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	1. 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: 7m 2045 GHG: 6.3m 2013 NOx: 11,106 2045 NOx: 2,116 2013 CO: 86,903 2045 CO: 39,891 2013 PM: 268 2045 PM: 100	⬇	⬇	**-52%**
			Per Capita (three-county area inside TRM) 2013 CO2: 15.1 2045 GHG: 8.8 2013 NOx: 0.024 2045 NOx: 0.003 2013 CO: 0.19 2045 CO: 0.06 2013 PM: 0.0006 2045 PM: 0.0001	⬇	⬇	**-70%**
		2. Total and per capita mobile energy consumption (gallons of auto gasoline)	Total (three-county area inside TRM) 2016: 737,096 2045: 668,031	⬇	⬇	**- 9%**
			Per Capita (three-county area inside TRM) 2016: 1.6 2045: 0.9	⬇	⬇	**- 42%**
	B. Reduce the negative impacts on the natural and cultural environment	1. Poportion of planned investment in existing highways	MTP | New | Existing 2040 | 19% | 81% 2045 | 11% | 89%	⬆	⬆	**+10%**
II. Connect People	A. Connect people to jobs, education and other important destinations using all modes	1. Percentage of work and non-work trips by auto less than 30 minutes	2016 Work: xxx 2045 Work: 69% 2016 NonWork: xxx 2045 NonWork: 93% Note: this is regional data	⬆	⬆	**-X% Work** **-X% Nonwork**
		2. Percentage of work and non-work trips by transit less than 45 minutes	2016 Work: xxx 2045 Work: 67% 2016 NonWork: xxx 2045 67% Note: this is regional data	⬆	⬆	**-X% Work** **-X% Nonwork**
		3. Percentage of urbanized area within ¼ mile of pedestrian facilities	2016: 38%	⬆	▬	**(Compare in 2018)**
		4. 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)	1. 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: xxx 2045 EJ: xxx 2016 Pop: xxx 2045 Pop: xxx	⬆	⬆	**+X%**
III. Promote	A. Enhance transit services, amenities and facilities	1. Per capita transit service hours	2016: 0.55	⬆	▬	**(Compare in 2018)**

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Multimodal and Affordable Travel Choices		2. Total transit boardings per capita	2016: 18.22	⬆	▬	**(Compare in 2018)**
		3. Proportion of bus stops that meet their defined facility threshold (to be determined).	2016: (thresholds to be determined)	⬆	▬	**(Compare in 2018)**
	B. Improve bicycle and pedestrian facilities	1. MPO total programming per capita on bicycle and pedestrian facilities	2016: $92.56 (FY16-25 STIP)	⬆	▬	**(Compare using FY18-27 STIP)**
		2. Proportion of jurisdictions that have an ordinance requiring developers to build or pay in lieu for sidewalks.	2016: 45% (14/31 jurisdictions)	⬆	▬	**(Compare in 2018)**
	C. Increase utilization of affordable non-auto travel modes	1. Percentage of transit, bicycle and pedestrian mode shares (overall)	Mode / 2016 / 2045 Transit / 3% / 4% Bike/Ped / 15% / 18%	⬆	⬆	**+37%, +16%**
		2. Percentage of transit, bicycle and pedestrian mode shares in transit corridors	2016: xxx 2045: xxx	⬆	⬆	**+X%**
		3. Percentage of transit, bicycle, and pedestrian mode shares in activity centers/TAZs	2016: 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.	1. Average clearance time for crashes on principal roadways	2016: xxx	⬇	▬	**(Compare in 20189)**
		2. Daily minutes of delay per capita	2016: 4 minutes 2045: 7 minutes	⬇	⬆	**+67%**
		3. (Placeholder for freight)	2016: xxx 2045: xxx	(to be determined)	(to be determined)	(to be determined)
	B. Promote Travel Demand Management (TDM, such as carpool, vanpool and park-and-ride)	1. Percentage of peak-hour travelers driving alone	2016: 45% 2045: 43%	⬇	⬇	**-6%**
		2. Total individuals provided TDM support via programs and activities	2015: 196,629	⬆	▬	**(Compare in 2018)**
		3. Vehicle Miles Traveled (VMT) per capita	2016: 32 2045: 31	⬇	⬇	**-3%**
	C. Enhance Intelligent Transportation Systems (ITS, such as ramp metering, dynamic signal phasing and vehicle detection systems)	1. ITS investments	2016: xxx	⬆	▬	**(Compare in 2018)**

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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	2016 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% Actual = xxx	⬇	▬	**(Compare in 2018)**
		2. 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% Actual = xxx	⬇	▬	**(Compare in 2018)**
		3. Percentage of facilities with a condition rating below 3 on the Federal Transit Agency's Transit Economic Requirements Model (TERM)	FAST Act Target = 0% Actual = xxx	⬇	▬	**(Compare in 2018)**
	C. Improve the condition of bicycle and pedestrian facilities and amenities	4. Proportion of bicycle facilities (bike lanes, shared use paths) ranked in good condition	2016: xxx	⬆	▬	**(Compare in 2018)**
	D. Improve response time to infrastructure repairs	1. Percent pothole complaints repaired within two days by NCDOT Division.	Durham (2016): 77% Orange (2016): 98% Chatham (2017): 100% Wake (Wake): 61%	⬆	▬	**(Compare in 2018)**
VI. Ensure Equity and Participation	A. Ensure that transportation investments do not create a disproportionate burden for any community	1. 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: xxx	⬆	▬	**(Compare in 2018)**
VII. Promote Safety and Health	A. Increase safety of travelers and residents	1. Number of non-motorized fatalities and serious injuries (FAST Act)	2012-2016 (average): 20.8 2014-2018 (average): xxx FAST Act Target: 18.4	⬇	▬	**(Compare in 2018)**
		2. Number of motorized fatalities (FAST Act)	2012-2016 (average): 39.4 2014-2018 (averageg): xxx FAST Act Target: 30.7	⬇	▬	**(Compare in 2018)**
		3. Rate of motorized fatalities (per 100m VMT) (FAST Act)	2012-2016 (average): 0.667 2014-2018 (average): xxx FAST Act Target: 0.601	⬇	▬	**(Compare in 2018)**

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		4. Number of motorized serious injuries (FAST Act)	2012-2016 (average): 79.2 2014-2018 (average): xxx FAST Act Target: 70.6	⬇	▬	**(Compare in 2018)**
		5. Rate of motorized serious injuries (per 100m VMT) (FAST Act)	2012-2016 (average): 1.537 2014-2018 (average): xxx 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%**
		1. Freight plan, buffer time index	2016: xxx	⬇	▬	**(Compare in 2019)**
	B. Link land use and transportation	Refer to Goal II: Connect People				
	C. Target funding to the most cost-effective solutions	1. Average payback period of investments by mode.	2045 MTP: xxx	⬇	⬇	**(Compare with previous MTP?)**
	D. Improve project delivery for all modes	1. Percentage of TIP projects completed on-time (let to construction) by mode (or, NCDOT project delivery measure)	2016: xxx	⬆	▬	**(Compare in 2019)**
		2. Percentage of projects in the MTP being built in the time period in which they first appeared.	2016: xxx	⬆	▬	**(Compare in 2019)**
		3. Percentage of projects in the TIP being built in the time period in which they first appeared.	2016: xxx	⬆	▬	**(Compare in 2019)**