

# Chapel Hill North-South BRT

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Chapel Hill Town Council

January 16, 2019



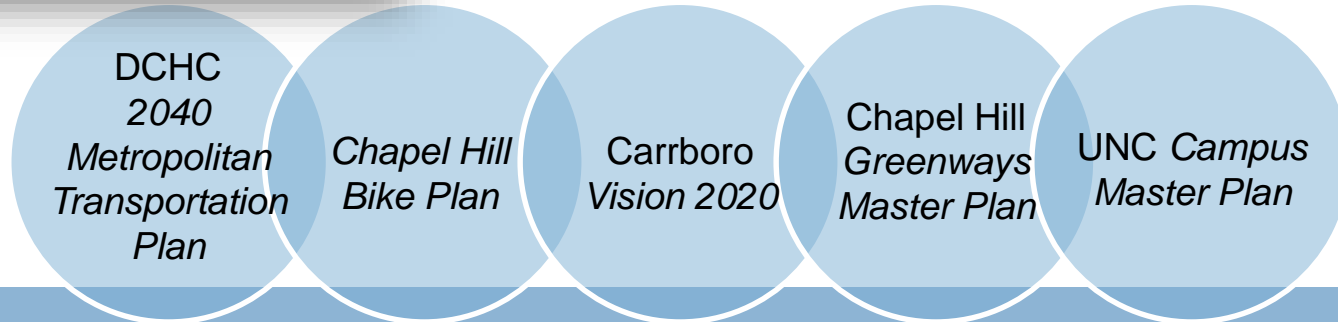
# Agenda

- 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



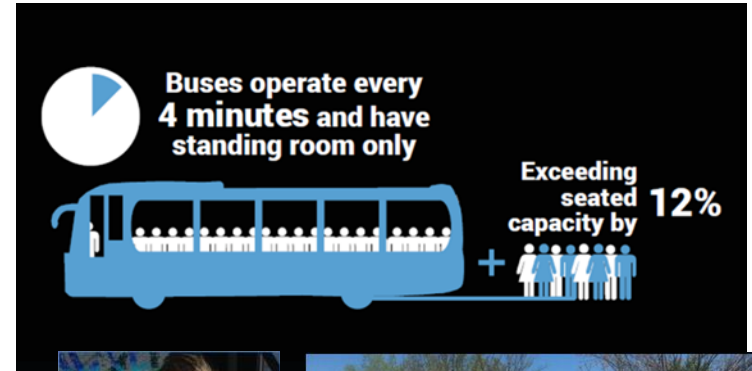
- Expands on previous regional and local planning
- Continues key theme identified in the Chapel Hill 2020 Comprehensive Plan - “Getting Around” and Small Area Plans such as Central West
- An opportunity to build on prior investments to improve connectivity within a critical transportation corridor,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



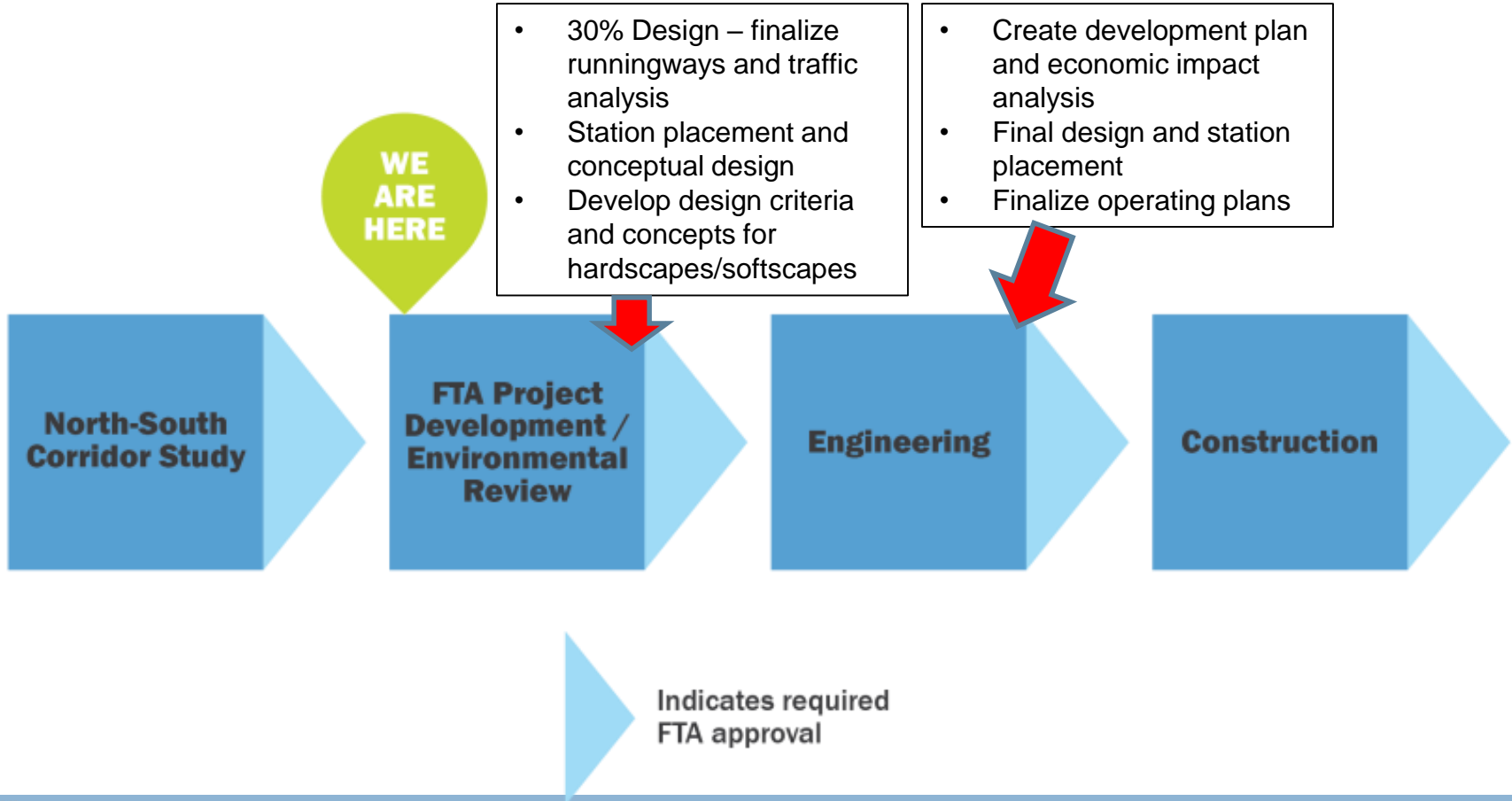
# Context and Vision

**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



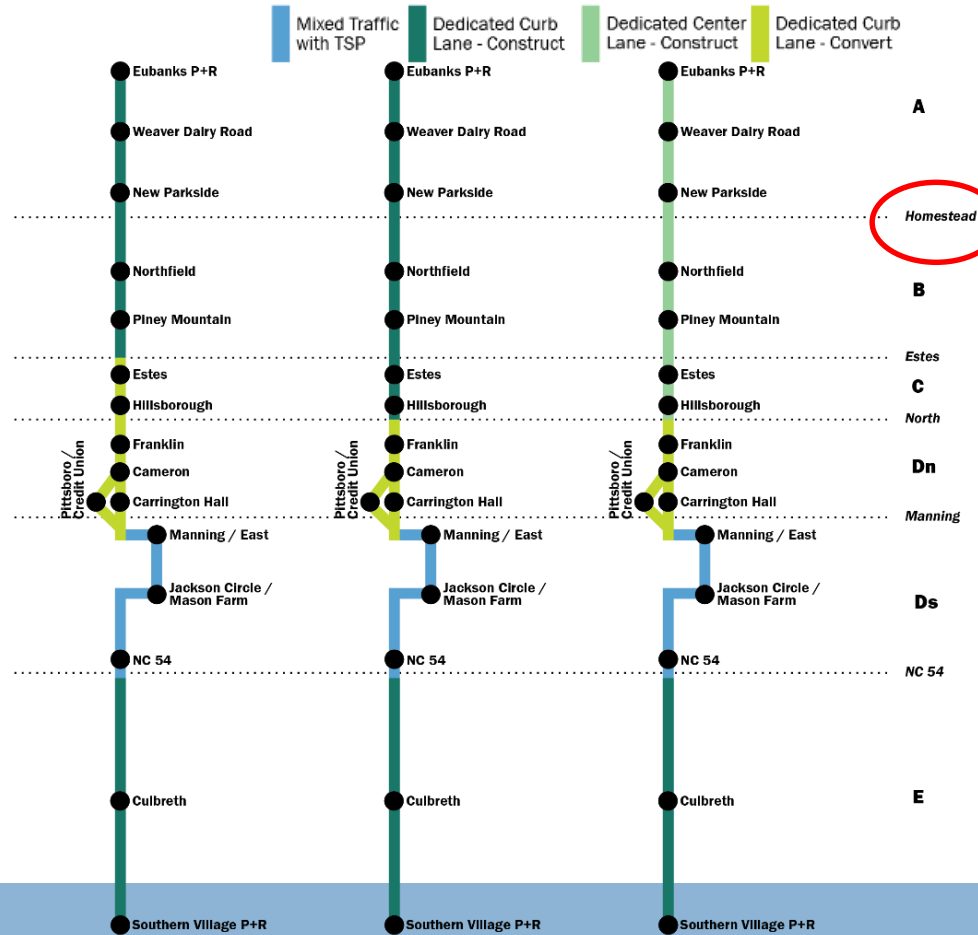
Dedicated Curb Lane - Construct a New Lane



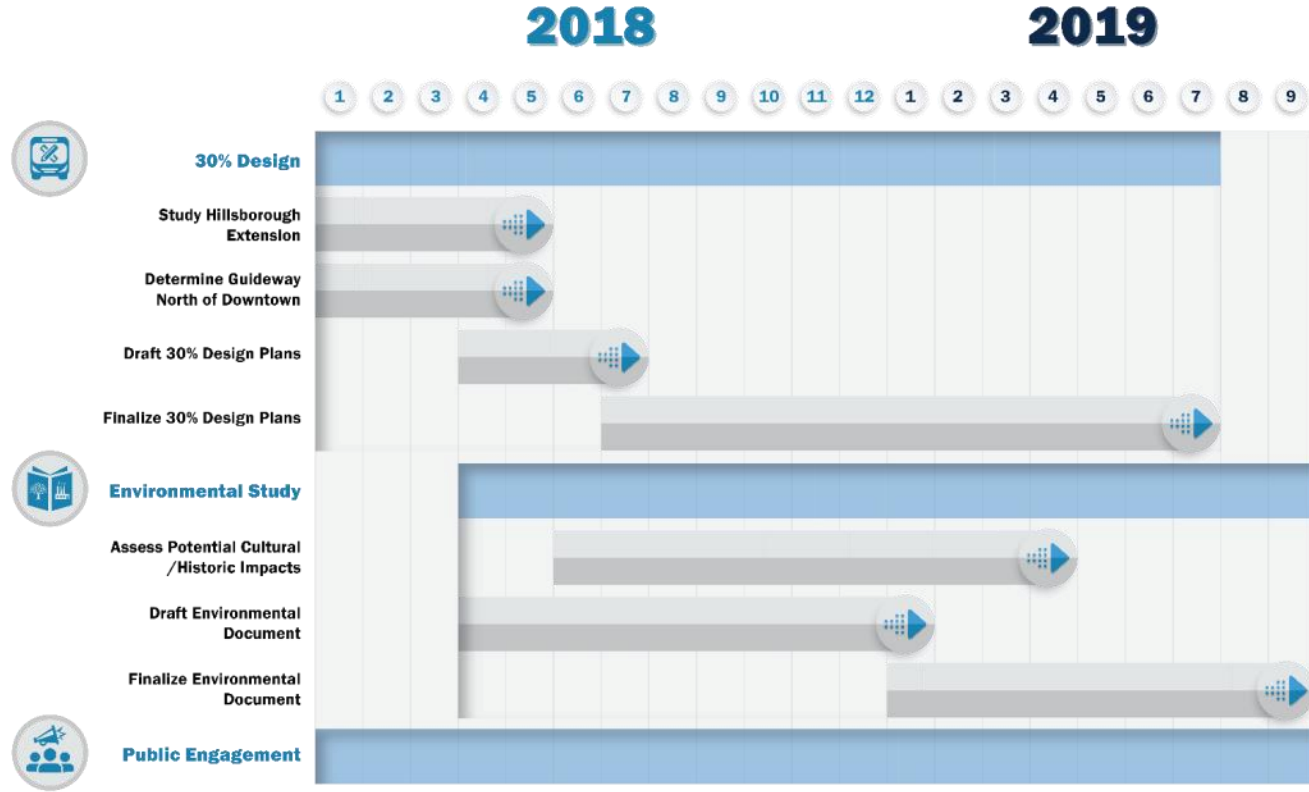
Dedicated Center Lane - Construct a New Lane



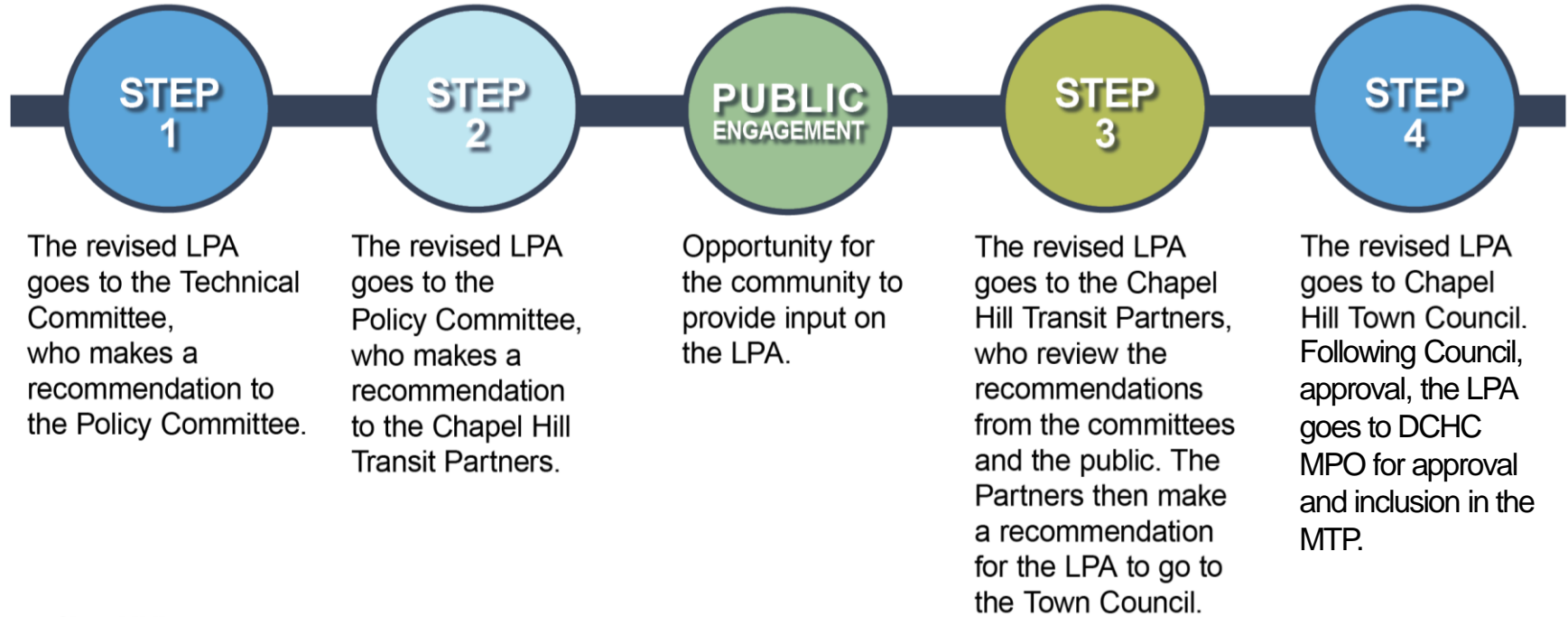
Dedicated Curb Lane - Convert Lane from Existing Use



# NEPA and 30% Design Schedule



# Process to Approve the Revised LPA



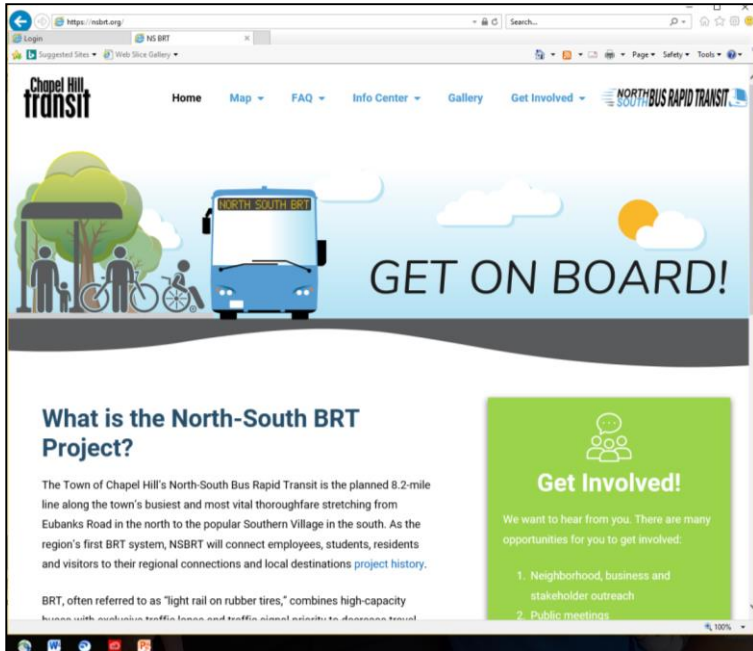


# Technical and Policy Committees



# Public Engagement

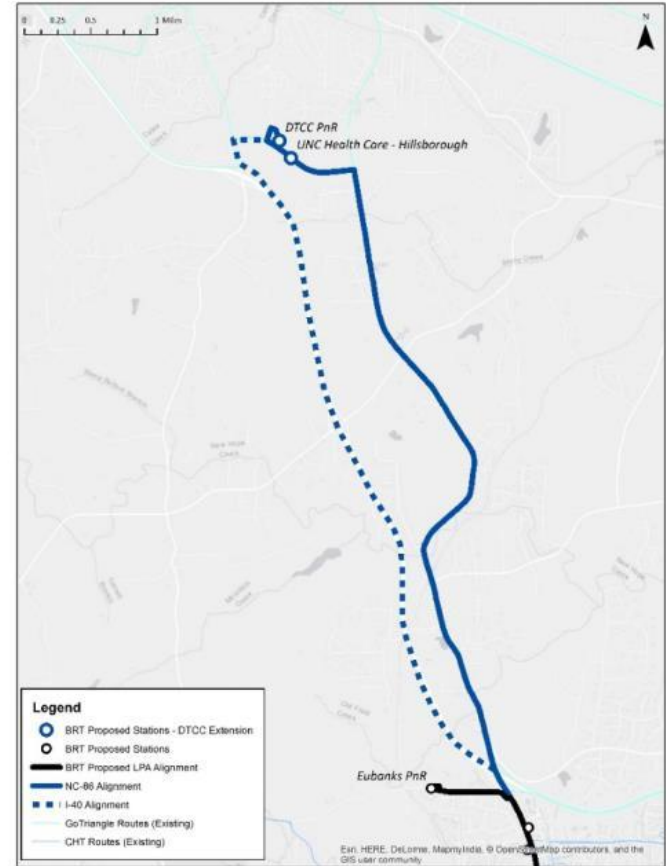
- Media / Social Media / MetroQuest / Website Update
- Key Stakeholder / Neighborhood / Local Business / University Outreach



# **Work To-Date and Transit Funding Partners' Recommendations**

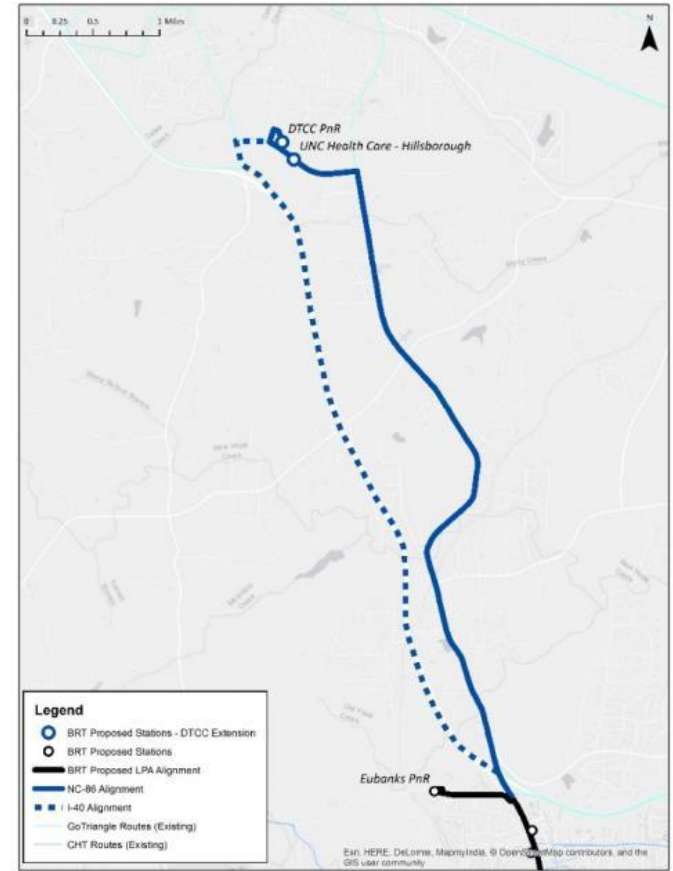
# Extension to Durham Technical Community College

- 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



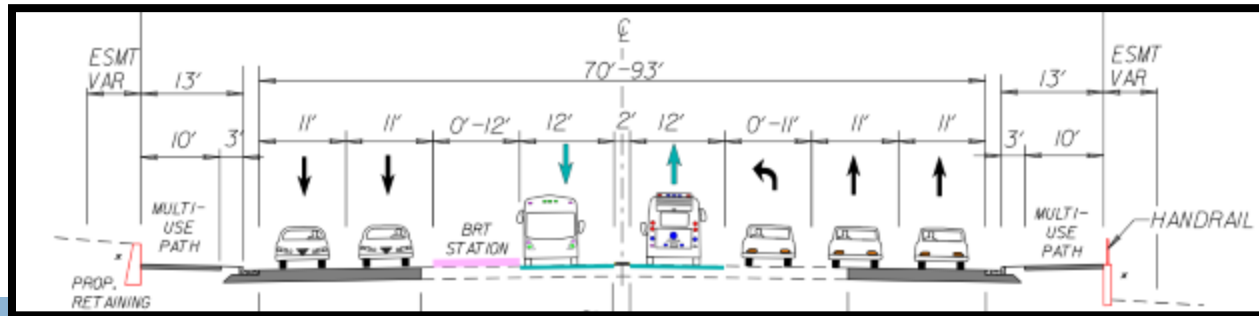
# Northern Guideway Options

- 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



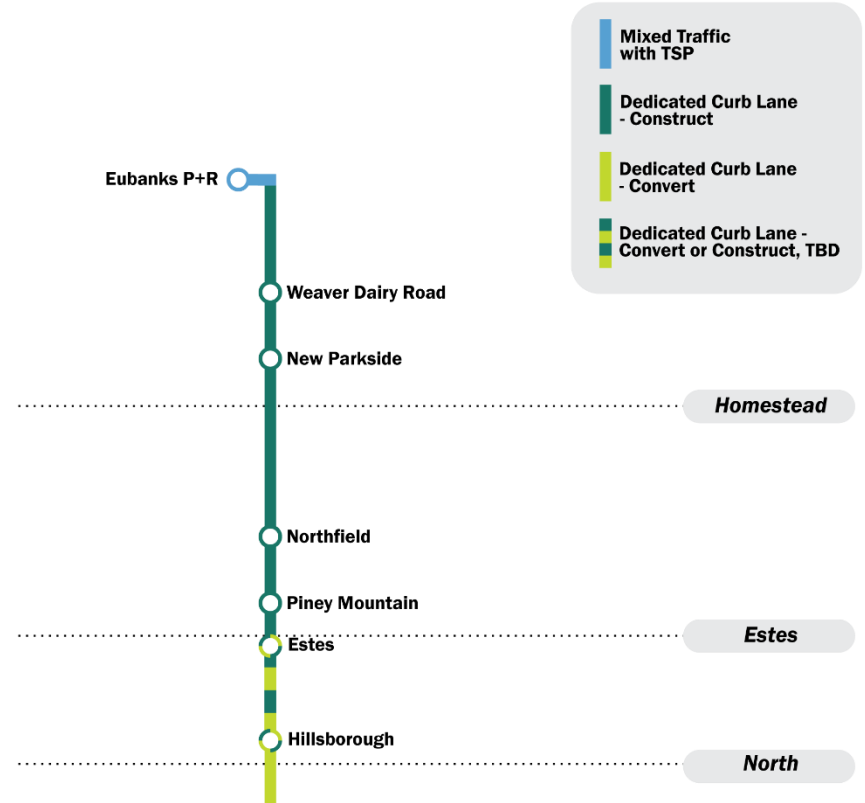
# Center Running Guideway Option

- 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

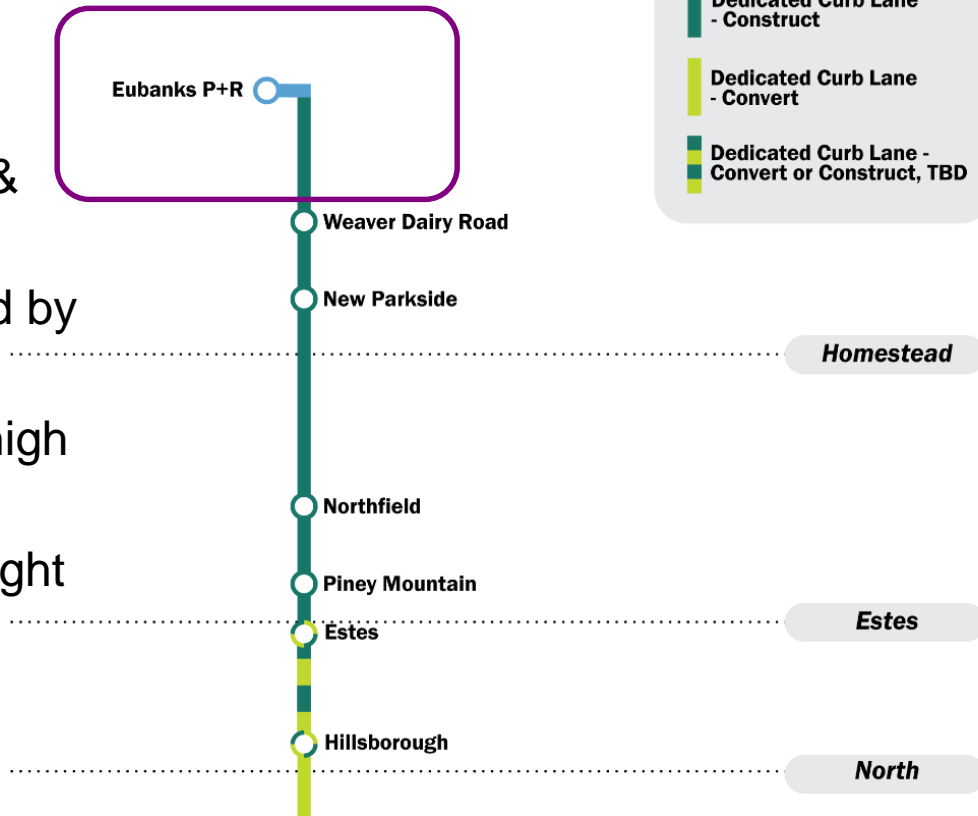
- Eubanks Road
  - Mixed Traffic
- Eubanks Road to Estes Drive
  - Construct Curbside Guideway
- Estes Drive to North Street
  - Evaluate Convert Curbside and Construct Curbside Guideway





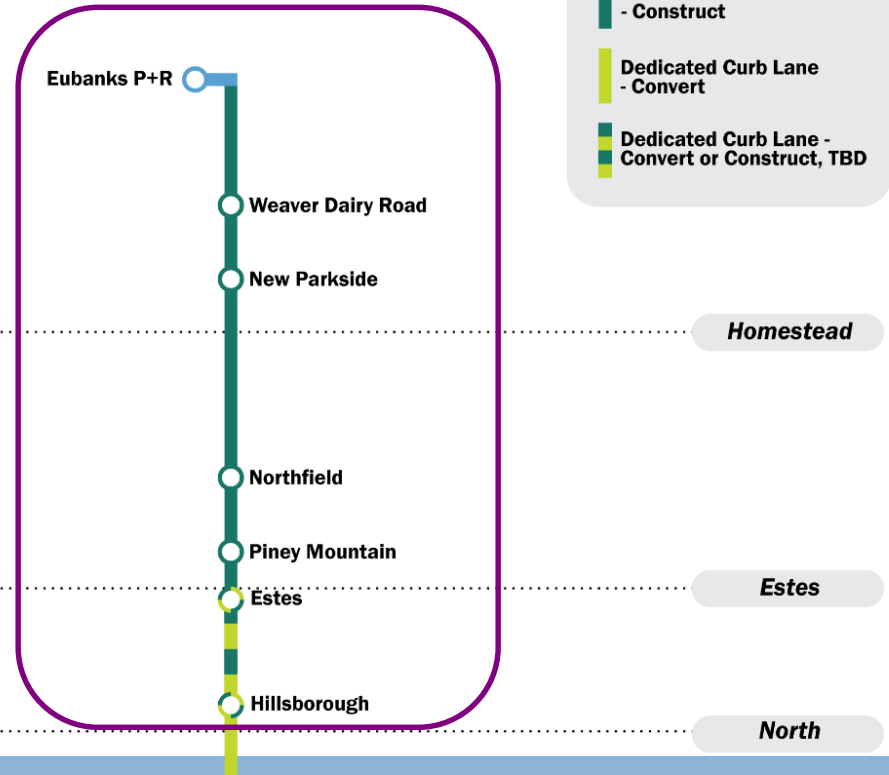
# Eubanks Road

- 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



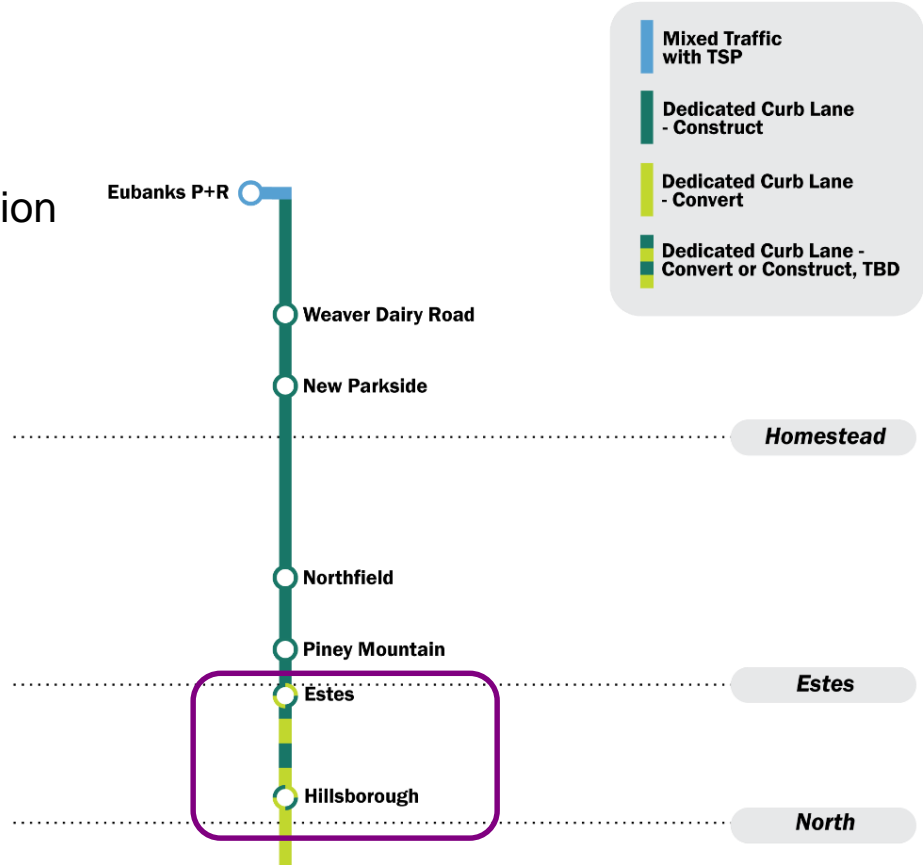
# Dedicated Curb Lane – Construct Option

- 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



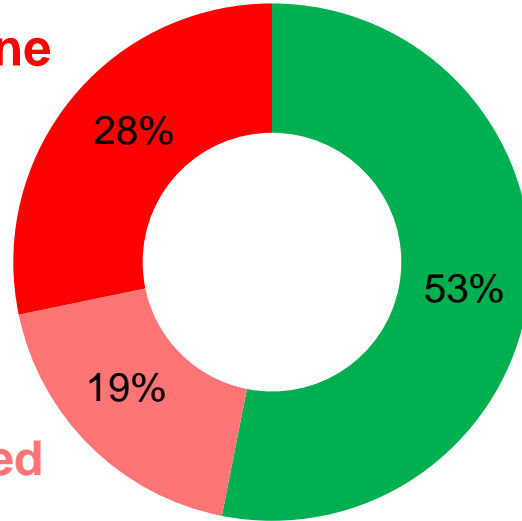
None

28%

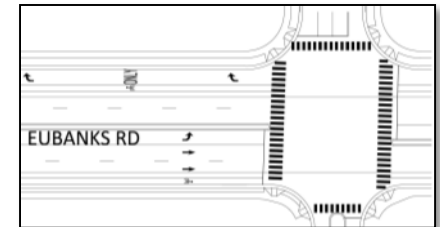


Shared  
Lanes

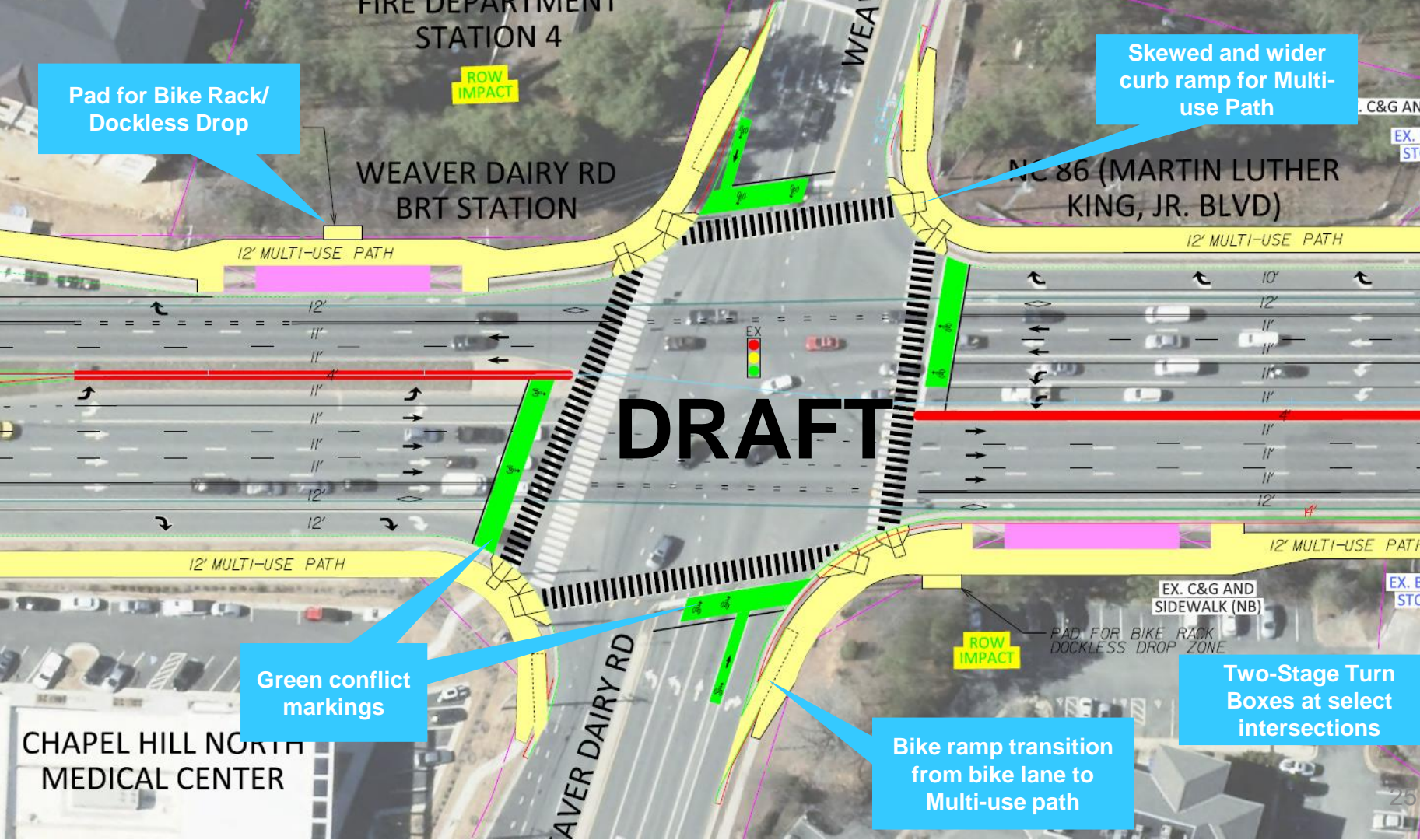
19%



Bike  
Lanes



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



Pad for Bike Rack/  
Dockless Drop

Skewed and wider  
curb ramp for Multi-  
use Path

WEAVER DAIRY RD  
BRT STATION

NC 86 (MARTIN LUTHER  
KING, JR. BLVD)

12' MULTI-USE PATH

12' MULTI-USE PATH

12' MULTI-USE PATH

12' MULTI-USE PATH

**DRAFT**

Green conflict  
markings

ROW  
IMPACT

EX. C&G AND  
SIDEWALK (NB)

PAD FOR BIKE RACK  
DOCKLESS DROP ZONE

Two-Stage Turn  
Boxes at select  
intersections

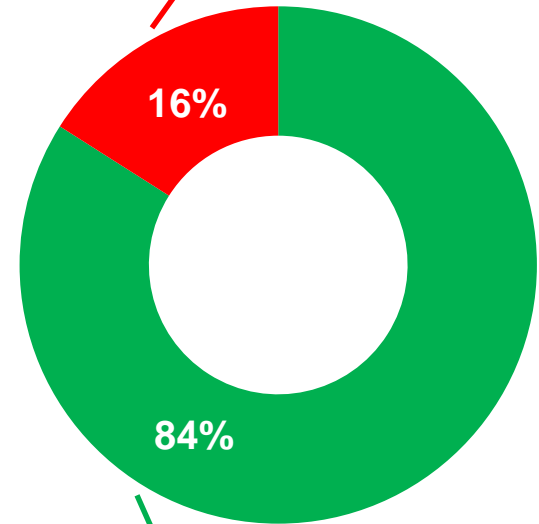
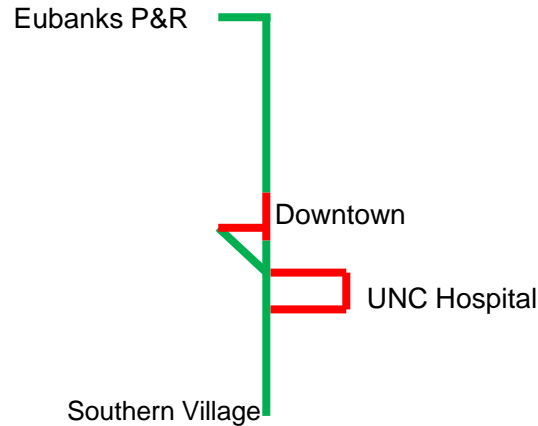
Bike ramp transition  
from bike lane to  
Multi-use path

CHAPEL HILL NORTH  
MEDICAL CENTER

WEAVER DAIRY RD

# 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