



# **Illinois DOT**

## **2018 Statewide Safety Targets**


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# Transportation Performance Management (TPM)

- Safety Performance Management Measures Final Rule (FHWA Safety PM) **(23 CFR 490)**
  - NHTSA's Provisions for Performance Measures and Targets in the Highway Safety Plan (HSP) **(23 CFR 1300)**
  - Coordination among Internal and External Partners
  - A key component of MAP-21 and continued in the FAST Act in the establishment of a performance and outcome based Federal-aid highway program
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# Safety Performance Measures

## FHWA - HSIP

### Safety Performance Management Measures for FHWA's Highway Safety Improvement Program (HSIP)


- 5 Performance Measures
  - 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 and Non-motorized Serious Injuries
- 5-Year Rolling Averages

# Safety Performance Measures


## NHTSA - HSP

<b>1. Total traffic fatalities</b>	7. Motorcyclist fatalities
<b>2. Fatalities per 100M VMT</b>	8. Unhelmeted motorcyclist fatalities
<b>3. Serious injuries in traffic crashes</b>	9. Drivers age 20 or younger involved in fatal crashes
4. Unrestrained passenger vehicle occupant fatalities (all seat positions)	10. Pedestrian fatalities
5. Fatalities in crashes involving a driver/motorcycle operator with a BAC of .08 and above	11. Bicyclist fatalities
6. Speeding-related fatalities	12. Observed seat belt use for passenger vehicles, front seat outboard occupants

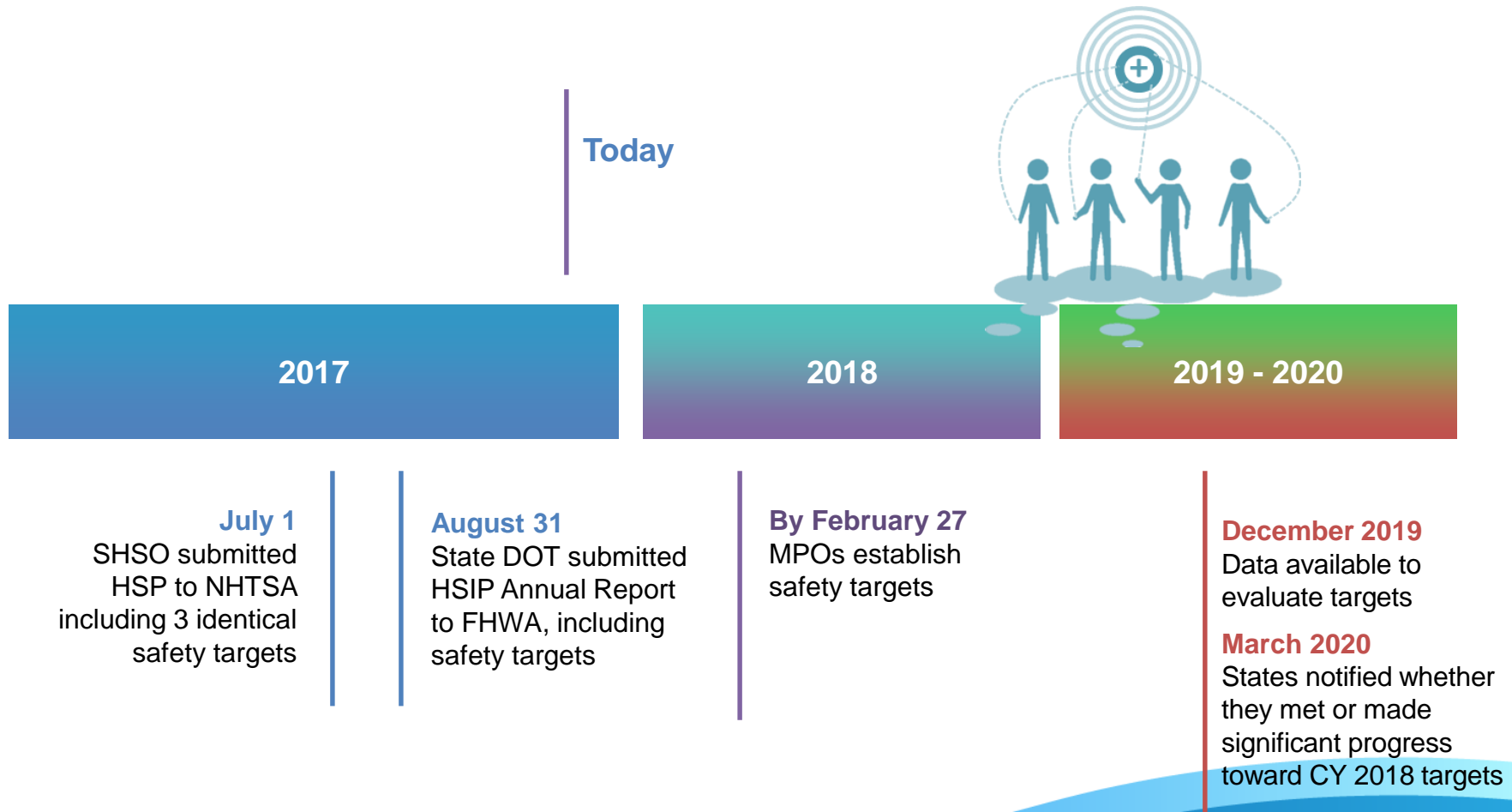
# Performance Targets

- States establish annual targets in the HSIP report
    - Beginning in August 2017 HSIP report for calendar year 2018
    - Target for each measure (5-year rolling average)
    - Based on calendar year
    - Applicable to **all** public roads regardless of functional classification or ownership
  - Targets must be identical to NHTSA HSP targets for three common measures:
    - Number of fatalities; rate of fatalities; and number of serious injuries
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# MPO Targets

- MPOs establish targets 180 days after State
    - Target for each measure required
  - Two options to establish targets
    - MPOs can agree to support the State DOT target; or
    - MPOs can establish a numerical target specific to the MPO planning area
  - Targets are applicable to all public roads in the MPO
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# Coordination Cycle for 2018 Targets



# Plans

## Strategic Highway Safety Plan (**SHSP**)

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graph TD; SHSP[Strategic Highway Safety Plan (SHSP)] --> HSIP[Highway Safety Improvement Program (HSIP)]; SHSP --> HSP[Highway Safety Plan (HSP)];
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## Highway Safety Improvement Program (**HSIP**)

- Report submitted annually
- Infrastructure improvements
- FHWA approved

- Updated every five years
- Infrastructure and behavioral countermeasures
- SHSP process approved by FHWA
- Requirement of HSIP

## Highway Safety Plan (**HSP**)

- Plan submitted annually
- Behavioral programs
- NHTSA approved



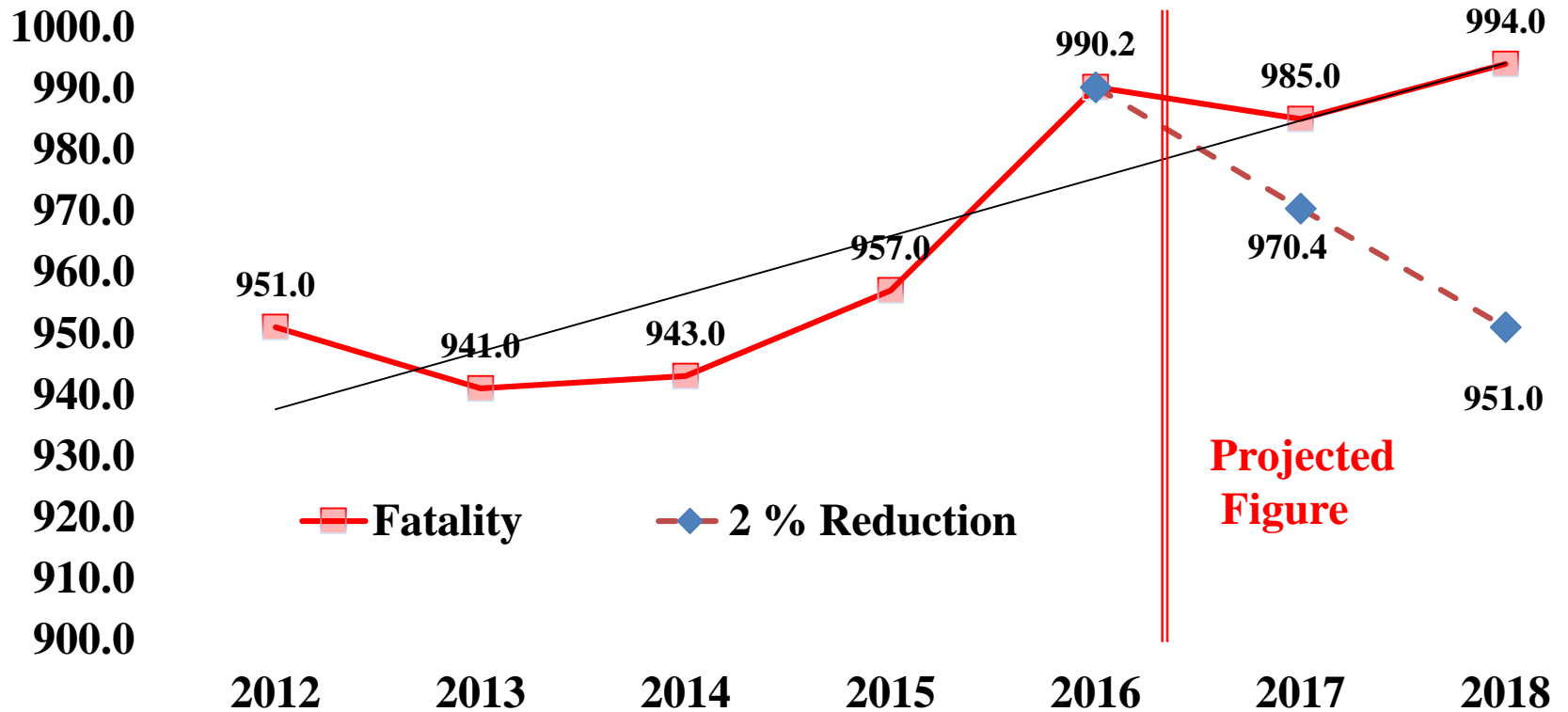
# Data Sources

<b>Performance Measure</b>	<b>Data Source for Target Achievement Evaluation</b>
Number of Fatalities	Final FARS or FARS ARF
Fatality Rate per 100M VMT	Final FARS or FARS ARF & HPMS
Number of Serious Injuries	State Motor Vehicle Crash Database
Serious Injury Rate per 100M VMT	State Motor Vehicle Crash Database for serious injuries and HPMS
Number of Non-motorized Fatalities and Serious Injuries	Final FARS or FARS ARF for fatalities and State Motor Vehicle Crash Database

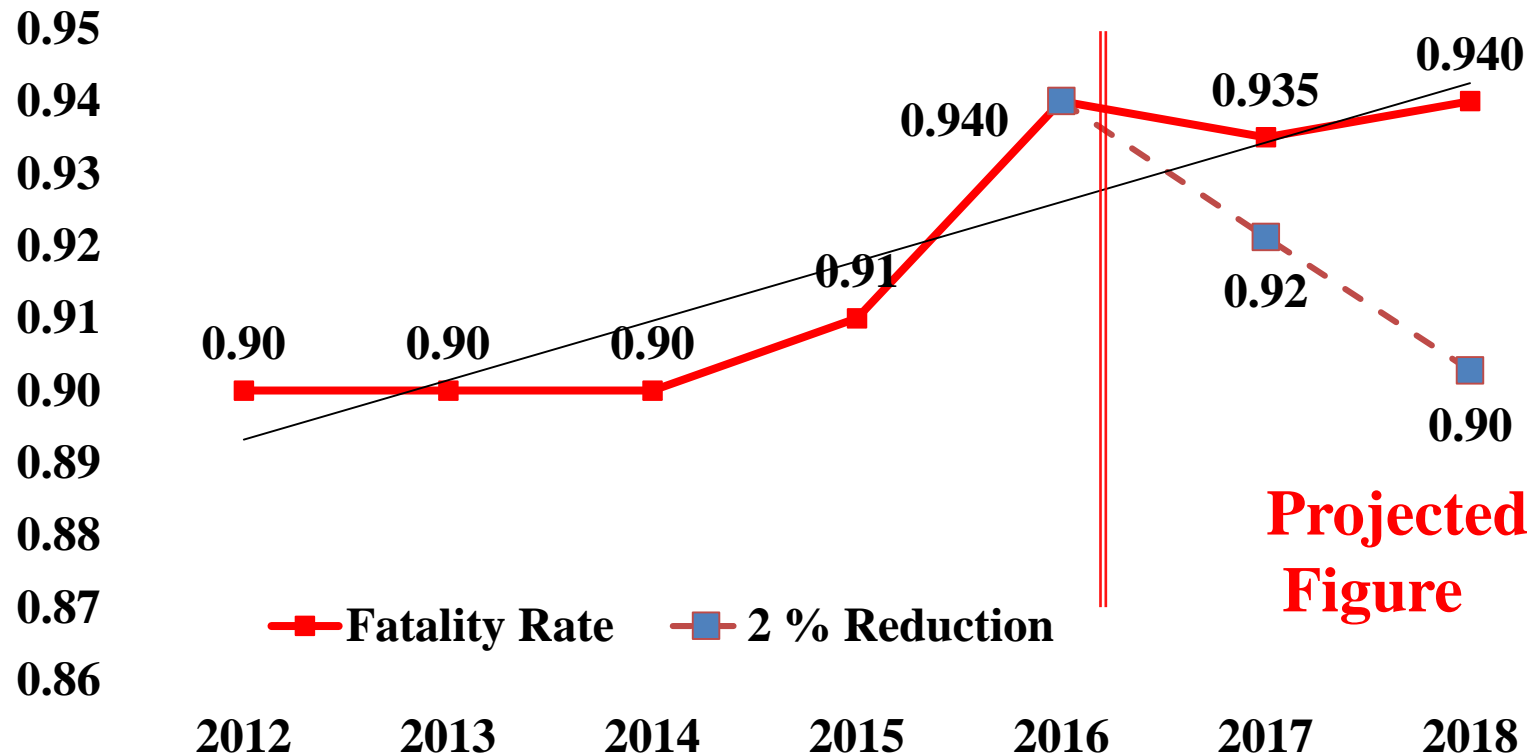
# Target Setting



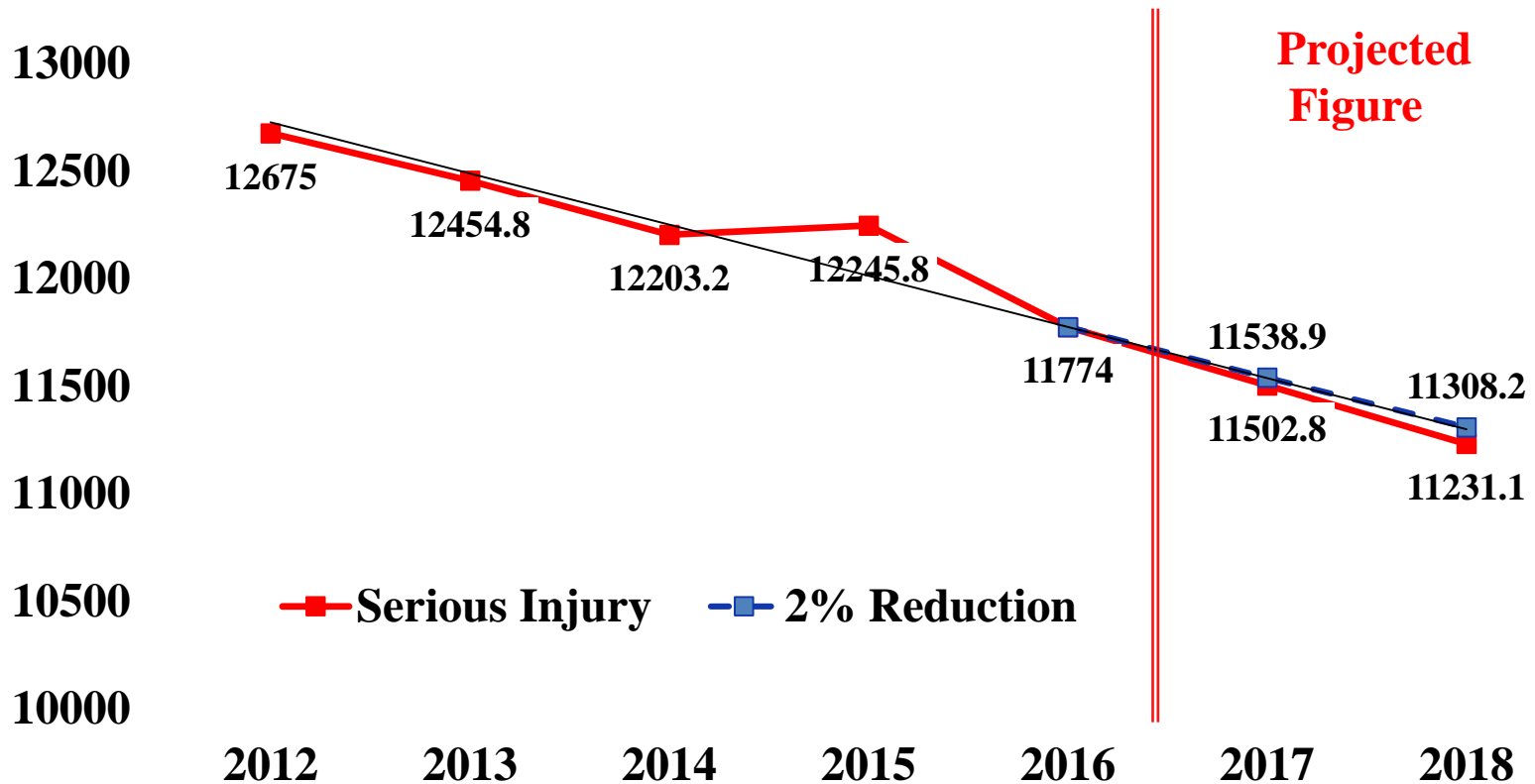
# Total Number of Traffic Fatalities



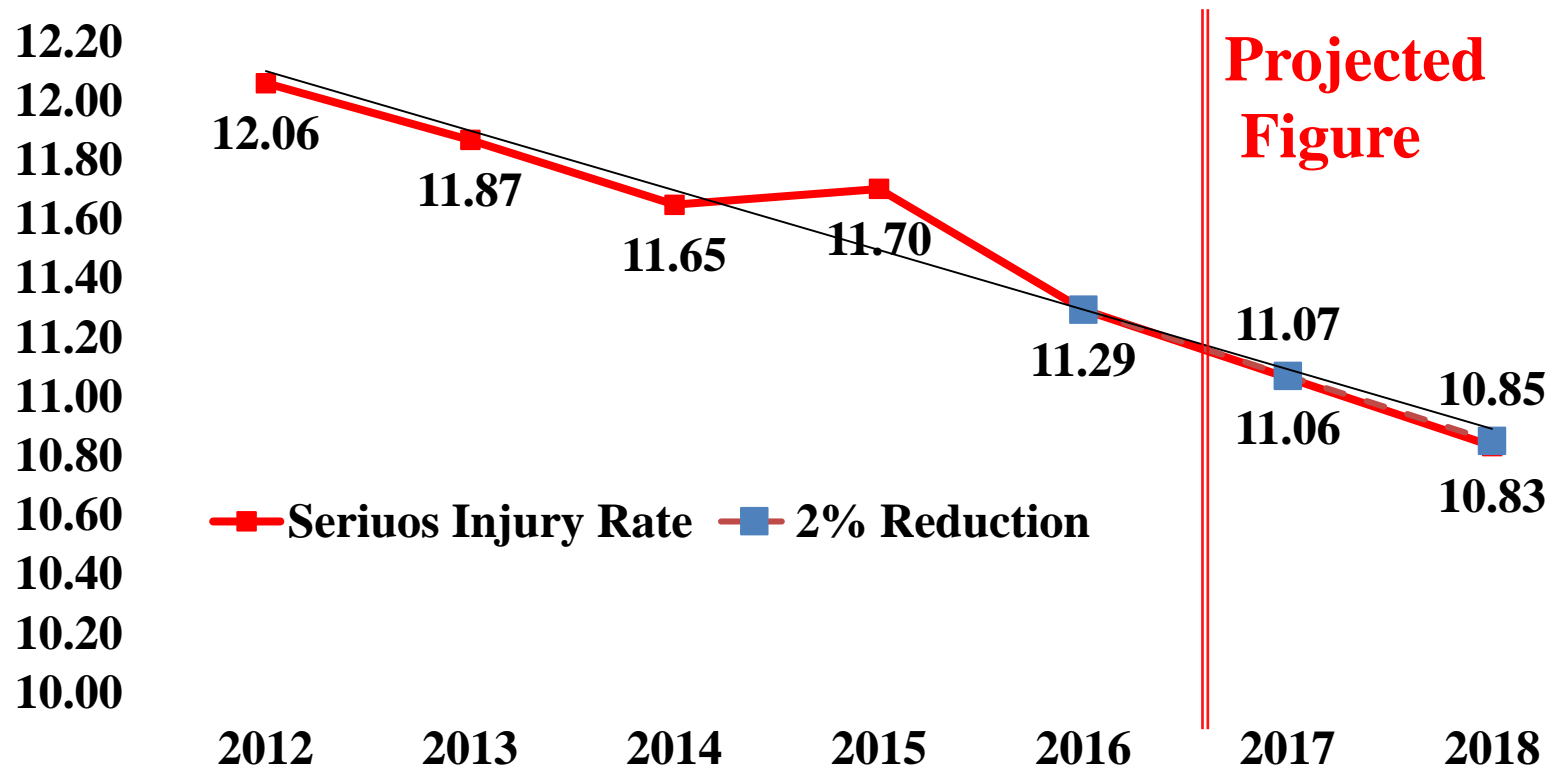
# Total Traffic Fatality Rate per 100 M VMT



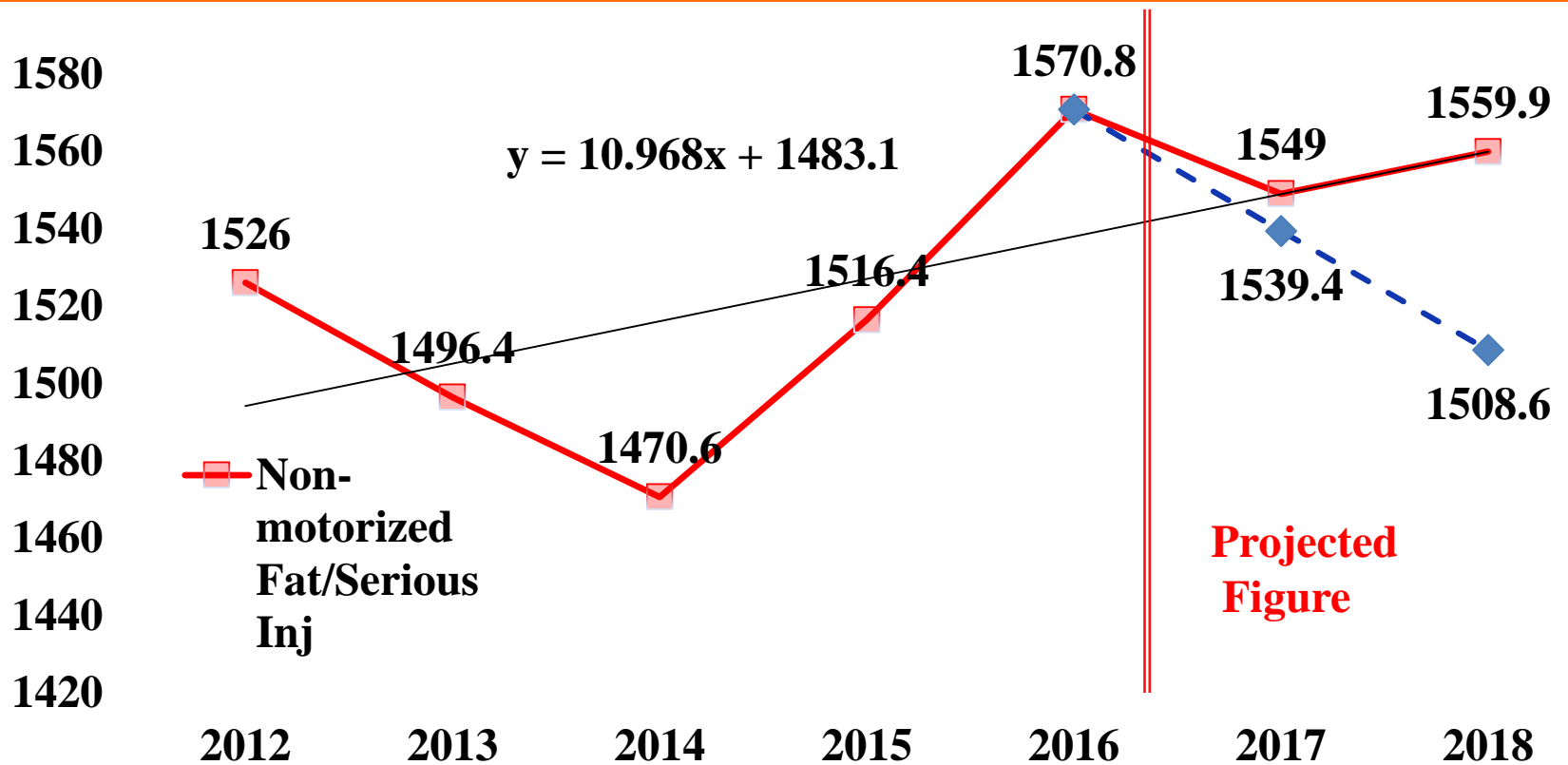
# Total Serious Injuries in Traffic Crashes



# Total Serious Injury Rate per 100M VMT



# Non-motorized Fatalities and Serious Injuries (Pedestrian and Bicyclist and Other Cyclist)



**Core Highway Safety Performance Measures Based on Rolling Average Using 2012-2016 FARS and Survey Data**

Selected Core Measures	Rolling Average				Baseline (Rolling Average)	Projected Measures for 2017 and 2018 Based on Different Options				Final Projection Option
	Ordinary Least Square Projections		At Least 2% Reduction Annually as Compared to 2012-2016 Baseline Data			Option1		Option 2		
	2017	2018	2017	2018		2017	2018	2017	2018	
<b>NHTSA/FHWA Common Core Measures</b>	<b>2008- 2012</b>	<b>2009- 2013</b>	<b>2010- 2014</b>	<b>2011- 2015</b>	<b>2012- 2016</b>	<b>2017</b>	<b>2018</b>	<b>2017</b>	<b>2018</b>	
Total Fatalities	951.0	941.0	943.0	957.0	990.2	985.0	994.0	970.4 <sup>2</sup>	951.0 <sup>2</sup>	<b>2</b>
Fatality Rate	0.90	0.90	0.90	0.91	0.94	0.935	0.94	0.92 <sup>2</sup>	0.90 <sup>2</sup>	<b>2</b>
Total Serious Injuries <sup>1</sup>	12675.0	12454.8	12203.2	12245.8	11774.4	11502.8	11231.1	11539 <sup>3</sup>	11308.2 <sup>3</sup>	<b>1</b>
Total Serious Injury Rate <sup>1</sup>	12.06	11.87	11.65	11.70	11.29	11.06	10.83	11.07 <sup>3</sup>	10.85 <sup>3</sup>	<b>1</b>
Non-motorized Fatalities and Serious Injuries (Pedestrian and Bicyclist and Other Cyclist) <sup>1</sup>	1526	1596.4	1470.6	1516.4	1570.8	1549	1559.9	1539.4 <sup>2</sup>	1508.6 <sup>2</sup>	<b>2</b>
<b>NHTSA Only Core Measures</b>										
Rural Fatality Rate <sup>1</sup>	1.48	1.49	1.54	1.60	1.58	1.60	1.62	1.55 <sup>2</sup>	1.52 <sup>2</sup>	<b>2</b>
Urban Fatality Rate <sup>1</sup>	0.71	0.70	0.69	0.69	0.67	0.66	0.65	0.657 <sup>4</sup>	0.643 <sup>4</sup>	<b>2</b>
Unrestrained Passenger Vehicle Occupant Fatalities <sup>1</sup>	282.0	272.0	268.0	264.0	249.4	239.8	230.0	244.4 <sup>3</sup>	239.5 <sup>3</sup>	<b>1</b>
Fatalities in Crashes Involving a Driver and Motorcycle Operator with BAC of 0.08 or higher <sup>1</sup>	312.0	307.0	305.0	308.0	295.0	288	282	289.1 <sup>3</sup>	283.3 <sup>3</sup>	<b>1</b>
Motorcyclist Fatalities	138.0	141.0	139.0	142.0	144.0	144.5	145.6	141.1 <sup>2</sup>	138.3 <sup>2</sup>	<b>2</b>
Unhelmeted Motorcycle Fatalities	105.0	108.0	105.0	104.0	106.0	105.0	104.8	103.9 <sup>4</sup>	101.8 <sup>4</sup>	<b>2</b>
Speed Related Fatalities <sup>1</sup>	395.0	402.0	407.0	393.0	390.0	385	380	382.2 <sup>4</sup>	374.6 <sup>4</sup>	<b>2</b>
Young Drivers Involved in Fatal Crashes (Under 21)	132.0	128.6	128.0	125.8	128.0	125.3	124.2	125.4 <sup>4</sup>	122.9 <sup>4</sup>	<b>2</b>
Pedestrian Fatalities	127.0	125.0	127.0	134.0	136.6	138.4	141.2	133.9 <sup>2</sup>	131.2 <sup>2</sup>	<b>2</b>
Bicyclist and Other Cyclist Fatalities	25.0	26.0	27.0	28.0	26.5	28.0	28.5	26.0 <sup>2</sup>	25.5 <sup>2</sup>	<b>2</b>
Safety Belt Usage Rate	92.3	92.9	93.4	93.9	93.9	94.6	95.0	N/A	N/A	<b>1</b>

<sup>1</sup> 2016 data are estimated.

<sup>2</sup> These figures are projected to go up using Option 1.

<sup>3</sup> Note: these figures are projected to go down greater than 2% annually using Option 1.

<sup>4</sup> Note: these figures are projected to go down less than 2% annually using Option 1.



# Five Core Performance Measures

Core Highway Safety Performance Measures Based on Rolling Average Using 2012-2016 FARS and Survey Data

Selected Core Measures	Rolling Average					Baseline (Rolling Average)	Projected Measures for 2017 and 2018 Based on Different Options				Final Projection Option
							Ordinary Least Square Projections		At Least 2% Reduction Annually as Compared to 2012-2016 Baseline Data		
							Option1		Option 2		
NHTSA/FHWA Common Core Measures	2008- 2012	2009- 2013	2010- 2014	2011- 2015	2012- 2016	2017	2018	2017	2018		
Total Fatalities	951.0	941.0	943.0	957.0	990.2	985.0	994.0	970.4 <sup>2</sup>	951.0 <sup>2</sup>	2	
Fatality Rate	0.90	0.90	0.90	0.91	0.94	0.935	0.94	0.92 <sup>2</sup>	0.90 <sup>2</sup>	2	
Total Serious Injuries <sup>1</sup>	12675.0	12454.8	12203.2	12245.8	11774.4	11502.8	11231.1	11539 <sup>3</sup>	11308.2 <sup>3</sup>	1	
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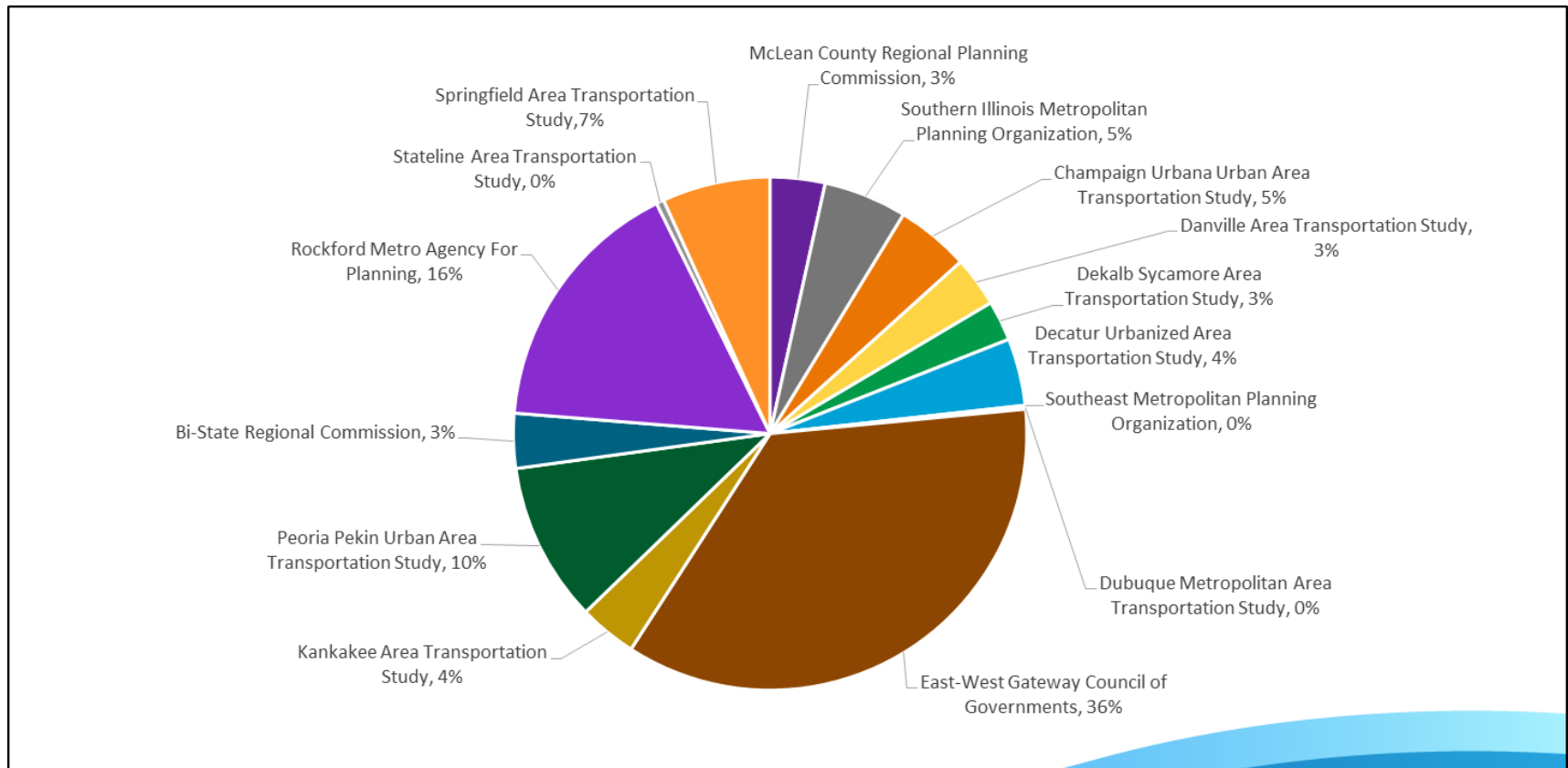
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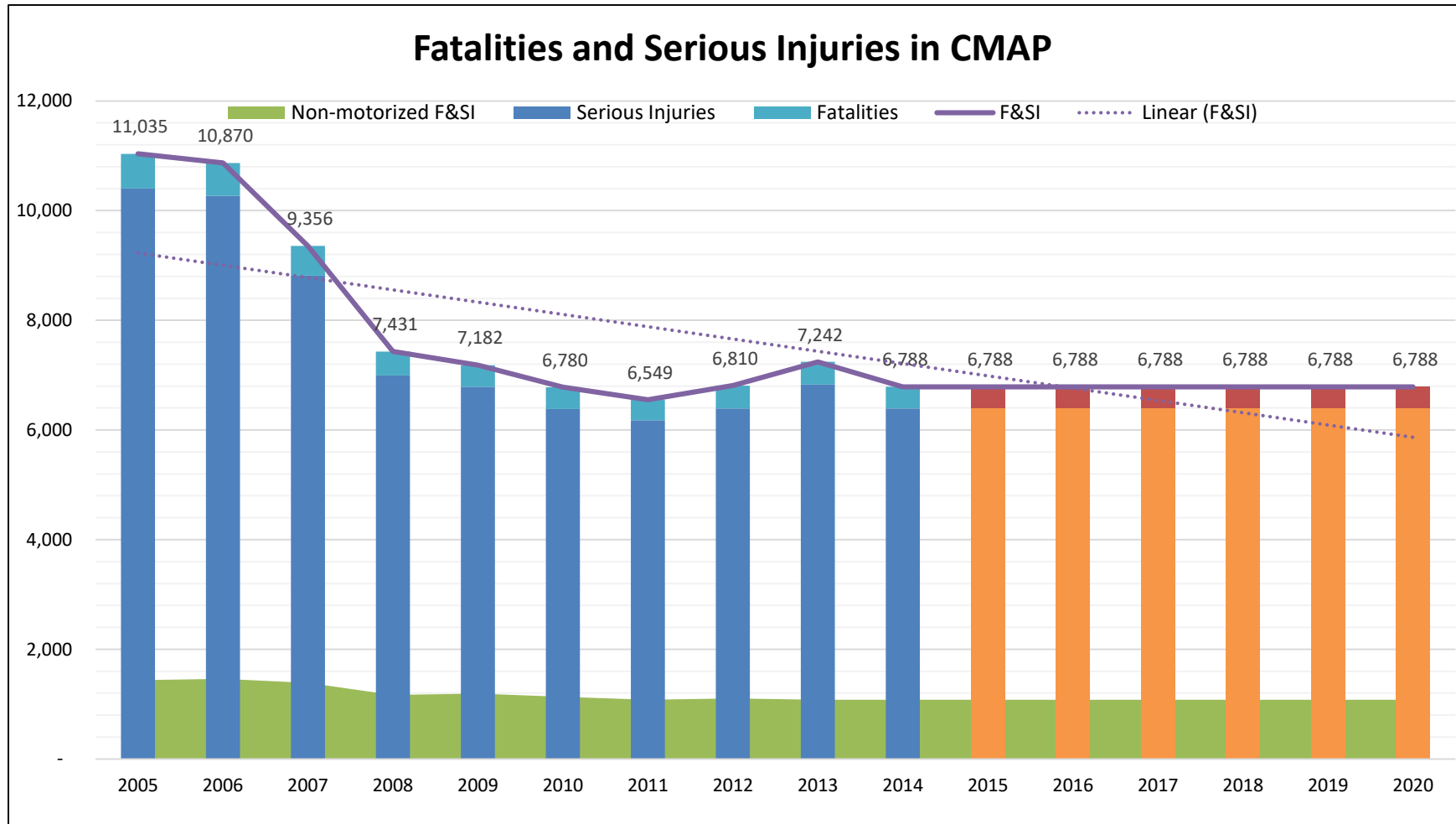
# MPO Fatalities

Chicago Metropolitan Agency for Planning (CMAP) experienced 69% of the fatalities occurred in Illinois MPOs from 2005 to 2014.




Note: Percentages are based on 2015 to 2014 fatalities in Illinois MPOs (excluding Chicago Metropolitan Agency for Planning). 2005 to 2014 fatalities are calculated based on the crash data and MPO boundaries received from IDOT.

# District 1 Chicago Metropolitan Agency for Planning (CMAP) Cook, DuPage, Kane, Kendall, Lake, McHenry and Will Counties



Note: 2005 to 2014 fatalities, serious injuries, and non-motorized fatalities & serious injuries are calculated based on the crash data and MPO boundaries received from IDOT. 2014 and 2015 VMTs are obtained from Illinois Travel Statistics. Previous years' VMTs are calculated based on 2014-2015 growth rate. 2015 to 2020 numbers are calculated based on the assumption of 0% annual change for injuries and VMTs.

# For more information

- Highway Safety Improvement Program  
<http://safety.fhwa.dot.gov/hsip/>
  - Highway Safety Plan  
<http://www.nhtsa.gov/About+NHTSA/Highway+Safety+Grant+Programs>
  - FHWA Transportation Performance Management  
<http://www.fhwa.dot.gov/TPM/>
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# Questions?



# Thank you!

**For Additional Information contact:**

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