



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

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SECRETARY

DATE: September 10, 2020

TO: Neil Burke, AICP, PTP
Secretary and Program Manager, Charlotte Regional Transportation
Planning Organization

FROM: Brian Mayhew, PE, CPM
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SUBJECT: Safety Performance Measures – FHWA Assessment and 2021 Targets

Background

Effective April 14, 2016, the Federal Highway Administration (FHWA) established five highway safety performance measures in accord with regulations set forth in the Federal MAP-21 and FAST Act transportation funding bills. These performance measures are:

1. Number of fatalities;
2. Rate of fatalities per 100 million vehicle miles traveled;
3. Number of serious injuries;
4. Rate of serious injuries per 100 million vehicle miles traveled; and
5. Number of combined non-motorized fatalities and non-motorized serious injuries.

These targets are established annually, are based on 5 year rolling averages, and are for calendar years. North Carolina state targets are set in agreement with our Strategic Highway Safety Plan (SHSP) (<https://spatial.vhb.com/ncdotshsp/>) goals. The SHSP goals are developed through collaborative efforts of a diverse group of stakeholders including state, regional, and local partners (including MPOs). The goal of the most recent (2019) SHSP is to reduce fatalities and serious injuries by half by 2035, moving towards zero by 2050.

North Carolina Safety Performance Target Achievement Determination

In early 2020, FHWA completed an assessment of target achievement for NCDOT's calendar year (CY) 2018 safety targets, based on the 5-year averages for 2014-2018 for each measure. As per 23 CFR 490.211(c)(2), a State Department of Transportation (DOT) has met or made significant

progress towards meeting its safety performance targets when at least four of the safety performance targets established under 23 CFR 490.209(a) have been met or the actual outcome is better than the baseline performance. **Based on FHWA’s review, North Carolina has not met or made significant progress toward achieving its safety performance targets.** As a result, NCDOT must ensure that all HSIP safety funds are obligated, and must develop an HSIP Implementation Plan that describes actions the State will take to meet or make significant progress toward achieving its targets. Table 1 below provides a summary of the target achievement determination at the state level. Note that these CY 2018 targets were based off the goal outlined in the 2014 SHSP to reduce fatalities and serious injuries by half by 2030.

Table 1: North Carolina Safety Performance Target Achievement Determination Summary for CY 2018

Performance Measures	5-year Rolling Averages			Target Achieved?	(Actual) Better than Baseline?	Met or Made Significant Progress?
	Target	Actual	Baseline			
	2014 - 2018	2014 - 2018	2012 - 2016			
Fatalities (5 Year Average)	1,207.3	1,392.4	1,340.4	No	No	No
Fatality Rate (5 Year Average)	1.114	1.206	1.226	No	Yes	
Serious Injuries (5 Year Average)	2,161.2	3,537.6	2,396.0	No	No	
Serious Injury Rate (5 Year Average)	1.988	3.028	2.184	No	No	
Non-motorized Fatalities and Serious Injuries (5 Year Average)	438.8	473.6	422.6	No	No	

Table 2 below shows what this determination would look like if the state’s methodology for establishing the CY 2018 goal (reducing fatalities and serious injuries by half by 2030) was applied to crash data specific to the Charlotte Regional Transportation Planning Organization.

Table 2: Charlotte Regional Transportation Planning Organization Safety Performance Target Achievement Determination Summary for CY 2018

Performance Measures	5-year Rolling Averages			Target Achieved?	(Actual) Better than Baseline?	Met or Made Significant Progress?
	Target	Actual	Baseline			
	2014 - 2018	2014 - 2018	2012 - 2016			
Fatalities (5 Year Average)	101.5	137.0	114.8	No	No	No
Fatality Rate (5 Year Average)	0.628	0.780	0.701	No	No	
Serious Injuries (5 Year Average)	204.8	288.8	231.2	No	No	
Serious Injury Rate (5 Year Average)	1.271	1.646	1.415	No	No	
Non-motorized Fatalities and Serious Injuries (5 Year Average)	50.8	68.8	56.8	No	No	

2021 State Safety Performance Targets

2021 state safety performance targets were submitted to FHWA on August 31st, as required, with the submission of the annual Highway Safety Improvement Program (HSIP) report. These targets reflect the 2019 SHSP goal to reduce fatalities and serious injuries by half by 2035, moving towards zero by 2050. The calculated targets are shown in Table 3 below. More detailed information about each target can be found at the following link:

[https://connect.ncdot.gov/resources/safety/Crash%20Data%20and%20TEAAS%20System/Crash%20Data%20and%20Information/NC%20Performance%20Measures%20\(Final%20HSIP%20CY%202021%20Targets\).pdf](https://connect.ncdot.gov/resources/safety/Crash%20Data%20and%20TEAAS%20System/Crash%20Data%20and%20Information/NC%20Performance%20Measures%20(Final%20HSIP%20CY%202021%20Targets).pdf)

Table 3: North Carolina Calendar Year 2021 Safety Performance Targets

Performance Measure	CY 2021
Number of Fatalities	1,309.9
Rate of Fatalities	1.105
Number of Serious Injuries	3,656.1
Rate of Serious Injuries	3.065
Number of Non-Motorized Fatalities & Serious Injuries	504.4

2021 Charlotte Regional Transportation Planning Organization Safety Performance Targets

Table 4 below provides crash data specific to your MPO and shows what the safety performance targets would look like if you applied the state's methodology (reducing fatalities and serious injuries by half by 2035). More detailed information specific to your MPO can be found at the following link:

https://connect.ncdot.gov/resources/safety/Crash%20Data%20and%20TEAAS%20System/Crash%20Data%20and%20Information/NC_PerformanceMeasuresData_2021Targets_CharlotteRegionalTransportationPlanningOrganization.pdf

Table 4: Charlotte Regional Transportation Planning Organization Specific Safety Performance Targets

Year	Fatalities (5 Year Average)	Fatality Rate (5 Year Average)	Serious Injuries (5 Year Average)	Serious Injury Rate (5 Year Average)	Non-motorized Fatalities and Serious Injuries (5 Year Average)
2008 - 2012	104.2	0.708	214.4	1.457	54.8
2009 - 2013	101.4	0.679	211.6	1.418	51.8
2010 - 2014	98.6	0.647	215.2	1.414	54.6
2011 - 2015	105.6	0.673	222.8	1.418	55.4
2012 - 2016	114.8	0.701	231.0	1.414	56.6
2013 - 2017	126.0	0.740	259.0	1.523	60.0
2014 - 2018	137.0	0.780	288.6	1.645	68.6
2015 - 2019	144.4	0.803	327.4	1.814	75.2
2021 Target	134.0	0.743	303.9	1.680	69.5

Next Steps

MPOs are not directly assessed by FHWA on their progress towards meeting safety performance targets. However, coordination and deliberate action will be needed to achieve the goals outlined in the NC Strategic Highway Safety Plan and as communicated through the safety performance targets. We encourage additional coordination between MPO's and NCDOT Traffic Safety Unit in all areas of safety, but specifically in data sharing, safety tools development, safety need identification and shared safety project implementation. The Traffic Safety Unit is available to meet with your MPO for additional discussion and partnership.

FHWA guidance allows each MPO to establish safety performance targets by either agreeing to plan and program projects so that they contribute toward the accomplishments of the State DOT performance targets or committing to quantifiable HSIP targets for their specific MPO area. If an MPO establishes its own targets, it will need to do so in coordination with the State per FHWA guidelines. The Traffic Safety Unit is available to facilitate this coordination. As a reminder, MPOs must establish safety performance targets no later than February 27 of each year per FHWA guidance. Please transmit a signed adoption resolution indicating the establishment of safety targets for your MPO or supporting the state's targets to Daryl Vreeland (dvreeland@ncdot.gov) in the Transportation Planning Unit just as you have in previous years. Daryl can also provide a template of the adoption resolution if helpful.

Please contact me directly at (919) 814-5011 or bmayhew@ncdot.gov for further questions or discussion.

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