TO: CATSO Coordinating Committee

FROM: CATSO Staff

SUBJECT: Item 5 - FAST Act Safety Targets/Support of Vision Zero

DATE: February 22, 2018

The federal Map-21 legislation established, and the Fast Act continues, a performance-based approach to transportation projects. Seven national performance goals were established for the Federal-Aid Highway Program. From these seven goals, fifteen performance measures were developed for states, Metropolitan Planning Organizations (MPOs), and transit agencies, which are required to set goals and monitor progress. Safety is the second performance measure for which targets must be set. CATSO finalized and adopted Transit Asset Management performance measures in November 2017. Additional targets will be developed by CATSO as required.

Accordingly, CATSO must now establish safety targets based on a 5-year rolling average of the following factors within its Metropolitan Planning Area (MPA):

1. Number of Fatalities
2. Fatality Rate per 100 Million VMT (Vehicle Miles Traveled)
3. Number of Serious Injuries
4. Serious Injury Rate per 100 Million VMT
5. Number of Non-Motorized Fatalities and Serious Injuries

All Missouri MPOs, including CATSO, have the choice to adopt the safety targets set by the Missouri Department of Transportation (MoDOT) or to set their own by February 27, 2018.

***Technical Committee Action***

At their February 7, 2018 meeting the CATSO Technical Committee reviewed two sets of safety targets developed by staff. The first set of targets mirrored the MoDOT targets. The second set of targets was based on preliminary knowledge of the City’s recently adopted Vision Zero Action Plan, with a goal of zero traffic deaths and serious injuries by 2030. However, staff informed the committee that they had recently been made aware of the fact that the City’s Vision Zero Team, for which CATSO staff is a part, planned to develop annual Vision Zero goals to be adopted by the Columbia City Council in May of 2018.

Consequently, the committee decided it was best to recommend that CATSO adopt the MoDOT safety targets (based on annual 7% fatality reduction, 4% serious injury reduction, and 4% non-motorized reduction), since they have already been set and they are based on MoDOT’s 2016-2020 Blueprint: A Partnership Towards Zero Death (TZD), which shares the same long-term goals as Columbia’s Vision Zero initiative (see CATSO DRAFT Tech Minutes, 2-7-18).

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***CATSO Safety Targets based on MoDOT Targets***

Per the CATSO Technical Committee’s recommendation to focus on the MODOT targets, staff has developed the following set of 2018 CATSO safety targets, based on historical data and the MoDOT safety targets, for the Coordinating Committee’s review.

**Proposed 2018 CATSO Safety Targets**

February 2018

|  |  |
| --- | --- |
| **Performance Measure** | **Targets for CY20181** |
| Number of Fatalities  | 15.12 |
| Fatality Rate per 100 Million VMT2 | 1.24 |
| Number of Serious Injuries  | 72.42 |
| Serious Injury Rate per 100 Million VMT | 5.95 |
| Number of Non-Motorized3 Fatalities and Serious Injuries | 11.24 |

1Targets based on 5 year rolling averages and 7% fatality reduction, 4% serious injury reduction, and 4 % non-motorized reduction.

2 2018 CATSO VMT estimate of 1,248,011,257

3 Non-motorized fatalities and serious injuries are included in the total numbers of fatalities and serious injuries, and are also shown separately to demonstrate the data and targets related specifically to vulnerable road users.

In addition, on the following pages, staff has developed these target projections out to 2030 to demonstrate the long-term positive impacts of meeting the targets and their alignment with Columbia’s Vision Zero goals.

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***Figure 1.1***

Figure 1.1 CATSO 20 Year Traffic Fatality Averages, Rates and Targets, Feb. 2018.

Annual averages based on rolling averages of the previous 5 years.

Annual rates per 100 million VMT. VMT reflects a 1% increase annually.

See CATSO Safety Data and Targets, 2010-2030 for more details.

Figure 1.1 demonstrates historically average CATSO traffic fatalities between 9 and 14, and average rates between 0.6 and 1.5 fatalities per 100 million VMT. There is an initial increase in fatality averages and rates even with the projected seven percent target decreases, due to the number of annual fatalities in recent years. However, if the targets continue to be met, annual CATSO fatality averages could decrease to less than 7 and rates to 0.5 per 100 million VMT by 2030.

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***Figure 1.2***

Figure 1.2 CATSO 20 Year Serious Averages, Rates and Targets, Feb. 2018.

Annual averages based on rolling averages of the previous 5 years.

Annual rates per 100 million VMT. VMT reflects a 1% increase annually.

See CATSO Safety Data and Targets, 2010-2030 for more details.

Figure 1.2 shows that from 2010-2017 the number of CATSO serious traffic injuries average between 70 – 82, and average rates are between 5.09 - 8.34 per 100 million VMT. Similar to the fatality projections, there is an initial increase in serious injury averages and rates when the 2018 target year begins, but if the targets continue to be met, annual CATSO serious injury averages could decrease to less than 47 and rates to 3.39 per 100 million VMT by 2030.

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***Figure 1.3***

Figure 1.1 CATSO 20 Year Non-Motorized Fatalities & Serious Injuries Averages and Targets, Feb. 2018.

Non-motorized fatalities and serious injuries are included in the total numbers of fatalities and serious injuries, and are also shown separately to demonstrate the data and targets related specifically to vulnerable road users.

Annual averages based on rolling averages of the previous 5 years.

See CATSO Safety Data and Targets, 2010-2030 for more details.

Over the past 7 years the combined annual average of CATSO non-motorized fatalities and serious injuries has been between 6 and 15, as Figure 1.3 shows. Higher numbers of incidents in 2014 (12) and 2016 (14) factor into the higher target averages starting in 2018. Yet, if projected targeted decreases continue, CATSO non-motorized fatalities and serious injuries could reach below 7.5, lower than any rolling average demonstrated between 2010 and 2017.

***Suggested Coordinating Committee Action***

Staff recommends that CATSO adopt the CY2018 safety targets based on the MoDOT safety targets, which will meet both the Fast Act requirements and support the City of Columbia’s Vision Zero Action Plan.

The safety targets can be re-set on an annual basis. If the City adopts different annual safety targets CATSO may consider adopting those next year in continual support of Columbia’s Vision Zero Action Plan. Targets may also be revised annually based on the initial and ongoing results of the Vision Zero efforts, as demonstrated through annual traffic fatality and serious injury numbers.