

Metropolitan Transportation Plan

DCHC MPO Board

December 13, 2017

www.dchcmpo.org

Today's Topics

- ▶ Updated Schedule
- ▶ Changes to highway and transit
- ▶ Change to financial plan
- ▶ Review public comments
- ▶ Updated land use (population)
- ▶ Review Triangle Regional Model

Updated Schedule

- ▶ Nov. 1 – Release Preferred Option for public input
- ▶ Dec. 12 – Public input period expires
- ▶ Dec. 13 – MPO Board approves 2045 MTP (including SE Data, project tables and maps, and financial plan)
- ▶ Jan. 10, 2018 – MPO releases full 2045 MTP report, final Goals Objectives and Performance Measures and Targets for public comment
- ▶ Feb 14 – MPO Board adopt, by resolution, the 2045 MTP and report

Highway Project Changes

Orange County/Carrboro

- ▶ Changed NC 54 cross-section from 3-lane to modernization. The NC 54 study results will direct improvements to NC 54 in the future.

Orange County/Hillsborough

- ▶ Added improvements to NC 86, north of US 70 in Hillsborough, and included NC 86 and US 70 intersection improvements.

Durham/Durham County

- ▶ Added modernization on NC 54 from Highgate to Fayetteville to fill the gap.
- ▶ Added modernization on Hope Valley Rd (NC 751) from NC 54 to Woodcroft to fill the gap.
- ▶ Added modernization on NC 147 from EEC to Briggs to fill the gap and extend to the west end to the Swift Avenue interchange.
- ▶ Added Northern Durham Parkway from Sherron Rd to NC 98.

These changes are shown on the meeting attachment and the interactive highway map at

www.bit.ly/DCHC-MTP-Preferred

Transit Project Change

- ▶ Changed Chapel Hill/Carrboro light rail extension – moved from W. Cameron Ave. to W. Franklin St. and E. Main St.
- ▶ Note: the light rail extension stations and alignment are conceptual at this point. There will be much study and public input before any implementation.

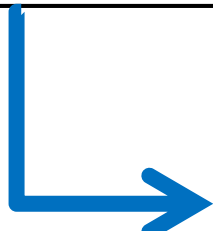
These changes are shown on the meeting attachment and the interactive transit map at

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Financial Plan Changes

- ▶ Highway project changes do not have significant financial impacts.
- ▶ Continue focus on total balance by decade, but do not break out by funding tier (statewide, regional and division)

BALANCE	<u>2025</u>	<u>2035</u>	<u>2045</u>	<u>Total</u>
Statewide	32	15	(139)	(92)
Regional	(7)	65	190	248
Division	61	41	4	106
Total Balance	86	121	55	263
Total Balance as Percent of Total Revenue	3%	3%	1%	2%



BALANCE	<u>2025</u>	<u>2035</u>	<u>2045</u>	<u>Total</u>
Total Balance	136	39	0	176
Total Balance as Percent of Total Revenue	4%	1%	0%	1%

Public Comments

- ▶ Prioritize biking, walking and transit, not cars.
- ▶ Provide direct rail access between airport and Durham and towns.
- ▶ TARPO:
 - ▶ NC 54 west of Carrboro should not be 3-lane
 - ▶ NC 751 in Chatham County should be 4-lane
- ▶ Advance projects:
 - ▶ US 15-501 bypass widening
 - ▶ NC 147 improvements in downtown Durham
 - ▶ I-85 widening in Orange County
 - ▶ CRT extension

Land Use

SE Data Guide Totals

Population					2013-2045
County	2013	2045 (old)	2045 (new)	2013-45	% change
Chatham*	41,543	72,110	84,066	42,523	102%
Durham	286,210	475,091	446,074	159,864	56%
Orange	139,289	194,867	187,059	47,770	34%
<i>Total</i>	467,042	742,068	717,199	250,157	54%

Update population projection based on latest NC OSMB data.

Employment				
County	2013	2045	2013-45	% change
Chatham*	9,339	17,718	8,379	90%
Durham	192,877	342,910	150,033	78%
Orange	64,212	107,791	43,579	68%
<i>Total</i>	266,428	468,419	201,991	76%

Employment projection does not change.

* Only includes portion of Chatham County in the modeling area.

**** The resolution (February 2018) will officially adopt this SE Data.****

TRM Version 6

-- Key Improvements

- ▶ CommunityViz Data converter (new) – adds demographic (e.g., income) data to forecasts
- ▶ Population Synthesizer (new) – converts zonal data to household level (e.g., household composition)
- ▶ Commercial Vehicle Model – improved truck model
- ▶ University Student Model (new) – improved modeling related to student travel behavior

TRM Version 6

-- Performance

- ▶ R Squared – model volumes vs. traffic count

R Squared	Target	Modeled
Region wide	(\geq) 0.88	0.90
DCHC MPO	(\geq) 0.88	0.91

- ▶ Model estimated volumes compared to traffic counts by Federal Functional Class

Functional Class	Observed (thou.)	Modeled (thous.)	Modeled % Deviation	Target % Deviation
Freeway	10,329	10,379	0.5%	5%
Principal Arterial	12,222	11,422	-7%	8%
Minor Arterial	10,826	10,384	-4.1%	10%
Collector	4,361	4,218	-3.3%	15%
Local	2,844	2,820	-0.8%	15%
Total	40,582	39,225	-3%	5%

- ▶ Percent Root Mean Square Error (%RMSE) –model estimated daily volumes vs. traffic count

%RMSE	Target	Modeled
Region wide	(\leq) 0.35	0.33
DCHC MPO	(\leq) 0.35	0.30

- ▶ Total transit ridership comparison

Transit Ridership	Observed	Modeled	%Deviation
Region Wide	107,203	110,816	3.37%
GoDurham, Duke & Chapel-hill Transit	61,639	62,692	1.71%

**** The resolution (February 2018) will officially adopt TRM version 6. ****