

To: Transportation Committee
From: Jennifer Carrier, Director of Transportation Planning
Jillian Massey, Senior Transportation Planner
Date: November 3, 2017
Subject: Safety Performance Measures

It has recently been brought to CRCOG's attention that CTDOT has established targets for safety performance measures. They were included in the Highway Safety Plan (HSP) sent by CTDOT to the National Highway Traffic Safety Administration (NHTSA) (approved on August 18, 2017) and the Highway Safety Improvement Program (HSIP) annual report sent by CTDOT to FHWA (approved on September 26, 2017). The purpose of this memo is to begin the conversation of safety performance measures with the Committee and to begin working toward endorsing targets with our Metropolitan Planning Organization (MPO).

Federal Regulations

Federal regulations (23 CFR 490.207 (a) (National performance management measures for the Highway Safety Improvement Program) state that MPOs shall establish performance targets for each of the measures identified in the HSIP by **February 27, 2018**. CRCOG's Policy Board acts as the MPO for the Hartford Urbanized Area, and is advised by the Transportation Committee. The five (5) safety performance measures that MPOs are required to set targets for include:

- Number of Fatalities
- Rate of Fatalities (per 100 million VMT)
- Number of Serious Injuries
- Rate of Serious Injuries (per 100 million VMT)
- Number of Non-motorized Fatalities plus Serious Injuries

To provide MPOs with flexibility, federal regulations allow MPOs to support the State targets or establish their own targets. CRCOG will be required to integrate safety goals, objectives, performance measures and targets into the transportation planning process. We will, in our Long Range Transportation Plan, have to identify the anticipated effect of the TIP toward achieving targets and link investment priorities in the TIP to those safety targets. Consequences for not meeting identified performance targets could result in a loss of flexibility in how federal funds are programmed.

CTDOT Safety Targets

CTDOT safety targets were issued to NHTSA and FHWA without being vetted with the Regional Planning Organizations (RPOs). CTDOT has acknowledged this disconnect and has agreed to better coordinate with the RPOs for the 2019 target setting exercise. The following identifies the five (5) safety performance measures. CTDOT's targets are based on a 5-year rolling average. Also included are segments from the HSP and HSIP in Attachments A through E.

- To maintain the five year (2011-2015) moving average of 257 Fatalities during the five year (2014-2018) period.

- To maintain the Fatality rate per 100 M VMT from the five year (2011-2015) moving average of .823 during the five year (2014-2018) period.
- To maintain the five year (2011-2015) moving average of 1,571 Serious (A) Injuries during the five year (2014-2018) period.
- To maintain the five year (2011-2015) moving average of 5.03 Serious (A) Injuries per 100M VMT during the five year (2014-2018) period.
- To maintain the five year moving average of 280 Non-motorized Fatalities and Serious Injuries.

CRCOG Safety Targets

CRCOG reviewed national and regional trends in safety data. Approximately 30% of fatalities and 22% of serious injuries in the last 5 years in Connecticut have occurred in the Capitol Region. Crashes associated with distracted and impaired (under the influence of alcohol or drugs) driving within our region have been on the increase since 2015. The number of distracted driving related crashes increased from 9,392 in 2015 to 10,924 in 2016 and the number of impaired driving related crashes increased from 883 in 2015 to 937 in 2016. Furthermore, fatalities have been on the rise (about 6%) nationally since 2015.

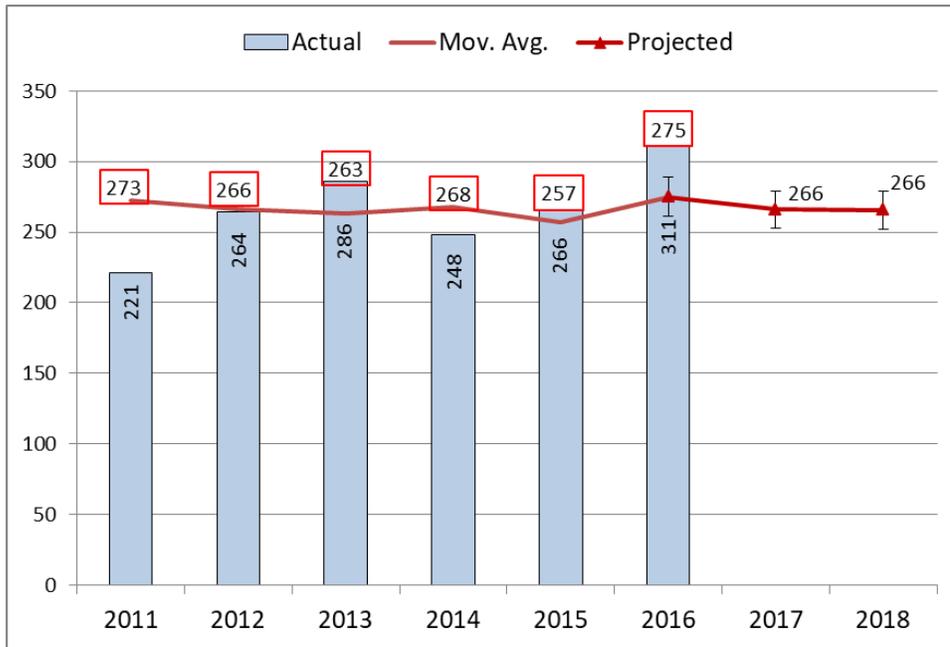
CTDOT is encouraging CRCOG to support the targets set by the CTDOT, as most MPOs in the country are doing for this first year of performance measure target setting. Should we decide to support and endorse the CTDOT's targets, the Unified Planning Work Program (UPWP) will need to be amended to outline roles and responsibilities for the Department and the MPO with regards to performance measures. If we elect to establish our own targets they would apply to all public roads in the region and we would need to estimate vehicle miles traveled (VMT) for all of these roads.

As we begin to review the material and consider safety performance targets we may want to consider the following:

- Fatalities and serious accidents are on the rise and our state's small geography may support CRCOG adopting CTDOT's targets for this first year. CTDOT's targets "maintain" 5-year averages which are good assumptions given crashes are on the rise. CRCOG can work in the coming year to assess what other regions are doing nationally and get a better handle on VMTs within the region (this incorporates understanding daily traffic on all public roads).
- CRCOG will be advancing a regional safety plan in the next couple of years (a joint effort with DOT and the regions). This regional plan can help us pinpoint safety patterns and areas of concerns.
- If we adopt CTDOT targets we may want to request CTDOT coordinate quarterly meetings with Regional Planning Organizations to collaborate on safety efforts and reaching targets.
- Continuing to work closely and collaborate with the Safety Circuit Rider program to address safety on local roads and understand best practices as it relates to safety projects.
- Consider amending our rating criteria or funding set-aside amounts on certain funding programs (e.g. LOTCIP, TA Set-Aside) to support projects that address safety.

We would be interested in your opinions in the coming months. Feel free to contact either of us if you have any comments or concerns: jcarrier@crcog.org or jmassey@crcog.org.

Fatalities 2011-2016

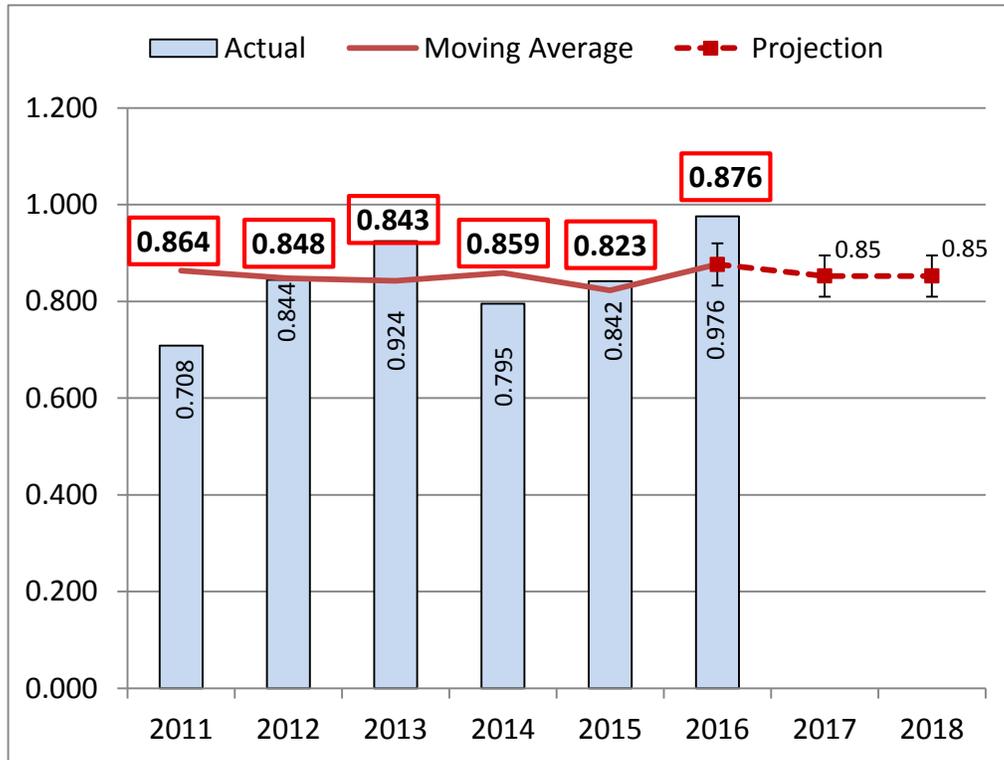


Source: FARS Final 2015/Connecticut Department of Transportation 2016 Crash File

To maintain the five year (2011-2015) moving average of 257 Fatalities during the five year (2014-2018) period.

- While fatality figures have fluctuated during the five year reporting period, the five year moving average and trend has continued to decrease for the 2011-2015 baseline period.
- Although the five year moving average decreased during the 2011-2015 baseline period, preliminary 2016 data show the fatality total of 311 and the five year moving average of 275 to represent an increase in the five year moving average.
- 2017 data show current fatality trends to keep pace with 2016 for the year to date.
- For this reason, the fatality trend is expected to increase during the planning period. Collaboration with SHSP targets has led to the choice to maintain the current five year moving average.

Fatality Rate per 100 M VMT 2011-2016

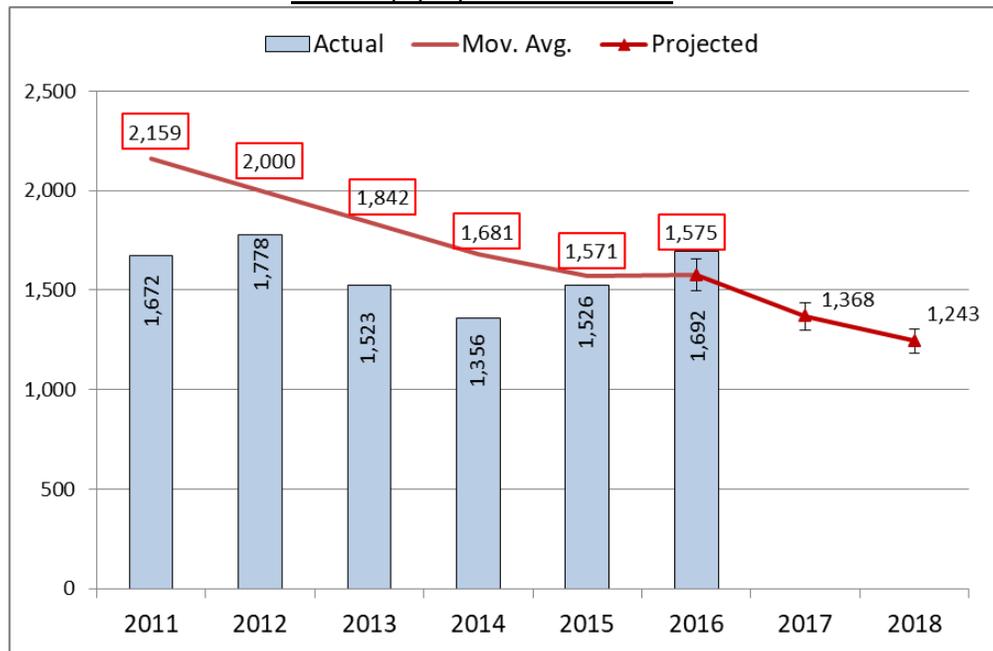


Source: FARS final files 2011-2014, Annual Report File 2015, CT Crash Data Repository 2016

To maintain the Fatality rate per 100 M VMT from the five year (2011-2015) moving average of .823 during the five year (2014-2018) period.

- The five year moving average decreased from .864 (2007-2011) to .823 during the 2011-2015 baseline period.
- Although the five year moving average decreased during the 2011-2015 baseline period, preliminary 2016 data show the fatality total of 311 and the five year moving average of 275 to represent an increase in the five year moving average.
- 2017 data show current fatality trends to keep pace with 2016 for the year to date.
- Although 2016 VMT data was not available at the time of publishing (projected VMT was used in the 2016 figure in this graph),
- Based on the anticipated increase in fatalities in 2016 and 2017, the Fatality rate per 100M VMT trend is expected to increase during the planning period. Collaboration with SHSP targets has led to the choice to maintain the current five year moving average.

Serious (A) Injuries 2011-2016

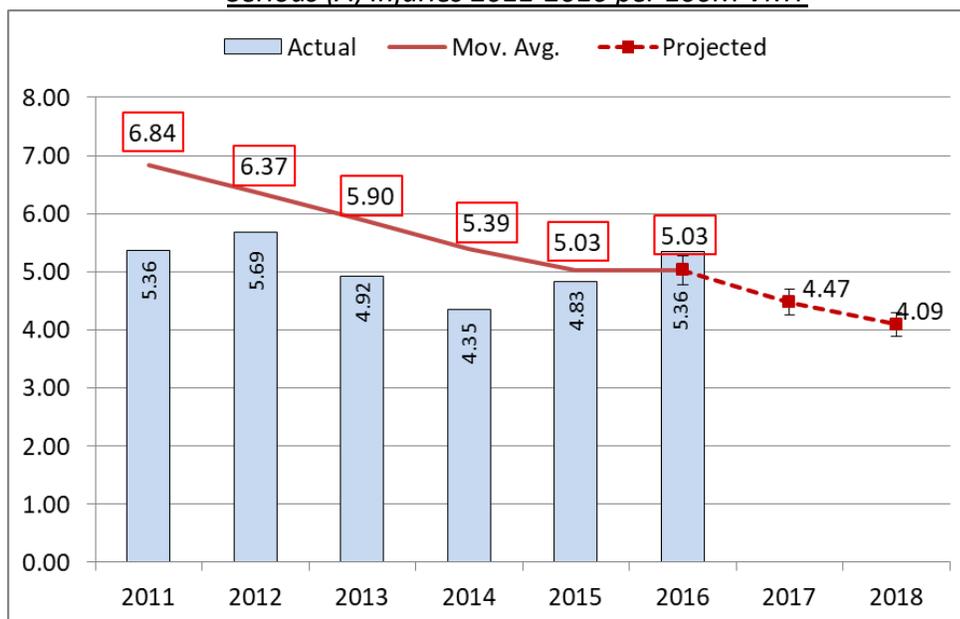


Source: FARS final files 2011-2014, Annual Report File 2015, CT Crash Data Repository 2016

To maintain the five year (2011-2015) moving average of 1,571 Serious (A) Injuries during the five year (2014-2018) period.

- While Serious (A) Injuries have fluctuated during the five year reporting period, the five year moving average and trend has continued to decrease for the 2011-2015 baseline period.
- Although the five year moving average decreased during the 2011-2015 baseline period, preliminary 2016 data show the Serious (A) Injury total of 1,692 and the five year moving average of 1,575 to represent an increase in the five year moving average.
- Serious Injury totals have increased for consecutive years, for this reason, the Serious (A) Injury trend is expected to increase during the planning period. Collaboration with SHSP targets has led to the choice to maintain the current five year moving average.

Serious (A) Injuries 2011-2016 per 100M VMT



Source: Connecticut Crash Data Repository

To maintain the five year (2011-2015) moving average of 5.03 Serious (A) Injuries per 100M VMT during the five year (2014-2018) period.

- While Serious (A) Injuries have fluctuated during the five year reporting period, the five year moving average and trend has continued to decrease for the 2011-2015 baseline period.
- Although the five year moving average decreased during the 2011-2015 baseline period, preliminary 2016 data show the Serious (A) Injury per 100M VMT total of 4.83 and the five year moving average of 5.03 to represent an increase in the five year moving average.
- Although 2016 VMT data was not available at the time of publishing projected VMT was used in the 2016 figure in this graph.
- Serious Injury totals have increased for consecutive years, for this reason, the Serious (A) Injury per 100M VMT trend is expected to increase during the planning period. Collaboration with SHSP targets has led to the choice to maintain the current five year moving average.

**Total Number of Non-Motorized
Fatalities and Serious Injuries** 280

Describe the basis for established target, including how it supports SHSP goals.

•Although Pedestrian and Bicyclist Fatalities and Serious Injuries have maintained a fairly steady level over the reporting period, there has been an increase in this measure during the last two years. Preliminary 2016 and 2017 data show this increase to be maintained during the current year. •Though 2016 VMT data was not available at the time of goal setting for the 2018 planning period, this trend is expected to continue and possibly increase. For this reason, the fatality and serious injury trends are expected to increase during the planning period and maintaining the current number of pedestrian bicyclists killed and seriously injured was chosen. After reviewing the 2017-2021 SHSP goals and emphasis area strategies, CTDOT chose to maintain the current number of pedestrian and bicyclists killed and seriously injured.