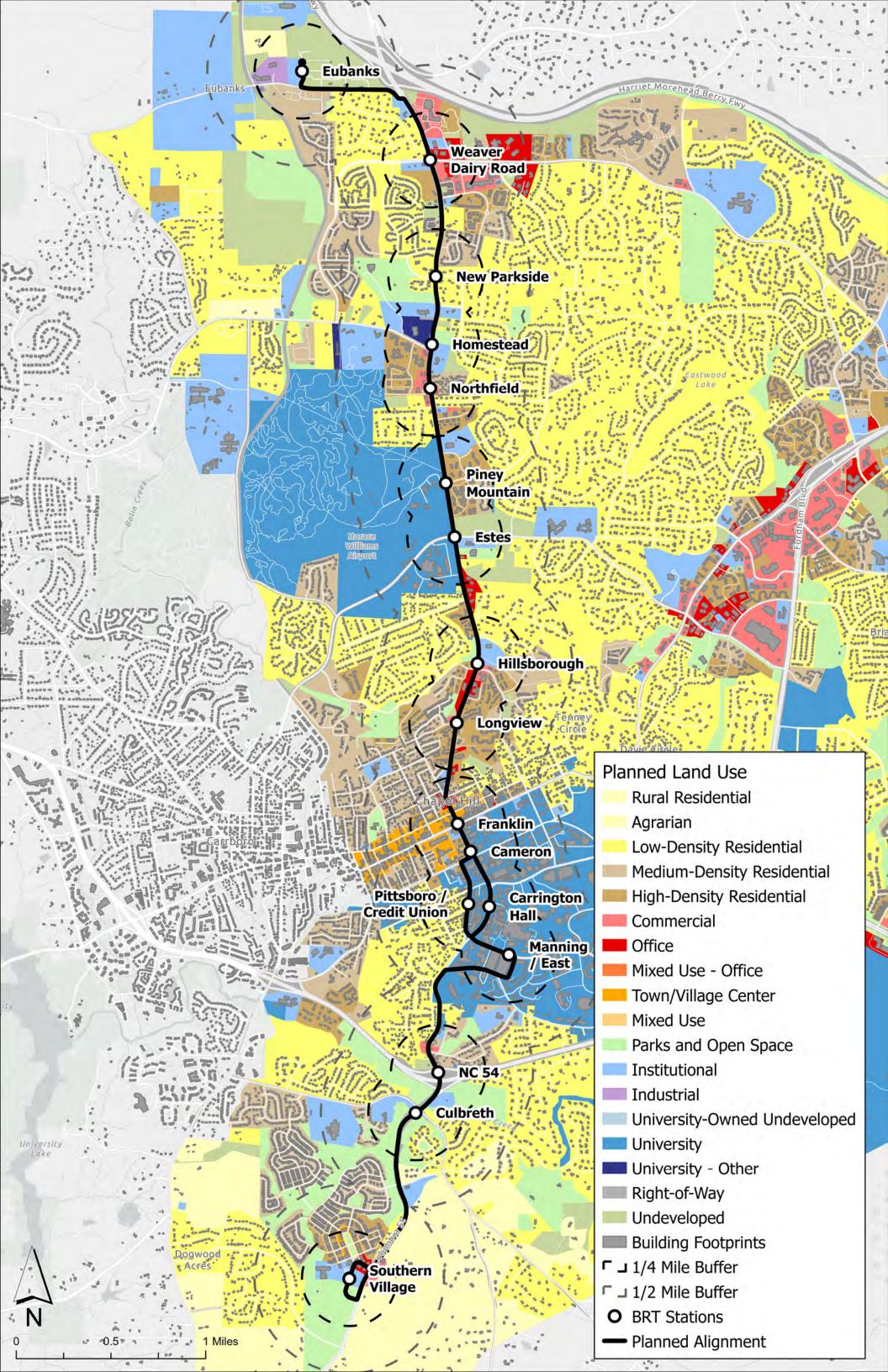
Through thoughtful policy decisions, investments and program placement that incorporate these equity values and recommendations, development occurring in transit-served locations can and should more effectively benefit all Chapel Hill residents, regardless of whether they reside near transit.

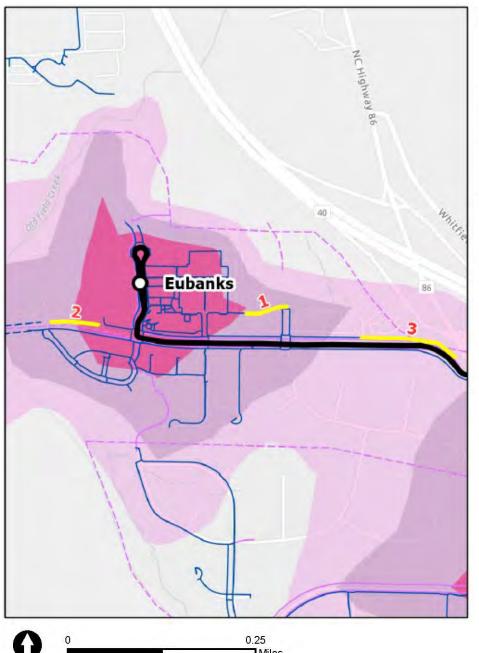
Research shows that those who live in transit-oriented communities walk and use transit more which contributes to better health outcomes and reduced greenhouse gas emissions. eTOD contributes to the local and regional economy through increased land values, more efficient cost to provide services, and through reducing the amount that individuals spend on transportation.









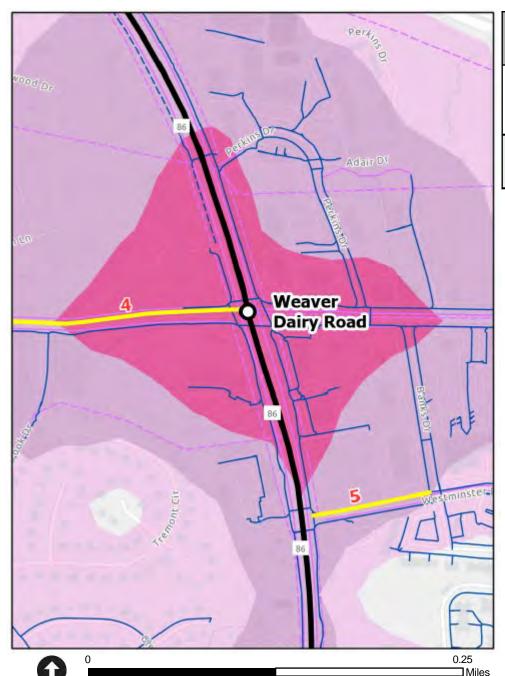


No.	Station	Description	Recommendations/Transit Equity Recommendations
1	Eubanks	No sidewalk south side of Carraway Crossing east of lot	250 LF Sidewalk Extension
2	Eubanks	Sidewalk on north side of Eubanks Road ends west of park and ride	450 LF Sidewalk Extension
3	Eubanks	No sidewalk north side of Eubanks Road from Village Center Drive to MLK and crossing gap of Eubanks Road between Northwoods Drive and MLK	930 LF Sidewalk Extension and Crossing of Eubanks Road



Network Gaps - Eubanks





No.	Station	Description	Recommendations/Transit Equity Recommendations
4	Weaver Dairy Road	Sidewalk ends north side.	2,110 LF Sidewalk Extension, dependent upon development and construction of Butterfield Court connection.
5	Weaver Dairy Road	Sidewalk is not compliant along the north side of Westminster Drive.	380 LF Sidewalk Reconstruction

Network Gaps
Bike/Sidepath Gap
Sidewalk Gap
Existing Sidewalks
Planned Sidewalks
Existing Sidepaths
Planned Sidepaths

Station Walksheds

5 Minutes

10 Minutes

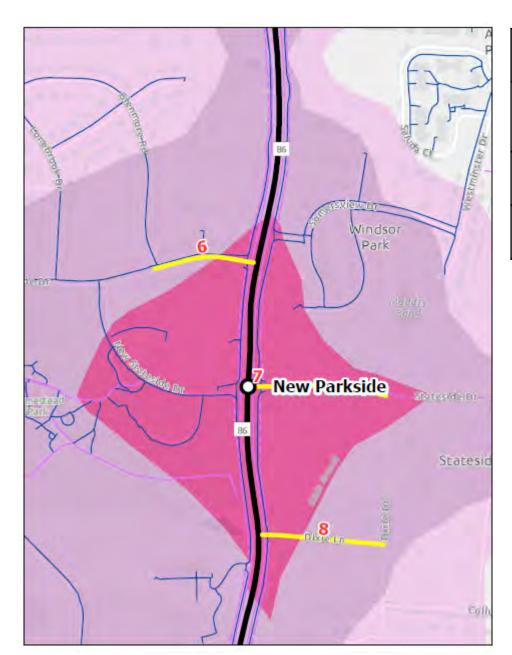
15 Minutes

O BRT Stations

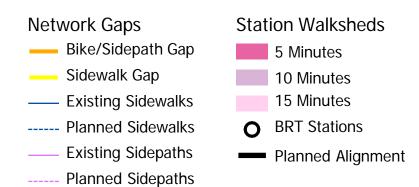
Planned Alignment

Network Gaps - Weaver Dairy Road



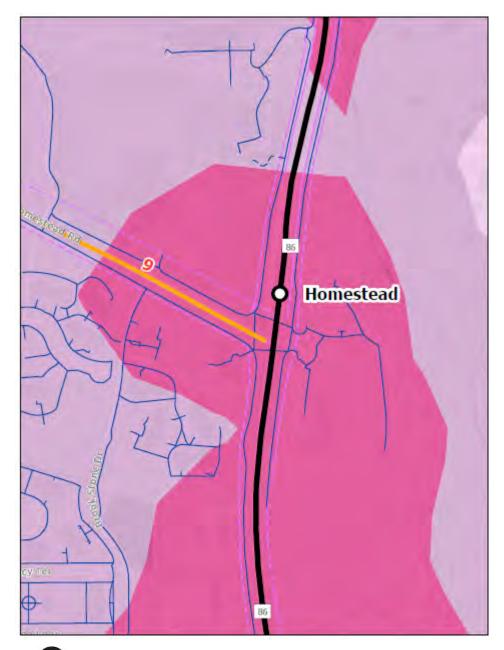


No.	Station	Description	Recommendations/Transit Equity Recommendations
6	New Parkside	No sidewalk south side of New Parkside Drive	750 LF sidewalk extension
7	New Parkside	No sidewalk either side of Stateside Drive	Minimum 700 LF sidewalk extension
8	New Parkside	No sidewalk either side of Dixie Lane	660 LF sidewalk extension



Network Gaps - New Parkside





No.	Station	Description	Recommendations/Transit Equity Recommendations
9	Homestead	No dedicated bike facilities along Homestead from MLK to trail entrance	2,500 LF sharrow or bikeable road conversion

Network Gaps

Bike/Sidepath Gap

Sidewalk Gap

— Existing Sidewalks

----- Planned Sidewalks

Existing Sidepaths

----- Planned Sidepaths

Station Walksheds

5 Minutes

10 Minutes

15 Minutes

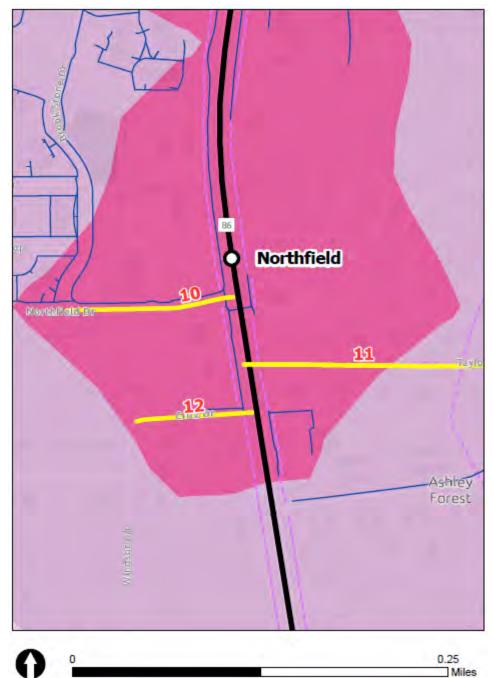
BRT Stations

Planned Alignment



Network Gaps - Homestead

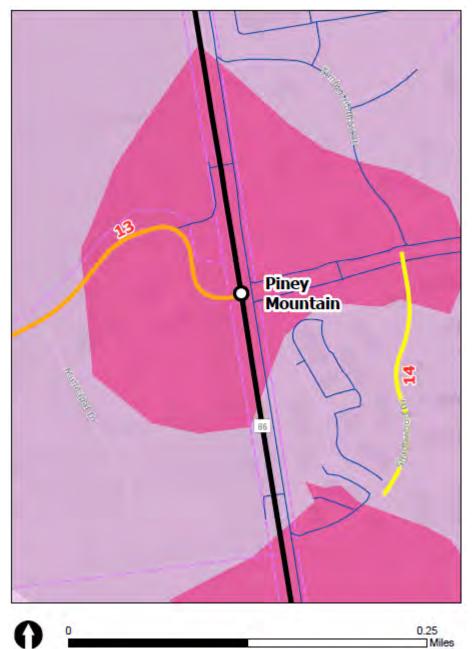




No.	Station	Description	Recommendations/Transit Equity Recommendations
10	Northfield	No sidewalk south side of Northfield Drive.	Min 500 LF Sidewalk Extension - If development occurs on south side of Northfield Drive
11	Northfield	No sidewalk either side of Taylor Street	1,350 LF Sidewalk Extension
12	Northfield	No sidewalk either side of Critz Dr. and crossing gap of MLK	Min 400 LF Sidewalk Extension and Crossing of MLK



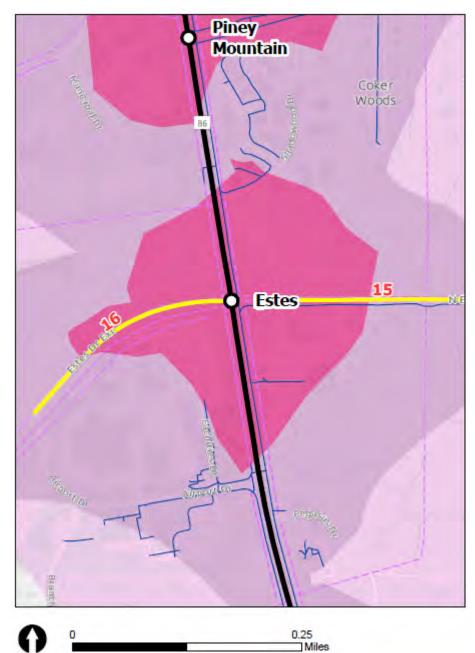
Network Gaps - Northfield



No.	Station	Description	Recommendations/Transit Equity Recommendations
13	Piney Mountain	No dedicated bike facility or sidewalk along Municipal Drive connecting MLK to nearby greenway.	Min 1,500 LF sharrow or bikeable road conversion and sidewalk
14	Piney Mountain	No sidewalk down south side of Shadowood Dr.	Min 350 LF Sidewalk Extension

Network Gaps - Piney Mountain

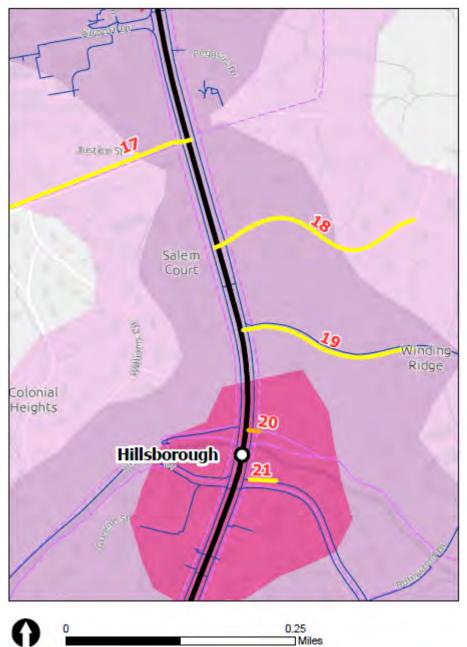




No.	Station	Description	Recommendations/Transit Equity Recommendations
15	Estes	3-4 foot, not compliant, asphalt walkway along east side of Estes Drive.	Min 1,500 LF Sidewalk Widening to Compliance
16	Estes	No sidewalk along west leg of Estes.	Min 700 LF Sidewalk Extension

Network Gaps - Estes





No.	Station	Description	Recommendations/Transit Equity Recommendations
17	Hillsborough	No sidewalk down Barclay St, No crossing over MLK.	3,500 LF Sidewalk Extension down Barclay St and Crossing of MLK
18	Hillsborough	No sidewalk down Mt Bolus Rd	Min 1,200 LF Sidewalk Extension
19	Hillsborough	Noncompliance, narrow sidewalk along Bolinwood Drive.	Min 1,500 LF Sidewalk Widening to Compliance
20	Hillsborough	No curb cut or dedicated access from MLK bike shoulder to greenway entrance, limited greenway access	Installation of accessible curb cut and integration with MLK on-road bike, add stairwell west side, and widen west sidewalk access to greenway
21	Hillsborough	Sidewalk on Hillsborough Street ends at gas station with ADA issues along the property.	Min 900 LF Sidewalk Extension + 100 LF Sidewalk Widening to Compliance

Network Gaps - Hillsborough





No.	Station	Description	Recommendations/Transit Equity Recommendations
22	Longview	Sidewalk inconsistent along North Columbia Street.	Sidewalk Extension or Dedicated Pedestrian Crossing where Sidewalks Change Sides
23	Longview	No sidewalk, goat path on south side of west leg of East Longview Street.	350 LF Sidewalk Extension

Network Gaps

Bike/Sidepath Gap

Sidewalk Gap

Existing Sidewalks

Planned Sidewalks

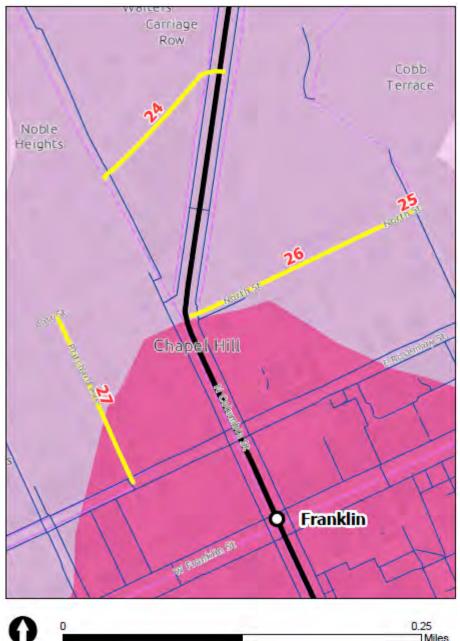
Existing Sidepaths

Planned Sidepaths

5 Minutes
10 Minutes
15 Minutes
BRT Stations
Planned Alignment

Network Gaps - Longview

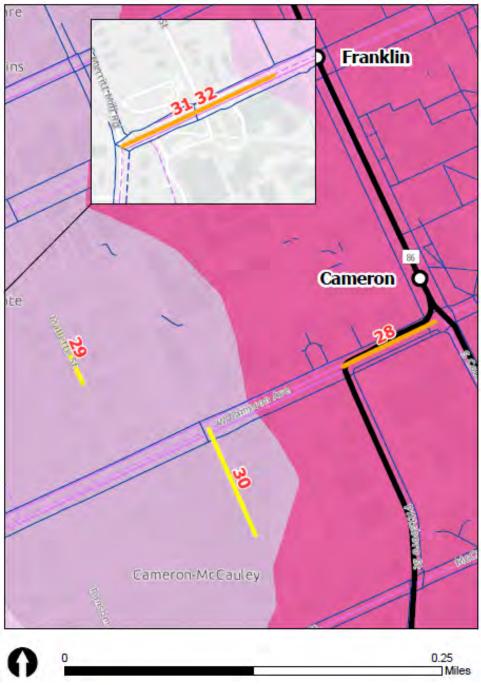




	No.	Station	Description	Recommendations/Transit Equity Recommendations
	24	Franklin	Sidewalk ends around corner from MLK Blvd. and Stephens Street, sidewalk only 30 LF on one side of Stephens.	Min 500 LF Sidewalk Extension
	25	Franklin	Curb ramps blocked and inaccessible at corner of North Street and Henderson Street.	Reconstruct to Compliance
	26	Franklin	No sidewalk either side of North Street.	Min 900 LF Sidewalk Extension on north Side of North Street
	27	Franklin	No sidewalk either side of Pritchard Ave.	Min 650 LF Sidewalk Extension on east side of Pritchard Avenue

Network Gaps - Franklin





No.	Station	Description	Recommendations/Transit Equity Recommendations
28a	Cameron	Missing bricks, steep slope along West Cameron Ave.	Redesign sidewalk or provide accessible alternate route on north end of Cameron
28b	Cameron	Sidewalk on West Cameron not compliant though tree important.	Redesign sidewalk or provide accessible alternate route on north end of Cameron
28c	Cameron	Bike lane/shoulder gap on West Cameron Avenue, ends abruptly across Pittsboro.	380 LF Bikeable Road Conversion
29	Cameron	Noncompliant, narrow and inaccessible sidewalk along Mallette Street.	Min 250 Sidewalk Redesign to Compliance
30	Cameron	Inconsistent sidewalk along Wilson Street, goat path present.	400 LF Sidewalk Extension
31	Cameron	No perpendicular crossing for bikes over RR crossing at Cameron & Merritt Hill Road.	Re-align bike lane to approach RR crossing at perpendicular angle
32	Cameron	No dedicated bike facility on eastbound side of Cameron, clearly well used.	2,000 LF bike lane or Bikeable Road Conversion along south side of West Cameron Ave.

Network Gaps

Bike/Sidepath Gap

Sidewalk Gap

— Existing Sidewalks

----- Planned Sidewalks

Existing Sidepaths

----- Planned Sidepaths

Station Walksheds

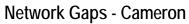
5 Minutes

10 Minutes

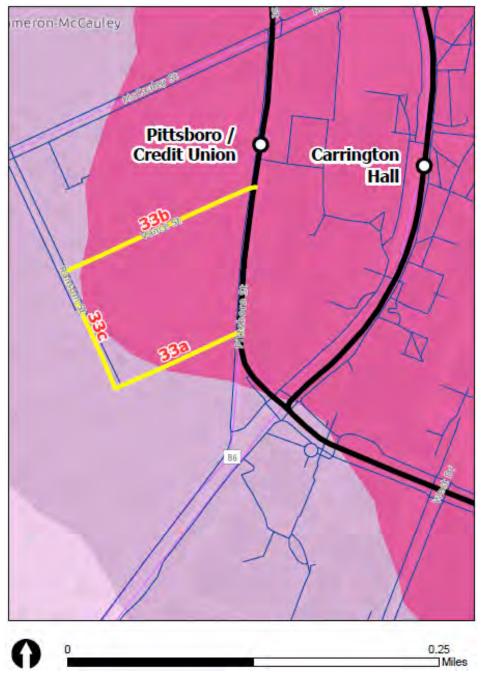
15 Minutes

BRT Stations

Planned Alignment







No.	Station	Description	Recommendations/Transit Equity Recommendations
33a	Pittsboro/ Credit Union	Sidewalk gaps along University	450 LF Sidewalk Extension
33b	Pittsboro/ Credit Union	Sidewalk gaps, well-worn goat path present along Vance	700 LF Sidewalk Extension on Vance Street
33c	Pittsboro/ Credit Union	Sidewalk gaps, well-worn goat path present along Ransom	430 LF Sidewalk Extension on Ransom Street

Network Gaps

— Bike/Sidepath Gap

— Sidewalk Gap

— Existing Sidewalks

— Planned Sidewalks

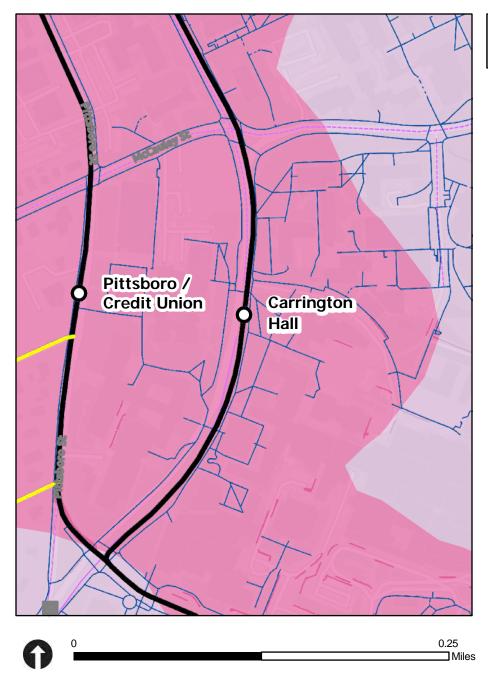
— Existing Sidepaths

— Planned Sidepaths

— Planned Sidepaths

Network Gaps - Pittsboro / Credit Union





No. Station Description Recommendations/Transit Equity Recommendations

No gaps identified at this station.

Network Gaps

Bike/Sidepath Gap

Sidewalk Gap

Existing Sidewalks

Planned Sidewalks

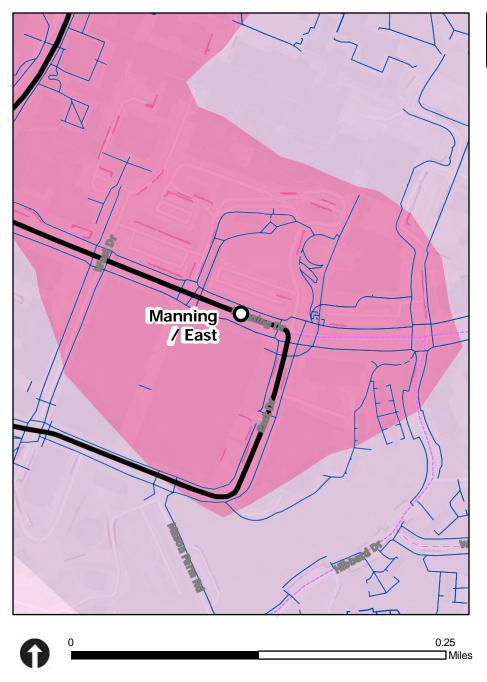
Planned Sidepaths

Planned Sidepaths

5 Minutes
10 Minutes
15 Minutes
15 Minutes
BRT Stations
Planned Alignment

Network Gaps - Carrington Hall





No. Station Description Recommendations/Transit Equity Recommendations

No gaps identified at this station.

Network Gaps

Bike/Sidepath Gap

Sidewalk Gap

Existing Sidewalks

Planned Sidewalks

Planned Sidepaths

Station Walksheds
5 Minutes
10 Minutes

15 Minutes

• BRT Stations

Planned Alignment

Network Gaps - Manning / East





No.	Station	Description	Recommendations/Transit Equity Recommendations
34	NC 54	No sidewalk on west side of S. Columbia Street, goat path present.	Min 500 LF Sidewalk Extension
35	NC 54	No sidewalk either side of Purefoy Road.	Min 650 LF Sidewalk Extension
36	NC 54	Noncompliance, 4 foot wide sidewalk on S. Columbia Street.	Min 500 LF Sidewalk Widening to Compliance
37	NC 54	East side gap at S. Columbia Street & NC 54 Offramp must cross twice.	Solved with new sidewalk on west side of S. Columbia Street

Network Gaps

Bike/Sidepath Gap

Sidewalk Gap

Existing Sidewalks

Planned Sidewalks

Existing Sidepaths

Planned Sidepaths

Station Walksheds

5 Minutes

10 Minutes

15 Minutes

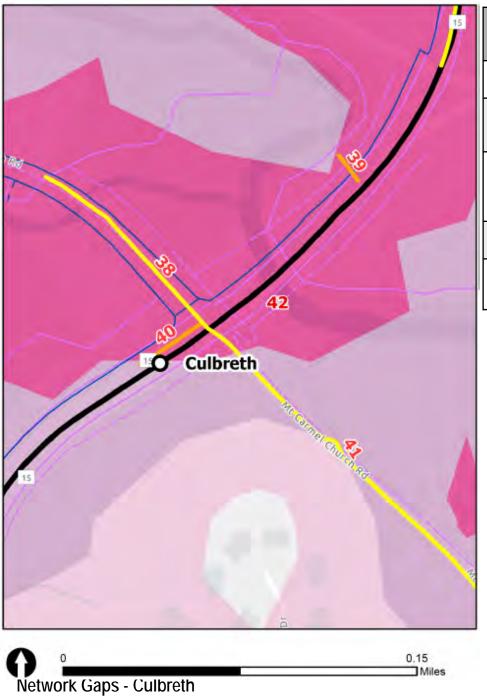
BRT Stations

— Dlanged Aligne

Planned Alignment

Network Gaps - NC 54

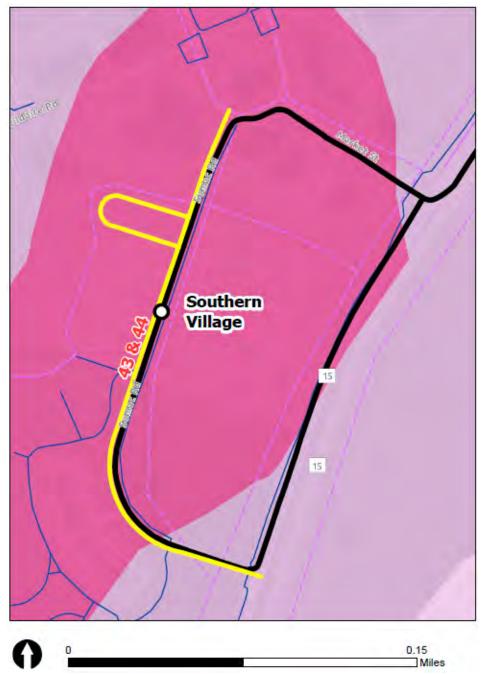




No.	Station	Description	Recommendations/Transit Equity Recommendations
38	Culbreth	Non-Compliance: 4-foot sidewalk on Culbreth Road.	Min 400 LF Sidewalk Widening to Compliance
39	Culbreth	No curb ramp for MLK bike lane access to greenway.	Installation of accessible curb cut and integration with MLK bike lane
40	Culbreth	No real access to sidepath direct from MLK bike lane, cyclists must cut into Culbreth to access sidepath curb ramp	Installation of accessible curb cut and integration with MLK bike lane
41	Culbreth	No sidewalk either side of Mt Carmel Church Road.	Min 650 LF Sidewalk Extension
42	Culbreth	No sidepath connection over Morgan Creek Bridge between greenways.	Widen bridge to accommodate pedestrians and bikes



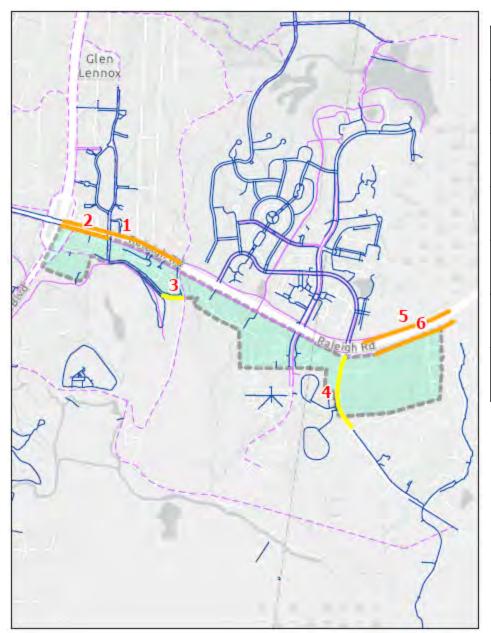




N	Ο.	Station	Description	Recommendations/Transit Equity Recommendations
43	3	Southern Village	Non-compliant sidewalk connection off Sumac Road.	Redesign to Compliance
44	4	Southern Village	Key sidewalk gap along all west side of Sumac Road and lack of curb ramps.	1,000 LF Sidewalk Extension

Network Gaps	Station Walksheds
Bike/Sidepath Gap	5 Minutes
Sidewalk Gap	10 Minutes
— Existing Sidewalks	15 Minutes
Planned Sidewalks	O BRT Stations
Existing Sidepaths	Planned Alignment
Planned Sidepaths	-





No.	Description	Recommendations/Transit Equity Recommendations
1	No sidepath along north side of NC 54/Raleigh Road from Barbee Chapel Road west to Fordham Blvd.	2,553 LF sidepath extension
2	No sidepath along south side of NC 54/Raleigh Road from Hamilton Road west to Fordham Blvd.	970 LF sidepath extension
3	No sidewalk connection to Finley Golf Course Road on the south side of Prestwick Road.	396 LF sidewalk extension
4	No sidewalk on the east side of Barbee Chapel Road north of Spring Meadow Drive.	1,546 LF sidewalk extension
5	Existing sidepath along north side of NC 54/Raleigh Road ends just east of E. Barbee Chapel Road.	1,860 LF sidepath extension to Downing Creek Parkway
6	Existing sidepath along south side of NC 54/Raleigh Road ends 640 LF east of E. Barbee Chapel Road.	1,740 LF sidepath extension to Downing Creek Parkway

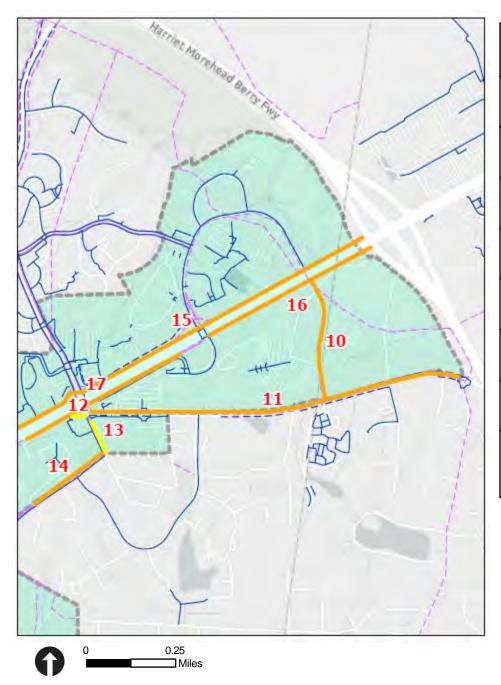


*Walksheds not Represented as there are no confirmed BRT stations within the Focus Area



Network Gaps - Focus Area NC-54





Network Gaps - Focus Area	15-501 North (A)
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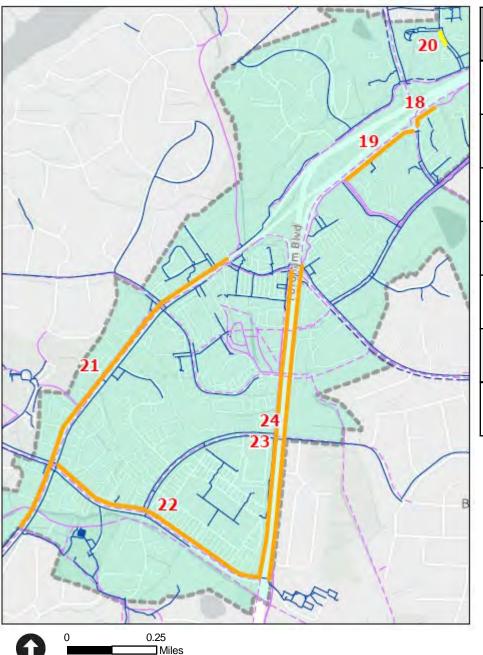
No.	Description	Recommendations/Transit Equity Recommendations
10	No sidepath along east side of Eastowne Drive from Durham- Chapel Hill Blvd. to Old Chapel Hill Road.	Construct 1,635 LF of sidepath
11	No sidepath along north side of Old Chapel Hill Road from Pope Road west to Scarlett Drive.	Construct 4,970 LF of sidepath
12	No sidewalk on the south side of Fordham Blvd. Service Road from Old Durham Road to frontage road	Construct 180 LF of sidewalk
13	No sidewalk on the east side of Scarlett Drive from Old Durham Road to Legion Road Extension.	Construct 440 LF of sidewalk
14	No sidepath on the north side of Legion Road from Scarlett Drive to Jackie Robinson Street.	Construct 1,110 LF of sidepath
15	No sidepath along north side of NC 501/Durham-Chapel Hill Blvd. from I-40 to Erwin Road.	Construct 6,174 LF sidepath
16	No sidepath along south side of NC 501/Durham-Chapel Hill Blvd. from I-40 to Eastowne Drive.	Construct 2,429 LF sidepath
17	No sidepath along south side of NC 501/Durham-Chapel Hill Blvd. from 430 LF west of Eastowne Drive to Greenfield Commons.	Construct 2,322 LF sidepath



Planned Sidewalks

*Walksheds not Represented as there are no confirmed BRT stations within the Focus Area





No.	Description	Recommendations/Transit Equity Recommendations
18	No sidepath east of Europa Drive on the south side of Durham-Chapel Hill Blvd.	Construct 360 LF of sidepath
19	No sidepath on the south side of the Service Road between Europa Drive and Novus Lane.	Construct 1,090 LF of sidepath
20	No sidewalk on the west side of Cosgrove Avenue between Turvey Court and Cosgrove Avenue.	Construct 180 LF of sidewalk
21	No sidepath on the west side of East Franklin Street from Eastgate Crossing to Dickerson Ct.	Construct 4,540 LF of sidepath
22	No sidepath on the north side of South Estes Drive from East Franklin Street to Fordham Blvd.	Construct 3,080 LF of sidepath
23	No sidepath on the west side of Fordham Blvd from Ephesus Church Road to S Estes Drive.	Construct 4,027 LF of sidepath
24	No sidepath on the east side of Fordham Blvd from Ephesus Church Road to S Estes Drive.	Construct 4,130 LF of sidepath



Planned Sidewalks

*Walksheds not Represented as there are no confirmed BRT stations within the Focus Area

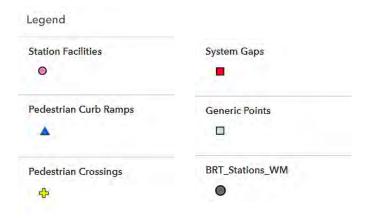
Network Gaps - Focus Area 15-501 North (B)



Accessibility Audit Summary

The following briefly summarizes the in-person field audit performed by SRF at all stations on April 14 and April 15, as well as walking audit with stakeholders held at nearly all stations. A breakdown of findings by station is displayed, though precise gaps and recommendations yet to be solidified.

Here is the legend used for the following data collection maps:





Eubanks Station

SRF Data

- The station has facilities including trash receptacle, bench seating, a portable toilet and shelter.
- Walking and biking gap between Myrica Street and Millhouse Road.
- On-street bicycle facilities along Eubanks Road are not low stress or accessible to those of all ages and abilities.
- Sidewalk gap along the north side of Eubanks Road from Village Center Drive to MLK Jr. Blvd.
- Sidewalk gap between the Carraway Village and Northwood Drive.
- Eubanks Road crossing at Myrica Street is wider than potentially needed with painted curb extension that could be permanent.
- Northbound to westbound bicycle connectivity from MLK Jr. Blvd to Eubanks Road does not exist.



- Affordable housing is planned north of Carraway Village.
- Expansion of the I-40 interchange is planned which could alter access at the Eubanks intersection.
- Desire for secure bike parking at the station.
- Enhanced wayfinding for people biking to know how to access the station, particularly from MLK Jr. Blvd.
- Sidepath along one side of Eubanks Road (perhaps the north side makes the most sense).
- Potential future rail to trial opportunity to the west.
- Desire for pedestrian refuge islands at major intersection crossings.
- Potential to change RRFBs to HAWKs along this corridor per the Town.



Weaver Dairy Road

SRF Data

- Crossing of MLK Jr. Blvd at Weaber Dairy Road is very long with no refuge.
- Wide curb radii promote high-turn speeds.
- Long wait time to receive walk signal.
- Non-ADA compliant sidewalk along Westminster Drive.



- No bike detection at the signal.
- Dangerous perception due to the size of the intersection for people walking and bicycling.
- Bike lanes are too narrow along both corridors.



New Parkside

SRF Data

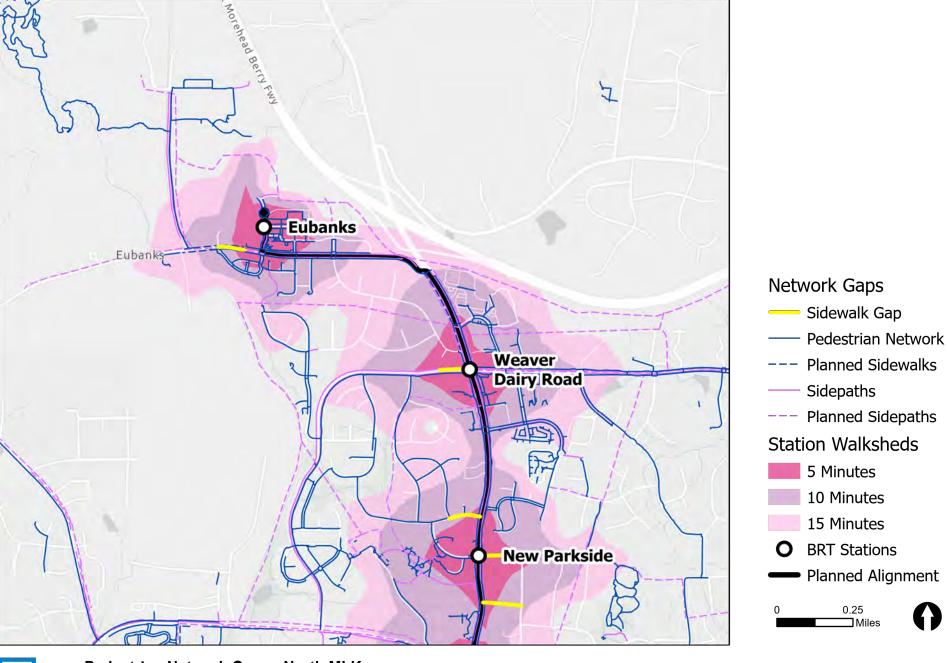
- Wide crossing of New Parkside Drive along MLK Jr. Blvd with non-directional ramps that direct users into MLK.
- Sidewalk gap along the south side of New Parkside Drive between MLK Jr. Blvd and New Statewide Drive.
- No crossing of MLK Jr. Blvd exists here to provide E/W connectivity across the corridor.
- Sidewalk gaps along Stateside Drive.



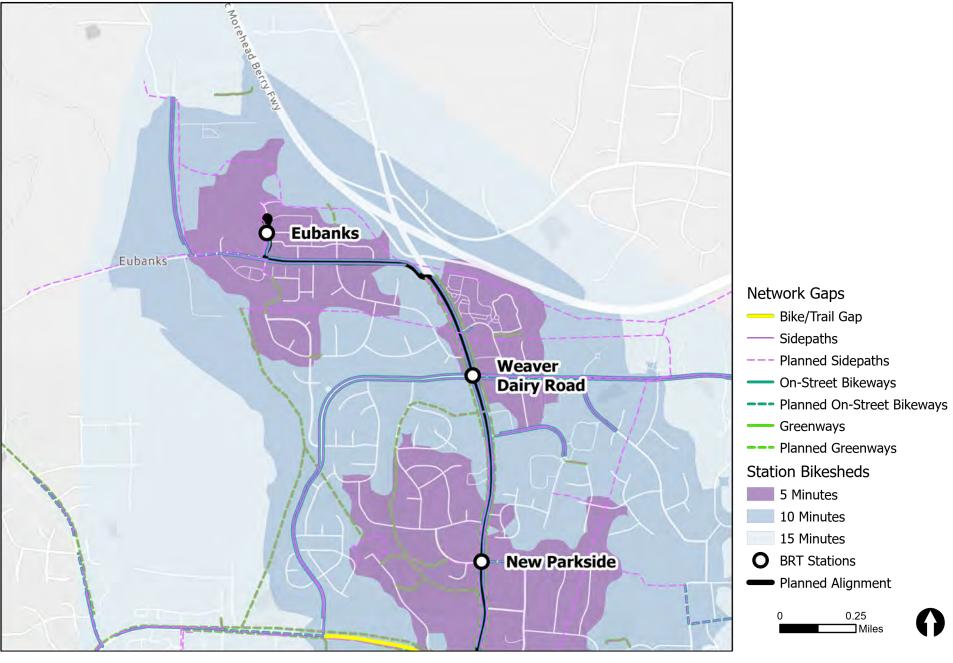
Stakeholder Data

• No feedback received here.











Bike Network Gaps - North MLK
Chapel Hill Transit Oriented Development

Homestead

SRF Data

- Sidewalk gap along Dixie Lane.
- Non-ADA accessible crossing of business driveway southwest of the intersection.
- Bike rack present at northbound bus stop.
- Non-ADA compliant curb ramps at the intersection. All ped phase with long crossing.



- Supportive services and housing for the homeless present northwest of the station which is important to consider.
- Important station serving multifamily and student housing.
- Heavily used stop currently.



Northfield

SRF Data

- Non-compliant driveway crossing along the northside of Northfield Drive.
- No sidewalk along Taylor Street, Ashley Forest Road, and Critz Drive.
- Lack of crossings at all legs of MLK Jr. Blvd intersection.



Stakeholder Data

• No feedback received here.



Piney Mountain

SRF Data

- No sidewalk along Shadowood Drive.
- Lack of crossings at all legs of MLK Jr. Blvd intersection.



Stakeholder Data

• Near the proposed UNC North Campus and airport development.



Estes

SRF Data

- Lack of crossings at all legs of MLK Jr. Blvd intersection.
- No sidewalk east or west of MLK Jr. Blvd along Estes Drive.



- Estes Drive is a key E/W bicycle connection between Carbarro and destinations in east Chapel Hill
- Future bike facilities planned along Estes are key.
- Major mixed-use development under construction in NE corner of intersection.
- Near misses between vehicles and bicyclists along Estes Drive have been seen.



Hillsborough

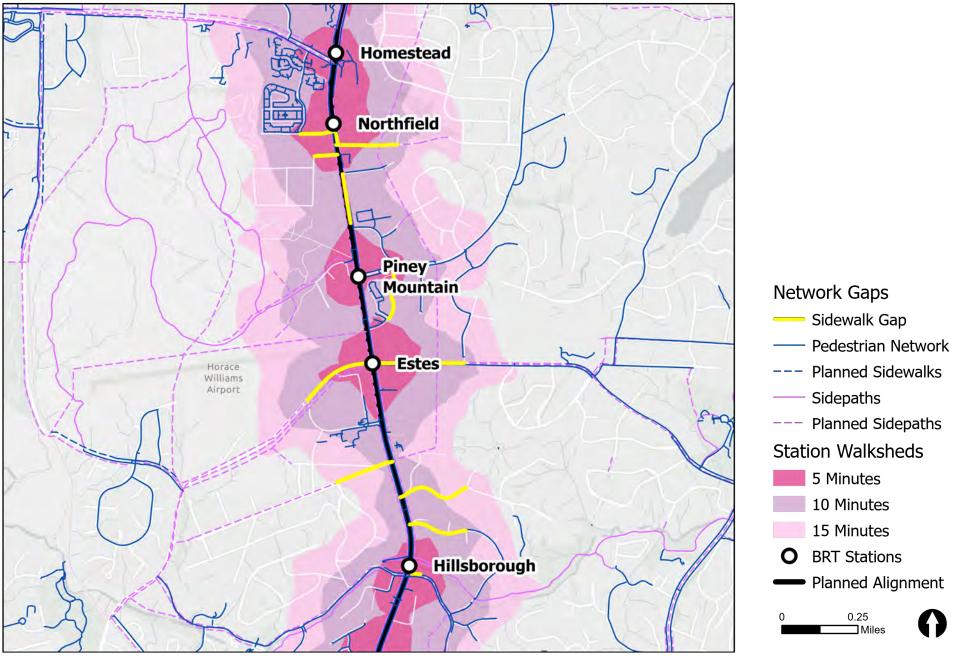
SRF Data

- No sidewalk along Barclay Street or Mt. Bolus Road.
- Non-ADA compliant sidewalk along Bolinwood Drive.
- Missing pedestrian connection between Bolin Creek Greenway and west side of MLK Jr. Blvd. A staircase exists on the east side.
- Non-ADA compliant driveway crossings of the gas station along Hillsborough Street.

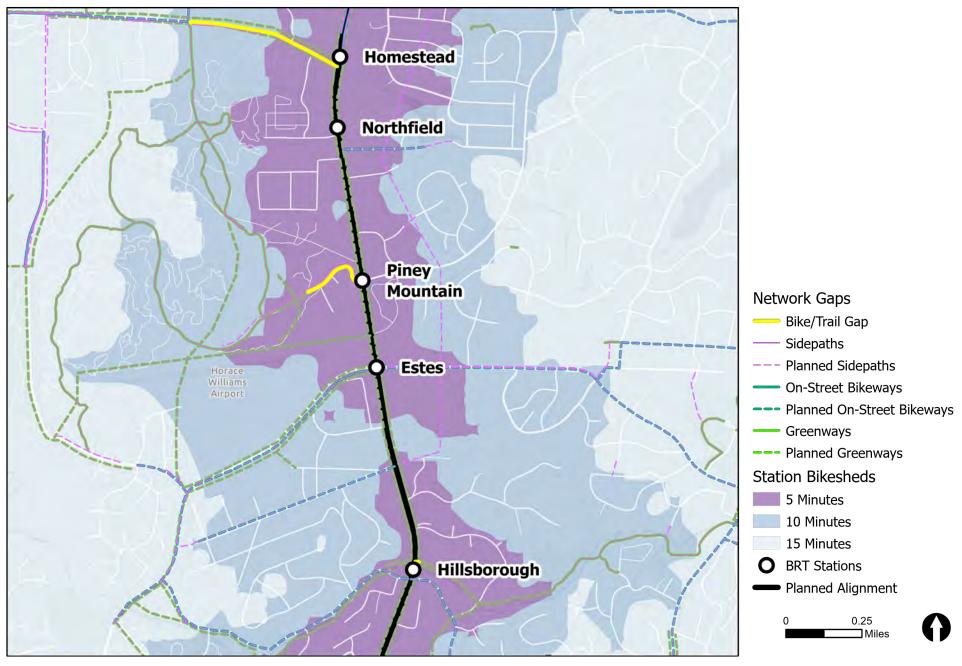


- Key connection between future BRT and a highly used Greenway.
- Hillsborough Street sidewalk and grade is very difficult for ADA-compliance. Stairs exist in some sections due to the topography.
- Police headquarters is slated for redevelopment.
- Close calls seen at the intersection.
- Lack of crossings at all legs of MLK Jr. Blvd intersection.











Bike Network Gaps - South MLK
Chapel Hill Transit Oriented Development

Longview

SRF Data

- Lack of crossings at all legs of MLK Jr. Blvd intersection.
- Sidewalk gaps along Longview Street, though the grade is very steep and topographically challenging.



Stakeholder Data

No feedback received here.



Franklin

SRF Data

- Sidewalk gaps along Columbia Street, North Street, and most of the local streets west of MLK Jr. Blvd and north of Rosemary Street.
- The station has facilities including trash receptacle, bench seating, and shelter.



- This is one of the most important stations along the line.
- Explore opportunities for placemaking, public art, etc. here.
- The Rosemary Street intersection can be a busy location to cross.
- Gap in on-street bicycle infrastructure along Rosemary and east of Columbia Street. Was planned but the new development may have scuttled that.
- The Columbia/Franklin intersection is very busy with all modes and needs to be reviewed for additional safety improvements.



Cameron

SRF Data

- Non-ADA compliant sidewalk along Mallette Street and south side of Cameron Avenue.
- All ped phase at Columbia/Cameron, though no signage/signals or roadway markings exist denoting this.



- Idea to remove eastbound traffic along Cameron Avenue to provide on-street bicycle facilities and better organize the Columbia/Cameron intersection.
- Cameron is a key bike connector.



Pittsboro/Credit Union

SRF Data

• Sidewalk gaps present along several local streets west of the station.



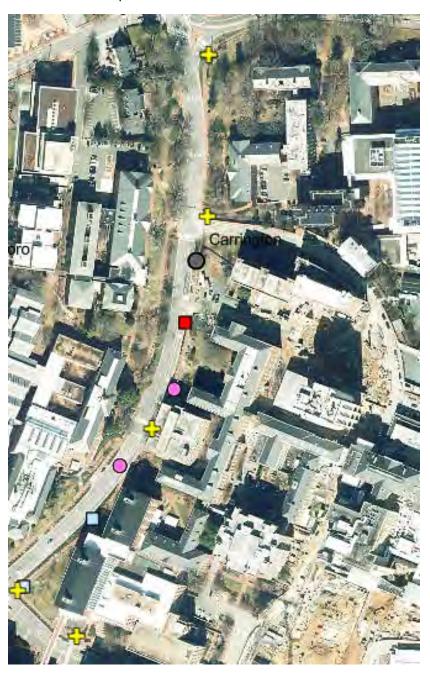
- Speed a concern here.
- Potential to remove one travel lane due volumes to provide on-street bicycle infrastructure.



Carrington Hall

SRF Data

• Bike racks present at several locations.



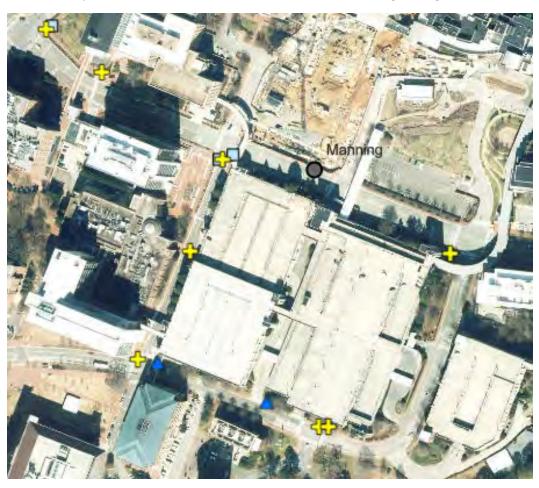
- Desire for secure bike parking.
- Could protected bicycle infrastructure be provided here? A wide boulevard is present.



Manning / East

SRF Data

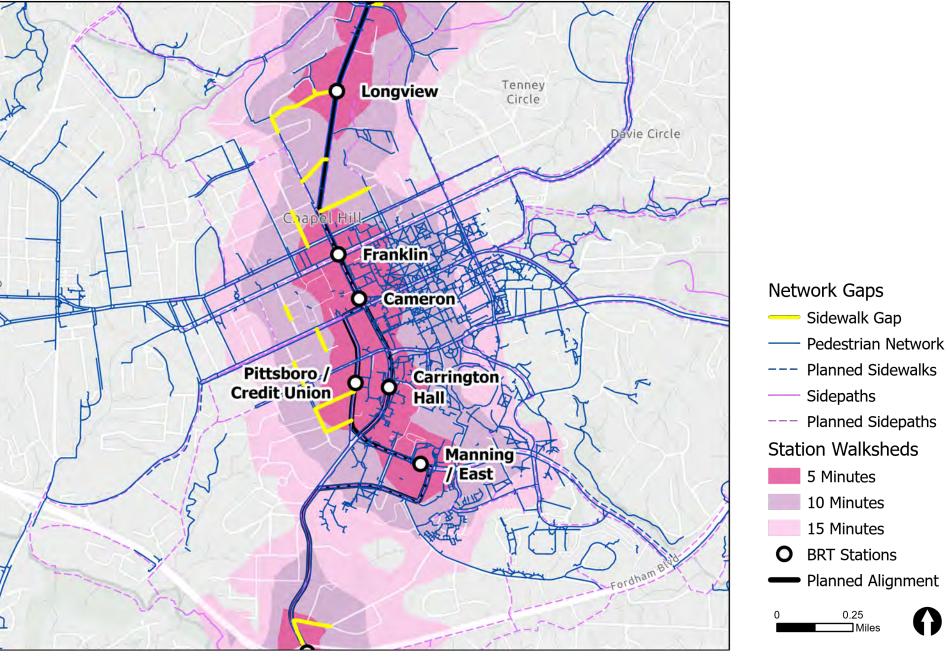
• Complete sidewalk network, several intersection crossings though all are ADA-compliant.



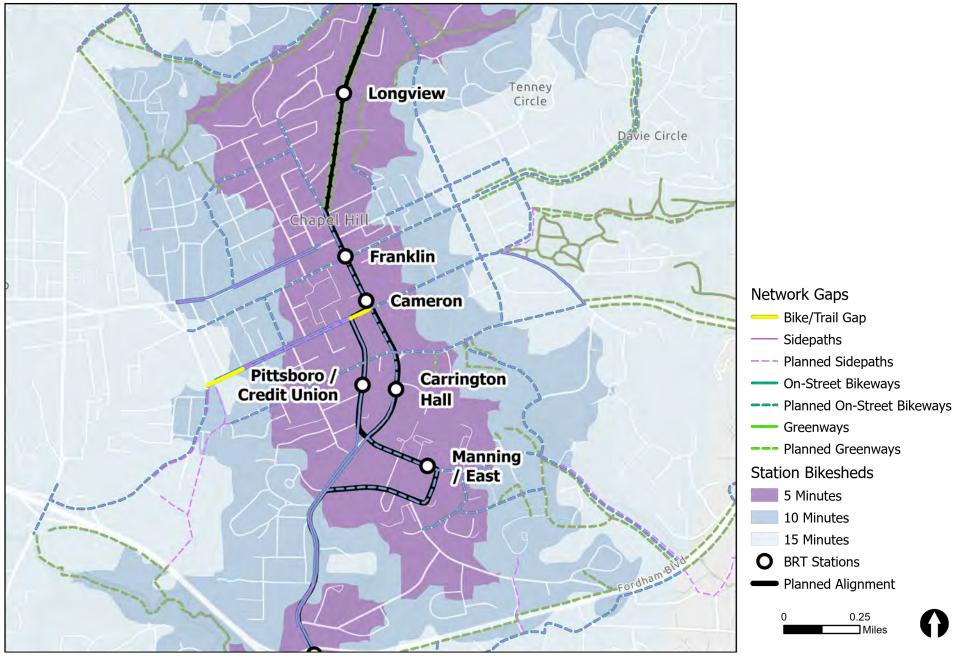
Stakeholder Data

• Future UNC development to the south may require another station and new alignment.











Bike Network Gaps - Downtown
Chapel Hill Transit Oriented Development

NC 54

SRF Data

- Sidewalk gaps to the east of Columbia Street, key is Purefoy Road.
- Non-ADA compliant sidewalk at the overpass.



Stakeholder Data

• Desire for the station to not be within the overpass.



Culbreth

SRF Data

- Sidewalk gaps along Culbreth Road and Mt. Carmel Church Road.
- No marked crossing of TH 15/501 at the intersection.
- Gap in the Greenway network here.



Stakeholder Data

• Better Greenway connections desired.



Southern Village

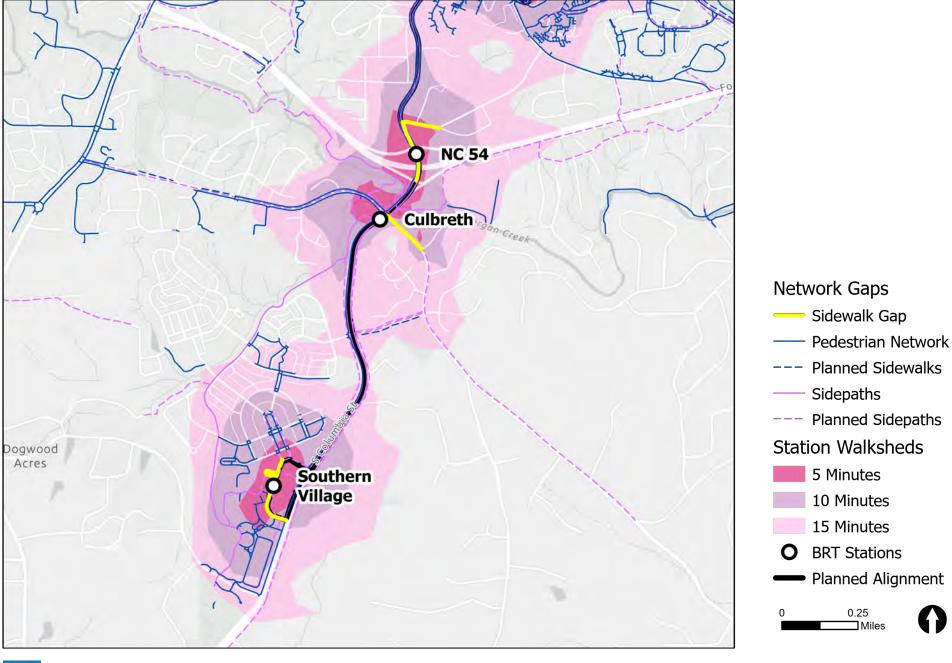
SRF Data

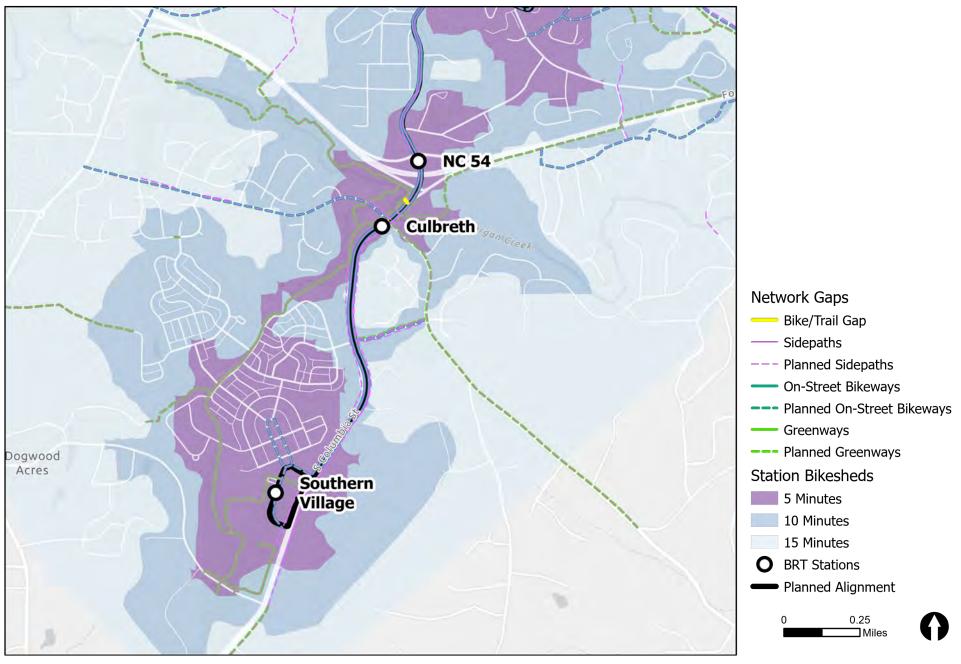
• ADA issues regarding curb ramps and sidewalk within the Park 'n' Ride area.



- Better connection between the Greenway and the Park 'n' Ride.
- Better wayfinding and secure bike parking.





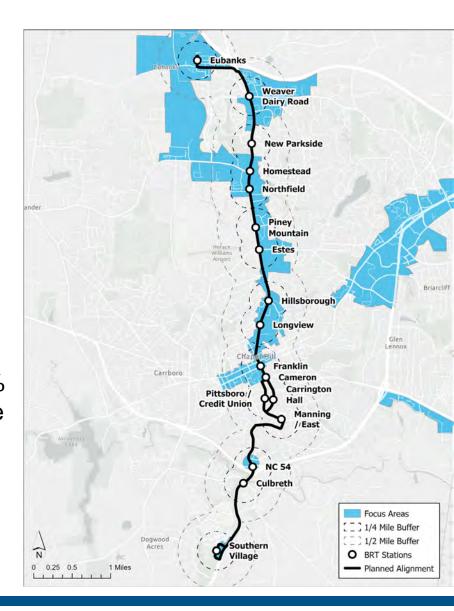




Existing Conditions

Background

- o 17 stations along a 7.3-mile route
- Focus with several walk and bikesheds (as the crow flies vs. actual)
- First/last mile connections via the existing or proposed walking and bicycling network
- Town goal to increase ped/bike/transit modeshare to 35% by 2025 means connectivity will be a key focus
- Significant greenway network with opportunities to further connect as "multimodal arterials"



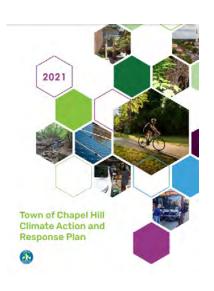


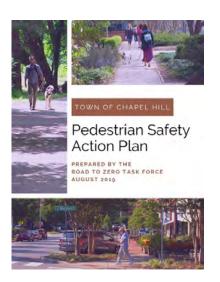
Existing Conditions

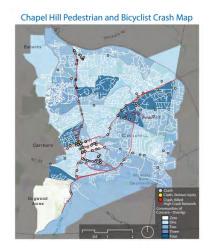
Reviewed Studies

- ADA Transition Plan (On-going)
- Climate Action Plan (2021)
- Mobility and Connectivity Plan (2020)
- o Vision Zero (2020)
- Pedestrian Safety Action plan (2019)







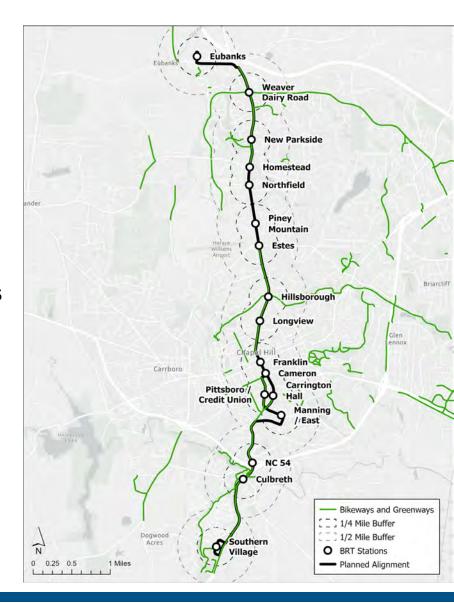




Existing Conditions

Existing Transportation Conditions

- Reviewed existing data made available by the Town:
 - Sidewalk
 - Greenways
 - o Land use
 - Crashes involving pedestrians and bicyclists
- Informed the gap identification process for further field review

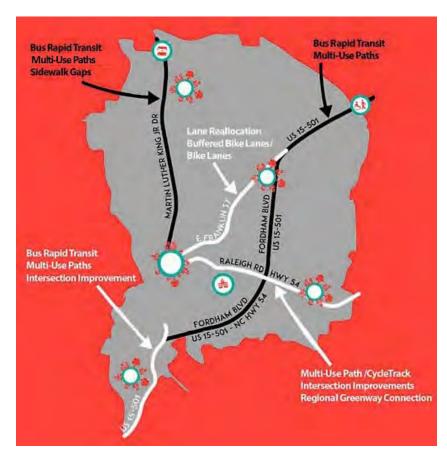




Recommendations From Other Studies

Mobility & Connectivity Plan

- Provide... "a comprehensive transportation system that provides everyone safe and reasonable access to all that the community offers".
- Follow "Complete Streets" best practices.
- Specific corridor recommendations identified including Martin Luther King Jr. Blvd and US Highway 15-501 South.
- Implement greenway connectors.





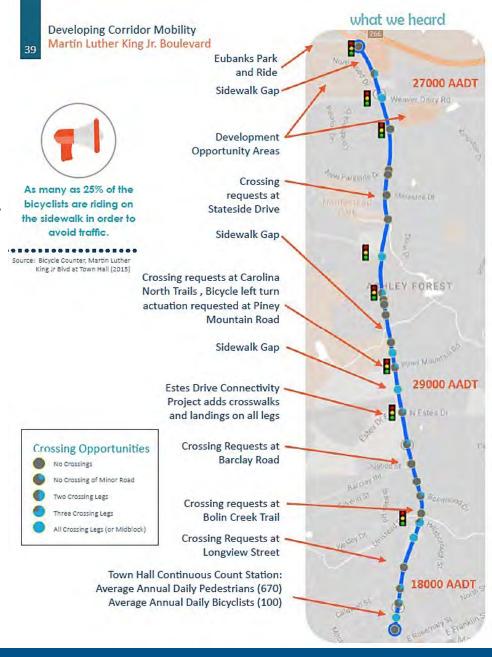
Martin Luther King Jr. Blvd. Review

Short-Term Recommendations

- Upgrade and widen sidewalks along corridor. Specific near-term need from Ashley Forest Road to Northfield Road and Northwood/Perkins.
- Add pedestrian crossings at Barclay Road, New Stateside Drive, Piney Mountain Road, and Westminster Drive (south side).
- Improve bike lane markings through all intersections, notably larger and busier locations.
- Improve bicycle signal actuation at all major intersections notably Weaver Dairy Road.
- Improve connections with Bolin Creek and Carolina North Trails by linking with shareduse paths, as well as sidewalks and bike lanes with curb cuts for easy movement between the roadway.

Long-term Recommendations

 Provide separated bicycle facilities (i.e., shared-use path) along both sides of the roadway.





US Highway 15-501 South Review

Short-Term Recommendations

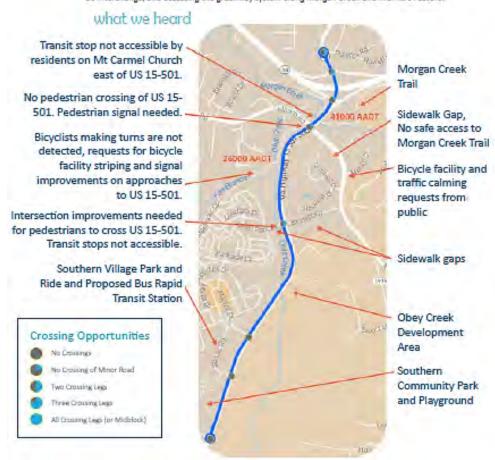
- Improve bike lanes and markings at the Mt. Carmel Church and Culbreth intersection.
- Construct a greenway connecting Mt.
 Carmel Church Road to the Fan Branch Trail.

Long-term Recommendations

- Provide separated bicycle facilities (i.e., shared-use path) along both sides of the roadway.
- Grade-separated ped/bike crossing of the roadway between Obey Creek and Southern Village.

US Highway 15-501 South

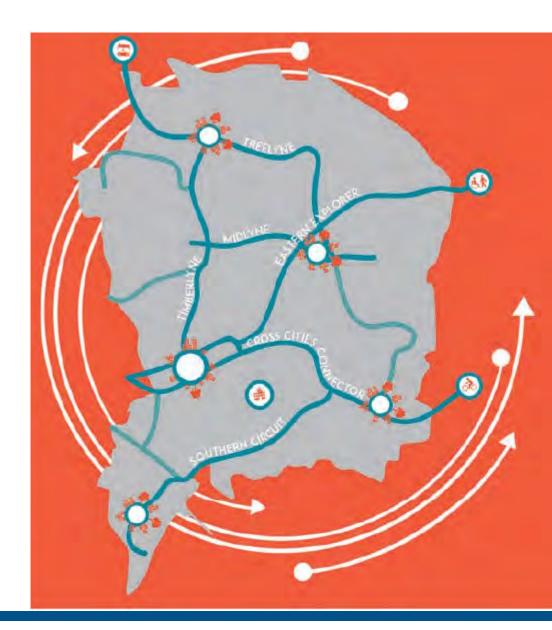
Existing Conditions: US 15-501 south of Chapel Hill continues to see tremendous growth, with large developments such as Obey Creek. The roadway itself is four-lane divided and provides sidewalks and bike lanes for most of its length south of the NO 54 interchange. There are bicyclist and pedestrian concerns about crossing US 15-501 at Mt. Carmel and Oulbreth Roads, navigating the US 15-501/NO 86 interchange, and accessing the greenway system along Morgan Creek and Merritt's Pasture.





Interconnecting Greenways

- Timberlyne
- Treelyne
- Eastern Explorer
- Cross Cities Connector
- Southern Circuit
- Homestead Connector
- Barclay Connector
- Pritchard Connector

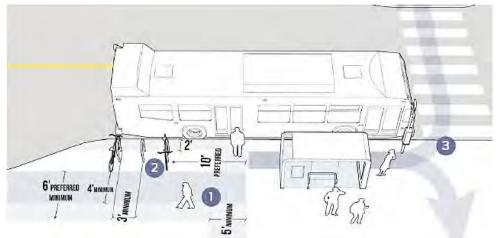




Bike Parking at BRT Stations

- Short-term: Minimum of 6 covered spaces
- Long-term: 5% of auto spaces or minimum of 8 covered spaces
- Secure parking especially important for more expensive bikes (i.e., e-bikes)
- Well-designed and accessible unsecure bike parking is also important







Bike Share

- Town is procuring bikeshare with UNC and Carrboro
- Consideration of bike share parking at all BRT stations
- Key to attracting riders in an accessible way for first/last mile as they will be e-bikes







Recommendations From Other Studies

Pedestrian Safety Action Plan

 Several improvements identified at intersections and along the corridor of Martin Luther King Jr. Boulevard

Locations	Specific Locations or Problems Identified	Safety Improvements
Intersections	Weaver Dairy Rd. and Martin Luther King Jr Blvd.	Eliminate Right-Turn-on-Red; install automatic lead pedestrian intervals; install accessible intersection upgrades (e.g. accessible pedestrian signals); install curb extensions or planters to increase right turning angles; expand pedestrian refuge island on the southern side; add and improve pedestrian level lighting. Configure intersection to accommodate future Bus Rapid Transit and increased number of pedestrians.
	Franklin St. and Columbia St.	Eliminate Right-Turn-on-Red; road diet on Franklin St.
	Columbia St. and Rosemary	Eliminate Right-Turn-on-Red; upgrade to high-visibility crosswalks on
	St.	all legs
	Franklin St. and Henderson St.	Eliminate Right-Turn-on-Red; add and improve pedestrian level lighting; upgrade to high-visibility crosswalks
	Franklin St. and Roberson St.	Add and improve pedestrian level lighting; upgrade crosswalks to high- visibility; install a RRFB at one of the crossings across Franklin Street; install curb extensions on all four corners
	S. Estes Dr. and Willow Dr.	Eliminate Right-Turn-on-Red; install automatic lead pedestrian intervals; install accessible intersection upgrades (e.g. accessible pedestrian signals); add crosswalks on western and southern crossings and upgrade all crosswalks to high-visibility; add and improve pedestrian level lighting; road diet on S. Estes Dr.
	Martin Luther King Jr. Blvd. and Westminster Dr.	Eliminate Right-Turn-on-Red; install automatic lead pedestrian intervals; install accessible intersection upgrades (e.g. accessible pedestrian signals); update eastern and western crosswalks to high-visibility; improve pedestrian level lighting; add pedestrian refuge on MLK as part of future BRT project
	Homestead Rd. and Martin Luther King Jr. Blvd	Eliminate Right-Turn-on-Red; install automatic lead pedestrian intervals; install accessible intersection upgrades (e.g. accessible pedestrian signals); upgrade crosswalks to high-visibility; add and improve pedestrian level lighting; extend pedestrian refuge island on northern side, add curb extensions on Homestead corners
Corridors	Martin Luther King Jr. Blvd	Road diet; install multiuse paths along both sides of corridor; add and improve pedestrian level lighting along corridor; narrow travel lanes; install additional RRFBs or hybrid beacons, implement Bus Rapid Transit along corridor
	Franklin St.	Road diet; add and improve pedestrian level lighting along corridor; narrow travel lanes; add RRFBs and hybrid beacons
	Fordham Blvd	Install sidewalks and multiuse paths where possible to ensure connectivity; add and improve pedestrian level lighting along corridor
	Rosemary St.	Add and improve pedestrian level lighting along corridor; narrow travel lanes; install curb extension for pedestrian crossings; install chicanes where possible; extend protection along bike lanes; close driveways where possible
	Estes Dr.	Add and improve pedestrian level lighting along corridor; install sidewalks, bike lanes, multiuse path and pedestrian crossings as part of planned project

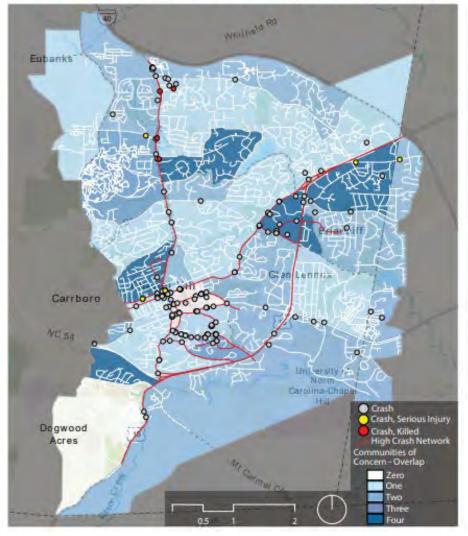


Recommendations From Other Studies

Vision Zero

- The entire N-S BRT route will run along roadways included in the Town's High Injury Network.
- Most intersections along the corridors have recorded crashes, notably in the downtown and UNC area where ped/bike volumes are higher.
- Improvements should be prioritized to these areas due to the higher need identified.

Chapel Hill Pedestrian and Bicyclist Crash Map





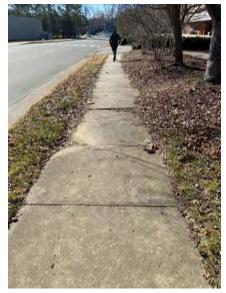
Findings, Deficiencies, and Gaps

Greenways and Connectors

- Improved connections to/from the BRT stations would improve access for longer trips.
- Some high-quality greenway connections exist, such as at Bolin Creek.
- The Greenway system is disconnected.

Sidewalk

- Improved connections to/from the BRT stations would improve access for shorter trips.
- Limited network and topographical challenges along adjacent roadways.
- Accessibility a key issue as it relates to the topography, elevation, and right-of-way constraints.







Findings, Deficiencies, and Gaps

Crossings and Intersections

- ADA-accessibility issues at intersections along the BRT route.
- Previous studies identified crossing enhancements at major intersections and key uncontrolled locations.
- High-quality crossing infrastructure will be important to facilitate comfortable crossing of busy roadways to access stations.

Bike Parking, Bikeshare, Wayfinding

- Limited bike parking outside of downtown/UNC and park 'n' rides.
- Bikeshare only within the UNC campus, though this will change soon via the existing RFP for town-wide service.
- Limited wayfinding outside of the Greenway system.



