



# **Transportation Performance Measures -- Safety**

Andy Henry, andrew.henry@durhamnc.gov, February 10, 2021

## Background



- TPMS are required by MAP-21 and FAST ACT (federal transportation legislation)
- January 2019 -- MPO adopted Safety measures and targets along with TPMs for transit assets, bridge and pavement condition and system performance
- November 2019 -- MPO approved updated Safety measures and targets
- MPO must re-adopt Safety targets by February 27, 2021 (other three TPMs are not due for re-adoption)

### Background (continued)



- Two options:
  - MPO establish own measures
     MPO must manage data to calculate measure
  - Support NCDOT measures

In three TPMs, MPO adopted NCDOT target. Why?: can use NCDOT data; and ambitious.

- NCDOT safety targets based on NCDOT's Strategic Highway Safety Plan (SHSP):
  - Reduce by 50% by 2035
  - Vison Zero by 2050
- At this point, no known consequences for MPO if targets not achieved

# **Safety Targets**



	Targets (per	cent reduc			
Safety Measure	2018	2019	2020	2021	
Total Fatalities	5.01	5.59	6.23	4.2	
Fatality Rate	4.75	5.02	5.39	4.35	
Total Serious Injuries	5.1	6.77	8.54	3.24	
Serious Injury Rate	4.75	6.12	7.64	3.35	
Total Non-motorized	5.3	6.02	7.13	3.65	
Fatalities and Serious			1	<b></b>	———— Proposed targ
Injuries					Current targets

2021 reduction targets are much lower than previous years because the horizon year for reducing fatalities and injuries by one-half was changed from 2030 to 2035.

# **Safety Targets**



#### Data for DCHC MPO

Target Setting Crash Data

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	29.8	0.634	74.4	1.586	18.4
2009 - 2013	31.2	0.649	70.8	1.474	17.6
2010 - 2014	32.4	0.656	75.0	1.517	18.6
2011 - 2015	33.2	0.659	80.4	1.597	20.2
2012 - 2016	34.4	0.667	78.6	1.526	20.6
2013 - 2017	36.0	0.675	83.8	1.569	19.2
2014 - 2018	35.8	0.654	87.2	1.593	19.8
2015 - 2019	39.0	0.699	94.4	1.690	22.0
2021 Target*	35.8	0.640	86.9	1.553	20.7

Fatalities and serious injuries – steady increase

The rates (per miles traveled)
– slow increase

Non-motorized fatalities and serious injuries – slow increase



# Support NCDOT 2021 Safety targets by resolution:

- Resolution: MPO agrees to plan and program projects so that they contribute toward the accomplishments of the NCDOT performance targets
- The proposed targets are ambitious, i.e., 50% reduction by 2035, zero fatality and serious injury by 2050
- Using the NCDOT targets allows the MPO to use NCDOT data