

# Executive Summary

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In January of 2014, the Transportation Planning Branch of the North Carolina Department of Transportation (NCDOT) and Durham-Chapel Hill-Carrboro Metropolitan Planning Organization (DCHC MPO) initiated a study to cooperatively develop the DCHC MPO Comprehensive Transportation Plan (CTP), which includes the towns of Carrboro, Chapel Hill, Hillsborough; the city of Durham; and Chatham, Durham and Orange Counties. This is a long range multi-modal transportation plan that covers transportation needs through 2040. Modes of transportation evaluated as part of this plan include: highway, public transportation and rail, bicycle, and pedestrian. This plan does not cover routine maintenance or minor operations issues. Refer to Appendix A for contact information on these types of issues.

Findings of this CTP study were based on an analysis of the transportation system, environmental screening and public input, which are detailed in Chapter 1. Figure 1 shows the CTP maps, which were mutually adopted by NCDOT in 2017. Descriptive information and definitions for designations depicted on the CTP maps can be found in Appendix B. Implementation of the plan is the responsibility of the counties and their municipalities, and NCDOT. Refer to Chapter 2 for information on the implementation process.

This report documents the recommendations for improvements that are included in the DCHC MPO CTP. The major highway recommendations for improvements are listed in the table below. Other major non-highway projects are listed on page vii. More detailed information about these and other recommendations can be found in Chapter 2 and Appendix C.

Major Highway Recommendations:

Facility	Project Location	Status	Recommendation
<i>Chatham County</i>			
US 15-501	Smith Level Road to south of Andrews Store Road	Needs Improvement	Improve access management along US 15-501 in accordance with the 2014 Corridor Study recommendations.

Facility	Project Location	Status	Recommendation
<i>Chatham County</i>			
NC 751	Durham County to Martha's Chapel Road	Needs Improvement	Improve to a boulevard facility. Further study is needed for cross section.
<i>Durham County</i>			
I-40	Wake County to NC 147	Needs Improvement	Widen freeway to 12 lanes. With 8 general purpose and 4 managed lanes.
I-40	NC 147 to NC 54	Needs Improvement	Widen freeway to 10 lanes. With 6 to 8 general purpose and 2 to 4 managed lanes.
I-40	NC 54 to US 15-501	Needs Improvement	Widen freeway to 8 lanes. With 6 general purpose and 2 managed lanes.
I-85	US 70 to Granville County	Needs Improvement	Widen to a 6-lane freeway and upgrade interchanges and ramps.
(Future) I-885 East End Connector (EEC)	NC 147 to US 70/ NC 98	Recommended New Facility	<ul style="list-style-type: none"> <li>- Construct new freeway facility connecting NC 147 and US 70.</li> <li>- Construct new minor thoroughfare connecting Lynn Road and Pleasant Drive</li> <li>- Improve NC 98 from North Miami Boulevard to US 70.</li> </ul>
US 15-501	I-40 to US 15-501 Bypass	Needs Improvement	Convert to freeway with interchanges.
US 15-501	US 15-501 Business to I-85	Needs Improvement	Widen freeway to 6 lanes with interchange improvements.
US 15-501 Business	US 15-501 to University Drive	Needs Improvement	Improve to boulevard facility to accommodate multimodal traffic.
US 501 (North Roxboro Road)	North Duke Street (US 501) to Sandlewood Drive	Needs Improvement	Improve to a 4-lane divided synchronized street (also known as superstreet).

Facility	Project Location	Status	Recommendation
<i>Durham County</i>			
US 501 (North Duke Street)	I-85 to US 501 Business (North Roxboro Street)	Needs Improvement	Improve to a 4-lane divided synchronized street (also known as superstreet).
US 501 Business (North Roxboro Street)	Old Oxford Road to East Club Boulevard	Needs Improvement	Improve to a 4-lane divided boulevard with a narrow median.
US 70	Pleasant Drive to Wake County	Needs Improvement	Widen to a 6-lane freeway with grade separations and interchanges.
NC 147 (Durham Freeway)	I-40 to I-85	Needs Improvement	<ul style="list-style-type: none"> <li>- I-40 to EEC: Widen freeway to 8 lanes with managed lanes and interchange improvements.</li> <li>- EEC to NC 55 (Alston Avenue): Widen freeway to 6 lanes with interchange improvements.</li> <li>- NC 55 (Alston Avenue) to I-85: Upgrade freeway with interchange improvements.</li> </ul>
NC 55	NC 147 to Holloway Street	Needs Improvement	Widen to a 4-lane divided boulevard facility.
NC 54	US 15-501 to NC 55	Needs Improvement	<ul style="list-style-type: none"> <li>- US 15-501 to I-40: Improve to synchronized street (also known as superstreet) with interchanges.</li> <li>- Barbee Chapel Road to NC 55 (Durham County): Add two travel lanes.</li> <li>- Throughout corridor: Improved bicycle, pedestrian and light rail transit accommodation.</li> </ul>

Facility	Project Location	Status	Recommendation
<i>Durham County</i>			
NC 55 (Avondale Drive)	I-85 to East Geer Street	Needs Improvement	Widen to 4-lane boulevard (with a narrow median), and bicycle lanes and sidewalks. To consider a multiuse path.
NC 98	Junction Road to Wake County	Needs Improvement	- Junction Road to Nichols Farm Drive: Add narrow median, bicycle lanes and sidewalks to improve current 4-lane undivided section. - Nichols Farms Drive to Wake County: Widen to a 4-lane divided boulevard.
NC 751	NC 54 to Chatham County	Needs Improvement	Improve to a boulevard facility. Further study is needed for cross section.
North Alston Avenue Extension	North Roxboro Street/ Old Oxford Road to North Alston Avenue	Recommended New Facility	Construct new boulevard facility. Further study is needed for cross section and alignment.
Northern Durham Parkway (NDP)	US 70 to I-85 to Old Oxford Rd	Recommended New Facility	Construct a new 4-lane divided boulevard facility with separate bicycle lanes and sidewalks.
South Roxboro Street Extension	Martin Luther King Jr Parkway to Cornwallis Road	Recommended New Facility	Construct new boulevard facility, sidewalks and bicycle lanes.
SW Durham Drive/ Mount Moriah Road/ George King Road Extension	Mount Moriah Road to NC 54	Needs Improvement and Recommended New Facility	- Mount Moriah Road to I-40: 4-lane divided with sidewalks and bicycle. - I-40 to NC 54: 2-lane divided with sidewalks and bicycle lanes.

Facility	Project Location	Status	Recommendation
<i>Orange County</i>			
I-40	I-85 to NC 86	Needs Improvement	Widen freeway to 6 general purpose lanes.
I-40	NC 86 to 15-501	Needs Improvement	Widen freeway to 6 lanes. With 4 general purpose and 2 managed lanes.
I-85	I-40 to Durham County	Needs Improvement	Widen freeway to 6 general purpose lanes with a raised median and interchange improvements.
US 15-501	NC 86 (South Columbia Street) to I-40	Needs Improvement	<ul style="list-style-type: none"> <li>- NC 86 (South Columbia Street) to East Franklin Street: Widen to a 6 lane boulevard with new/improved interchanges at needed locations with improved bus, bicycle and pedestrian accommodations.</li> <li>- East Franklin Street to I-40: Improve facility to better accommodate bus, bicycle and pedestrian traffic.</li> </ul>
US 70	I-85/US 70 Connector to US 70 Alternate	Needs Improvement	Widen to a 4-lane divided cross section with 5-foot bike lanes and 5-foot sidewalks separate from travel lanes.
NC 54	US 15-501 to NC 55 (in Durham County)	Needs Improvement	<ul style="list-style-type: none"> <li>- US 15-501 to I-40: Improve to synchronized street (also known as superstreet) with interchanges.</li> <li>- Barbee Chapel Road to NC 55 (Durham County): Add two travel lanes.</li> <li>- Throughout corridor: Improved bicycle, pedestrian and light rail transit accommodation.</li> </ul>
NC 54	Old Fayetteville Road to Bethel Hickory Grove Church Road	Needs Improvement	Provide operational improvements; further study is needed to determine specific long-term improvements.

Facility	Project Location	Status	Recommendation
<i>Orange County</i>			
NC 86	US 70 Business to Old NC 10	Needs Improvement	Widen to a 4-lane divided cross section with a raised median with bike lanes and sidewalks.
NC 86	US 70 Bypass (Cornelius Street) to north of the NC 86/ NC 57 split	Needs Improvement	Improvements are needed to accommodate projected traffic and to improve pedestrian safety. Further study is needed for specific improvements.
I-85/ US 70 Connector	I-85 to US 70	Needs Improvement	Improve existing I-85/US 70 Connector interchange with US 70 to a full-movement interchange.
S Churton Street (US 70/ NC 86/ SR 1009)	Eno River Bridge to I-40	Needs Improvement	Widen to a 4-lane divided cross section with a raised median with bike lanes and sidewalks.
Eubanks Road	NC 86 to Millhouse Road	Needs Improvement	Widen to a 4-lane divided boulevard.
Eno Mountain Road (SR 1148) realignment	Eno Mountain Road to intersection of Mayo Street and Orange Grove Road	Recommended New Facility	Realignment of Eno Mountain Road at the intersection of Mayo Street and Orange Grove Road with on-road bicycle, pedestrian and bus accommodations.
Orange Grove Road Extension	New Location: South Churton Street to US 70 Business	Recommended New Facility	Construct a new 4-lane divided boulevard facility with bicycle, pedestrian and bus accommodations.

There are many recommended improvements associated with the public transportation and rail mode, such as light rail transit, commuter rail, bus rapid transit, express bus, improved regular bus service, park and ride facilities, transit centers, multimodal centers and rail stations. Major public transportation and rail recommendations include:

- Durham-Orange Light Rail Transit (D-O LRT): Light rail system running from UNC Hospitals in Chapel Hill to NCCU in Durham.
- North-South Corridor Bus Rapid Transit (N-S BRT): Bus Rapid Transit route along NC 86 (Martin Luther King Jr Boulevard/ South Columbia Street) and US 15-501 from the Eubanks Park and Ride to Southern Village.

There are many recommended improvements associated with the bicycle and pedestrian modes, such as bicycle lanes, wide paved shoulders, wide outside lanes and off-road bicycle trails, off-road pedestrian paths, and multiuse paths. One major multiuse recommendation is:

- Durham-Orange Light Rail Transit Multiuse Path: A multiuse path, or a combination of separate bicycle and pedestrian accommodations when appropriate, constructed generally parallel to the Durham-Orange Light Rail corridor from Chapel Hill to Durham.

The following links provide electronic copies of the CTP maps for all the modes:

- online interactive maps -- <http://bit.ly/DCHCMPO-Draft-CTP> (see Adopted tab)
- poster-sized PDF maps -- <http://bit.ly/DCHCMPO-CTP>.