

Chapel Hill North-South BRT

Chapel Hill Town Council

January 16, 2019



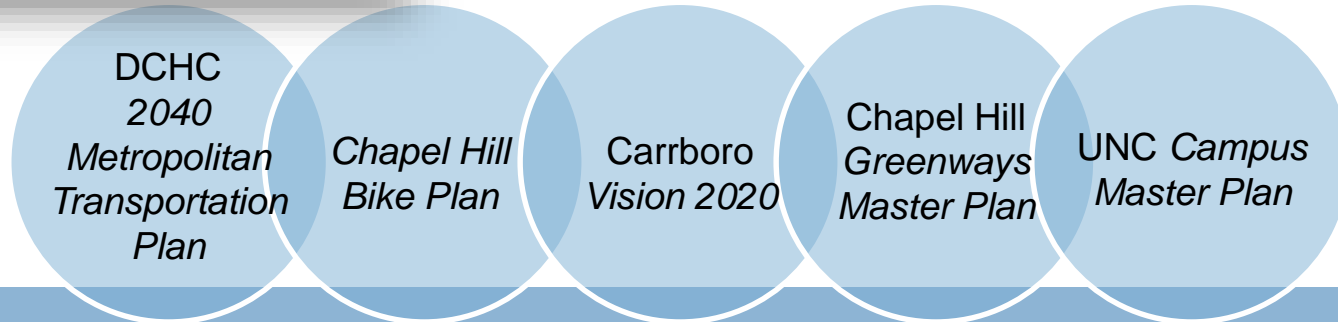
Agenda

- Project Origination and Review of 2016 Council adopted Locally Preferred Alternative (LPA)
- Council consider refinements to adopted LPA
 - Durham Tech Extension Feasibility Study
 - Refinement of LPA from Eubanks Road to North Street as recommended by Transit Partners Committee.
- Pedestrian and Bicycle Facilities Update
- Next Steps

Project Origination



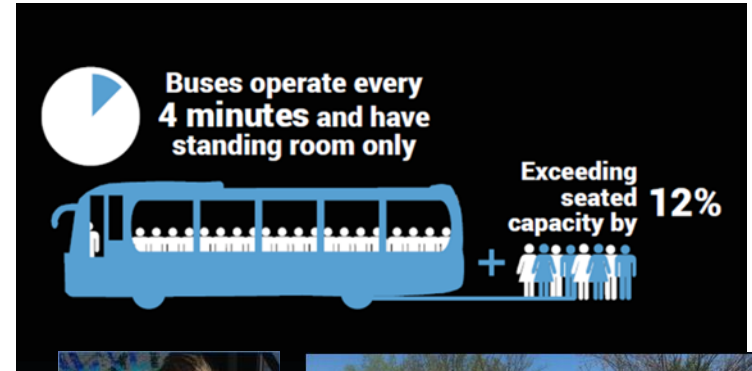
- Expands on previous regional and local planning
- Continues key theme identified in the Chapel Hill 2020 Comprehensive Plan - “Getting Around” and Small Area Plans such as Central West
- An opportunity to build on prior investments to improve connectivity within a critical transportation corridor, including regional connections, support planned land uses and contribute to regional equity, sustainability, and quality of life



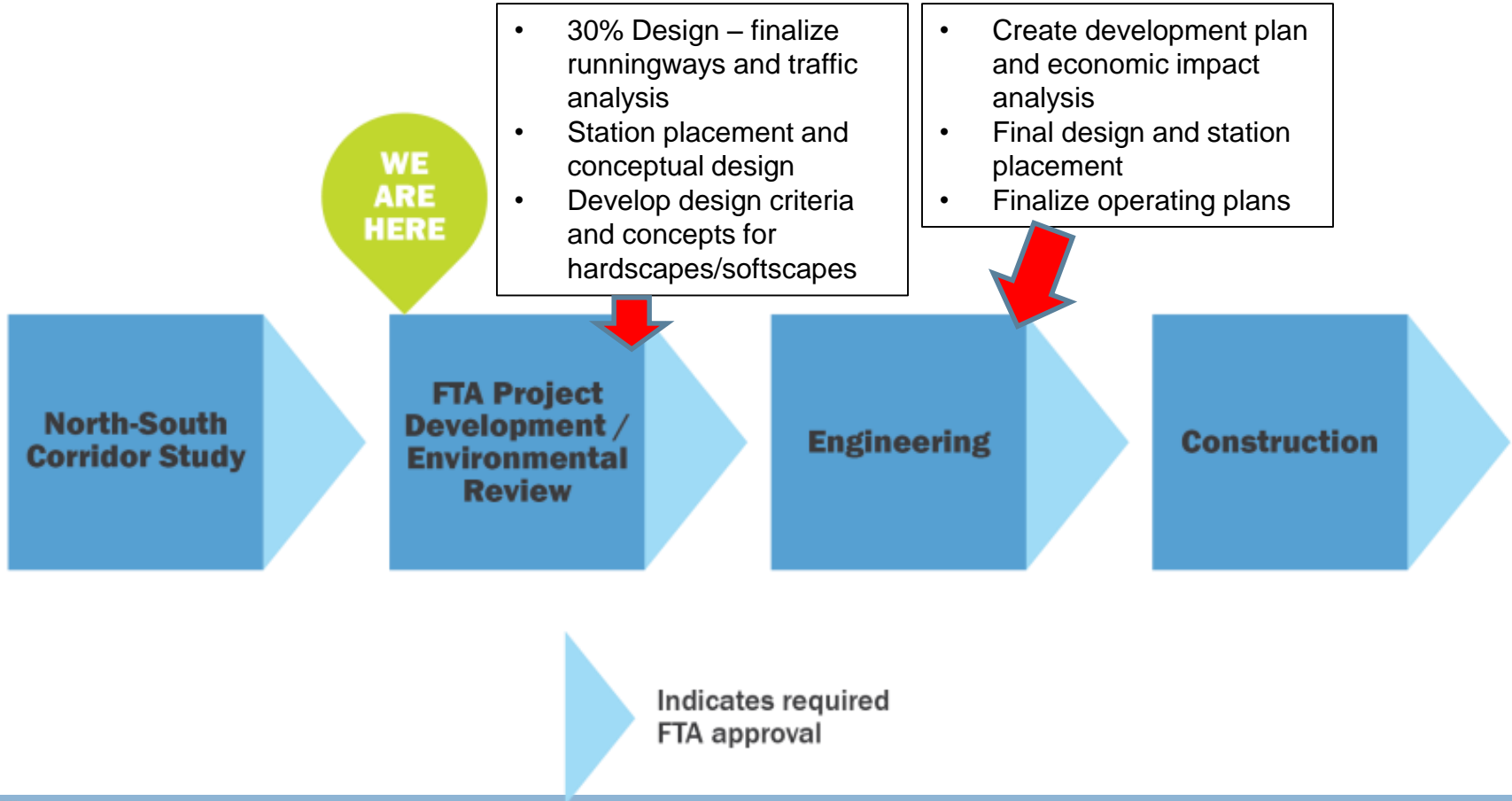
Context and Vision

Prepares the Town to meet mobility demand as the region continues to grow:

- Current system operates close to maximum capacity
- Proposed system provides a long-term, scalable solution available to residents and visitors of the community
- Connects to regional transit options
- Supports current and planned development in the corridor with a multi-modal system that serves cyclists, pedestrians and other users



Federal Project Implementation Process



The 2016 North-South Corridor LPA



Dedicated Curb Lane - Construct a New Lane



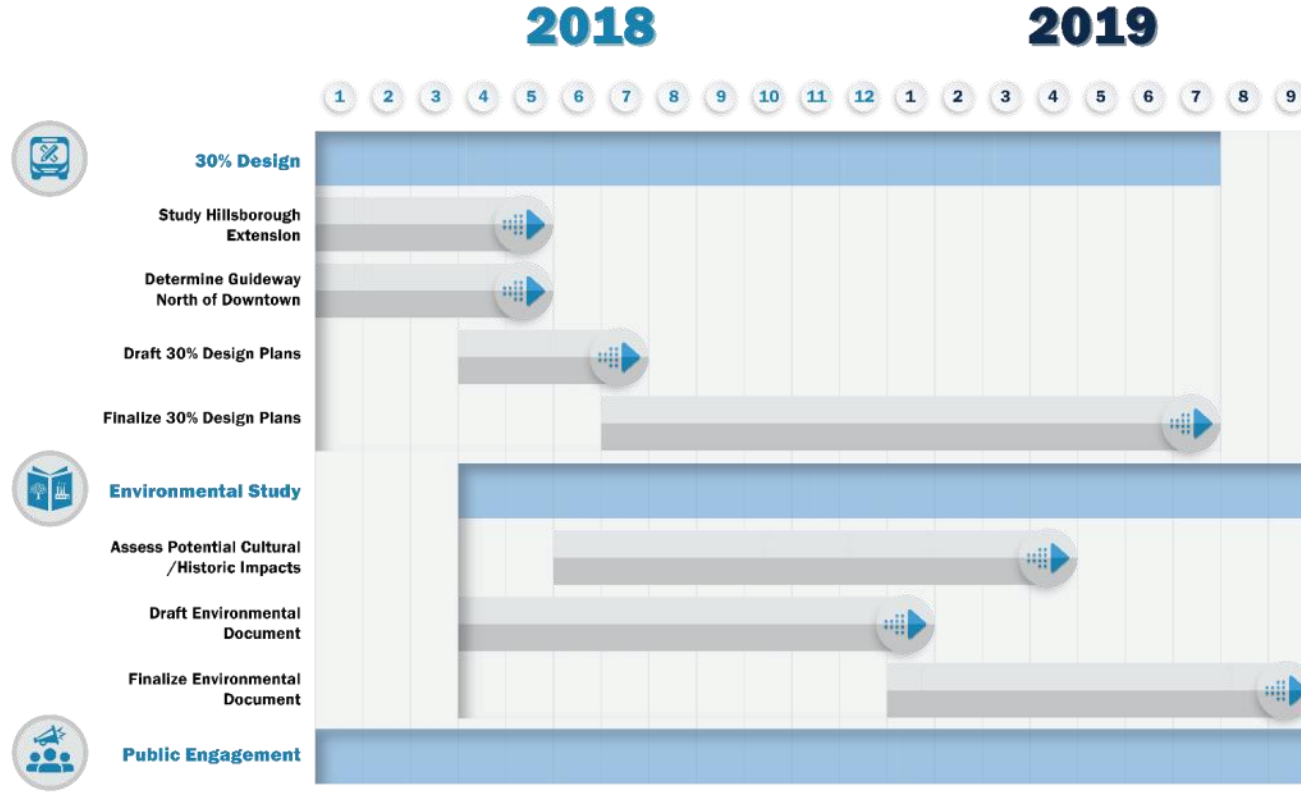
Dedicated Center Lane - Construct a New Lane



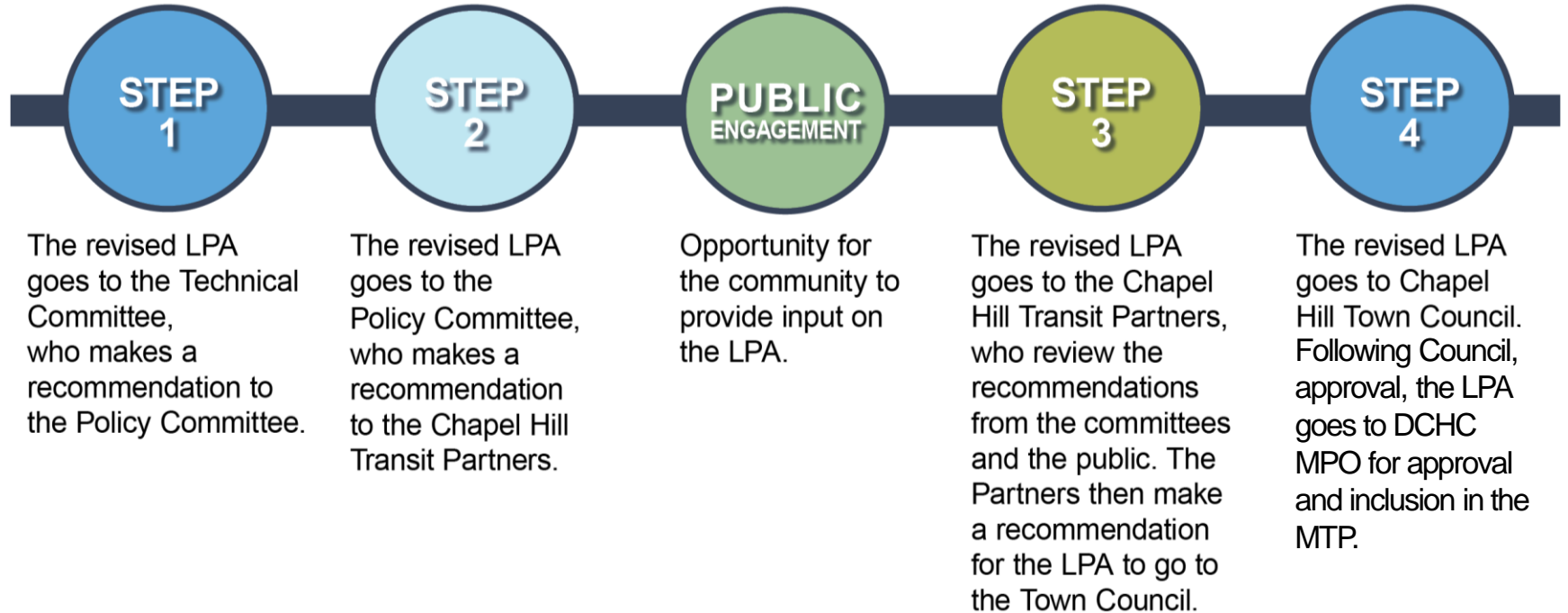
Dedicated Curb Lane - Convert Lane from Existing Use



NEPA and 30% Design Schedule



Process to Approve the Revised LPA



Technical and Policy Committees



Chapel Hill
transit

DCHC
Metropolitan Planning Organization
Planning Tomorrow's Transportation



UNC
HEALTH CARE



THE UNIVERSITY
of NORTH CAROLINA
at CHAPEL HILL

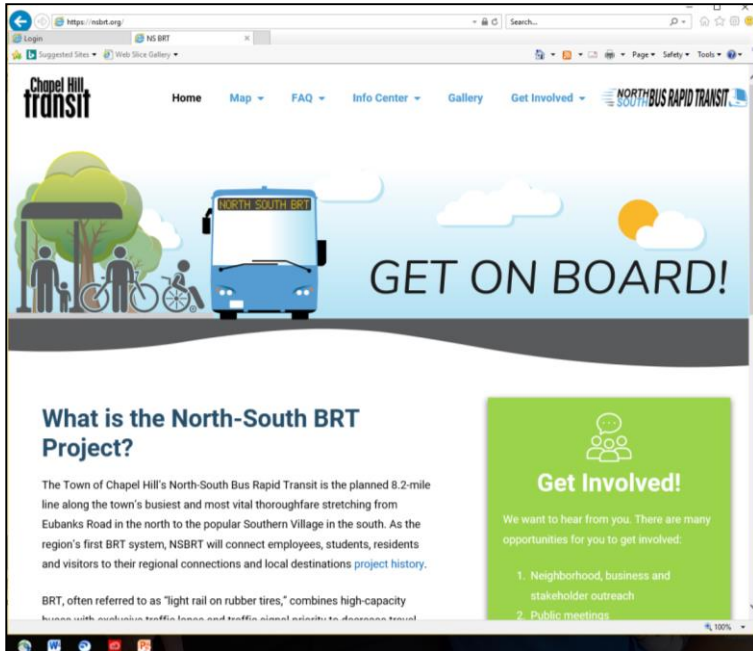


ORANGE COUNTY
NORTH CAROLINA



Public Engagement

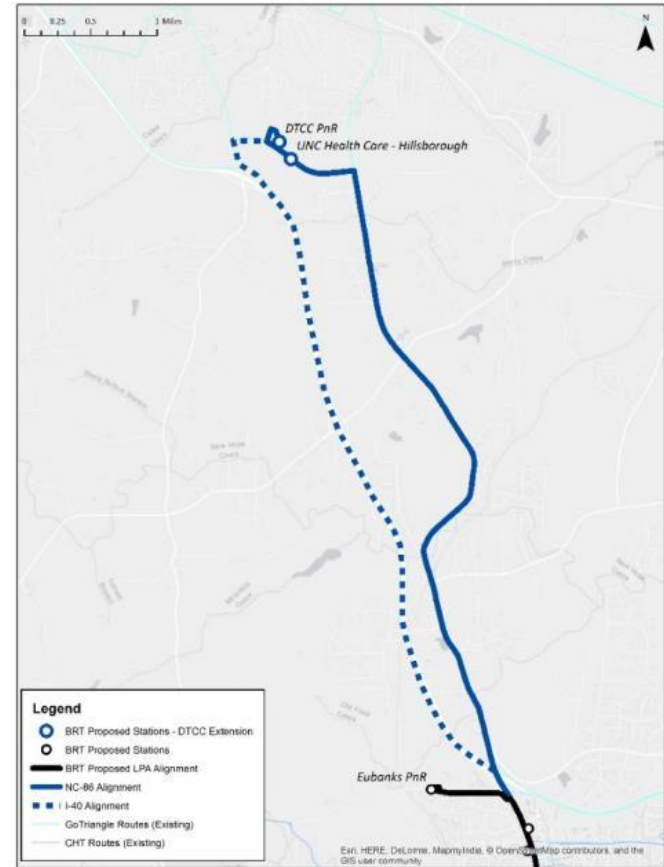
- Media / Social Media / MetroQuest / Website Update
- Key Stakeholder / Neighborhood / Local Business / University Outreach



Work To-Date and Transit Funding Partners' Recommendations

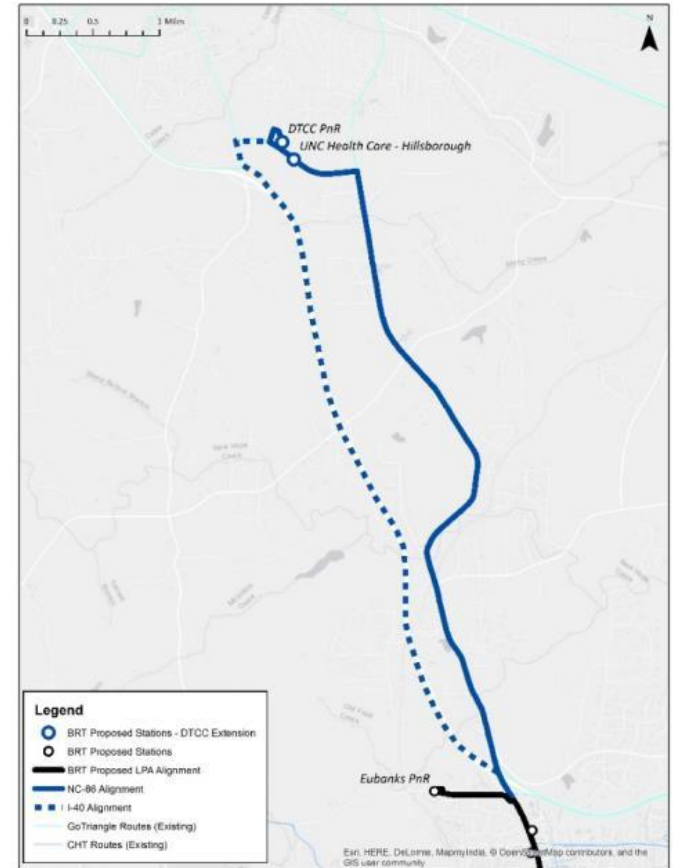
Extension to Durham Technical Community College

- Discussion participants
 - Chapel Hill Transit
 - GoTriangle
 - Orange County
 - Town of Hillsborough
 - DHCH MPO



Extension to Durham Technical Community College

- 6.7-mile BRT extension from Eubanks P&R to DTCC
- 2 potential BRT stops
 - UNC Healthcare – Hillsborough Campus (2 platforms)
 - DTCC Park-and-Ride (1 platform)
- Committees' Recommendations
 - Eliminate DTCC Extension
 - Ridership gain does not justify capital or operating and maintenance costs
 - Pursue opportunities to improve Route 420 as local funding becomes available
 - Maintain 2016 LPA service plan



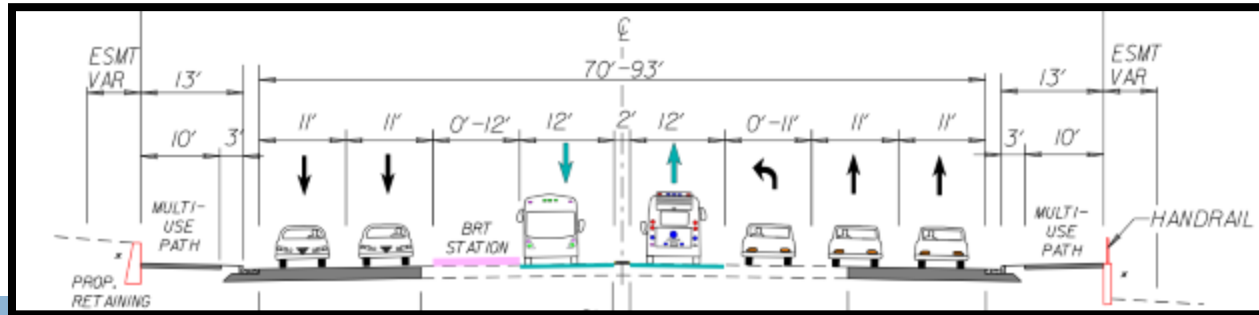
Northern Guideway Options

- Eubanks Road to North Street
- 3 segments / multiple options
- Eubanks Road: Carraway Village
- Comparison matrix
- Bike and pedestrian considerations
- Additional traffic analysis during 30% Design
- Additional station to be added at Homestead Road



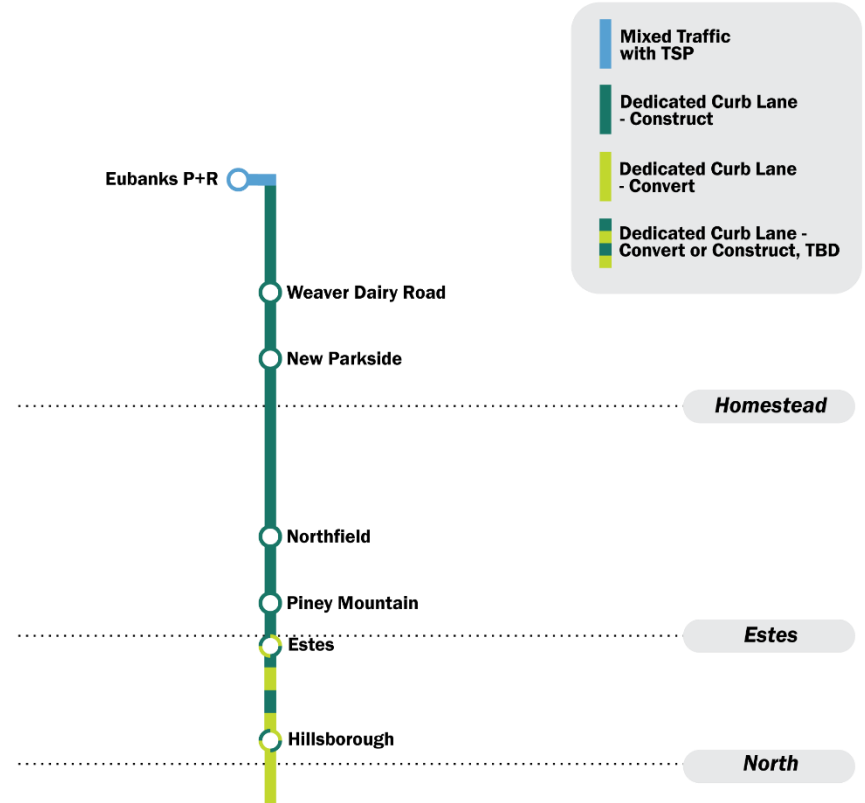
Center Running Guideway Option

- Eliminate Center Running Guideway
 - Consistent curbside guideway for the entire route
 - Less roadway widening at signalized intersections
 - Curbside used by other local and regional buses
 - Better access with center turn lane



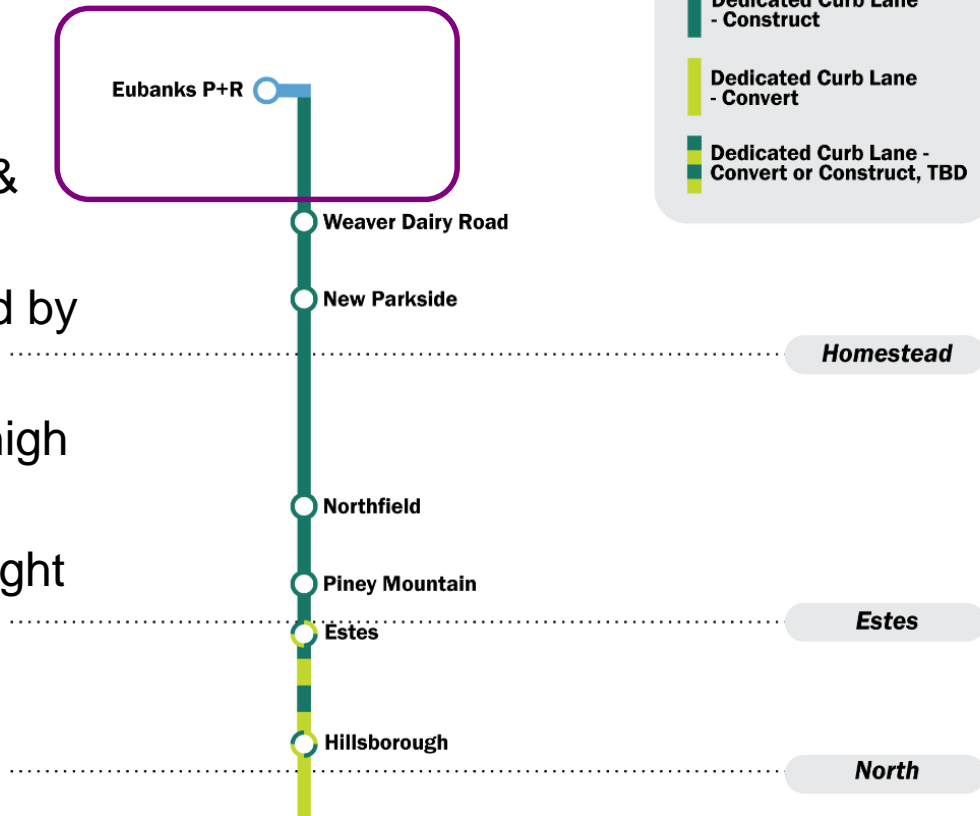
Northern Guideway Options: Recommendations

- Eubanks Road
 - Mixed Traffic
- Eubanks Road to Estes Drive
 - Construct Curbside Guideway
- Estes Drive to North Street
 - Evaluate Convert Curbside and Construct Curbside Guideway



Eubanks Road

- Recommend Mixed Traffic
 - From MLK, Jr. Blvd to Park & Ride lot (0.6 mi)
 - To be widened and improved by Carraway Village developer
 - Build out traffic volume too high to convert lanes
 - BRT could use westbound right turn lane in future



Mixed Traffic
with TSP

Dedicated Curb Lane
- Construct

Dedicated Curb Lane
- Convert

Dedicated Curb Lane -
Convert or Construct, TBD

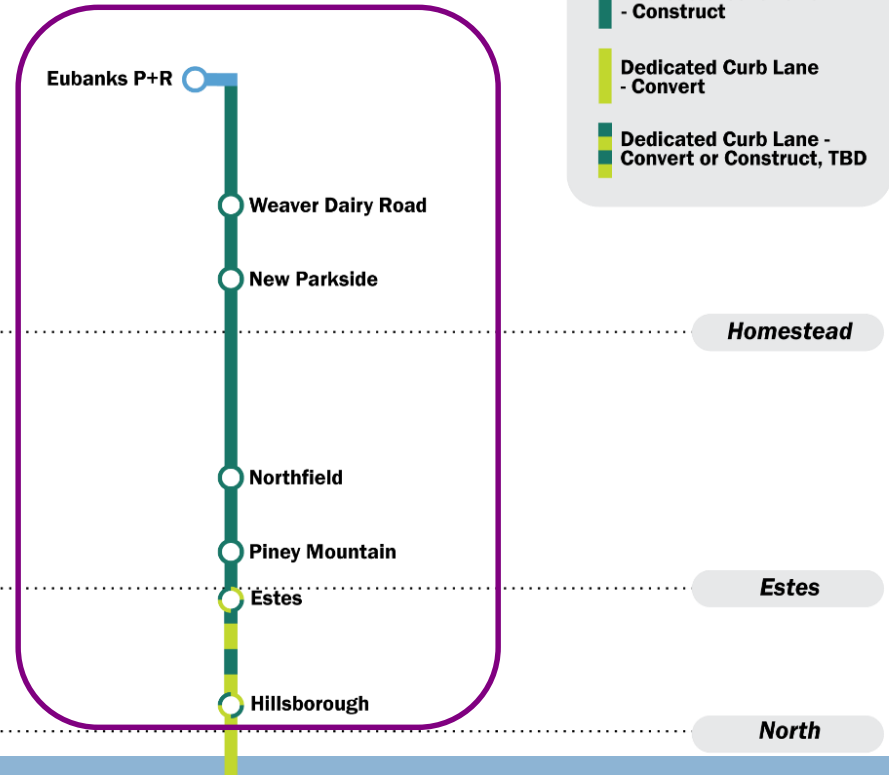
Homestead

Estes

North

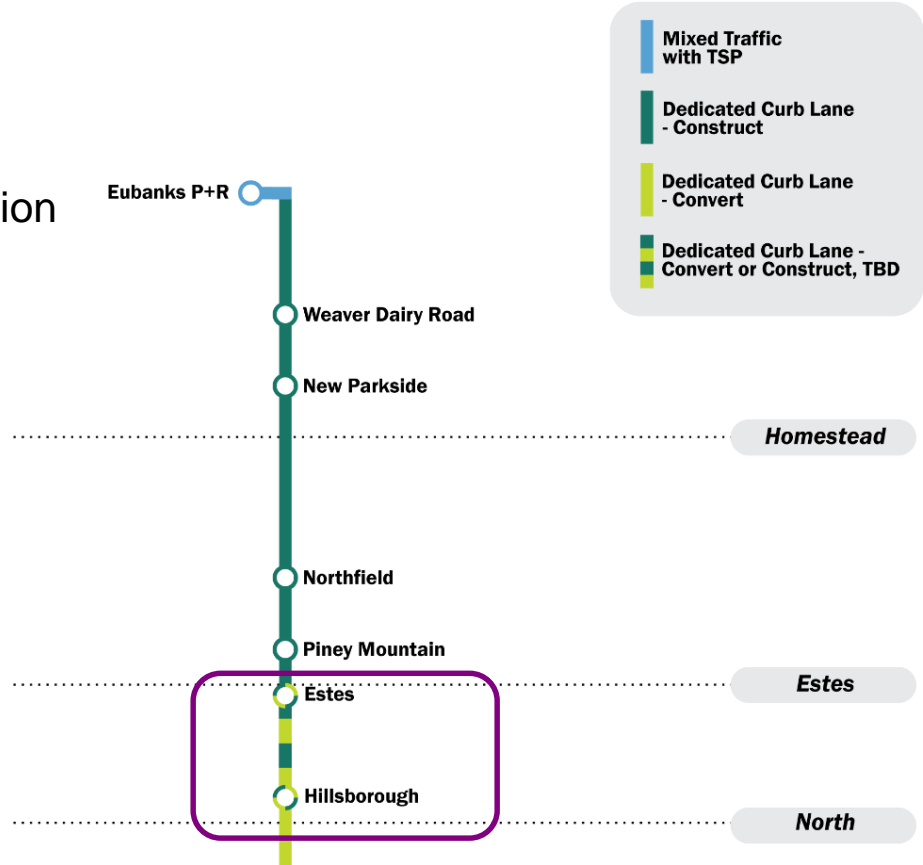
Dedicated Curb Lane – Construct Option

- Recommend from Eubanks to Estes
 - Widening towards median to retain outside curb & gutter
 - Center turn lane for access
 - Keep existing right turn lanes
 - Narrow travel lanes to 11'
 - Maintains current traffic capacity
 - Longer distance to cross the road
 - Intersection improvements for active transportation
- Consider from Estes to North Street
 - Additional traffic and analysis necessary



Dedicated Curb Lane – Convert Option

- Consider from Estes to North Street
 - Reduction of one travel in each direction
 - Longer signal delays
 - Can narrow travel lanes
 - Maintains center turn lane for access
 - Shorter pedestrian crossing length
 - Lower capital cost than construct
 - Reduced ROW
 - No parking impacts
 - Multi-use path



Guidance from Study Committees and Transit Funding Partners on Pedestrian and Bicycle Facilities

Existing Bike Facilities

N-S BRT Route: Southern Village to Eubanks Park & Ride



None

28%

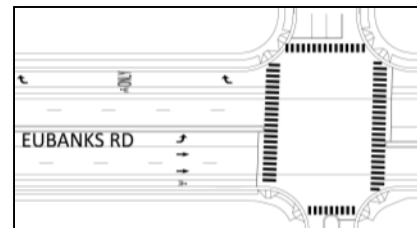
Bike Lanes

53%



Shared Lanes

19%



Bike Lanes proposed on Eubanks Road and Caraway Village (by Developer)

FIRE DEPARTMENT
STATION 4

ROW
IMPACT

Pad for Bike Rack/
Dockless Drop

WEAVER DAIRY RD
BRT STATION

Skewed and wider
curb ramp for Multi-
use Path

NC 86 (MARTIN LUTHER
KING, JR. BLVD)

12' MULTI-USE PATH

12' MULTI-USE PATH

DRAFT

12' MULTI-USE PATH

12' MULTI-USE PATH

Green conflict
markings

EX. C&G AND
SIDEWALK (NB)

ROW
IMPACT

PAD FOR BIKE RACK
DOCKLESS DROP ZONE

Two-Stage Turn
Boxes at select
intersections

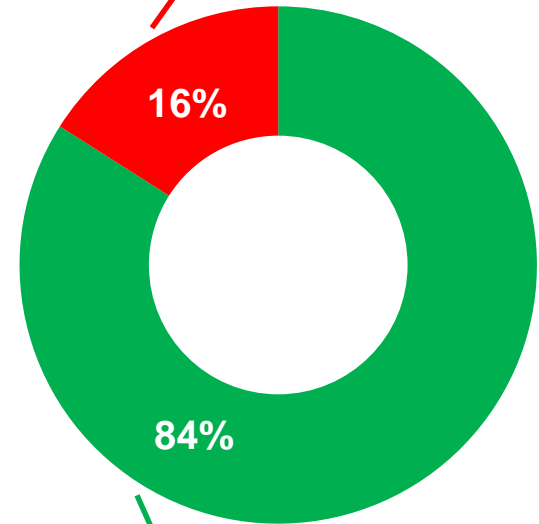
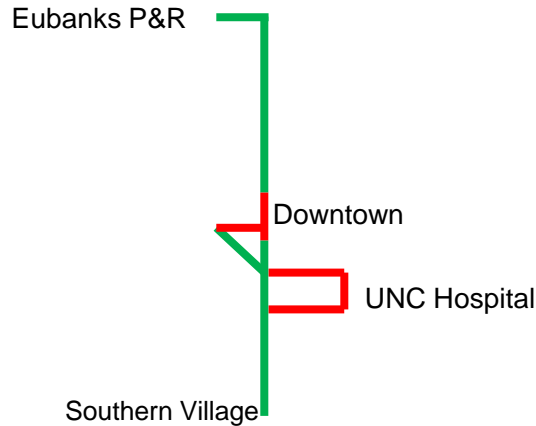
CHAPEL HILL NORTH
MEDICAL CENTER

WEAVER DAIRY RD

Bike ramp transition
from bike lane to
Multi-use path

Bike Opportunities

- Potential for 2.5 mile increase
- 6.9 of 8.2 miles = 84% of route



UNC Hospital
Downtown

Southern Village to UNC
Hospital
Downtown to Eubanks
P&R

Next Steps if LPA is Adopted

- Complete 30% design **[FTA review and approval]**
- Conduct Environmental Assessment (EA)
 - Lags behind design as project footprint must be defined:
 - Guideway design
 - Station locations
 - Construction limits
 - Traffic and access
 - Parking
 - EA document **[FTA review]**
 - Public hearing/response to public comments
 - FONSI **[FTA review and approval]**
- Refine project financial plan

Staff Recommendation

- Council to adopt a resolution revising the LPA for the North-South Corridor Study as recommended by the Chapel Hill Transit Public Transit Committee and the Study's Technical and Policy Committees. And, authorize staff to submit the revised LPA to the Durham – Chapel Hill – Carrboro Metropolitan Planning Organization (DCHC).
 - Eliminate DTCC extension
 - Eliminate Center Running guideway option
 - BRT in Mixed Traffic on Eubanks Road
 - Eubanks to Estes Road
 - Construct dedicated curb lane
 - Estes Road to North Street
 - Construct and Convert Curbside options to be evaluated in EA