



DATE: 12/29/2017

TO: DSATS Policy Committee
DSATS Technical Advisory Committee

FROM: Brian Dickson, DSATS Coordinator
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SUBJECT: DSATS Safety Performance Management Goal

SUMMARY

The Federal Highway Administration (FHWA) established the Safety Performance Management (PM) Final Rule to require all states and MPOs to implement safety performance measures as part of their planning process. The State of Illinois has set a safety goal of an annual 2% reduction in the number of fatal and serious injury crashes.

All of the MPOs in Illinois are now required to either adopt the State's PM goal or implement their own goal by February 28, 2018, according to FHWA's Safety PM Final Rule. The majority of the smaller MPOs, similar in size to DSATS, have elected to adopt the State's PM goal. Some of the larger MPOs are adopting their own goals.

Staff is recommending DSATS initially adopts the State's PM goal. The goal must be renewed annually, and DSATS may develop their own safety PM goal in the future. Staff is requesting members approve the attached resolution to adopt the State's PM goal of an annual 2% reduction in fatal and serious injury crashes in the region.

BACKGROUND

According to the FHWA, the Safety PM Final Rule supports the Highway Safety Improvement Program (HSIP), as it assesses fatalities and serious injuries on all public roads for the purpose of carrying out the requirements of the HSIP. The Safety PM Final Rule is one component of the Transportation Performance Management (TPM) program. The purpose of the TPM is to use transportation system information to improve investment and policy decisions and to meet national performance goals set by the Moving Ahead for Progress in the 21st Century Act (P.L. 112-141) (MAP-21).

The Safety PM Final Rule establishes five performance measures. Each measure is to be averaged over a five-year rolling period. These performance measures include:

1. Number of Fatalities
2. Rate of Fatalities per 100 Million (M) Vehicle Miles Traveled (VMT)
3. Number of Serious Injuries (SI)

4. Rate of Serious Injuries per 100M VMT
5. Number of Non-motorized Fatalities and Non-motorized SI

The Safety PM Final Rule also establishes the process for State Departments of Transportation (DOTs) and Metropolitan Planning Organizations (MPOs) to establish and report their safety targets, and the process FHWA will use to assess whether State DOTs have met or made significant progress toward meeting their safety targets. <https://safety.fhwa.dot.gov/hsip/spm/>

IDOT recommends each MPO decide how to proceed with selecting the safety PM goals for their MPO. However, IDOT requires each MPO obtain Policy Committee approval. IDOT does not have detailed guidance about what documentation they need to demonstrate acceptance of MPO safety PM goals at this time. IDOT suggests either a resolution or letter outlining the outcome of the safety PM goal selection process, regardless of whether the MPO selects IDOT's safety PM goals or sets different goals. These safety PM goals will need to be identified in LRTP updates or TIP amendments after May 27, 2018.

FREQUENTLY ASKED QUESTIONS

Why must MPOs adopt safety PM goals?

The federal MAP-21 transportation act required the U.S. Department of Transportation (USDOT) to establish performance measures, including safety improvements in the nation's highway system. The Safety PM Final Rule was the first performance measure to be implemented by the FHWA.

The Safety PM Final Rule supports the HSIP and requires State DOTs and MPOs to set HSIP goals for five safety performance measures.

What will MPOs be required to do when the safety PM Goal is implemented?

All MPOs are required to either adopt their state's PM goal for safety or develop their own safety PM goal. Once adopted, the MPOs, with support from the state DOTs, are required to annually track all fatal and serious injury crashes and identify if the annual safety PM goal has been achieved.

What happens if the MPO does not implement a safety PM goal?

Federal law requires all MPOs to implement PM goals within 180 days of a state establishing and reporting its HSIP goals. If a MPO does not adopt a PM goal, the USDOT could potentially withhold all federal transportation grant funding for all roadways in the MPO region.

What are the consequences if a MPO does not meet its safety PM goal?

There are currently no fiscal repercussions if the PM goals are not attained by MPOs. However, DSATS staff and member organizations shall be expected to identify potential actions to be implemented to achieve the PM goals through the Long Range Transportation Plan and Transportation Improvement Program (TIP).

How do MPOs establish safety PM goals?

MPOs may adopt and support their state's safety PM goals, develop their own goals, or use a combination of both.

If an MPO adopts their state safety PM goal, the MPO would:

- Work with the state and safety stakeholders to address areas of concern for fatalities or serious injuries within the metropolitan planning area;
- Coordinate with the state and include the safety performance measures and the state's PM goals for those measures;
- Integrate the safety PM goals, objectives, performance measures, and targets into the metropolitan transportation planning process, such as applicable portions of the HSIP; and
- Include a description in the TIP of the anticipated effect of the TIP toward achieving PM goals, linking investment priorities in the TIP to those safety targets.

If an MPO establishes its own safety PM goals, the MPO would:

- Establish safety PM goals for all public roads in the metropolitan planning area in coordination with the state;
- Estimate VMT for all public roads within the metropolitan planning area for rate targets;
- Coordinate with the state and include the safety performance measures and the MPO's PM goals for those measures;
- Integrate the safety goals, objectives, performance measures, and targets into the metropolitan transportation planning process, such as applicable portions of the HSIP, including the SHSP; and
- Include a description in the TIP of the anticipated effect of the TIP toward achieving PM goals, linking investment priorities in the TIP to those safety targets.

When must MPOs establish these safety PM goals?

MPOs must establish their safety PM goals 180 days after their state establishes its goals. The State of Illinois has established its PM goals, and DSATS must now establish its PM goals by February 27, 2018.

Where do MPOs report safety PM goals?

MPO safety PM goals are reported to the State DOT.

How are MPOs assessed regarding significant progress toward meeting the safety PM goals?

State safety PM goals are assessed annually. Currently MPO safety PM goals are not assessed, but the State could implement assessment procedures in the future.

What are IDOT's safety PM goals?

IDOT has implemented a 2% reduction per year from the base year 2015 as a safety PM goal for all five performance measures.

ANALYSIS

To evaluate IDOT's safety PM goal for each performance measure for the DeKalb planning area, DSATS staff used crash data compiled by IDOT. The information provided in the following table and charts was compiled by IDOT for each MPO in Illinois. While county-wide data has been compiled through 2016, data for the specific MPO regions has only been compiled through 2014 so far. Table 1 identifies:

1. Number of Fatalities (F) per year,
2. 5-Year F rolling average,
3. The F rate per 100M Annual VMT,
4. 5-Year F-VMT rolling average,
5. Number of SI per year,
6. 5-Year SI rolling average,
7. The SI rate per 100M VMT,
8. 5-Year SI-VMT rolling average,
9. Number of Non-Motorized (NM) F + SI,
10. 5-Year NM rolling average,
11. Annual VMT for the DSATS region, and
12. Combined fatality & serious injury count.

Table 1. DSATS Fatalities and Serious Injuries Data Table 2005-2020

DeKalb Sycamore Area Transportation Study (DSATS)	Fatality Reduction %	2.00%	VMT % Increase	1.04%	VMT Rate of Change (2005-2013)	1.04%
	DeKalb					

Year	Fatalities (F)	5-Yr Fatality Avg	Fatality Rate	5-Yr Fatality Rate	Serious Injuries (SI)	5-Yr SI Avg	SI Rate	5-Yr SI Rate	Non-Motorized (NM) F&SI	5-Yr NM F&SI	Annual VMT	F&SI
2020	5	5.5	0.97	1.032	43	45.2	7.92	8.430	6	6.5	547,836,812	49
2019	5	5.6	1.00	1.064	44	46.1	8.17	8.692	6	6.6	542,197,953	50
2018	6	5.8	1.03	1.097	45	47.1	8.42	8.961	6	6.7	536,617,135	51
2017	6	5.7	1.06	1.087	46	49.2	8.68	9.475	7	6.0	531,093,760	52
2016	6	5.5	1.10	1.073	47	50.4	8.95	9.801	7	5.7	525,627,237	53
2015	6	5.2	1.13	1.014	48	52.2	9.23	10.255	7	5.8	520,216,980	54
2014	6	5.0	1.17	0.990	49	55.2	9.52	10.960	7	5.8	514,837,610	55
2013	5	4.6	0.98	0.921	56	60.0	10.99	12.043	3	5.6	509,513,866	61
2012	5	5.0	0.99	1.014	52	64.6	10.31	13.112	5	6.0	504,245,173	57
2011	4	5.4	0.80	1.108	56	73.2	11.22	15.018	7	6.8	499,030,961	60
2010	5	5.6	1.01	1.159	63	87.2	12.76	18.093	7	6.4	493,870,668	68
2009	4	5.4	0.82	1.127	73	93.4	14.94	19.551	6	7.0	488,763,736	77
2008	7		1.45		79		16.33		5		483,709,612	86
2007	7		1.46		95		19.85		9		478,707,751	102
2006	5		1.06		126		26.60		5		473,757,612	131
2005	4		0.85		94		20.05		10		468,858,661	98

Source: IDOT

*Note: Figures in black are actual numbers, figures in red are estimates

Figure 1. Fatalities and Serious Injuries in DSATS Region

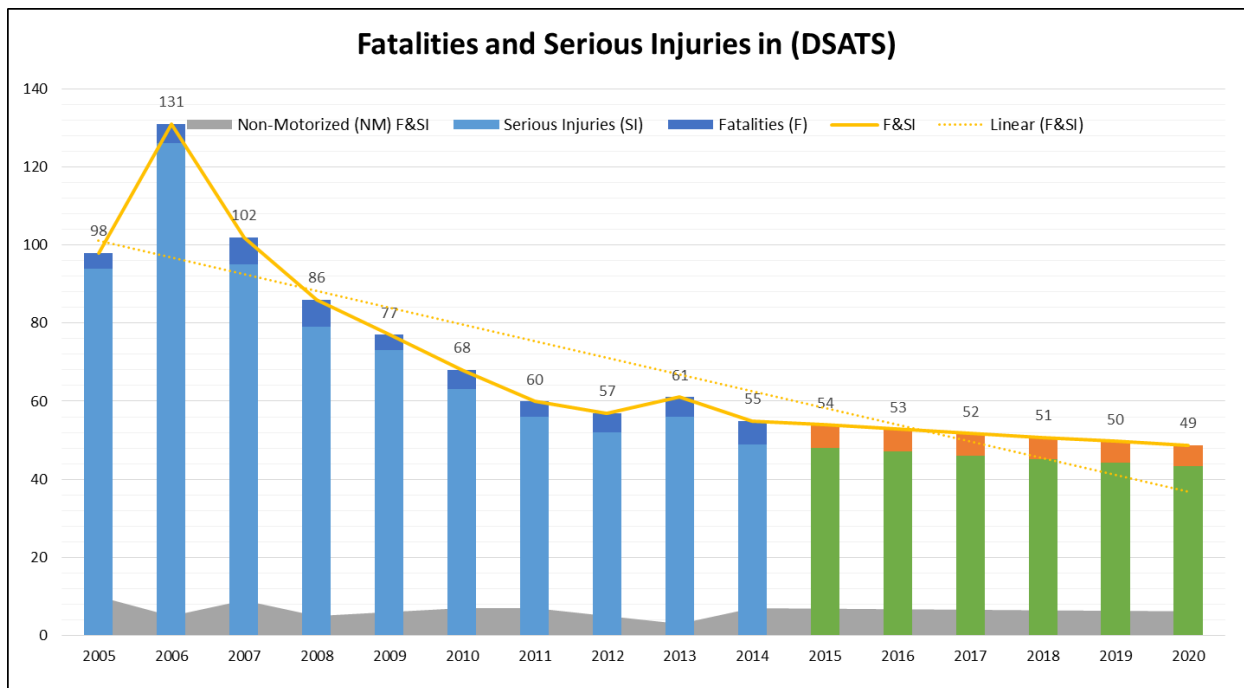
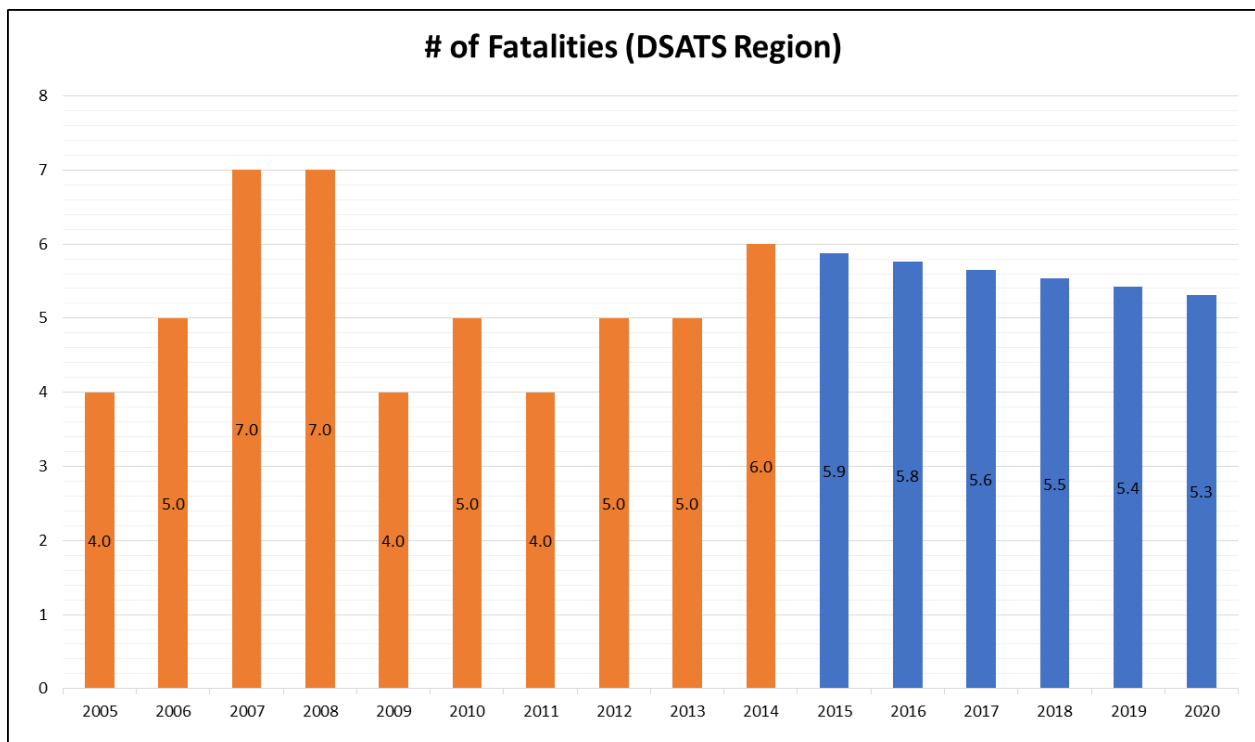


Figure 2. Number of Fatalities per Year in DSATS Region



According to Figure 2, implementing the state 2% reduction rate shall result in the need for DSATS member organizations to achieve a reduction of 1 fatal crash over a five year period.

Figure 3. 5-Year Fatality per 100M Vehicle Miles Traveled Rate in DSATS Region

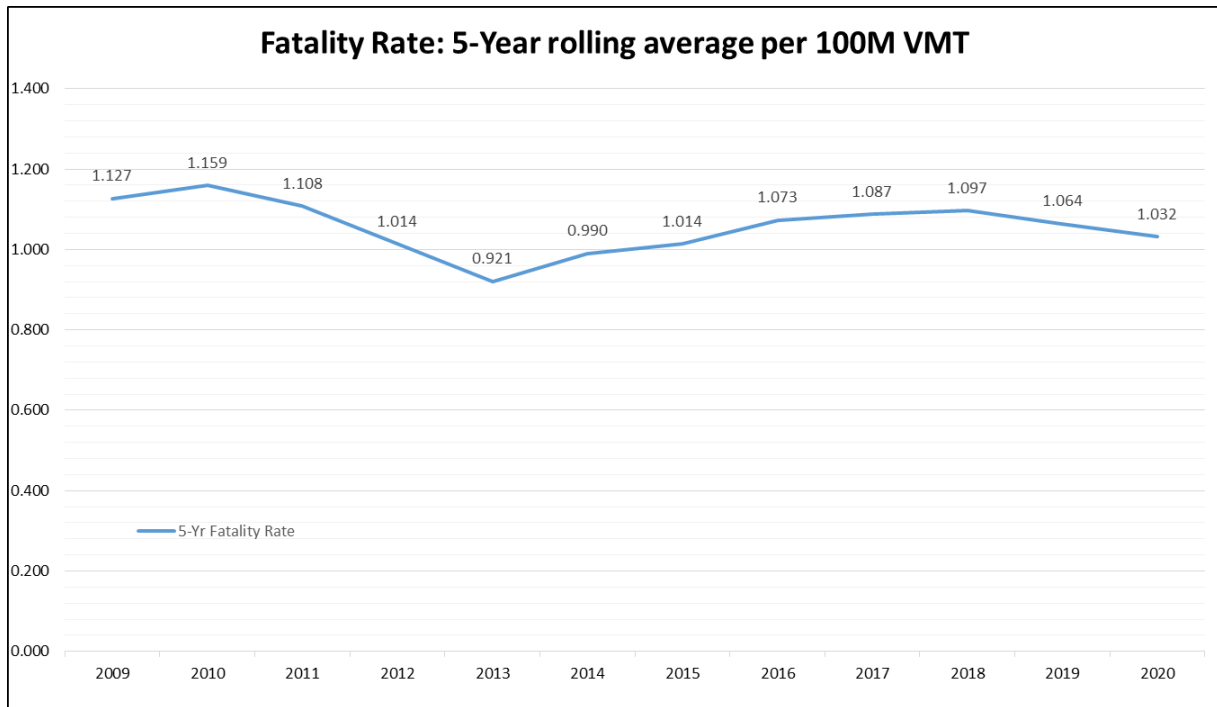
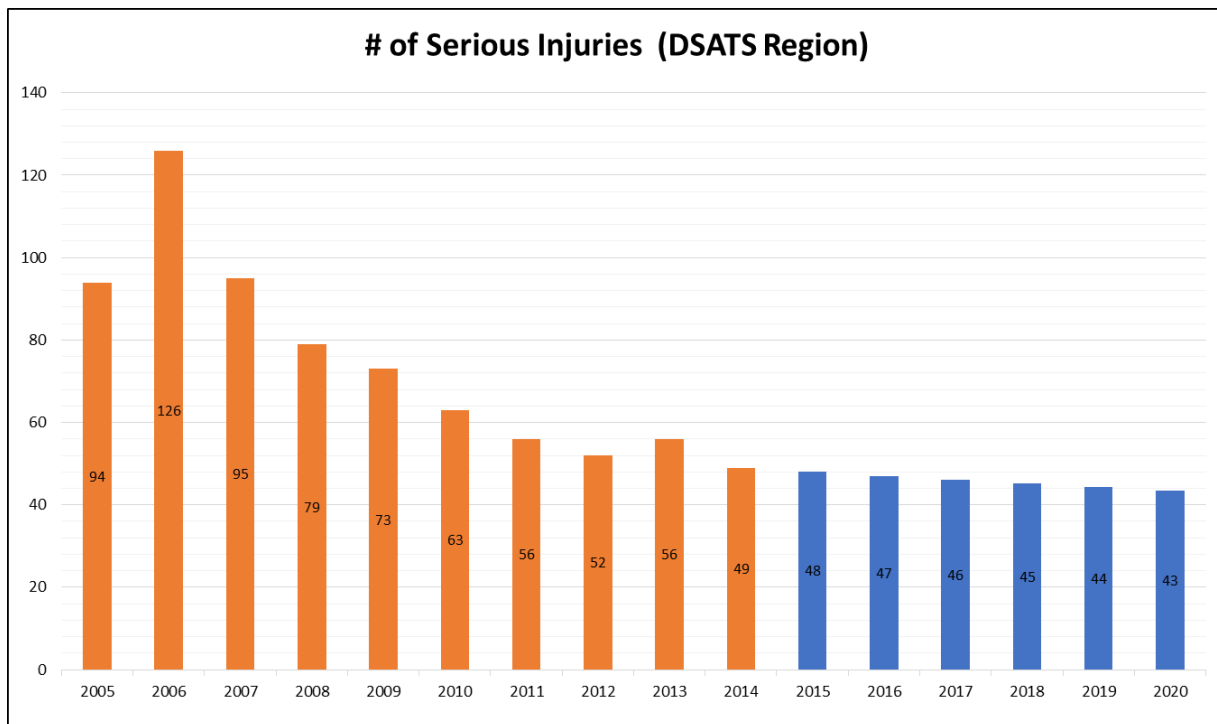


Figure 4. Number of Serious Injuries per Year in DSATS Region



According to Figure 4, implementing the state 2% reduction rate shall result in the need for DSATS member organizations to achieve a reduction of 1 serious injury crash every year.

Figure 5. 5-Year Serious Injury per 100M Vehicle Miles Traveled Rate in DSATS Region

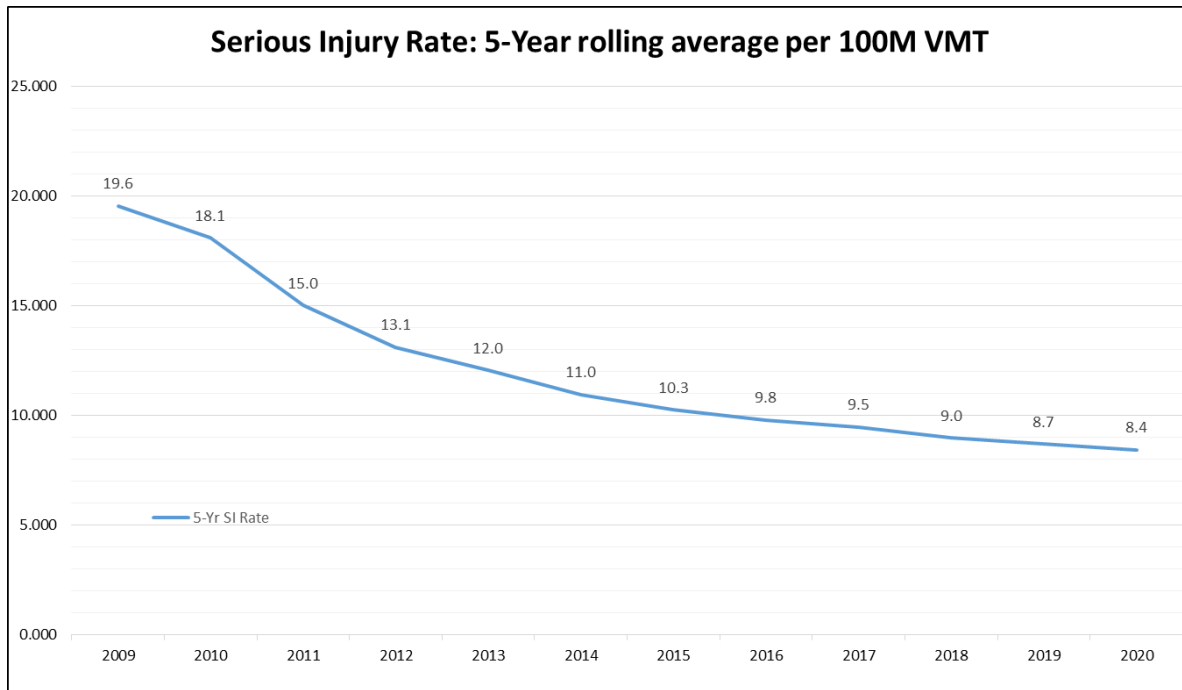
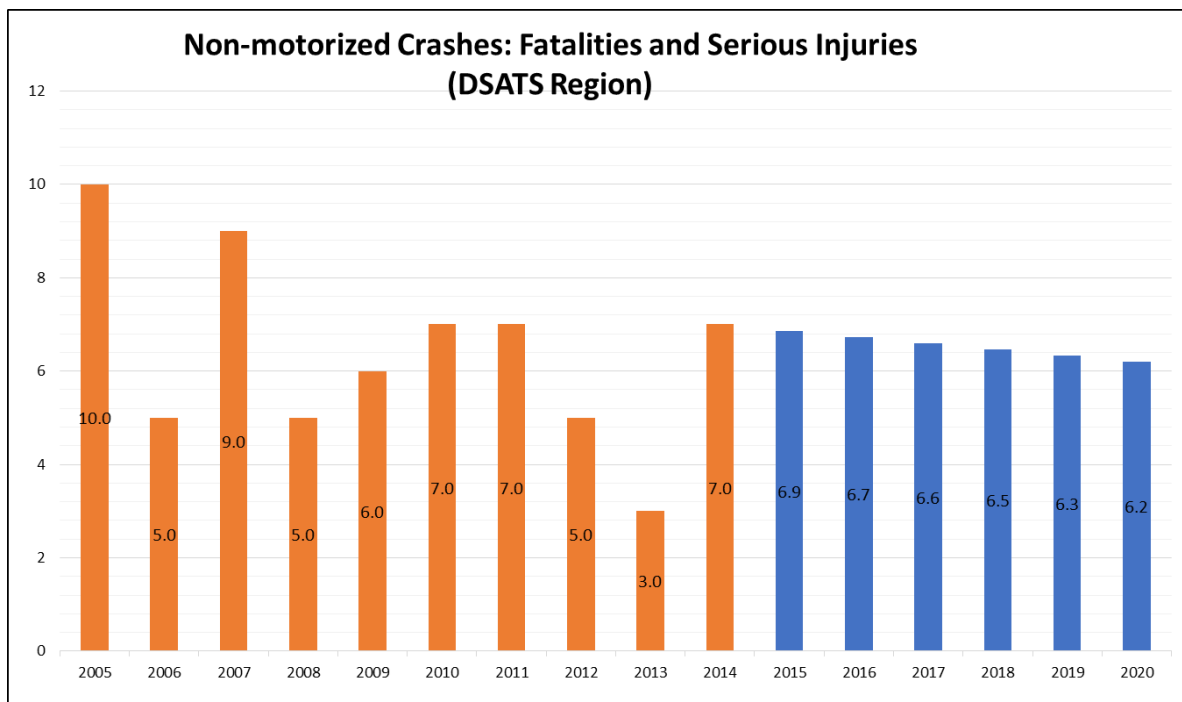


Figure 6. Number of Non-motorized Fatalities & Serious Injuries per Year in DSATS Region



According to Figure 6, implementing the state 2% reduction rate shall require the DSATS member organizations to achieve a reduction of 1 non-motorized fatality/serious injury crashes over a five year period.

IMPLEMENTATION OF SAFETY PM GOALS BY OTHER ILLINOIS MPOS

At the direction of TAC, staff requested information from other MPOs in Illinois to identify whether they are implementing the State's 2% reduction safety PM goal or implementing their own safety PM goals.

Table 2. Implementation of the State Safety PM by MPO.

MPO	Urban Area	Adopting State Goal?	Action
SATS	Springfield	No	SATS developed their safety performance targets as part of their 2014 LRTP and have been reporting progress against those targets since.
CMAP	Chicago	Undecided/Likely	CMAP is still discussing whether to implement the state PM or implement their own PM. Staff expects to implement the state PM goal first and continue to work with the CMAP Committees to implement their own PM goal in the future.
CUUATS	Champaign/ Urbana	No	The CUUATS Policy Committee voted in December to adopt the safety targets established in their 2040 LRTP, which sets a goal of 20% reduction, rather than a 2% reduction.
DUATS	Decatur	Yes	DUATS staff is recommending their Policy Committee adopt the state rate of 2% reduction at either their January or February meeting
Bi-State	Quad Cities	Yes	Bi-State is recommending their Policy Committee adopt the safety targets adopted by their respective states of Illinois and Iowa.
SIMPO	Carbondale	Yes	SIMPO staff is recommending the Policy Committee adopt the Illinois state rate of 2% reduction at either their January or February meeting.
KATS	Kankakee	Yes	The KATS Safety Committee chose to recommend support of the state safety goal of a 2% reduction at their November meeting. Their TAC and Policy Committees shall be approving the goal at their January or February meeting.
SEMPO	Cape Girardeau	Yes	The SEMPO Policy Committee adopted the state safety targets at their December 2017 meeting.

Overall, the larger MPOs in Illinois have chosen to implement their own safety PM goals. The smaller MPOs, similar in size to DSATS, have chosen to adopt the State's safety PM goal.

RECOMMENDATION

Staff is recommending DSATS adopt the states goal of reducing fatal and serious injury crashes by 2% annually. The implementation of a 2% reduction in fatal and serious injury crashes approximates eliminating one to two major crashes per year in the DSATS planning area. As this is the first PM goal implemented by the USDOT, there are still many questions on how to report

PM goals and what to do if annual goals are not reached. The next year or two will provide federal, state, and MPO officials with much more information on how to achieve these PM goals. By implementing the state PM goal initially, DSATS and IDOT can work together on improving the goals in the future.

Staff requests the DSATS TAC and Policy Committee approve the Resolution to adopt the State's safety PM goal.