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Metropolitan Planning Organization
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Town of Carrboro
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City of Durham
Town of Hillsborough*

Amendment #1 -- Farrington Road

**Durham-Chapel Hill-Carrboro Metropolitan
Planning Organization**
Comprehensive Transportation Plan
October 10, 2018

Amendment #1 – Farrington Road

The Durham-Chapel Hill-Carrboro Metropolitan Planning Organization (DCHC MPO) hereby amends the Comprehensive Transportation Plan (CTP) to change the proposed future configuration of the segment of Farrington Road between Southwest Durham Drive and the Falconbridge Road Extension. The originally adopted CTP lists this roadway segment as a future four-lane, divided cross-section. Amendment #1 changes the cross-section to be a two-lane, divided cross-section with bike lanes and sidewalks. The CTP highway map on page 4 shows the roadway segment that is to be amended. A larger, interactive map can be found at the top of the following CTP Web page: www.bit.ly/DCHCMPO-Adopted-CTP. Note that the CTP uses a distinct name, i.e., boulevard, and map symbology for divided roadways.

Reasons for the Change

The MPO believes that a two-lane, divided cross-section that includes bicycle and pedestrian facilities is more appropriate for forecasted traffic volume in that corridor and the future, adjacent land use. The map on page 5 depicts the likely future roadway network in the so-called Leigh Village area where a Durham-Orange Light Rail Transit station is planned, and shows the capacity and forecasted traffic volumes on the two north/south arterial boulevards. The 2045 traffic volume forecast for Farrington Road, 16,000 to 22,000vpd (vehicles per day), might exceed the two-lane divided capacity, 18,000vpd. However, the Southwest Durham Drive capacity, 18,000vpd, will significantly exceed the 2045 traffic volume forecast, 8,000vpd. These two roads are parallel and will be connected by local roads and collector roads stipulated in the *Southwest Durham/Southeast Chapel Hill Collector Street Plan*. If vehicle traffic becomes congested on Farrington Road, traffic can easily divert to the Southwest Durham Drive that has excess capacity.

The adjacent land use also includes the future Rail Operations and Maintenance Facility (ROMF) for the Durham-Orange Light Rail Transit system that will be located east of Ephesus Church Road between Farrington Road and I-40. The right-of-way (ROW) for a four-lane roadway, a minimum of 110', would make it difficult for the ROMF to provide adequate screening between the ROMF and adjacent residential development. The roadway ROW would reduce the available land for creating the screening.

Finally, the two-lane divided cross-section is safer for bicyclists and pedestrians to cross than a four-lane section. The adjacent area is expected to continue to be developed with medium- to low-density residential communities and the Creekside Elementary School is only one block from Farrington Road.

Changes to the CTP Map and Report

Based on Amendment #1, the originally adopted CTP map and report is changed as described below.

Map -- The official CTP map will not need to be changed because the line symbology for 2- and 4-lane boulevards is the same in the CTP.

Appendix C, Street Inventory -- The table below shows the current and proposed amendment #1 attributes for this segment of Farrington Road in the CTP. The change is shown in **bold blue** font – the cross section will be 2L (2-lane, divided with bicycle and pedestrian facilities). Note that the original CTP report used the 2040 forecasts from version 5 of the Triangle Regional Model (TRM). The MPO analysis for this amendment uses the updated TRM, i.e. version 6, and therefore the analysis and CTP report forecasts values might vary slightly.

Highway												
ID	Facility	Segment			2015 Existing System			2040 Proposed System			CTP Class	
		From	To	Dist. (mi)	Lanes	Existing Capacity (vpd)	2011 Volume	2040 Volume E+C	2040 V/C	Status		Cross-Section
<u>Current CTP...</u>												
DURH0039-H	Farrington Rd	Falconbridge Ext.	Southwest Durham Dr	0.8	2	12,700	11,000	23,200	1.80	NI	4D	Blvd
<u>Amendment</u>												
DURH0039-H	Farrington Rd	Falconbridge Ext.	Southwest Durham Dr	0.8	2	12,700	11,000	23,200	1.80	NI	2L	Blvd

Unaddressed Deficiencies -- The table below shows the addition of Farrington Road to the CTP Unaddressed Deficiencies table in chapter 2 of the report. It indicates that a parallel boulevard with excess capacity, i.e., Southwest Durham Drive, will be able accommodate trips that are diverted from a congested Farrington Road. The combined capacity of Farrington Rd and Southwest Durham Drive, 36,600 (2 x 18,300), will exceed the estimated combined volume of approximately 30,000.

Roadway Name	Location		
	From	To	Jurisdiction
Farrington Rd	Falconbridge Ext	Southwest Durham Dr	DurCity, Dur

Reasons for No Recommended Improvements				Existing			2040	
Need	Comm	Parallel	Notes	Current Count	No. of Lanes	Capacity (Cap.)	Volume (Vol.)	Vol./Cap. (V/C)
--	--	Par	Parallel: Southwest Durham Dr		2	12,700	23,200	1.3

Public Involvement -- The CTP public involvement section, page 1-54 of the original report, hereby includes the summary of the amendment #1 activities, notices, website information and responses as discussed in the section below.

Public Involvement

Schedule -- The MPO's public involvement policy requires that a proposed amendment to the CTP be released for public input for a minimum of 42 days. The schedule for Amendment #1 was as follows:

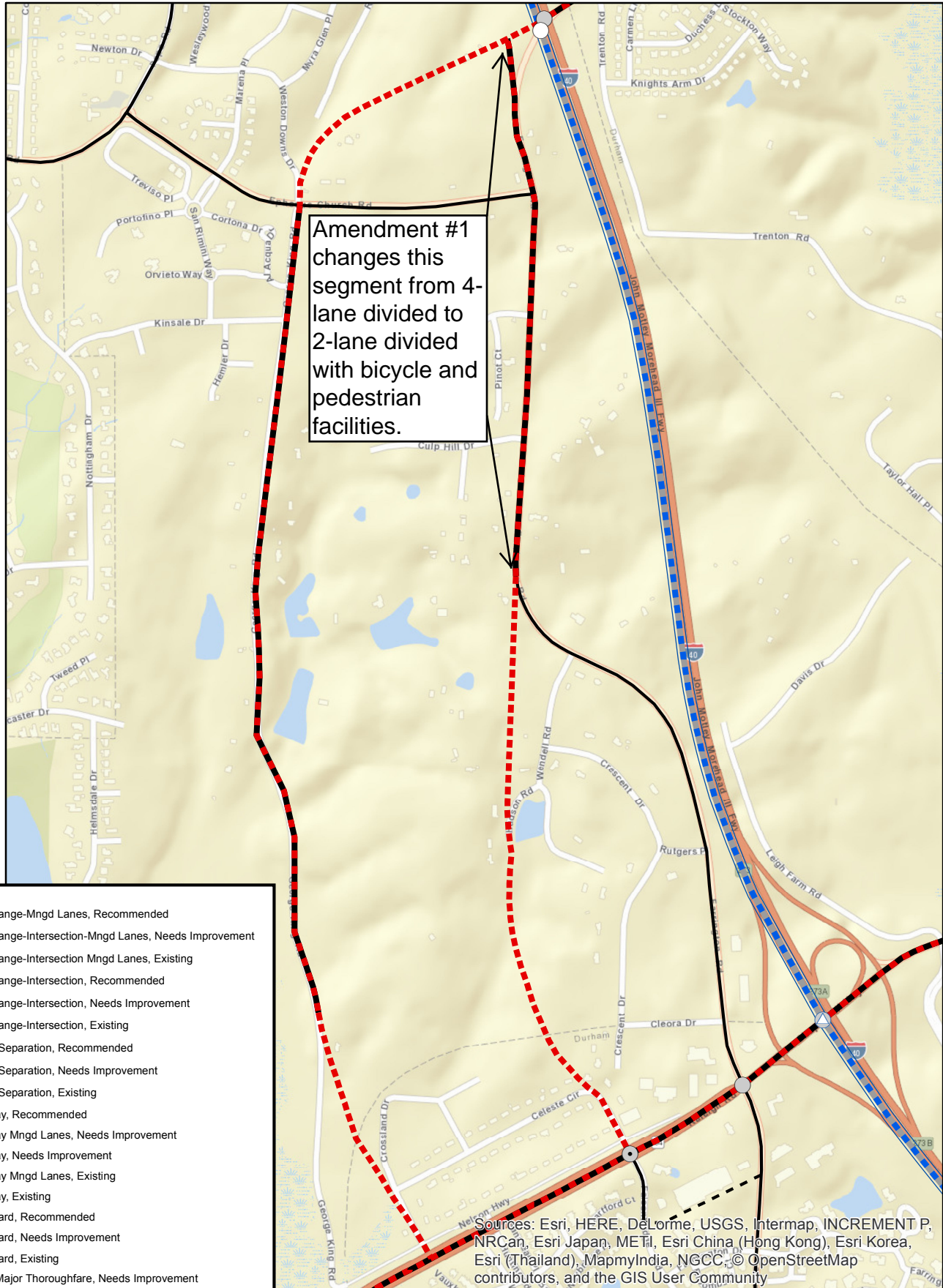
- May 9 -- DCHC MPO Board released amendment #1 for public input.
- June 13 -- DCHC MPO Board conducted a public hearing on Amendment #1.
- June 20 -- Public involvement period ended.
- September 12 -- DCHC MPO Board can adopt amendment #1.

Notification -- The MPO posted the amendment and schedule on its Web site and included maps and traffic volume forecasts. Notice was also sent through the social media contact, e.g., Twitter and Facebook, for the DCHC MPO and Durham Transportation Department.

Public Comment -- A citizen, Phil Post, met with MPO staff and spoke at the June 13 public hearing. He believes that traffic from the current development of apartment buildings and expected future development in the Leigh Village area would require a four-lane roadway in this particular segment of Farrington Road. Mr. Post will also meet with MPO and GoTriangle staff and a local elected official to discuss the proposed amendment. The MPO did not receive any email or other comments.

Alternatives -- The MPO considered some alternatives to the two-lane divided cross-section. Staff believe that a four-lane boulevard would have much unused capacity (i.e., 36,000vpd capacity for projected volumes of 16,000 to 22,000vpd), and the relatively wide roadway would be a safety hazard for bicyclists and pedestrians, and be inappropriate for the expected residential development adjacent to the roadway. The MPO also considered a two-lane undivided cross-section but it does not have the roadway crossing advantages that a boulevard has for bicyclists and pedestrians. Also, the two-lane non-divided capacity is lower than the boulevard capacity (i.e., 13,000vpd vs. 18,000vpd) and therefore doesn't offer as much assurance that the roadway will not be congested when the area gets developed.

Comprehensive Transportation Plan (CTP) DCHC MPO -- Amendment #1

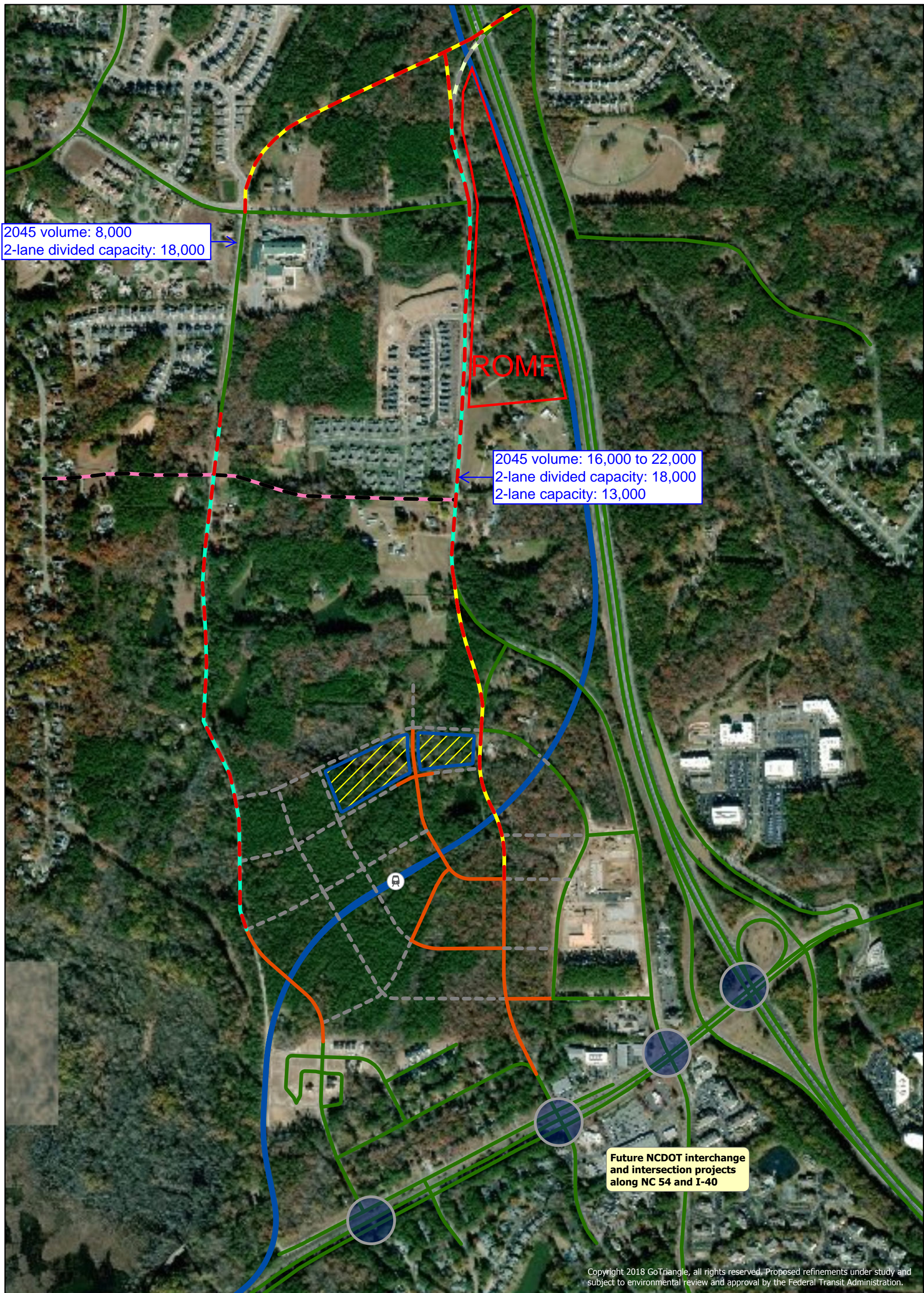


Amendment #1 changes this segment from 4-lane divided to 2-lane divided with bicycle and pedestrian facilities.

- Interchange-Mngd Lanes, Recommended
- ⊕ Interchange-Intersection-Mngd Lanes, Needs Improvement
- ⊕ Interchange-Intersection Mngd Lanes, Existing
- Interchange-Intersection, Recommended
- ⊕ Interchange-Intersection, Needs Improvement
- Interchange-Intersection, Existing
- Grade Separation, Recommended
- ⊕ Grade Separation, Needs Improvement
- Grade Separation, Existing
- ▬ Freeway, Recommended
- ▬ Freeway Mngd Lanes, Needs Improvement
- ▬ Freeway, Needs Improvement
- ▬ Freeway Mngd Lanes, Existing
- ▬ Freeway, Existing
- ▬ Boulevard, Recommended
- ▬ Boulevard, Needs Improvement
- ▬ Boulevard, Existing
- ▬ Other Major Thoroughfare, Needs Improvement
- ▬ Other Major Thoroughfare, Existing
- ▬ Minor Thoroughfare, Recommended
- ▬ Minor Thoroughfare, Needs Improvement
- ▬ Minor Thoroughfare, Existing

Sources: Esri, HERE, DeLorme, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), MapmyIndia, NGCC, © OpenStreetMap contributors, and the GIS User Community

This is a close-up view of the CTP highway map. See www.bit.ly/DCHCMPO/Adopted-CTP for a full, interactive map.



2045 volume: 8,000
2-lane divided capacity: 18,000

ROMF

2045 volume: 16,000 to 22,000
2-lane divided capacity: 18,000
2-lane capacity: 13,000

Future NCDOT interchange and intersection projects along NC 54 and I-40

Copyright 2018 GoTriangle, all rights reserved. Proposed refinements under study and subject to environmental review and approval by the Federal Transit Administration.

Legend

- | | |
|--------------------------------------|-----------------------------|
| Leigh Village roadway network | Future planned roads |
| Existing road | CTP - New road |
| Future conceptual road | CTP - Upgraded road |
| Built as part of D-O LRT Project | CTP - Removed road |
| D-O LRT alignment | Leigh Village Station |

Durham-Orange Light Rail Transit

Draft Leigh Village roadway network July 2018



0 0.13 0.25 Miles

