



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

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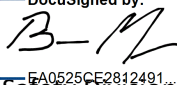
J. ERIC BOYETTE
SECRETARY

DATE: September 28, 2022

TO: Phil Conrad, AICP
Transportation Planner, Cabarrus - Rowan Metropolitan Planning Organization

FROM: Brian Mayhew, PE, CPM
State Traffic Engineer
Transportation Mobility & Safety Division

SUBJECT: Safety Performance Measures – FHWA Assessment and 2023 Targets

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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 \(SHSP\)](#) 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

Earlier this year, FHWA completed an assessment of target achievement for NCDOT's calendar year (CY) 2020 safety targets, based on the 5-year averages for 2016-2020 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.

Table 1: North Carolina Safety Performance Target Achievement Determination Summary for CY 2020

Performance Measures	5-year Rolling Averages			Target Achieved?	(Actual) Better than Baseline?	Met or Made Significant Progress?
	Target	Actual	Baseline			
	2016 - 2020	2016 - 2020	2014 - 2018			
Fatalities (5 Year Average)	1,227.8	1,458.6	1,392.2	No	No	No
Fatality Rate (5 Year Average)	1.084	1.250	1.206	No	No	
Serious Injuries (5 Year Average)	2,812.8	4,410.2	3,362.4	No	No	
Serious Injury Rate (5 Year Average)	2.462	3.776	2.884	No	No	
Non-motorized Fatalities and Serious Injuries (5 Year Average)	426.6	583.0	491.0	No	No	

Table 2 below shows what this determination would look like if the state’s methodology for establishing the CY 2020 goal was applied to crash data specific to Cabarrus - Rowan MPO.

Table 2: Cabarrus - Rowan MPO Safety Performance Target Achievement Determination Summary for CY 2020

Performance Measures	5-year Rolling Averages			Target Achieved?	(Actual) Better than Baseline?	Met or Made Significant Progress?
	Target	Actual	Baseline			
	2016 - 2020	2016 - 2020	2014 - 2018			
Fatalities (5 Year Average)	35.9	42.2	40.0	No	No	No
Fatality Rate (5 Year Average)	1.016	1.151	1.111	No	No	
Serious Injuries (5 Year Average)	94.7	132.6	117.6	No	No	
Serious Injury Rate (5 Year Average)	2.653	3.594	3.225	No	No	
Non-motorized Fatalities and Serious Injuries (5 Year Average)	13.6	15.4	13.8	No	No	

2023 State Safety Performance Targets

2023 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 this [link](#).

Table 3: North Carolina Calendar Year 2023 Safety Performance Targets

Performance Measure	CY 2023
Number of Fatalities	1,202.2
Rate of Fatalities	1.011
Number of Serious Injuries	3,423.0
Rate of Serious Injuries	2.863
Number of Non-Motorized Fatalities & Serious Injuries	468.2

2023 Cabarrus - Rowan MPO 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 this [link](#).

Table 4: Cabarrus - Rowan MPO 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	42.2	1.277	62.2	1.894	11.4
2009 - 2013	41.6	1.290	64.8	2.018	13.6
2010 - 2014	41.0	1.280	72.2	2.244	14.8
2011 - 2015	41.8	1.280	77.6	2.370	13.2
2012 - 2016	43.2	1.290	92.4	2.730	14.2
2013 - 2017	41.2	1.197	107.2	3.043	15.4
2014 - 2018	40.0	1.111	117.6	3.225	13.8
2015 - 2019	40.4	1.090	121.8	3.262	13.4
2016 - 2020	42.2	1.151	132.6	3.594	15.4
2017 - 2021	46.4	1.247	136.0	3.640	19.2
2023 Target*	33.9	0.907	103.7	2.760	11.4

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 Division just as you have in previous years. An adoption resolution template can be found at this [link](#).

Finally, a new NCDOT Traffic Safety website has been established to communicate safety information to the public. A few direct links that may be of specific interest to MPOs can be found below:

- Main NCDOT Traffic Safety Unit website: [link](#)
- Mapped safety data: [link](#)
 - Here you can find a variety of spatial datasets related to traffic safety, including: fatal and serious injury crashes, pedestrian and bicycle crashes, safety projects (completed, funded, and those competing for funding), and several interactive map-based dashboards that allows the user to select an area of interest for more specific crash statistics.
- Safe Streets for All Grant (SS4A) Program: [link](#)
 - Here you will find North Carolina specific information related to the SS4A grant program. It is expected that the content of this site will expand over time.

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

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