Town of Chapel Hill

Central West Focus Area

Transit Service

DRAFT

0' 300' 600' 1200'
Scale: 1" = 600'

- Impact Area
- Evaluation for Transportation & Connections
- Evaluation for Form & Use

Evaluation for Form & Use
(Existing Weekday Routes)
- G route
- NS &T route
- A route
- HS route
- NU route

Evaluation for Transportation & Connections
(Existing Weekday Routes)
- CL route
- D route
- F route

- Existing Triangle Transit
- Future BRT route
- Future BRT stop
- Existing bus stops with number of daily boardings (size corresponds with level of transit use)
- Existing Park and Ride

MAP HIGHLIGHTS:

- The primary focus area is served by a total of five bus routes, while three additional routes serve the secondary focus area. Routes within the primary focus area follow primary roads only and do not pass through surrounding neighborhoods.
- Martin Luther King Jr. Boulevard is served by two bus routes north of Estes Drive and five bus routes south of Estes Drive.
- Estes Drive is served by two bus routes west of Martin Luther King Jr. Boulevard and one bus route east of Martin Luther King Jr. Boulevard.
- Based on bus boardings data, the greatest number of boardings occur near multifamily residential development along Martin Luther King Jr. Boulevard north of Estes Drive. Bus stops with the greatest number of boardings are located between Northfield Drive and Homestead Road and between Piney Mountain Road and Estes Drive.
- Future bus rapid transit service is planned along Martin Luther King Jr. Boulevard, with a planned stops at Estes Drive and just south of Homestead Drive.

sources: Town of Chapel Hill GIS
Chapel Hill Transit
Triangle Transit

Town of Chapel Hill

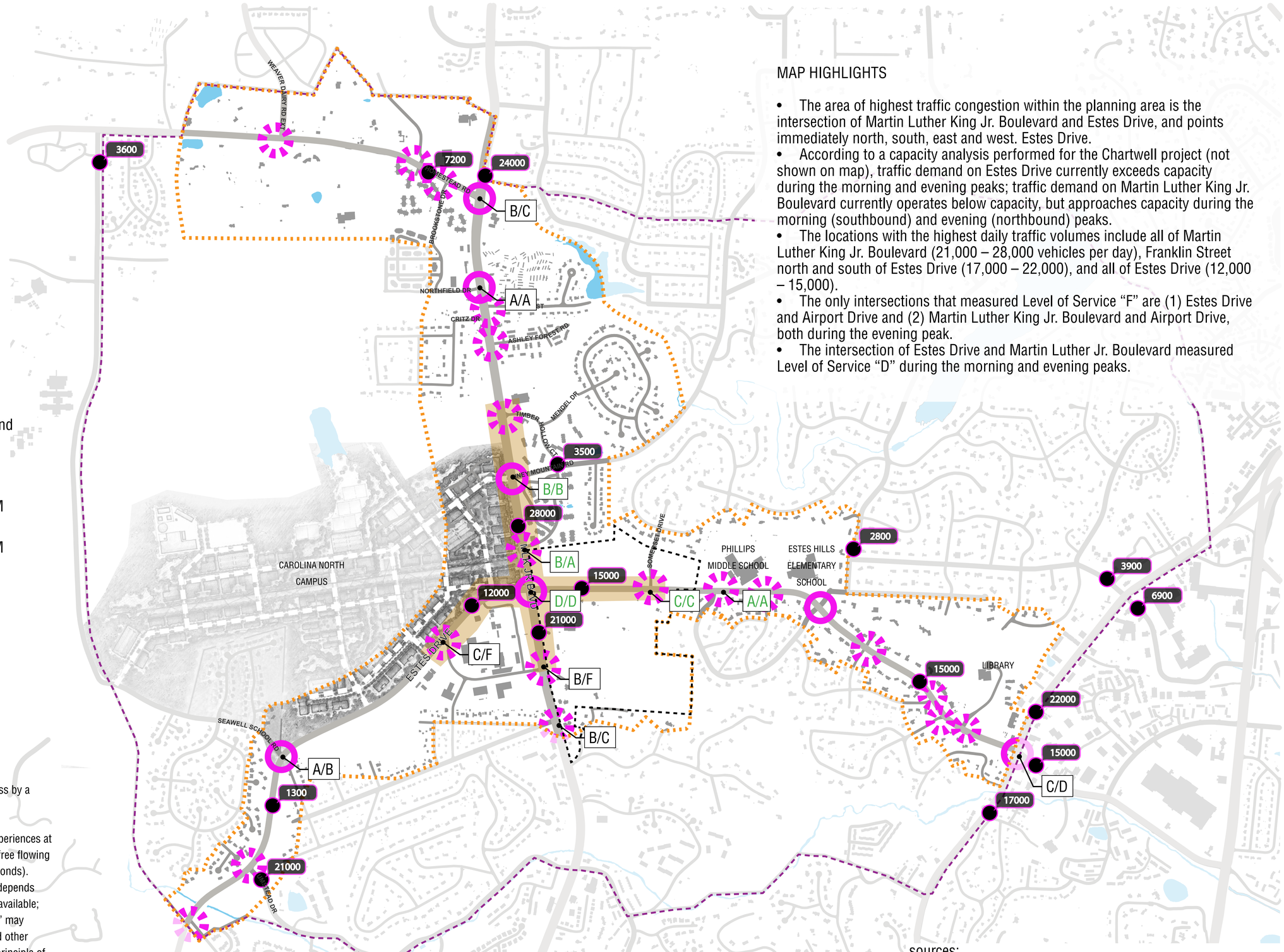
Central West Focus Area

Traffic Analysis

DRAFT

0' 300' 600' 1200'
Scale: 1" = 600'

- Impact Area
- Evaluation for Transportation & Connections
- Evaluation for Form & Use
- Signalized Intersection
- Un-signalized Intersection
- 2011 NCDOT Annual Average Daily Traffic (AADT) measurement points and volume estimates*
- Highest Congestion Area
- A/B — Existing Level of Service(AM peak/PM peak) based on 2009 data#
- A/B — Existing Level of Service(AM peak/PM peak) based on 2012 data#



MAP HIGHLIGHTS

- The area of highest traffic congestion within the planning area is the intersection of Martin Luther King Jr. Boulevard and Estes Drive, and points immediately north, south, east and west. Estes Drive.
- According to a capacity analysis performed for the Chartwell project (not shown on map), traffic demand on Estes Drive currently exceeds capacity during the morning and evening peaks; traffic demand on Martin Luther King Jr. Boulevard currently operates below capacity, but approaches capacity during the morning (southbound) and evening (northbound) peaks.
- The locations with the highest daily traffic volumes include all of Martin Luther King Jr. Boulevard (21,000 – 28,000 vehicles per day), Franklin Street north and south of Estes Drive (17,000 – 22,000), and all of Estes Drive (12,000 – 15,000).
- The only intersections that measured Level of Service "F" are (1) Estes Drive and Airport Drive and (2) Martin Luther King Jr. Boulevard and Airport Drive, both during the evening peak.
- The intersection of Estes Drive and Martin Luther Jr. Boulevard measured Level of Service "D" during the morning and evening peaks.

* Average Annual Daily Traffic (AADT) is a measure of traffic volume that refers to the average number of vehicles that pass by a measurement point during a 24-hour period in a given year.

Level of Service (LOS) measures the delay each vehicle experiences at a particular intersection, ranging from Level of Service "A" (free flowing traffic) to Level of Service "F" (average delay exceeds 80 seconds). Determining what constitutes an acceptable level of service depends on the local context and the range of transportation options available; for example, in some urban areas, Level of Service "E" or "F" may be considered acceptable. The Project for Public Places, and other highly regarded urban planning organizations, promote the principle of "Streets as Places" urging street design for community livability rather than for free flowing traffic alone.

sources:

Traffic Impact Analysis: Carolina Flats at Estes (June 2012)
Traffic Impact Analysis: Fall 2009 Update for the Carolina North Development (December 31, 2009)
NCDOT 2011 Average Annual Daily Traffic
Rhodeside & Harwell Site Analysis

Town of Chapel Hill

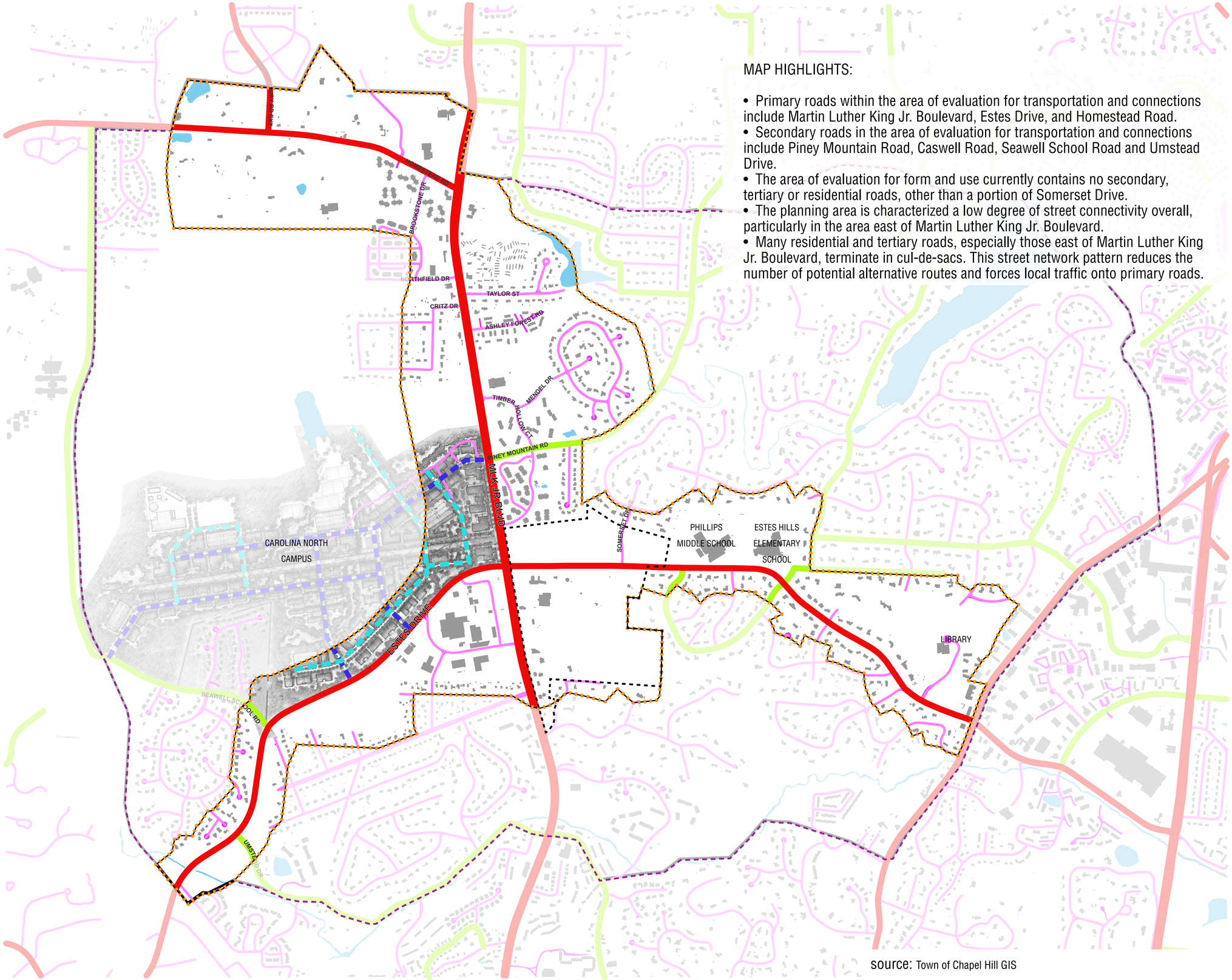
Central West Focus Area

Street Connectivity

DRAFT

0' 300' 600' 1200'
Scale: 1" = 600'

- Impact Area
- Evaluation for Transportation & Connections
- Evaluation for Form & Use
- Primary Roads
- Secondary Roads
- Tertiary/Residential Roads
- Major Proposed Roads
- Minor Proposed Roads



MAP HIGHLIGHTS:

- Primary roads within the area of evaluation for transportation and connections include Martin Luther King Jr. Boulevard, Estes Drive, and Homestead Road.
- Secondary roads in the area of evaluation for transportation and connections include Piney Mountain Road, Caswell Road, Seawell School Road and Umstead Drive.
- The area of evaluation for form and use currently contains no secondary, tertiary or residential roads, other than a portion of Somerset Drive.
- The planning area is characterized a low degree of street connectivity overall, particularly in the area east of Martin Luther King Jr. Boulevard.
- Many residential and tertiary roads, especially those east of Martin Luther King Jr. Boulevard, terminate in cul-de-sacs. This street network pattern reduces the number of potential alternative routes and forces local traffic onto primary roads.

source: Town of Chapel Hill GIS

Town of Chapel Hill

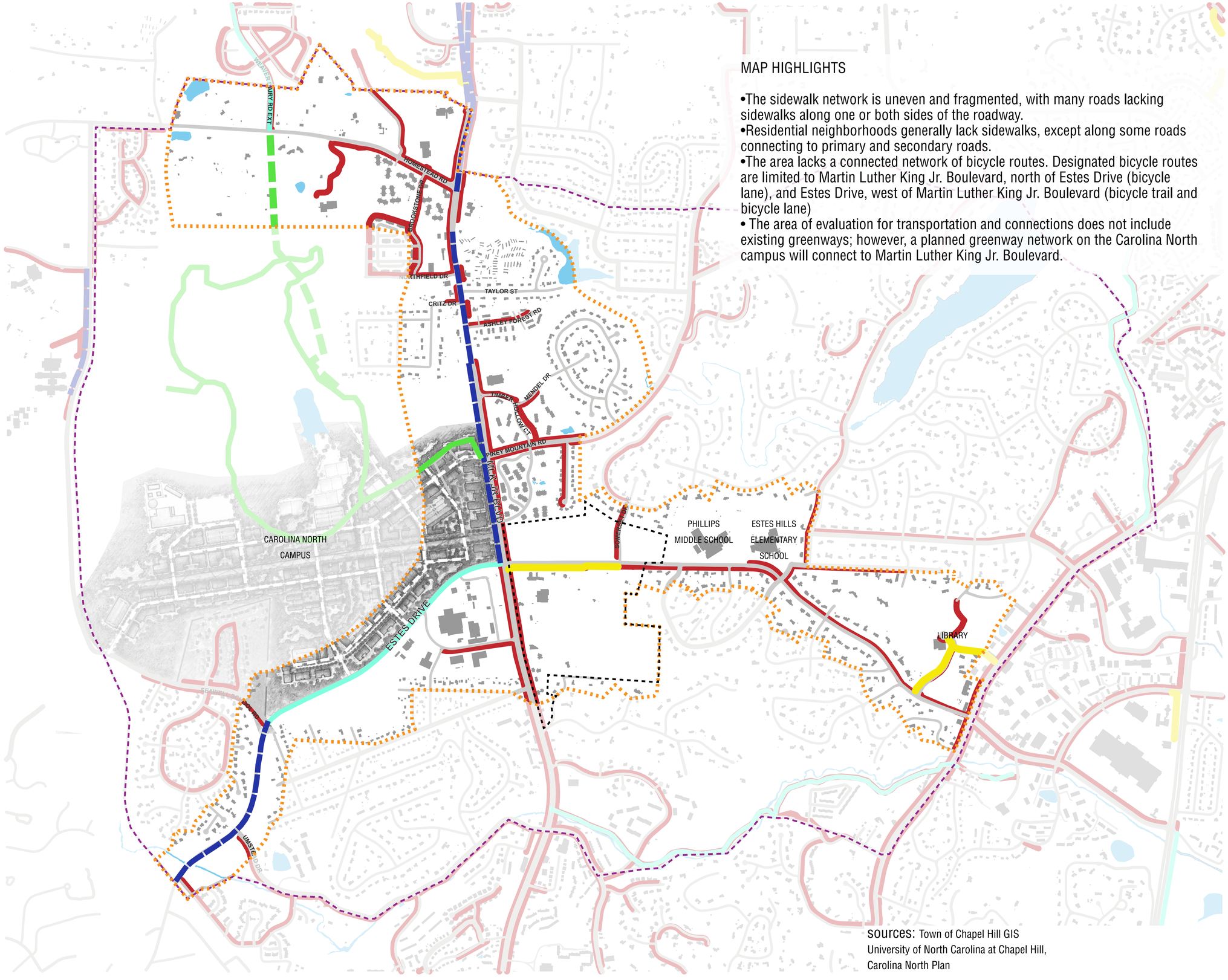
Central West Focus Area

Sidewalks,Bike Routes, and Greenways

DRAFT

0' 300' 600' 1200'
Scale: 1" = 600'

- Impact Area
- Evaluation for Transportation & Connections
- Evaluation for Form & Use
- Sidewalks
- Multi-use Path
- Bike Lane
- Bike Trail (Carolina North)
- Proposed Greenway
- Existing Pumpkin Loop Trail



MAP HIGHLIGHTS

- The sidewalk network is uneven and fragmented, with many roads lacking sidewalks along one or both sides of the roadway.
- Residential neighborhoods generally lack sidewalks, except along some roads connecting to primary and secondary roads.
- The area lacks a connected network of bicycle routes. Designated bicycle routes are limited to Martin Luther King Jr. Boulevard, north of Estes Drive (bicycle lane), and Estes Drive, west of Martin Luther King Jr. Boulevard (bicycle trail and bicycle lane)
- The area of evaluation for transportation and connections does not include existing greenways; however, a planned greenway network on the Carolina North campus will connect to Martin Luther King Jr. Boulevard.

sources: Town of Chapel Hill GIS
University of North Carolina at Chapel Hill,
Carolina North Plan