2045 MTP Goals, Objectives, and Performance Measures

Goals	Objectives	Performance Measures	Data	Desired	Actual	Trend
I. Protect Environment and Minimize Climate Change	A. Reduce mobile source emissions, GHG, and energy consumption	 Total and per capita transportation GHG (CO2), ozone (NOx), CO, and particulate matter emissions (in kilograms; August) 	Total (three-county area inside TRM)2013 CO2: 7m2045 CO2: 6.3m2013 NOx: 11,1062045 NOx: 2,1162013 CO: 86,9032045 CO: 39,8912013 PM: 2682045 PM: 100	➡	➡	-52%
			Per Capita(three-county area inside TRM)2013 CO2: 15.12045 GHG: 8.82013 NOx: 0.0242045 NOx: 0.0032013 CO: 0.192045 CO: 0.062013 PM: 0.00062045 PM: 0.0001	₽	➡	- 70 %
		 Total and per capita mobile energy consumption (daily gallons of auto gasoline) 	<u>Total</u> (three-county area inside TRM) 2016: 737,096 2045: 668,031			- 9%
			Per Capita(three-county area inside TRM)2016: 1.62045: 0.9			- 42%
	B. Reduce the negative impacts on the natural and cultural environment	1. Poportion of planned investment in existing highways	2040 MTP 2045 MTP DCHC 81% 91%			+ 14%
ll. Connect People	A. Connect people to jobs, education and other important destinations using all modes	 Percentage of work and non-work trips by auto less than 30 minutes 	2013 Work: 81% 2045 Work: 69% 2013 NonWork: 98% 2045 NonWork: 93% Note: this is regional data		➡	-15% Work - 4% Nonwork
		 Percentage of work and non-work trips by transit less than 45 minutes 	2013 Work: 63% 2045 Work: 67% 2013 NonWork: 59% 2045 67% Note: this is regional data			+ 7% Work +13%Nonwork
		 Percentage of urbanized area within ¼ mile of pedestrian facilities 	2016: 38% Note: this is regional data		_	(Compare in 2018)
		 Percentage of jobs within 1/4 mile of frequent bus transit service (15min) or 1/2 mile of fixed guideway transit service 	2016: xxx 2045: xxx			+X%
	 B. Ensure transportation needs are met for all populations (especially the aging and youth, economically disadvantaged, mobility impaired, and minorities) 	 Percentage of Environmental Justice (EJ) population and total population within ½ mile of bus transit service, 1 mile of rail transit service, ½ mile of bike facilities, or ¼ mile of sidewalk 	2016 EJ: TBD 2045 EJ: TBD 2016 Pop: TBD 2045 Pop: TBD	1		TBD

Goals	Objectives	Performance Measures	Data	Desired	Actual	Trend
III. Promote Multimodal and Affordable Travel	A. Enhance transit services, amenities and facilities	1. Per capita transit service hours	2016: 0.55 Note: this is regional data		_	(Compare in 2018)
		2. Total transit boardings per capita	2016: 18.22 Note: this is regional data		—	(Compare in 2018)
		 Proportion of bus stops that meet their defined facility threshold (to be determined). 	2016: TBD			(Compare in 2018)
	B. Improve bicycle and pedestrian facilities	1. MPO total programming per capita on bicycle and pedestrian facilities	2016: \$93 (FY16-25 STIP)		—	(Compare using FY18-27 STIP)
		 Proportion of jurisdictions that have an ordinance requiring developers to build or pay in lieu for sidewalks. 	2016: 45% (14/31 jurisdictions) Note: this is regional data		-	(Compare in 2018)
Choices	C. Increase utilization of affordable non- auto travel modes	shares (overall) (need to update)	Mode 2016 20	045		+37%,
			Transit 3% 49			+16%
		 Percentage of transit, bicycle and pedestrian mode shares in transit corridors 	Bike/Ped 15% 18 2015: xxx 2045: xxx	8%		+10%
		3. Percentage of transit, bicycle, and pedestrian mode shares in high frequency bus corridors (at lease 15min headways)	2015: xxx 2045: xxx			+X%
IV. Manage Congestion & System Reliability	 A. Allow people and goods to move with minimal congestion and time delay, and greater predictability. B. Promote Travel Demand Management (TDM, such as carpool, vanpool and park-and-ride) 	 Average clearance time for crashes on principal roadways 	2016: TBD	•	—	(Compare in 20189)
		2. Daily minutes of delay per capita	2015: 4.4 minutes 2045: 7.3 mi	nutes		+65%
		3. (Placeholder for freight)	2016: xxx 2045: xxx	(to be determined)	(to be determined)	(to be determined)
		1. Percentage of peak-hour travelers driving alone	2015: 45% 2045: 43%	-	➡	-4%
		 Total individuals provided TDM support via programs and activities 	2015: 196,629		—	(Compare in 2018)
		3. Vehicle Miles Traveled (VMT) per capita	2015: 32 2045: 31			-3%

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	C. Enhance Intelligent Transportation Systems (ITS, such as ramp metering, dynamic signal phasing and vehicle detection systems)	1. ITS investments	2016: TBD		—	(Compare in 2018)
V. Improve Infrastructure Condition	A. Increase proportion of highways and highway assets in 'Good' condition	1. Percent lane miles with unacceptable pavement condition ratings by NCDOT	2017 Durham County: 18% poor condition 2017 Orange County: 18% poor condition 2017 Chatham County: 23% poor condition	➡	-	(Compare for 2018)
		2. Percent of structurally deficient bridges (SD)	Orange County: 10% SD Durham County: 5% SD Chatham County: 6% SD > DCHC Counties: 7% SD	-	—	(Compare in 2018)
	B. Maintain transit vehicles, facilities and amenities in the best operating condition.	1. Percentage of non-revenue vehicles that have met or exceeded their useful life benchmark (ULB) (FAST Act)	FAST Act Target = 0% 2018 = xxx	➡	—	(Compare in 2018)
		 Percentage of revenue vehicles (i.e., vans, light transit vehicle (LTV) and buses) that have met or exceeded their ULB (FAST Act) 	FAST Act Target = 50% 2018 = xxx		-	(Compare in 2018)
		 Percentage of facilities with a condition rating below 3 on the Federal Transit Agency's Transit Economic Requirements Model (TERM) (FAST Act) 	FAST Act Target = 0% 2018 = xxx	➡	-	(Compare in 2018)
	C. Improve the condition of bicycle and pedestrian facilities and amenities	 Proportion of bicycle facilities (bike lanes, shared use paths) ranked in good condition 	2016: TBD		—	(Compare in 2018)
	D. Improve response time to infrastructure repairs	1. Percent pothole complaints repaired within two days by NCDOT Division.	Durham (2017): 82% Orange (2017): 98% Chatham (2017): 100%		-	(Compare in 2018)
VI. Ensure Equity and Participation	 A. Ensure that transportation investments do not create a disproportionate burden for any community 	 Does the 2045 MTP meet Environmental Justice requirements? 	2045 MTP: Meets requirements			Meets requirement
	B. Enhance public participation among all communities	1. Number of participants in public participation process by type (in-person, email, surveys, social media)	2016: TBD		—	(Compare in 2018)
VII.Promote	A. Increase safety of travelers and residents	 Number of non-motorized fatalities and serious injuries (FAST Act) 	2012-2016 (average): 20.8 2014-2018 (average): xxx 2018 FAST Act Target: 18.4	➡		(Compare in 2018)
Safety and Health		2. Number of motorized fatalities (FAST Act)	2012-2016 (average): 39.4 2014-2018 (averageg): xxx 2018 FAST Act Target: 30.7		—	(Compare in 2018)

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		3. Rate of motorized fatalities (per 100m VMT) (FAST Act)	2012-2016 (average): 0.667 2014-2018 (average): xxx 2018 FAST Act Target: 0.601		_	(Compare in 2018)
		4. Number of motorized serious injuries (FAST Act)	2012-2016 (average): 79.2 2014-2018 (average): xxx 2018 FAST Act Target: 70.6	➡	—	(Compare in 2018)
		 Rate of motorized serious injuries (per 100m VMT) (FAST Act) 	2012-2016 (average): 1.537 2014-2018 (average): xxx 2018 FAST Act Target: 1.384	➡		(Compare in 2018)
	B. Promote public health through transportation choices	1. Percentage of adults who are physically inactive	2016: Chatham Co. – 23% Durham Co. – 21% Orange Co. – 15%	➡	_	(Compare in 2018)
VIII. Stimulate Economic Vitality	A. Improve freight movement	1. Truck delay (minutes) per trip	2016: 2 minutes 2045: 4 minutes	➡		-50%
		2. Freight plan, buffer time index	2016: xxx		_	(Compare in 2019)
	B. Link land use and transportation	Refer to Goal II: Connect People	See measures in goal II.A			
	C. Target funding to the most cost- effective solutions	1. Average payback period of investments by mode.	2045 MTP: TBD	➡	➡	(Compare with previous MTP?)
	D. Improve project delivery for all modes	 Percentage of TIP projects completed on-time (let to construction) by mode (or, NCDOT project delivery measure) 	2016: TBD		_	(Compare in 2019)
		 Percentage of projects in the MTP being built in the time period in which they first appeared. 	2016: TBD		_	(Compare in 2019)
		3. Percentage of projects in the TIP being built in the time period in which they first appeared.	2016: TBD		—	(Compare in 2019)