

Proposed Safety Performance Measures and Short-Term Targets

Transportation Committee
January 8th, 2018



Background on Performance Measures

- MAP-21 (2012) established a performance and outcome based program for states and MPOs
- Used to ensure resources are invested in projects that make progress towards meeting 7 national goals
 - Safety
 - Infrastructure condition
 - Congestion reduction
 - System reliability
 - Freight movement/economic vitality
 - Environmental sustainability
 - Reduced project delivery delays

Background on Performance Measures

- In order to achieve the performance goals, MAP-21 required state DOTs and MPOs to establish performance measures and specific short-range **targets**
- Three distinct “families” of performance measures:
 - Safety Performance Measures/HSIP (PM1)
 - Pavement/Bridge Performance Measures (PM2)
 - System Performance Measures and CMAQ (PM3)

Federal Measures and Target Setting Implementation Timeline

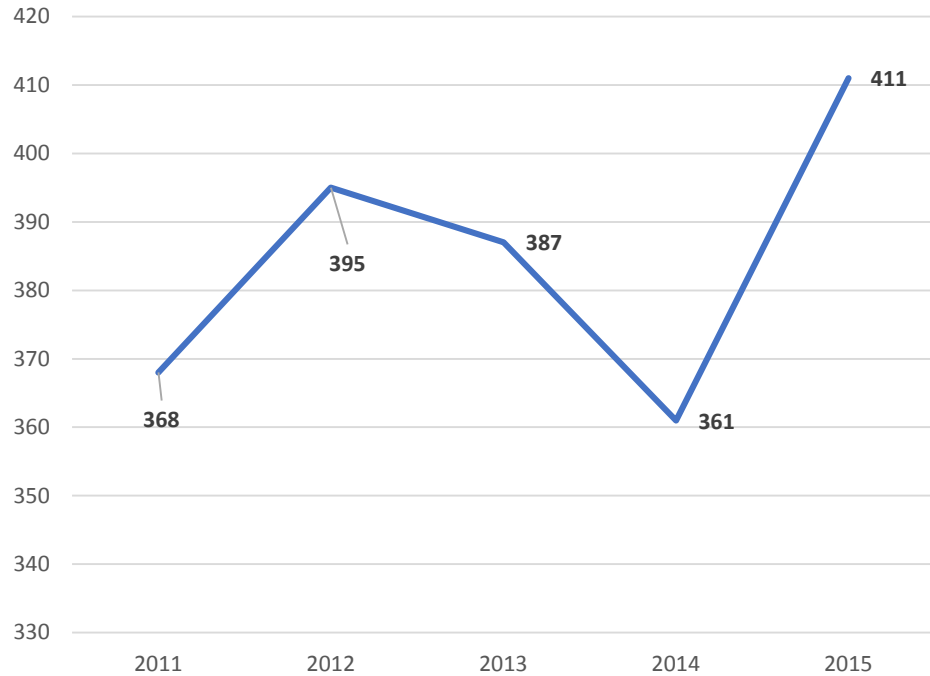
Final Rule		State Sets Targets By:	MPO Short-Term Operational Targets By:	Measures	TPP and TIP Inclusion
PM1	Safety Performance Measure/HSIP	August 31st, 2017	February 27th, 2018	Annual reporting and target setting for: 1. Number of fatalities 2. Rate of fatalities (per 100 million VMT) 3. Number of serious injuries 4. Rate of serious injuries (per 100 million VMT) 5. Number of non-motorized fatalities and serious injuries	Updates or amendments after May 27th, 2018
PM2	Pavement/Bridge Performance Measures (PM2)	May 20th, 2018	180 days after state target is set (likely November 15th, 2018)	2 and 4 year targets for: Bridges: 1. % NHS bridges by deck area in good condition 2. % NHS bridges by deck area in poor condition Pavement: 1. % of interstate pavement in good condition 2. % of interstate pavement in poor condition 3. % of non-interstate NHS pavement in good condition 4. % of non-interstate NHS pavement in poor condition	Updates or amendments after May 20th, 2019
PM3	System Performance Measures (Non-CMAQ)	May 20th, 2018	180 days after state target is set (likely November 15th, 2018)	1. % of reliable person-miles traveled on the interstate 2. % of reliable person-miles traveled on non-interstate NHS 3. % of interstate system mileage providing for reliable truck travel time 2 and 4 year targets for interstate; 4-year targets for non-interstate	Updates or amendments after May 20th, 2019
PM3	CMAQ - only applicable to Metro Area	May 20th, 2018	180 days after state target is set (likely November 15th, 2018)	2 and 4 year targets while designated nonattainment/maintenance. Only 4 year if in attainment. <u>Staff is working with MnDOT to establish all targets.</u> 1. On-road Mobile Source Emissions measure. Sum of emissions reductions of pollutants, in kilograms per day, for all projects funded with CMAQ funds. 2. Non-Single Occupancy Vehicle measure. Percent of regional travel by non-SDV modes. 3. Peak Hour Excessive Delay. Measured by annual hours of delay per capita. Delay is travel at less than 20 MPH or 60% of posted speed.	Updates or amendments after May 20th, 2019

Safety Performance Measures (PM1)

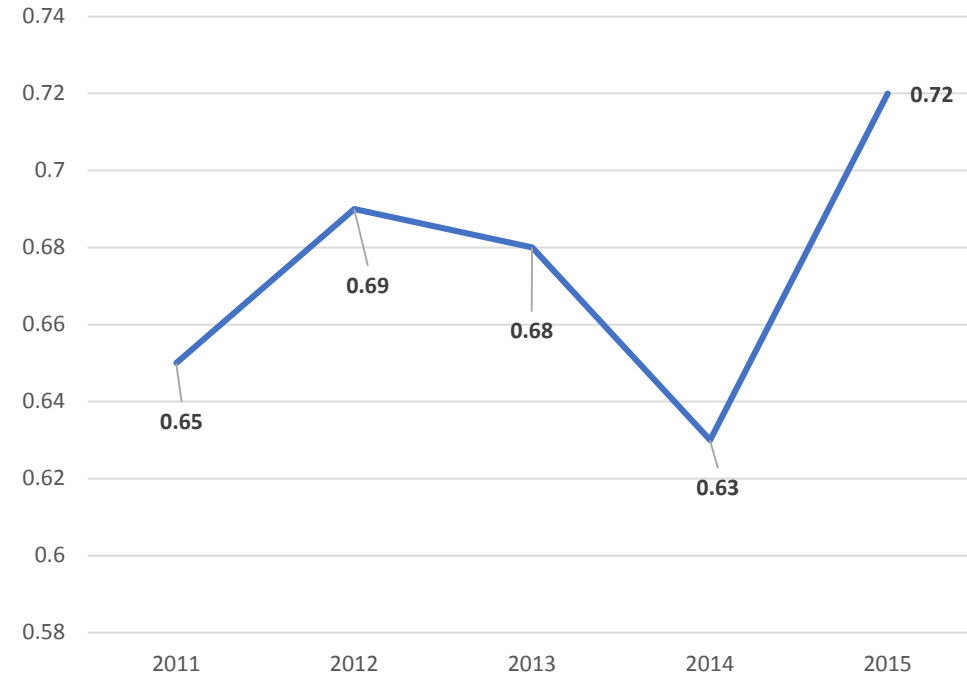
- 5 federally-required performance measures
 1. Number of traffic fatalities
 2. Rate of fatalities (per 100 million vehicle miles travelled)
 3. Number of traffic crashes involving serious injuries
 4. Rate of serious injury crashes (per 100 million vehicle miles travelled)
 5. Number of non-motorized fatalities and serious injuries

Traffic Fatality Trends (state-wide)

Fatal Crashes - State

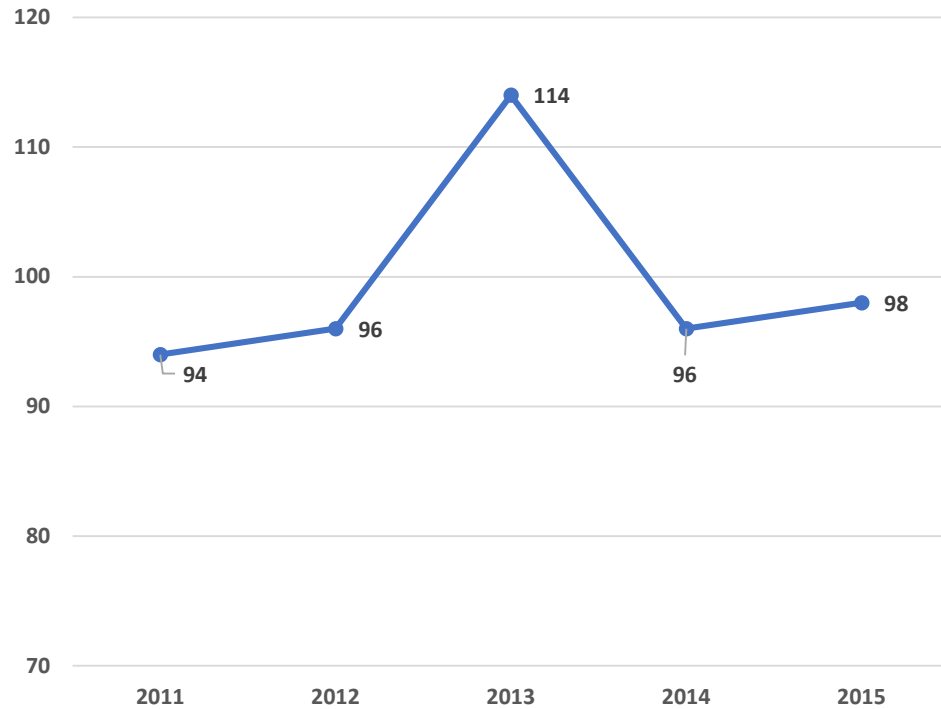


Fatality Rate - State

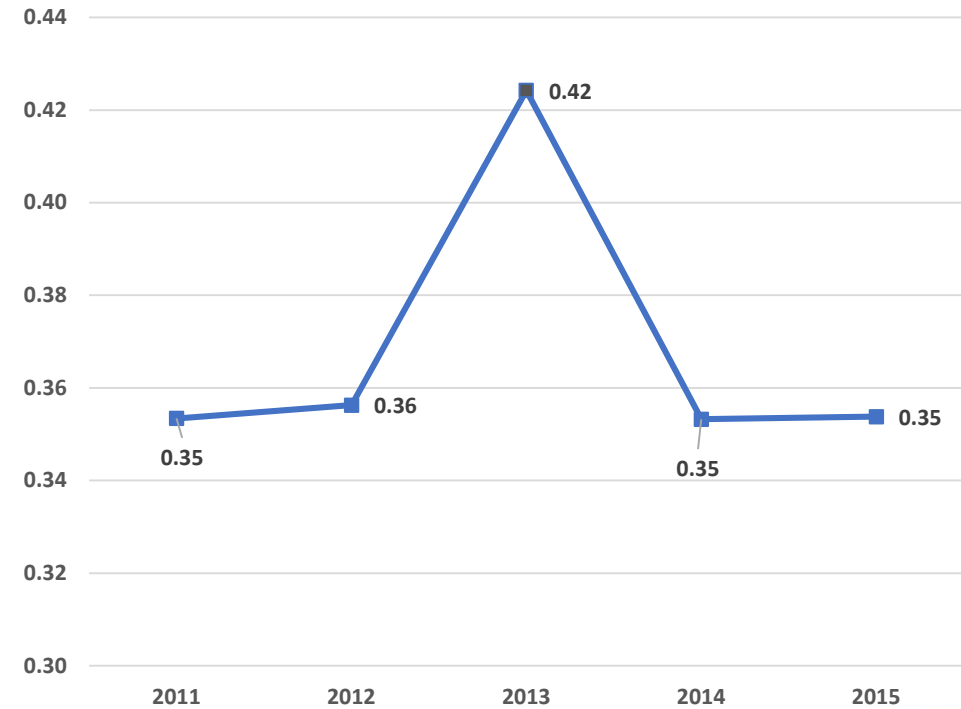


Traffic Fatality Trends in Metro Area

Fatal Crashes in MPO Boundary

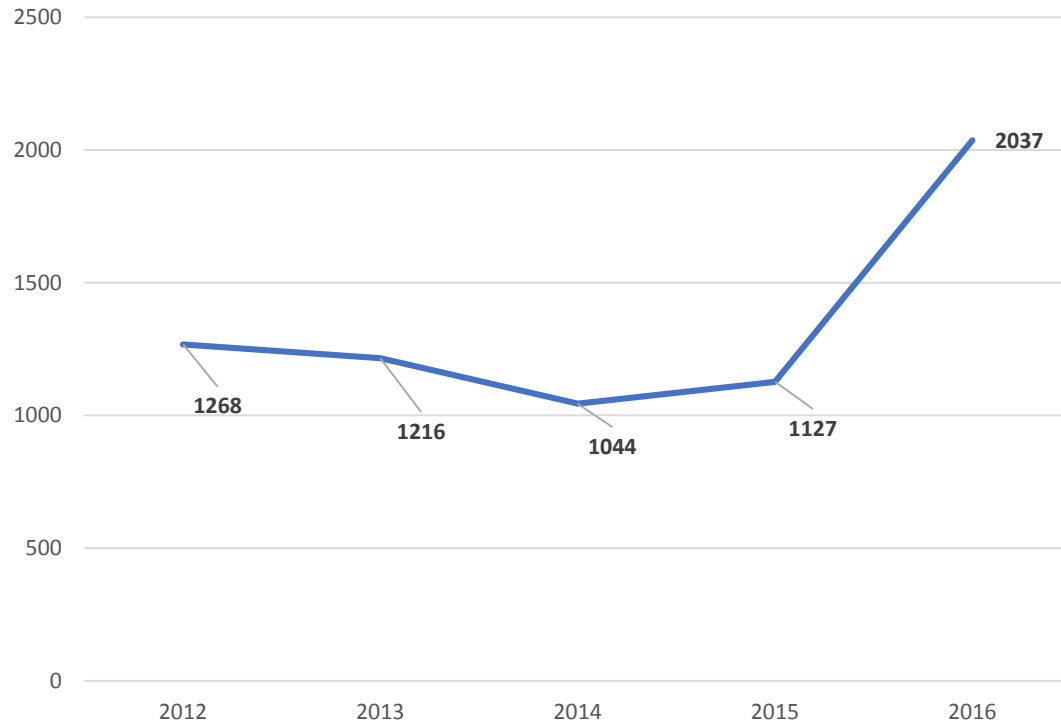


Fatal Crash Rate in MPO Boundary

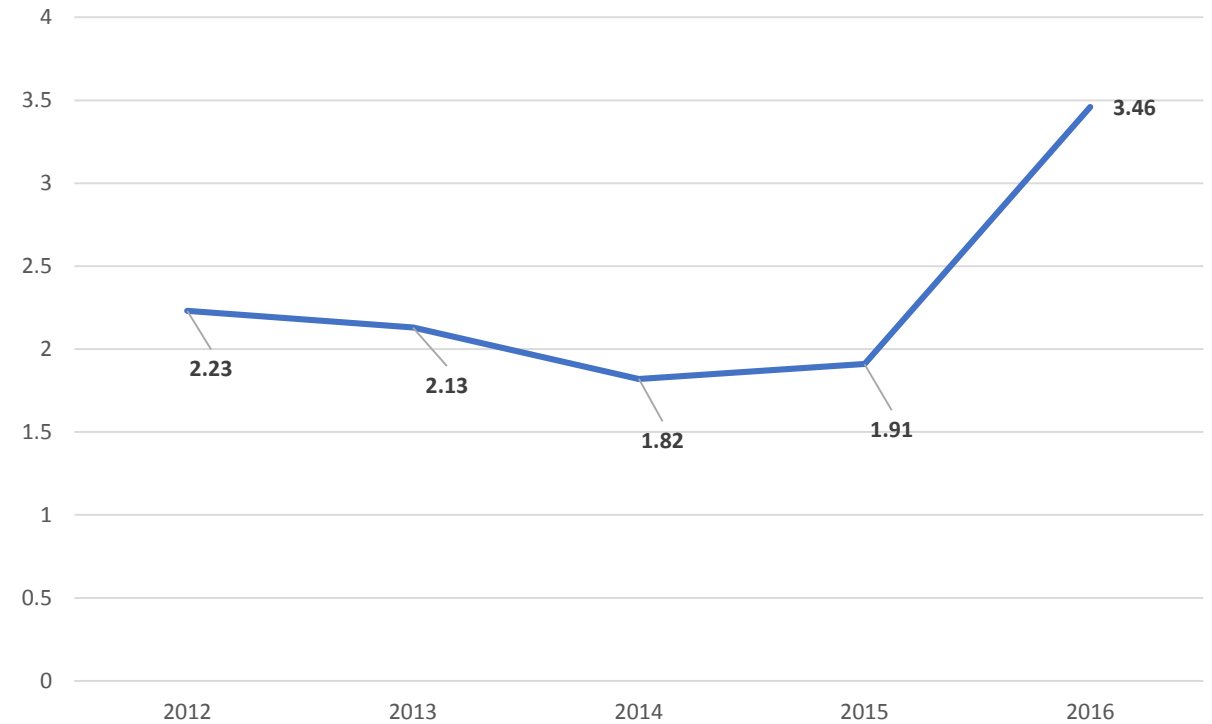


Serious Injury Trends (state-wide)

Serious Injuries - State

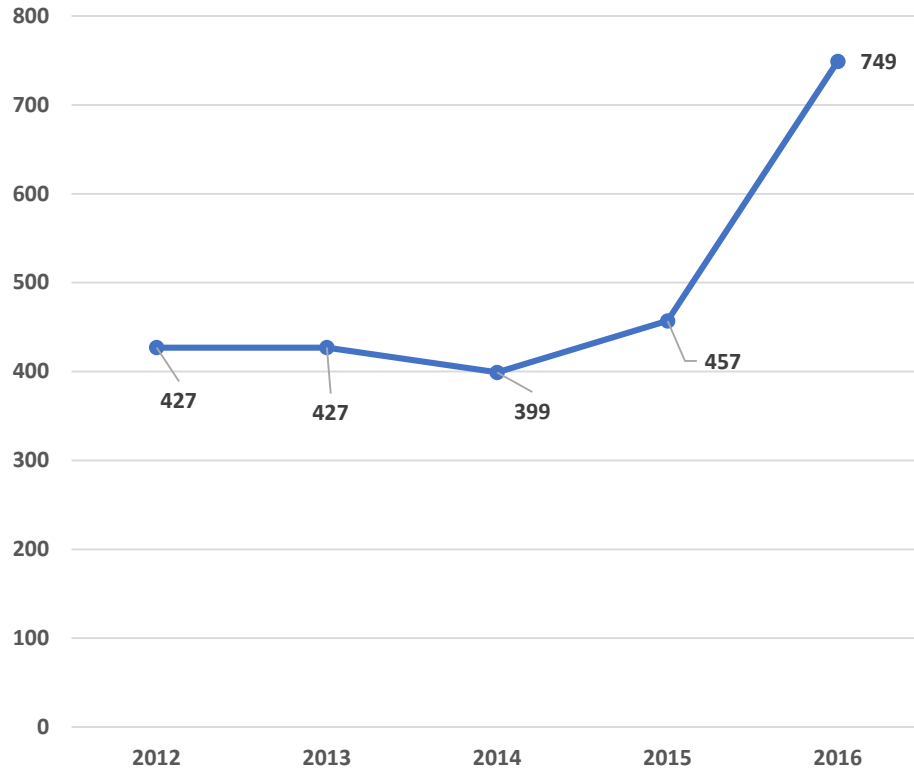


Serious Injury Rate - State

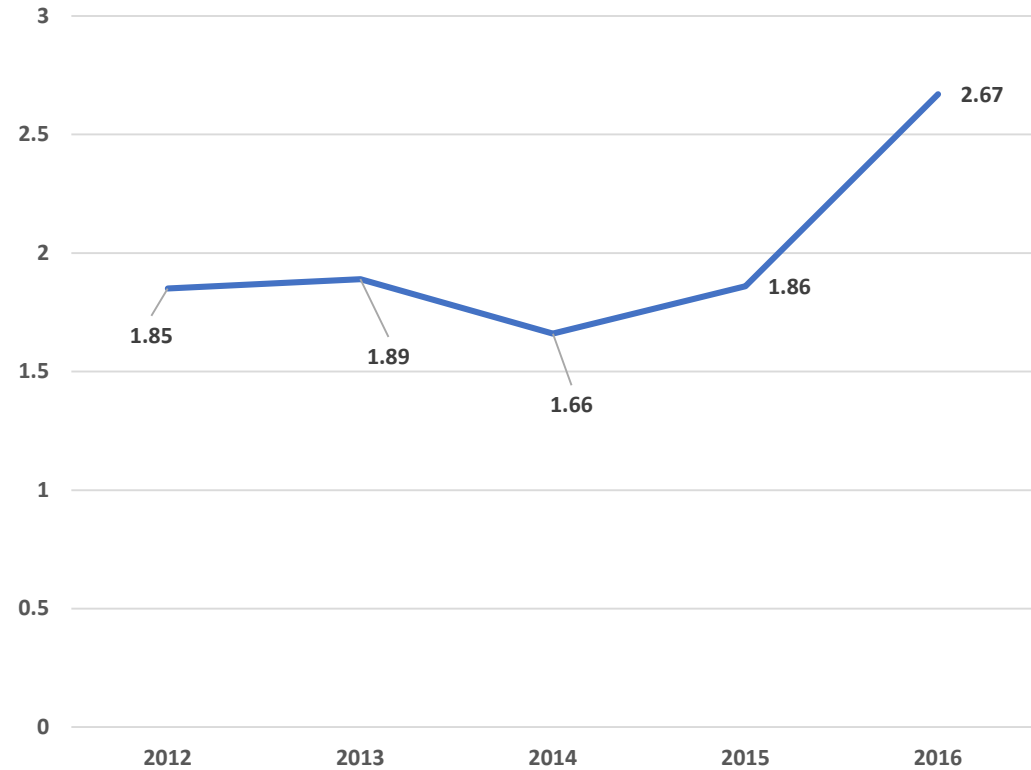


Serious Injury Trends in Metro Area

Crashes Involving Serious Injuries

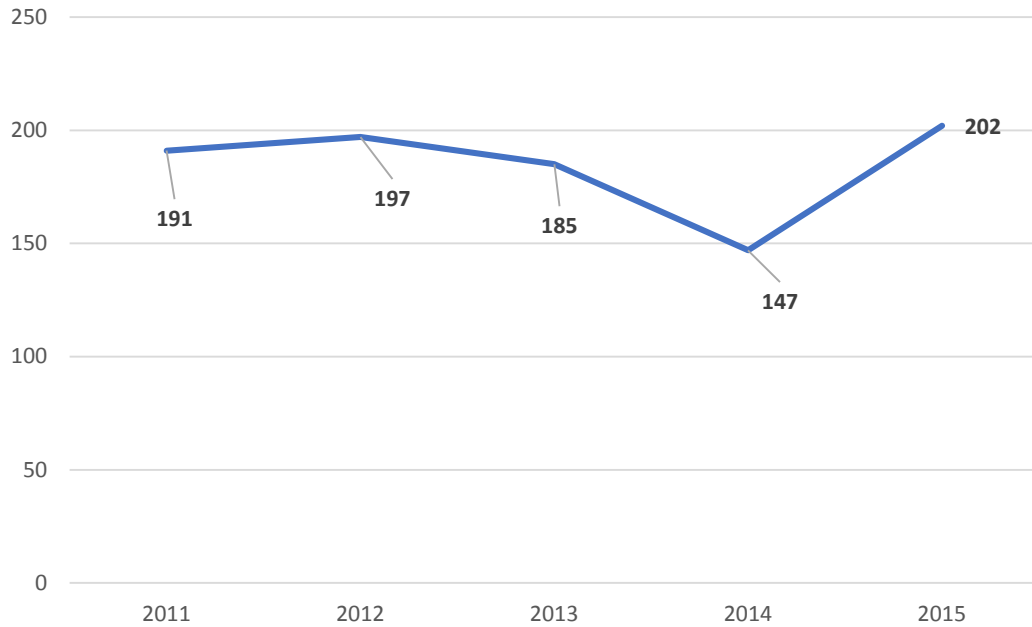


Serious Crash Rate in MPO Area

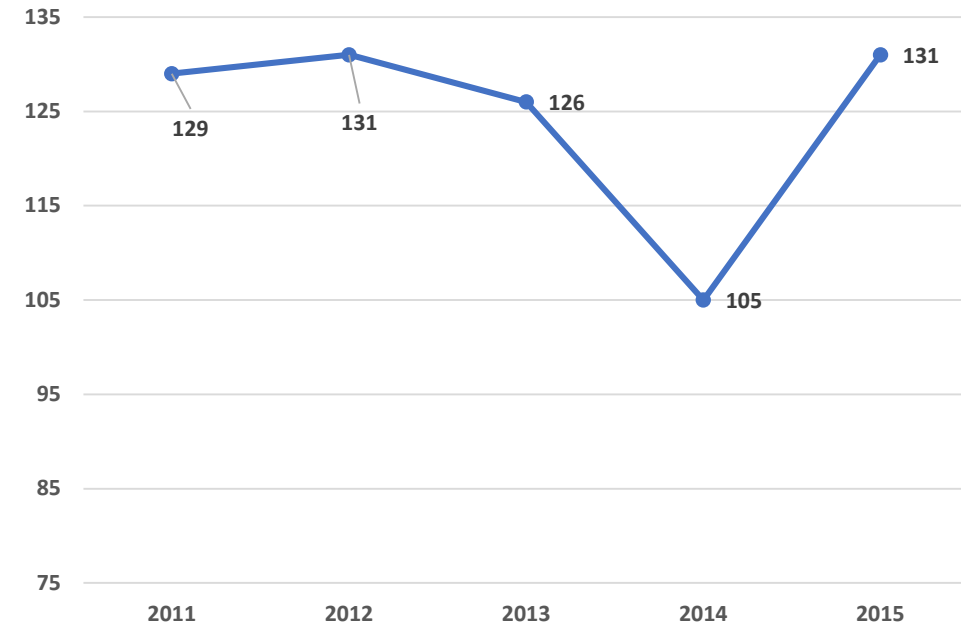


Non-Motorized Fatal/Serious Injury Trends

Non-Motorized Crashes - State



Non-Motorized Crashes within MPO Boundary



MnDOT's Adopted 2018 Targets (state-wide)

1. Total traffic fatalities: 375
2. Fatality rate (per 100 million VMT): 0.62
3. Serious injury crashes: 1,935
4. Serious injury crash rate (per 100 million VMT): 3.19
5. Non-motorized fatalities/serious injuries: 348

Proposed Metropolitan Council Short-Term Targets

1. Total traffic fatalities: 89
2. Fatality rate (per 100 million VMT): 0.31
3. Serious injury crashes: 642
4. Serious injury crash rate (per 100 million VMT): 2.35
5. Non-motorized fatalities/serious injuries: 112



David Burns

Senior Highway Planner

651-602-1887

David.Burns@metc.state.mn.us