



STAFF REPORT/RESOLUTION

TO: Southwest Washington Regional Transportation Council Board of Directors
FROM: Matt Ransom, Executive Director *MR*
DATE: February 26, 2019
SUBJECT: **MAP-21/FAST Act Safety Performance Measures and Target Setting,
Resolution 03-19-05**

AT A GLANCE - ACTION

To adopt Resolution 03-19-05 for the purpose of providing an annual update on federally-required safety targets for prescribed safety performance measures and to re-affirm RTC's current strategy agreeing to support the WSDOT's statewide safety performance targets now updated to 2019.

INTRODUCTION

The federal transportation act, MAP-21 (2012), established performance driven transportation planning and decision making, and these provisions were carried into the current federal transportation act, the FAST Act (2015). States and Metropolitan Planning Organizations (MPOs) are required to establish performance management targets for designated transportation measures, monitor conditions and publish periodic reports and updates. Performance management is a strategic approach that uses performance data to inform decision-making and outcomes. When implemented effectively, performance management can improve project and program delivery, inform investment decisions, focus on leadership priorities, and provide greater transparency and accountability.

At the March 2019 meeting, the RTC Board can review the latest crash data, safety trends and the second round of safety target setting at the statewide level. Updated crash data is also available for the RTC Metropolitan Planning Organization (MPO) region. Given the updated data and statewide safety targets, the Board will be asked to agree to continue the current status regarding safety targets whereby the MPO agrees to plan and program projects so they contribute toward the accomplishment of the WSDOT Highway Safety Improvement Program (HSIP) targets.

BACKGROUND INFORMATION: SAFETY PERFORMANCE MEASURES AND FIRST-ROUND TARGET SETTING

Among the 17 required transportation performance measures reviewed at prior RTC Board meetings in 2017 and 2018, the 5 safety performance measures were the first that had to have performance targets set by State and MPOs.

The 5 Safety Performance Management Measures for which targets are set are summarized in the list below:

- Number of fatalities on all public roads
- Fatality rate per 100 million vehicle miles traveled (VMT) on all public roads
- Number of serious injuries on all public roads
- Serious injury rate per 100 million VMT on all public roads
- Number of non-motorist fatalities and serious injuries on all public roads (bicyclists and pedestrians)

WSDOT set the first round of safety performance measure targets in August 2017. These were aspirational targets based on the State's Strategic Highway Safety Plan, Target Zero. The RTC Board adopted Resolution 01-18-02 in January 2018, supporting the WSDOT's safety performance targets rather than setting discrete targets for the Clark County MPO region. All other MPOs in Washington State opted to use the same strategy working cooperatively with WSDOT.

The updated Regional Transportation Plan for Clark County (anticipated March 2019) includes a description of the performance measures and targets set for Washington-statewide along with RTC's resolve to support WSDOT in trying to attain performance targets. Performance targets are addressed in Chapter 6 of the 2019 RTP.

SECOND-ROUND TARGET SETTING FOR SAFETY MEASURES

WSDOT has continued to compile crash data with most recent information from WSDOT included in the attached Folio, "MAP-21 and Safety, Washington State" (January 2019 – Final Rule). Under federal rules, WSDOT must report on the performance targets annually. In August 2018, the Washington Traffic Safety Commission (WTSC) and WSDOT set the latest state safety targets for 2019. These targets are detailed in the attached Washington State target spreadsheet as well as in the updated MAP-21 & Safety folio.

For the first-round reporting period, in which 2018 targets were established, WSDOT provided a spreadsheet that broke out the relative shares of the state target by each metropolitan planning area (MPA). WSDOT has again provided MPO break-outs (see the attachment Safety Performance for RTC; WSDOT release date 1/14/2019) though the methodology used for 2019 targets is modified from that used to establish 2018 targets. The MPO spreadsheet now applies an approach that is consistent across all the MPOs, using Vehicle Miles Traveled (VMT) values estimated using the official Highway Performance Monitoring System (HPMS) submittals for 2010 through 2017.

The table below provides the 2018 statewide safety targets established in August 2017 based on 2016 baseline data as well as the updated statewide safety targets for 2019 as set in August 2018 based on 2017 baseline data. The two sets of targets are not directly comparable because of a modified approach to setting the updated targets. Target-setting must be based on a 5-year rolling average. The linear trend of the 5-year rolling average was used to set the 2019 targets unless the target showed an increase; then the 5-year average value for 2013-2017.

Safety Performance Targets:						
Baseline 2016 and 2018 Targets; Baseline 2017 and 2019 Targets						
Agency	Year	Fatalities	Fatality Rate	Serious Injuries	Serious Injury Rate	Non-Motorist Fatalities and Serious Injuries
State	Baseline 2016	484.8	0.828	2,086.0	3.568	503.4
State 2018 Target (set in August 2017)	2018	415.5	0.709	1,788.0	3.058	431.5
State	Baseline 2017	510.0	0.857	2,092.2	3.517	511.8
State 2019 Target (set in August 2018)	2019	489.2	0.813	1,855.0	3.068	511.8

WSDOT will continue to refine target setting and reporting processes in 2019 and RTC will provide any updates to the Regional Transportation Advisory Committee and the RTC Board.

POLICY IMPLICATION

Final rules governing traffic safety and safety-oriented performance management became effective on April 14, 2016, requiring State DOTs to set initial safety performance targets for 2018 by August 31, 2017 with MPOs having to set targets 180 days after the State. WSDOT and its partners adopted the state's *Target Zero* approach for MAP-21 safety target setting in February 2017. The RTC Board adopted Resolution 01-18-02 in January 2018, supporting the WSDOT's initial 2018 safety performance targets. RTC has included these initial 2018 safety performance targets in the Regional Transportation Plan, 2019 update (anticipated March, 2019) and in the 2019-2022 Transportation Improvement Program (adopted October 2018). RTC will need to integrate updated safety performance targets into the Regional Transportation Plan and Transportation Improvement Program at the next update to the RTP and TIP.

WSDOT is required to report annually to FHWA as part of the Highway Safety Improvement Program and RTC works in close coordination with WSDOT to address updated crash data annually and to determine the strategy to try to attain established targets.

FHWA will determine whether WSDOT is making progress toward achieving its initial 2018 targets by December 2019 and will make a determination regarding progress toward achieving the 2019 targets by December 2020. Washington MPOs are not exposed to penalties using the target-setting approach used by WSDOT. Washington State’s allocations to safety projects already exceed its federally required amounts under the Highway Safety Improvement Program (HSIP) – a circumstance that currently ensures that funds received by or distributed through MPOs would not be affected if the state were subsequently penalized by USDOT for missing safety targets.

BUDGET IMPLICATION

There is no direct budget impact to RTC. RTC will use performance management data and information to guide decision-making on how to invest transportation funds for needed transportation projects, infrastructure and assets in the long-range Regional Transportation Plan and in the regional Transportation Improvement Program (TIP).

RTAC RECOMMENDATION TO THE RTC BOARD

At the February 15, 2019 meeting, Regional Transportation Advisory Committee (RTAC) members took action to recommend RTC Board adoption of Resolution 03-19-05 whereby RTC will continue to help support WSDOT attain 2019 safety performance targets as established by WSDOT in August 2018.

ACTION REQUESTED

Adoption of Resolution 03-19-05, “MAP-21/FAST Act Safety Performance Measures and Target Setting.”

ADOPTED this 5th day of March 2019, by the Southwest Washington Regional Transportation Council.

SOUTHWEST WASHINGTON
REGIONAL TRANSPORTATION COUNCIL

ATTEST:

Anne McEnery-Ogle
Chair of the Board

Matt Ransom
Executive Director

Attachments:

1. MAP-21 & Safety, Washington State, Official Targets, January 2019 Final Rule (WSDOT)
2. Safety Performance Metrics and Targets for Washington State, dated 8/19/2018
3. Safety Performance for RTC (WSDOT, release date 1/14/2019)



Moving Ahead for Progress in the 21st Century Act - Final rules on traffic safety performance management

The U.S. Department of Transportation has issued two interrelated final rules governing traffic safety and safety-oriented performance management which became effective on April 14, 2016. These two rules are referred to in this folio as

- Rule #1 - Safety Performance Measures rule; (23 CFR §490)
- Rule #2 - Highway Safety Improvement Program (HSIP) rule; (23 CFR §924)

Both final rules relate to highway safety, the primary objective being to significantly reduce fatal and serious-injury crashes on all public roads. The Safety Performance Measures rule (Rule #1) also includes the goal of reducing traffic fatalities of and serious injuries to people using non-motorized transportation modes, namely bicyclists and pedestrians.

Safety Performance Reporting

Rule #1 specifies the performance management measures for safety, and defines the target setting process for State DOTs and Metropolitan Planning Organizations (MPOs). Per Rule #2, State DOTs will establish and report their safety targets and progress toward these targets in an annual Highway Safety Improvement Program (HSIP) report.

Summary of required performance measures

Rule #1 requires all State DOTs to report targets and performance with respect to the following safety performance measures:

- No. 1 - Number of fatalities on all public roads** (due July 1/Aug. 31)
- No. 2 - Number of fatalities per 100 million vehicle miles traveled (VMT) on all public roads** (due July 1/Aug. 31)
- No. 3 - Number of serious injuries on all public roads** (due July 1/Aug. 31)
- No. 4 - Number of serious injuries per 100 million VMT on all public roads** (due Aug. 31)
- No. 5 - Number of non-motorist fatalities and serious injuries on all public roads (e.g. bicyclists and pedestrians)** (due Aug. 31)

In general, MPOs establish targets by either agreeing to plan and program projects so that they contribute toward the accomplishment of the State DOT HSIP target, or by committing to a quantifiable target for their Metropolitan Planning Area. MPOs will report annually to their State DOT in a manner agreed upon and documented by both parties. MPOs would report safety performance in the Metropolitan Transportation Plan, as provided in U.S. Code 23 Section 134(i)(2)(C).

In Washington state, the MPOs and WSDOT worked together to jointly develop a collaborative approach in support of data, process, and target-setting decision making. This Target Setting Framework Group has agreed WSDOT will take the lead in establishing safety targets, which MPOs will adopt.

About this folio:

See inside for the official statewide safety targets for 2019, a description of the target setting approach for the five required safety performance measures in Washington state, and how this approach to target setting relates to the stipulations of MAP-21 rulemaking.

Optional targets: States have the option to set additional targets for the performance measures for any number and combination of urbanized area boundaries, as well as for a single non-urbanized area. If optional targets are set, they will not be assessed when determining significant progress, and states will not incur penalties if they fail to show progress.

Overlapping measures/targets in the Highway Safety Plan: Targets for Measures No. 1-3 must also be reported to the National Highway Traffic Safety Administration by July 1 of each year. They must be numerically identical targets to those reported for MAP-21 compliance on August 31 as part of the HSIP. See the Timelines section inside for details.

MAP-21 Special Rules: Numeric targets are not required, but states must report performance in these two categories, and show improvement compared to baseline.

- Fatality rate on High Risk Rural Roads (due Aug. 31)
- Number of fatalities and serious injuries of drivers and pedestrians age 65 and older on all public roads (due Aug. 31)

FHWA provides flexibility for safety target setting under MAP-21

State DOTs and MPOs have flexibility in setting numeric targets for the five performance measures identified in Rule #1. It does place stipulations on certain aspects of the process, however. It requires that states and MPOs report their performance metrics and targets for each of five performance measures as rolling 5-year averages. Per Rule #2, states are also required to develop a Strategic Highway Safety Plan (SHSP). Washington state's plan is called Target Zero.

Summary of required performance measures

Following the ideals of Target Zero, Washington is working to achieve zero transportation-related serious injuries and deaths by 2030. While short-term goals might show increases or slight decreases, WSDOT and the Washington Traffic Safety Commission feel this aspirational goal will become more achievable as advances in transportation technology (autonomous vehicles) become more widespread.

WSDOT's target adoption

In 2018, the linear trend of the 5-year rolling average was used to set the targets unless the target showed an increase; then the 5-year average value for 2013-2017 was used to set the target for 2019. See the table below for the targets produced via this method.

MAP-21 Safety Target Setting

Five-year rolling averages; number of persons, or number of persons per 100 million VMT

	<u>2017 Baseline</u>	<u>2019 Official Targets</u> Statewide MAP-21 Target
No. 1 - Fatalities	510.0	489.2
No. 2 - Fatality rate	0.857	0.813
No. 3 - Serious injuries	2,092.2	1,855.0
No. 4 - Serious injury rate	3.517	3.068
No. 5 - Non-motorist fatalities & serious injuries	511.8	511.8

Data sources: Washington State Traffic Safety Commission - Fatality Analysis Reporting System; Washington State Department of Transportation - Transportation Data, GIS & Modeling Office.

FHWA's "Significant Progress" measurement

At the end of each reporting period, FHWA will determine whether a state has made overall "significant progress" toward achieving its safety targets. The penalties listed on the back page of this folio, including the obligation of state funds, will apply to the State DOT if FHWA deems it has not made that progress.

To make significant progress overall, a state must achieve at least four out of five targets. For each measure, there are two ways this can be done. For example, the value of the 5-year rolling average in 2019 must be:

- At or below the target set in 2018 for the 2019 year, OR
- At or below its 2017 (baseline) level.

If either of these conditions are met, the state will have made significant progress for that measure. It must do so for any four of the five measures to have made significant progress overall and avoid the penalty provisions. For example, in the graph for Measure No. 1, Washington must lower the 5-year average to fewer than 510.0 fatalities (the baseline value) or meet the 2019 target of 489.2 to achieve significant progress in that measure.

How WSDOT is setting its targets to reduce fatality and serious injuries

The general process for generating trend and target information as prescribed by Rule #1 proceeds as follows:

- The annual number of fatalities, serious injuries, and Vehicle Miles Traveled (VMT) is determined for a 10-year period.
- A 5-year rolling average is calculated for each performance measure. For example, in the graph for Measure No. 1, data from 2006-2010 creates the value of the rolling average in 2010—535.4 fatalities. Data from 2007-2011 creates the next 5-year rolling average in 2011.
- The rolling 5-year average value for 2017 will serve as the baseline for performance (annual average of 2013 through 2017).
- The linear trend line through the rolling 5-year average values is determined along with its projected value in 2019 (the target year). If the projected value for 2019 is higher than the baseline value, the baseline value becomes the 2019 target. If the projected value for 2019 is lower than the baseline value, then this lower value is selected as the 2019 target.

Timelines

For MAP-21 compliance, all five statewide targets were reported to FHWA by the HSIP deadline of August 31, 2018. MPOs have until February 28, 2019 (180 days after the HSIP reporting deadline) to either agree to plan and program projects so they contribute toward the accomplishment of the State DOT HSIP targets, or commit to a quantifiable target for their Metropolitan Planning Area. In Washington state, MPOs have agreed to adopt the WSDOT targets.

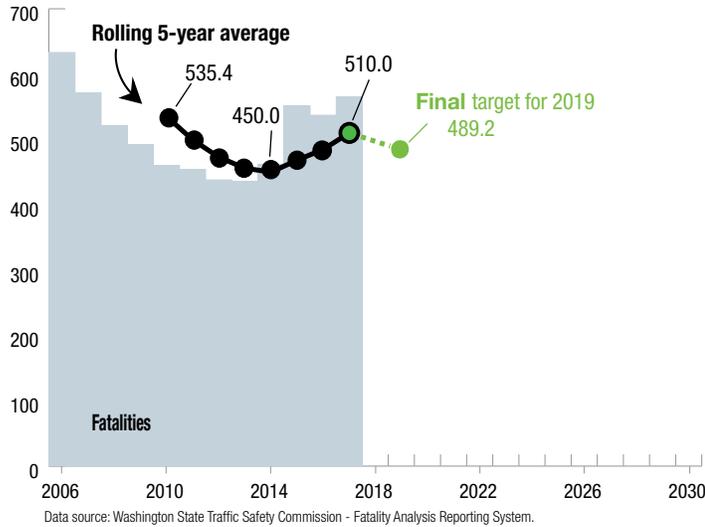
In December 2020, the FHWA will make its first determinations of significant progress toward achieving 2019 targets. They will notify states of the outcome in March 2021.

About these graphs

These graphs display the final 2019 targets for each of the five MAP-21 safety performance measures, and show targets developed by WSDOT in coordination with Washington State Traffic Safety Commission.

Measure No. 1 - Fatalities

2006 through 2030



Measure No. 2 - Fatality rate per million VMT

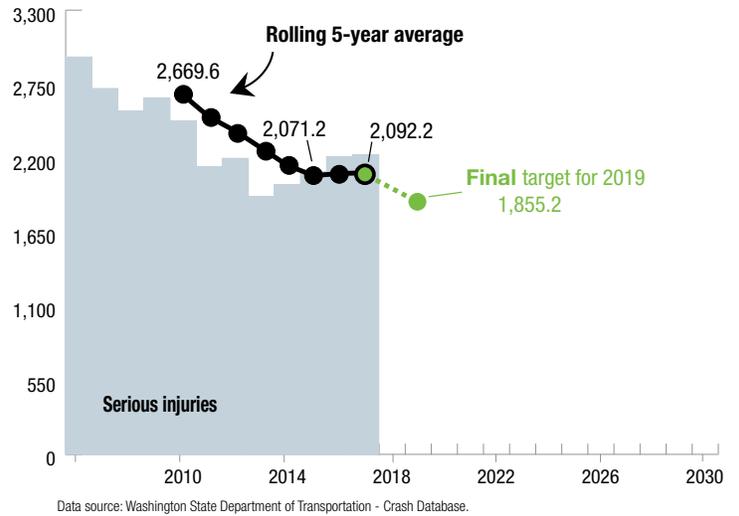
2006 through 2030



Notes for all graphics: Fatality data for 2016 is finalized as of January 2018, serious injury count for 2016 is as of August 2018. All data for 2017 is preliminary as of August 2018. Under 23 U.S. Code § 148 and 23 U.S. Code § 409, safety data, reports, surveys, schedules, lists compiled or collected for the purpose of identifying, evaluating, or planning the safety enhancement of potential crash sites, hazardous roadway conditions, or railway-highway crossings are not subject to discovery or admitted into evidence in a federal or state court proceeding or considered for other purposes in any action for damages arising from any occurrence at a location mentioned or addressed in such reports, surveys, schedules, lists, or data.

Measure No. 3 - Serious injuries

2006 through 2030



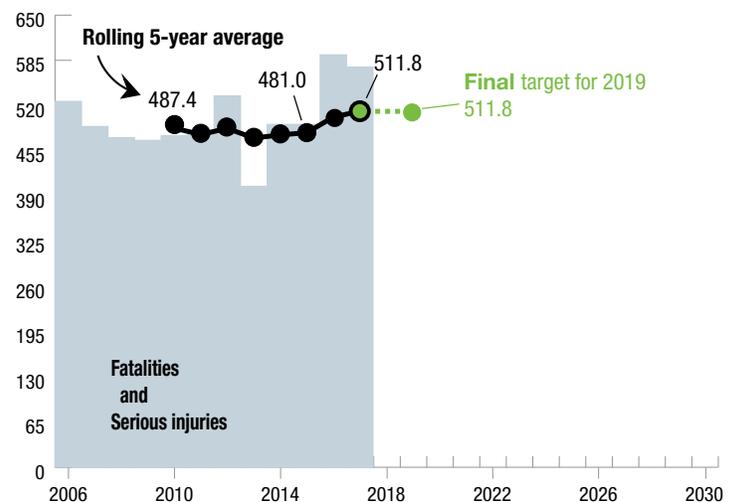
Measure No. 4 - Serious injury rate per 100 million VMT

2006 through 2030



Measure No. 5 - Non-motorist fatalities and serious injuries

2006 through 2030



Penalties

As described in U.S. Code 23 Section 148(i), for the Final Safety Performance Rule (Rule #1), if the U.S. Department of Transportation (U.S. DOT) Secretary determines a state has not met or made significant progress toward achieving its safety performance targets by the date that is two years after the establishment of its targets, the State DOT would:

- Dedicate its obligation authority equal to the apportionment for HSIP to the state for the prior year to highway safety improvement projects until the U.S. DOT Secretary determines that the state has made significant progress or met the targets; and
- Annually submit to U.S. DOT a safety implementation plan until the U.S. DOT Secretary determines that the state has made significant progress or met the targets.

See WSDOT's [MAP-21 Funding and Performance Penalties](#) folio for full details, including special rule penalties.

Available Data

- Number of traffic fatalities for all public roads
- Rate of traffic fatalities per 100 million Vehicle Miles Traveled (VMT) for all public roads¹
- Number of serious traffic injuries for all public roads
- Rate of serious traffic injuries per 100 million VMT for all public roads¹
- Bicyclist/Pedestrian fatalities and serious injuries for all public roads²
- Fatality and serious injury data for drivers and pedestrians age 65 and older³
- Rate of traffic fatalities for all High Risk Rural Roads (HRRR)^{1,3}

Notes: Crash data is available for all Washington public roads and annual summaries are also available by county. WSDOT entered into a data sharing agreement with the Washington Traffic Safety Commission to incorporate the fatality data necessary for target setting. **1** The Federal Highway Administration (FHWA) requires the use of Highway Performance Monitoring System (HPMS) data for any performance metric involving estimated vehicle miles travelled. **2** This data is required as part of the Fiscal Year 2015 Omnibus Appropriations Bill. **3** This data satisfies a MAP-21 special rule reported at the statewide level to FHWA, that may be of interest to MPOs.

For more information

MAP-21 safety requirements information: John Milton, Director of Transportation Safety and Systems Analysis (360) 704-6363 or MiltonJ@wsdot.wa.gov.

Traffic crash fatal and serious injury data: Mike Bernard at (360) 570-2454, BernarM@wsdot.wa.gov. Data is protected by U.S. Code 23 §148 and §409, but can be requested.

What is the current distribution of HSIP funds?

Safety: Federal Highway Safety Improvement Program (HSIP) funding provided to the state is split based upon fatal and serious injury crash data on state and local facilities. The HSIP funds are used to implement engineering countermeasures which reduce fatal and serious injury crashes. WSDOT manages the Local Federal Safety program and provides more than \$24 million annually for improvements on local facilities. WSDOT prioritizes the improvements on state and local facilities based on crash data and benefit-cost analysis. The HSIP is one component of WSDOT's total annual expenditure on safety projects. WSDOT uses additional funds from other federal and state resources each year, averaging over \$15 million since 2013.

Data collection

- MAP-21 requires fatality data from the Washington State Traffic Safety Commission's (WTSC) Fatality Analysis Reporting System (FARS) and serious injury data from WSDOT's system.
- State law enforcement officers record crash events in The Washington State Police Traffic Collision Report. This report is the sole source for all WSDOT serious injury data and most FARS data, with few exceptions.
- MAP-21 requires Vehicle Miles Traveled (VMT) data from WSDOT's Highway Performance Monitoring System. Along with the number of fatalities or serious injuries, VMT is used to calculate the rate of fatalities or serious injuries per 100 million VMT.
- WSDOT's serious injury data and FARS fatality data for the previous calendar year is preliminarily available in about February and April of the following year, respectively. WSDOT's VMT data is available about June of the following calendar year.

Purpose of reporting requirements

In July 2012, the Moving Ahead for Progress in the 21st Century Act (MAP-21) became law. The primary objectives of MAP-21 are to increase the transparency and accountability of states for their investment of federal taxpayer dollars into transportation infrastructure and services nationwide, and to ensure that states invest money in transportation projects that collectively make progress toward the achievement of national goals. The new rules will require reporting performance on the following areas: Safety; Pavement and Bridge; System Performance, Freight, and Congestion Mitigation and Air Quality.

Americans with Disabilities Act (ADA) Information: This material can be made available in an alternate format by emailing the WSDOT Diversity/ADA Affairs team at wsdotada@wsdot.wa.gov or by calling toll free, 855-362-4ADA(4232). Persons who are deaf or hard of hearing may make a request by calling the Washington State Relay at 711.

Title VI Statement to Public: It is the Washington State Department of Transportation's (WSDOT) policy to assure that no person shall, on the grounds of race, color, national origin or sex, as provided by Title VI of the Civil Rights Act of 1964, be excluded from participation in, be denied the benefits of, or be otherwise discriminated against under any of its federally funded programs and activities. Any person who believes his/her Title VI protection has been violated, may file a complaint with WSDOT's Office of Equal Opportunity (OEO). For additional information regarding Title VI complaint procedures and/or information regarding our non-discrimination obligations, please contact OEO's Title VI Coordinator at (360) 705-7082.

Safety Performance Metrics and Targets for Washington State

Under 23 U.S. Code § 148 and 23 U.S. Code § 409, safety data, reports, surveys, schedules, lists compiled or collected for the purpose of identifying, evaluating, or planning the safety enhancement of potential crash sites, hazardous roadway conditions, or railway-highway crossings are not subject to discovery or admitted into evidence in a Federal or State court proceeding or considered for other purposes in any action for damages arising from any occurrence at a location mentioned or addressed in such reports, surveys, schedules, lists, or data.

Date of release:	8/19/2018	
Point of contact for questions related to the data and this Microsoft Excel™ tool:	Ida van Schalkwyk, Ph.D. Safety, Policy, and Innovations Engineer vanschi@wsdot.wa.gov or 360-705-7119	
WSDOT and MPO safety performance measure technical team lead:	John Milton, Ph.D., PE. State Safety Engineer miltonj@wsdot.wa.gov or 360-704-6363	
WSDOT MAP-21 performance management implementation lead:	Dan Davis Director, WSDOT Strategic Assessment and Performance Analysis Division DavisD@wsdot.wa.gov or 360-705-7558	
WSDOT and MPO coordination lead:	Doug Cox Interim Manager, WSDOT Tribal and Regional Coordination Office coxdoug@wsdot.wa.gov or (360) 705-6906	
Data sources:	Fatality data:	WA FARS Analytical File (2017Q4 released April 2018) (2017 Preliminary) Contact for FARS data: Staci Hoff, Ph.D., WTSC shoff@wtsc.wa.gov or (360) 725-9874
	Serious injury data:	WSDOT Engineering Crash Database (snapshot: 6/11/2018) Contact for WSDOT Crash Data Mart: Mike Bernard, WSDOT BernarM@wsdot.wa.gov or 360-570-2454
	VMT data (forthcoming):	HPMS Data Contact for HPMS Data: Pat Whittaker, WSDOT Whittap@wsdot.wa.gov or 360-570-2370
Assumptions:	1. Fatality data is from the preliminary 2017 Q4 release of the WA-FARS Analytical File, and the final 2016 WA-FARS, the best available data (final NHTSA FARS data is only available up to 2015). 2. Serious injury data is from the WSDOT Engineering Crash Database and represents reported crashes involving at least one motor vehicle and meeting the requirements of RCW 46.52.070, RCW 46.52.030 and WAC 446-85-010. 3. The rolling 5-year average for 2013-2017 is used as the baseline for the target setting. * In 2017 a 'Target Zero approach' was followed as the target setting method. Using the baseline point (5-year average for 2012-2016), a straight line is projected to a zero value at 2030 (the Target Zero goal). The proposed target, using this method, is set for 2018. * In 2018, the linear trend of the five year rolling average was used to set the targets unless the target showed an increase: then the 5-year average value for 2013-2017 was used to set the target for 2019. 4. VMT data used for the target setting are from the state HPMS (Submittal June 2018) 5. FHWA will use the baseline point and actual performance for 2014-2018 to determine whether the state has met targets or made significant progress. 7. For federal resources related to safety target setting: https://safety.fhwa.dot.gov/hsip/spm/target-setting_resources.cfm	
File contents:		
Documentation and Assumptions:	Summarizes the contacts, basic assumptions and file contents	
Input and Data Tables:	Input for selection of MPA, and data tables for the safety performance metrics and targets	
1. Fatalities	Graph showing the annual number of fatalities, the rolling 5-year averages, and the 2018 target	
2. Fatality rate	Graph showing the fatality rate (fatalities per 100 million VMT, the rolling 5-year averages, and the 2018 target)	
3. Serious Injuries	Graph showing the annual number of serious injuries, the rolling 5-year averages, and the 2018 target	
4. Serious injury rate	Graph showing the serious injury rate (fatalities per 100 million VMT, the rolling 5-year averages, and the 2018 target)	
5. Non-motorist fatalities and serious injuries	Graph showing the annual number of non-motorist fatalities and serious injuries, the rolling 5-year average, and the 2018 target. Non-motorists represent individuals other than motor vehicle occupants that died or were seriously injured (generally referred to as pedestrians and cyclists).	

Summary of preliminary safety performance metrics for the state of Washington

Table 1. Summary of metrics for Washington State - 2005 to 2017; and Targets for Each Safety Performance Metric

Year	Fatalities (FARS)	Fatalities (5-year rolling average) (FARS)	Target Fatalities for 2012-2018 (5-year rolling average) (FARS)	Fatality rate	Fatality rate (5-year rolling average)	Target for Fatality rate	Serious Injuries (WSDOT)	Serious Injuries (5-year rolling average) (WSDOT)	Target for Serious Injuries (5-year rolling average) (WSDOT)	Serious injury rate (Serious Injuries per HMVMT)	Serious injury rate (5-year rolling average) (Serious Injuries per HMVMT)	Target serious injury rates (5-year rolling average) (Serious Injuries per HMVMT)	Non-motorist fatalities and serious injuries	Non-motorist fatalities and serious injuries (5-year rolling average)	Target for non-motorist fatalities and serious injuries	Annual VMT (1000s)
2007	571			1.002			2718			4.771			490			56,963,726
2008	521			0.940			2552			4.603			474			55,447,151
2009	492			0.871			2648			4.690			470			56,461,484
2010	460			0.804			2478			4.333			477			57,190,791
2011	454	499.6		0.797	0.883		2135	2,506.2		3.748	4.429		481	478.4		56,965,187
2012	438	473.0		0.774	0.837		2201	2,402.8		3.888	4.252		536	487.6		56,607,485
2013	436	456.0		0.762	0.802		1916	2,275.6		3.349	4.002		404	473.6		57,211,195
2014	462	450.0		0.796	0.787		2004	2,146.8		3.452	3.754		493	478.2		58,059,800
2015	551	468.2		0.924	0.811		2100	2,071.2		3.520	3.591		493	481.4		59,652,504
2016	536	484.6		0.881	0.827		2217	2,087.6		3.643	3.570		594	504.0		60,851,096
2017	565	510.0		0.920	0.857		2224	2,092.2		3.621	3.517		575	511.8		61,419,915
2018			415.5			0.709			1,788.0			3.058			431.5	
2019			489.2			0.813			1,855.2			3.068			511.8	

2019 target set based on linear trend of 5-year rolling average

2019 target set based on linear trend of 5-year rolling average

2019 target set based on linear trend of 5-year rolling average

2019 target set based on linear trend of 5-year rolling average

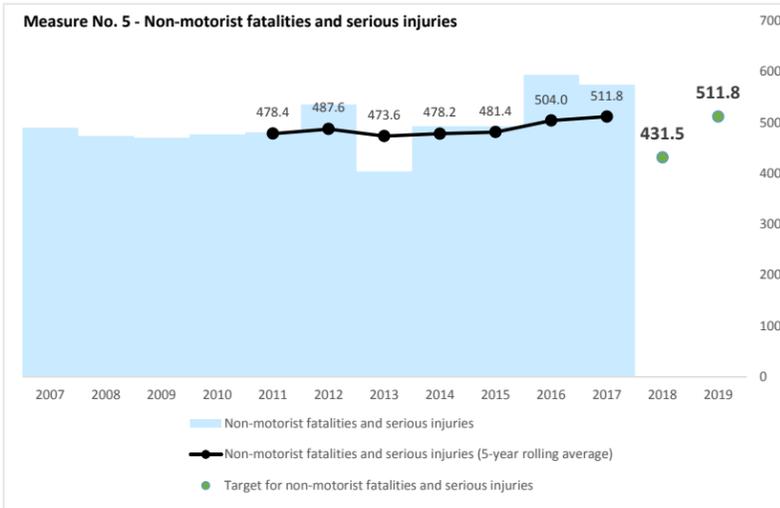
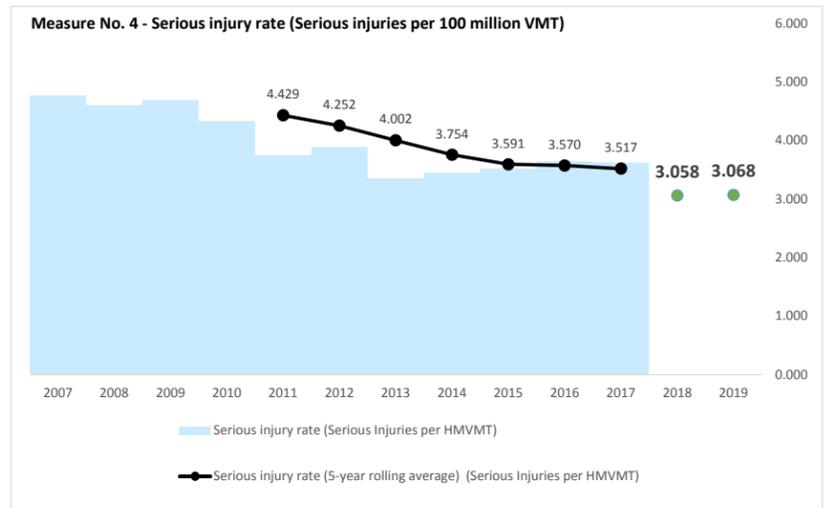
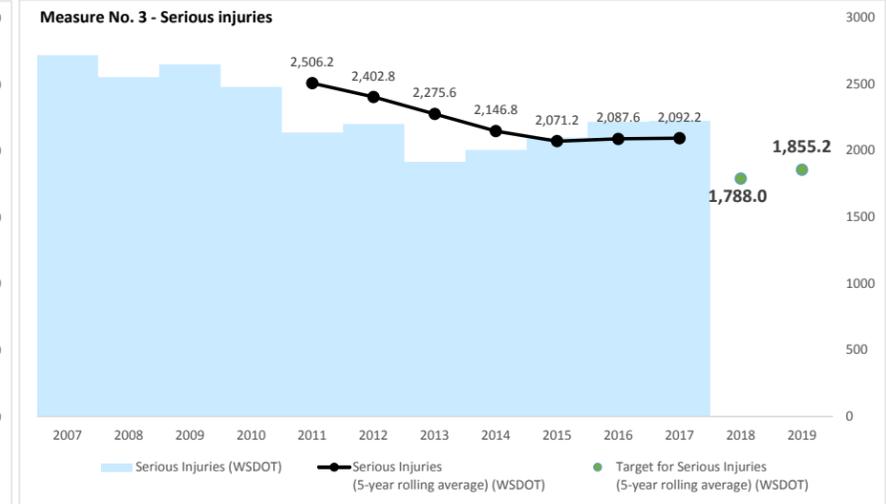
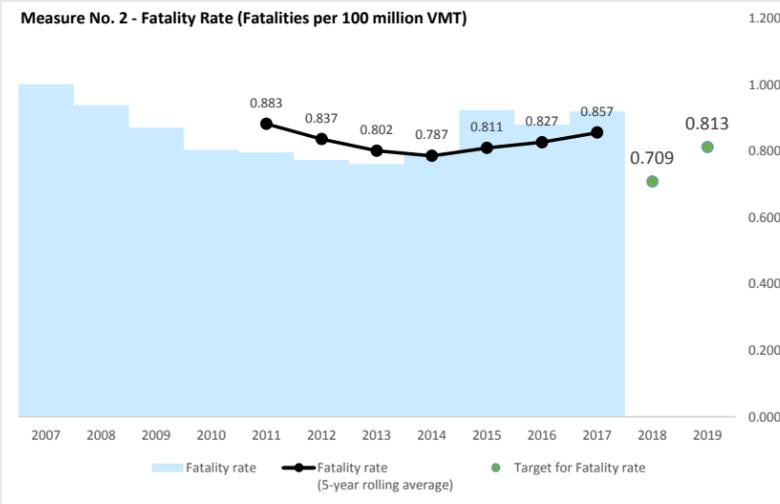
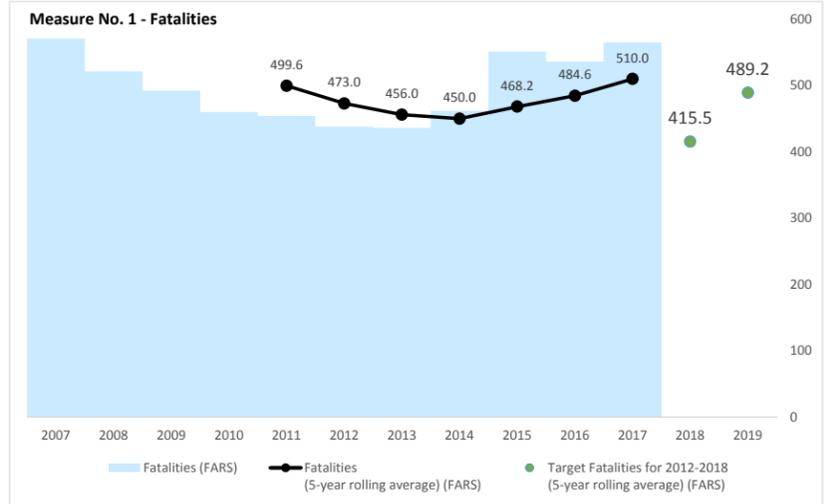
2019 target set equal to the 5-year av for 13-17 because linear trend is upwards

Table 2. Safety Performance Targets for Washington

Year	Fatalities (5-year rolling average) (FARS)	Fatality rate (5-year rolling average)	Serious Injuries (5-year rolling average) (WSDOT)	Serious injury rate (5-year rolling average) (Serious Injuries per HMVMT)	Non-motorist fatalities and serious injuries (5-year rolling average)
2018	415.5	0.709	1,788.0	3.058	431.5
2019	489.2	0.8	1,855.2	3.068	511.8

Set in 2017

Set in 2018



Safety Performance for RTC

Under 23 U.S. Code § 148 and 23 U.S. Code § 409, safety data, reports, surveys, schedules, lists compiled or collected for the purpose of identifying, evaluating, or planning the safety enhancement of potential crash sites, hazardous roadway conditions, or railway-highway crossings are not subject to discovery or admitted into evidence in a Federal or State court proceeding or considered for other purposes in any action for damages arising from any occurrence at a location mentioned or addressed in such reports, surveys, schedules, lists, or data.

Date of release: 1/14/2019

Data sources: *HPMS VMT source information*

NOTE: The HPMS VMT was used as the source data for the VMT conflation to MPA boundaries (contact Ida van Schalkwyk for a discussion of the method followed for conflation)

Important Note:

1. This tool provides a summary of the MAP-21 safety performance metrics for each MPA and demonstrates the 2018 and 2019 target setting methods adopted by WTSC and WSDOT using the performance metrics for each MPA. The target setting methods are shown in item 3 under Assumptions below. The tool is not showing MPO specific targets.
2. This tool also incorporates MPA boundary changes in 2018, and the final HPMS release for 2017 VMT.

Assumptions:

1. Fatality data is from the preliminary 2018Q1 release (ARF). Note that the ARF is used because final FARS data is only available up to 2015.
2. Serious injury data is from the WSDOT Engineering Crash Database and represents reported crashes involving at least one motor vehicle and meeting the requirements of RCW 46.52.070, RCW 46.52.030 and WAC 446-85-010.
3. The rolling 5-year average for 2013-2017 is used as the baseline for the target setting.
 - * In 2017 a 'Target Zero approach' was followed as the target setting method for setting the 2018 statewide targets. Using the baseline point (5-year average for 2012-2016), a straight line is projected to a zero value at 2030 (the Target Zero goal). The proposed target, using this method, is set for 2018.
 - * In 2018, the following method was used to set the 2018 targets. The projected value in 2019 based on the linear trend of the five year rolling average unless the target (projected value in 2019) showed an increase: then the target was set to be equal to the 5-year average value for 2013-2017.
4. The VMT values were estimated using the official HPMS submittal for 2010 through 2017, using spatial conflation. Because of the significant improvement in estimation of local access road coverage and VMT estimation, the local access road VMT values for 2016 are used as an estimate for the local access road VMTs for 2010 through 2016.
5. FHWA uses the statewide baseline point and actual performance for 2015-2019 to determine whether the state has met targets or made significant progress.
6. The published MPA GIS boundaries (updated in September 2017) were used to assign HPMS roadway segments, fatal crash points (using reported XY coordinates in the 2018Q1 release), and the serious injury crash points (XY coordinates from the WSDOT Engineering Crash Database), along with the xy coordinates for fatalities and serious injuries to assign crashes to each MPA boundaries. The intersect function in ARCGIS 10.3.1 was used to assign the crashes. It is important to note that some crashes may be reported on the boundaries of MPAs: these crashes may account for differences between the reported county that a crash occurred in and the GIS assignment. Also, crashes without XY coordinates were not included in the estimate for each MPA.
7. For further information, please visit the WSDOT MAP-21 safety page at <http://wsdot.wa.gov/Accountability/MAP-21safety.htm>. The website includes a link to the recording of a target setting webinar during June 2017; and the Safety MAP-21 WSDOT Technical Folio.
8. For federal resources related to safety target setting, please visit: https://safety.fhwa.dot.gov/hsip/spm/target-setting_resources.cfm

File contents:

Documentation and Assumptions: Summarizes the contacts, basic assumptions and file contents

Input and Data Tables: Input for selection of MPA, and data tables for the safety performance metrics and targets

1. **Fatalities** Graph showing the annual number of fatalities, the rolling 5-year averages, and the 2018 and 2019 portion of the state target
2. **Fatality rate** Graph showing the fatality rate (fatalities per 100 million VMT, the rolling 5-year averages, and the 2018 portion of the state target)
3. **Serious Injuries** Graph showing the annual number of serious injuries, the rolling 5-year averages, and the 2018 and 2019 portion of the state target
4. **Serious injury rate** Graph showing the serious injury rate (fatalities per 100 million VMT, the rolling 5-year averages, and the 2018 target) (VMT)
5. **Non-motorist fatalities and serious injuries** Graph showing the annual number of non-motorist fatalities and serious injuries, the rolling 5-year average, the 2018 and 2019 portion of the state target. Non-motorists represent individuals other than motor vehicle occupants that died or were

SourceTable1 The source data for all the tables in the 'Input and Data Tables' sheet

SourceTable2 A more detailed breakdown of the SourceTable1 data, for example, showing pedestrian and bicyclist data separated out rather

SourceTable3 A more detailed breakdown of the SourceTable1 data, for example, showing VMT values.

Select an MPO (dropdown): Southwest Washington Regional Transportation Council MPA

Table 1. Summary of metrics for Southwest Washington Regional Transportation Council MPA - 2010 to 2019

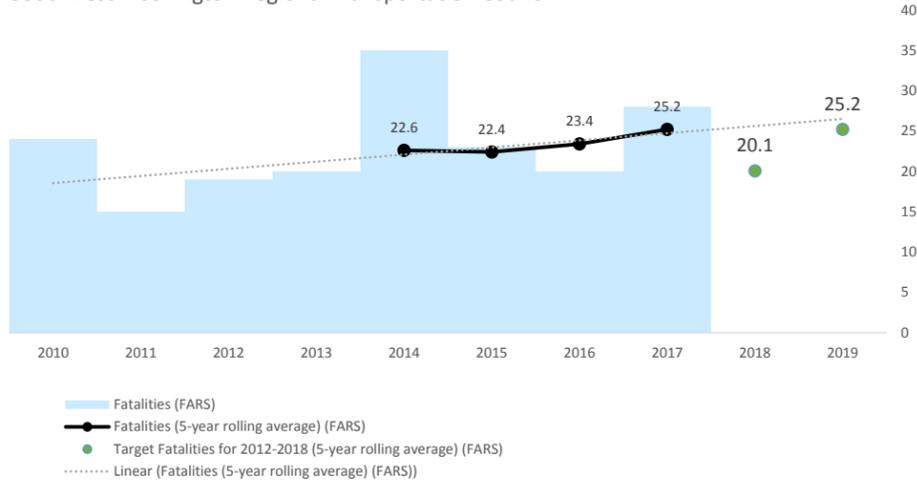
Year	Fatalities (FARS)	Fatalities (5-year rolling average) (FARS)	Target Fatalities for 2012-2018 (5-year rolling average) (FARS)	Fatality rate	Fatality rate (5-year rolling average)	Target for Fatality rate for 2012-2018 (5-year rolling average)	Serious Injuries (WSDOT)	Serious Injuries (5-year rolling average) (WSDOT)	Target for Serious Injuries for 2018 and 2019 (5-year rolling average) (WSDOT)	Serious injury rate (Serious Injuries per HMVMT)	Serious injury rate (5-year rolling average) (Serious Injuries per HMVMT)	Target serious injury rate for for 2018 and 2019 (5-year rolling average) (Serious Injuries per HMVMT)	Non-motorist fatalities and serious injuries	Non-motorist fatalities and serious injuries (5-year rolling average)	Target for non-motorist fatalities and serious injuries for for 2018 and 2019 (5-year rolling average)	Annual VMT (1000s) (from HPMS)
2010	24			0.855			139			4.951			31			2,807,624
2011	15			0.534			131			4.661			30			2,810,418
2012	19			0.677			101			3.597			27			2,808,222
2013	20			0.702			108			3.793			19			2,847,481
2014	35	22.6		1.213	0.796		106	117.0		3.672	4.135		29	27.2		2,886,598
2015	23	22.4		0.764	0.778		143	117.8		4.753	4.095		28	26.6		3,008,734
2016	20	23.4		0.656	0.802		122	116.0		4.003	3.963		30	26.6		3,047,747
2017	28	25.2		0.905	0.848		108	117.4		3.489	3.942		20	25.2		3,095,385
2018			20.1			0.688			99.4			3.397			22.8	
2019			25.2			0.848			116.8			3.785			24.3	

Table 2. 2012- 2019 Safety Performance Targets for Southwest Washington Regional Transportation Council MPA

Year	Fatalities (5-year rolling average) (FARS)	Fatality rate (5-year rolling average)	Serious Injuries (5-year rolling average) (WSDOT)	Serious injury rate (5-year rolling avg) (Serious Injuries per HMVMT)	Non-motorist fatalities and serious injuries (5-year rolling average)
2018	20.1	0.688	99.4	3.397	22.8
2019	25.2	0.848	116.8	3.785	24.3

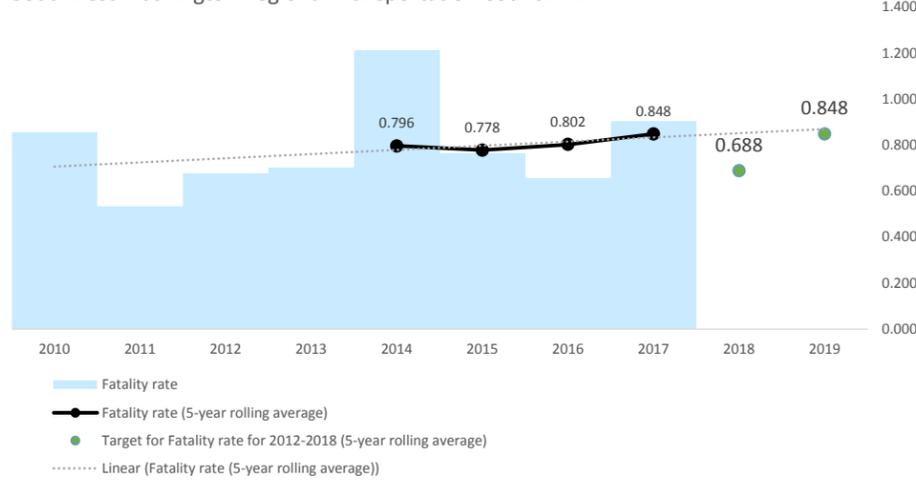
Measure No. 1 - Fatalities 2006 through 2030

Southwest Washington Regional Transportation Council MPA



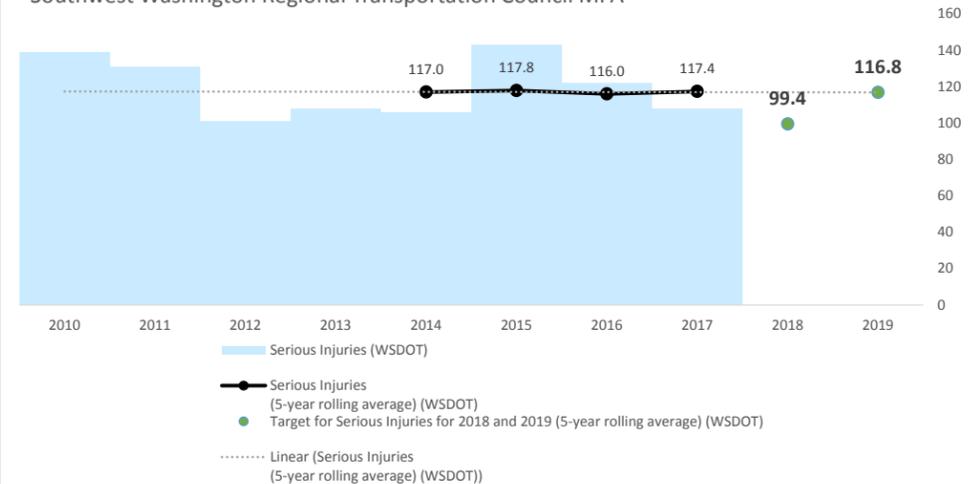
Measure No. 2 - Fatality Rate (Fatalities per 100 million VMT)

Southwest Washington Regional Transportation Council MPA



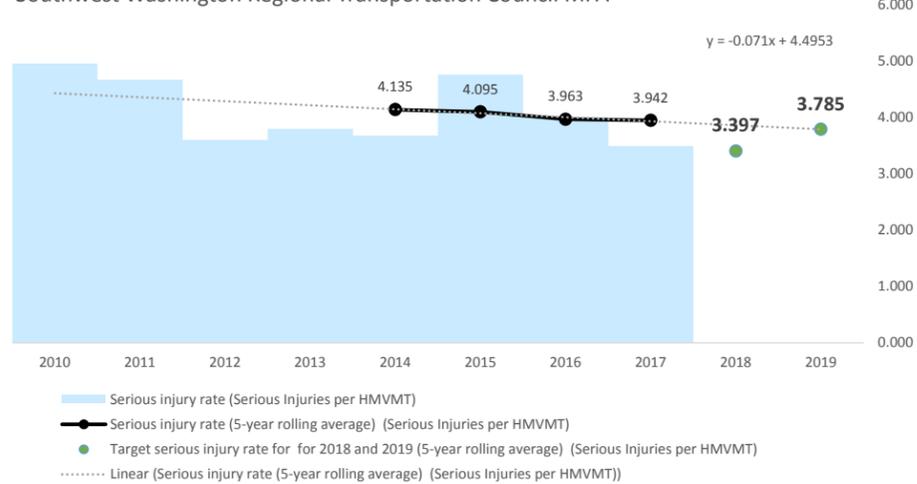
Measure No. 3 - Serious injuries

Southwest Washington Regional Transportation Council MPA



Measure No. 4 - Serious injury rate (Serious injuries per 100 million VMT)

Southwest Washington Regional Transportation Council MPA



Measure No. 5 - Non-motorist fatalities and serious injuries

Southwest Washington Regional Transportation Council MPA

