



A guide to understanding the Federal-aid Highway Program

The Federal-Aid Highway Program (FAHP), administered by the Federal Highway Administration (FHWA), provides federal funding for surface transportation programs and eligible projects on highways. Financing the FAHP requires congressional authorization in the form of a statutory provision known as authorizing legislation, currently the Fixing America's Surface Transportation (FAST) Act.

The FAST Act replaces MAP-21, which was passed in 2012. The FAST Act builds on the changes made by MAP-21, including provisions to make the Federal surface transportation more streamlined, performance-based and multi-modal. The FAST Act supports and continues the overall performance management approach by establishing two new provisions related to performance management. These provisions include requiring states to submit a plan of action to achieve targets if the freight performance targets are not met within two years after establishing the targets and shortens the time frame for States and MPOs to make progress toward meeting performance targets. FAST Act funds are apportioned to main (core) programs with specific dollar amounts set aside for funding transportation alternatives (TAP), State Planning and Research (SPR) and Rail-Highway Crossings (RHC). The states have some flexibility to transfer funds to other programs.

Apportionments are typically available for obligation up to four years after they are distributed. Obligation Authority (OA) defines the amount of apportioned funds that may be obligated, or authorized to eligible projects in a federal fiscal year (October through September). Unobligated apportionments carry over to the next year for up to four years, or until expiration. For example, if the total apportionment for federal fiscal year

A new approach

The FAST Act uses the same approach to core formula program funding as MAP 21. This approach and the corresponding performance penalties, are the focus of this folio. Washington state apportionments and penalties are calculated using FFY2017 numbers for illustration purposes.

(FFY) 2017 is \$697,316,033 and Washington state obligates less than the full amount, the difference between the apportionment and obligation will carry over to the following year and be added to the new apportionment.

Washington state has had a long history of collaborating with our partners to establish an agreement on the distribution of federal highway formula funds to the state and local governments. With the passage of the FAST Act, the Governor's Transportation Policy Advisor led a steering committee with representation from a variety of stakeholders including the Legislature, transportation industry, local officials and WSDOT to determine the FAST Act distributions.

The current agreement of annual statewide apportionment under the FAST Act is split, with 64 percent allocated to WSDOT and 36 percent allocated to local jurisdictions (locals) in federal fiscal years 2016 and 2017 with 1 percent shifting from WSDOT to local jurisdictions each year thereafter until 2020.

The split of the final FAST Act apportionment in 2020 will be 61 percent to WSDOT and 39 percent to local jurisdictions. The funding is first set aside for the National Highway Freight Program, the Surface Transportation Block Grant, Recreational Trails, SPR and MPO, then distributed by predetermined percentages between NHPP, CMAQ (100 percent local), and HSIP.

The National Highway Freight Program funds are being awarded to WSDOT, ports, and local jurisdictions based on advice provided by the Washington State Freight Advisory Committee and regional planning organizations. Freight projects were evaluated based on project readiness, benefits to the freight system, and federal freight program goals. Prioritized freight projects are included in the freight investment plan, which was developed as a component of 2017 Washington State Freight System Plan. The 2017 Washington State Freight System Plan was approved and certified by the Federal Highway Administration on December 1, 2017.

What about the penalties?

The FAST Act, which continues the focus on performance established under MAP-21, assesses penalties for falling below the acceptable target. These "penalties" are actually redistributions that involve shifting funds to focus on regaining acceptable levels of performance as well as requiring the establishment of a formal plan of action for meeting the target. While penalties may mean a loss of flexibility with regard to how a state spends its FAST funds, the intent is to get back on target. Further, if states are already spending an amount greater than the penalty to achieve the desired result, there would be no additional penalty.

MAP-21 programs, statewide apportionments and set-asides

Core programs and their apportionments

National Highway Performance Program (NHPP)

The FHWA designates NHPP funds that may be used for transportation projects on the National Highway System. Eligible projects include roadway and bridge construction projects to improve infrastructure condition, safety, mobility, or freight movement toward the achievement of national performance goals.

- The Washington statewide apportionment for NHPP in FFY2017 was \$371,021,480. At WSDOT's discretion, up to 50% of NHPP funds may be transferred to other programs.

Surface Transportation Program (STP)

The STPBG provides funds that may be used for construction, rehabilitation, and improvement of highways; bridge and tunnel rehabilitation and replacement projects on public roads; construction of new bridges and tunnels on federal-aid highways; pedestrian and bicycle infrastructure, and transit projects. Federal-aid highways include the National Highway System, its Interstate System and all other public roads not classified as local roads or rural minor collectors.

- The Washington statewide apportionment for STPBG in FFY2017 was \$180,294,550. Fifty percent of a state's STP apportionment after set-asides is to be obligated to locals in proportion to their relative share of the state's population. At WSDOT's discretion, the remaining 50% may be obligated in any area of the state or transferred to other programs.

Congestion Mitigation and Air Quality Program (CMAQ)

The CMAQ program provides funds that may be used for projects that generate an emissions reduction in areas that do not meet the National Ambient Air Quality Standards (non-attainment areas), as well as former non-attainment areas that are now in compliance with standards (maintenance areas). The CMAQ program provides funding for projects and programs that help regions meet the requirements of the Clean Air Act through intermodal emissions reduction, alternate fuel use, improvement of traffic flow, and transit investment.

- The Washington statewide apportionment for CMAQ in FFY2017 was \$36,635,619. At WSDOT's discretion, up to 50% of CMAQ funds may be transferred to other programs.

Highway Safety Improvement Program (HSIP)

The HSIP provides funds that may be used for safety projects on public roads or publicly owned pathways or trails. Funds may be used for strategies, activities, and projects that address a highway safety problem to achieve significant reduction in traffic fatalities and serious injuries according to the state's Strategic Highway Safety Plan: Target Zero.

- The Washington statewide apportionment for HSIP in FFY2017 was \$38,208,099. At WSDOT's discretion, up to 50% of HSIP funds may be transferred to other programs.

Metropolitan Planning (PL)

The Metropolitan Planning program provides funding for transportation investments in metropolitan areas. Funds are distributed to Metropolitan Planning Organizations and may be used for transportation planning activities that meet the objectives of their Transportation Improvement Program, including route studies to determine road condition and capacity, identifying the types and volumes of vehicles using a given route, or predicting the level and location of future population, as well as employment and economic growth.

- The Washington statewide apportionment for PL in FFY2017 was \$7,391,590, which may not be transferred to other programs.

Set-asides from core programs

Transportation Alternatives Program (TAP)

The TAP program provides dollars that may be used to fund transportation alternatives projects (routes for non-drivers, community improvement projects, and environmental mitigation), safe routes to schools, and workforce development and training. The TAP is funded by setting aside an amount from NHPP, SP, CMAQ, HSIP and PL.

- The Washington statewide set-aside for TAP in FFY2017 was \$10,847,983. Fifty percent of a state's TAP apportionment is to be obligated to local areas in proportion to their relative shares of the state's population. At the WSDOT's discretion, the remaining 50 percent may be transferred to other programs.

State Planning and Research (SPR)

The SPR program provides funds that may be used for statewide planning and research activities. Eligible projects include development and implementation of management processes, studies of the economy and surface transportation system, research and training on transportation system engineering. The SPR program is funded by setting aside an amount from NHPP, STP, HSIP, and CMAQ.

- The Washington statewide set-aside for RHC in FFY2017 was \$4,211,178. The RHC funds may not be transferred to other programs.

Rail-Highway Crossings (RHC)

The RHC program provides funds for projects to reduce the number of fatalities, injuries and crashes at public crossings. Funds may be used to eliminate hazards of railway-highway crossings and record data about improvement programs. The RHC program is funded by setting aside an amount from HSIP.

- The Washington statewide set-aside for RHC in FFY2014 was \$4,063,343. The RHC funds may not be transferred to other programs.

MAP-21 flexible funds and performance management penalties

Federal-aid funds are distributed to ensure funding of critical transportation projects. States have varying needs for federal-aid programs; some programs are allowed to transfer up to 50% of that program's apportionment between programs (after set-asides and penalties). For example, a state may transfer NHPP funds to the STP program in order to obligate additional funding to projects on non-NHS roads. The transferred amount from NHPP must not reduce the amount set-aside for TAP, and must occur within the constraints of any penalties.

State DOTs and local agencies rely on this flexibility to optimize the impact of their Obligation Authority in areas where funding is most needed. Penalties may impact apportionments and limit the flexibility of transfers. Some penalties are based on amounts budgeted in FFY2009 for SAFETEA-LU programs that no longer exist or have been absorbed by MAP-21 or FAST Act programs. The chart below shows sample penalty calculations for pavement, bridge and safety based on FFY2017 apportionments. No penalties have been assessed, the calculations are shown for illustration purposes only.

The MAP-21 and FAST Acts describe performance management targets related to these programs and proposes measurements that determine compliance with established targets. Penalties for noncompliance are designed to direct funds within programs and ensure that states improve transportation system performance in programmatic areas that are classified as deficient. If a state fails to meet performance targets or minimum condition levels of highway assets, penalties may impact apportionments. These funding-related penalties may constrain the obligation of funds in particular programs, potentially limiting the flexibility of transfers, or directly shifting funds by requiring the transfer of apportionment amounts between programs.

Performance management penalties included in the final federal rules refer to performance measures of pavement condition on the Interstate System, bridge condition on the National Highway System, and safety performance measures for all public roads. These penalties would impact the funding of three programs: National Highway Performance Program (NHPP), Surface Transportation Block Grant Program (STPBG) and Highway Safety Improvement Program (HSIP). A summary of each penalty and its impact on federal-aid funding is described here and on page 4.

Safety Measures and Penalty

Performance Measure

In order to avoid a penalty, states must meet or make significant progress toward achieving four of five of the established safety targets for traffic fatalities and serious traffic injuries on all public roads. A state is considered as having met this requirement when the actual outcome is equal to or better than the baseline performance. If the state has not met or made significant progress toward achieving the targets within two years of establishing them, the funding penalty will apply the following year.

Sample Washington state penalties: Safety

Impacted federal-aid funding program:		HSIP
FFY2017 statewide apportionment		\$38,987,856
FFY2017 sample penalty		\$36,100,981
Penalty source	How penalty would be calculated	
HSIP, FFY2016	Rural Roads Target, HSIP: Obligate HSIP funds = \$36,100,981 (HSIP appropriation from previous year)	
Impacted federal-aid funding program:		HSIP for HRRR
FFY2009 statewide apportionment		\$1,572,286
FFY2017 sample penalty		\$3,144,572
Penalty source	How penalty would be calculated	
HSIP, FFY2009	Safety Targets, HSIP: Obligate HSIP funds = \$3,144,572 (\$1,572,286 x 2)	

Data sources: FHWA National Performance Management Measures, HSIP, NHPP.
 Note: no penalty has been assessed; for illustration purposes only.

States have an option to use additional measures to ascertain progress in urbanized and non-urbanized areas for each of the required measures. If optional measures are chosen, targets must be set and DOTs can be assessed penalties if they do not show progress. No penalties have been assessed to date in Washington state. The penalty samples shown in this folio are for illustration purposes only using source data from FHWA National Performance Management Measures, HSIP and NHPP. For target information, see the Safety MAP-21 WSDOT Technical Folio.

The state must use Obligation Authority equal to the HSIP apportionment for the prior year only for highway safety improvement projects under this section until the state has met or made significant progress toward achieving targets. (If a penalty had been assessed in Washington state in FFY2017, the obligated amount would have been \$36,100,981).

Special Rule for High Risk Rural Roads

- In order to avoid a penalty, states must not exceed the baseline target, which will be established for the Rate of traffic fatalities per 100 million Vehicle Miles Traveled for rural roads.

If the traffic fatality rate increases consecutively during the most recent 2-year period for which data is available, the funding penalty will apply during the following year. Rural roads are classified as rural major and minor collectors and rural local roads.

Penalty (Impacted federal-aid funding program: HSIP)

The state must obligate in the next fiscal year for high-risk rural roads an amount at least equal to 200% of its FFY2009 high risk rural road funds. (If a penalty had been assessed in Washington state in FFY2017, the obligated amount would have been \$3,144,572).

Special Rule for Older Drivers

In order to avoid a penalty, states must not exceed the baseline target which will be established for the number of traffic fatalities and serious injuries per capita for drivers and pedestrians age 65 and older in a state.

MAP-21 flexible funds and performance management penalties

If the rate increases during the most recent 2-year period for which data is available, that state shall be required to include, as part of the subsequent strategic highway safety plan of the state, strategies to address increases in those rates. There is no funding penalty for the Special Rule for Older Drivers.

A safety penalty obligates HSIP funds equal to the previous year's apportionment (in FFY2016 that would have been \$36,100,981). If a High Risk Rural Road (HRRR) penalty is assessed, the total obligation increases by 200 percent of the FFY2009 HRRR set-aside (in FFY2017 that would have been \$3,144,572).
 Note: A safety penalty may cause total HSIP obligations to exceed the current annual apportionment. Funds from past years' apportionments, or transfers from other programs may be used to account for the difference.

Pavement Condition Measure and Penalty Performance Measure

- In order to avoid a penalty, states must meet the following minimum condition level: Interstate pavement condition not to exceed 5 % in poor condition.

Under MAP 21, a state that does not meet the minimum condition for two consecutive years is subject to the penalty however, passage of the FAST Act reduced the time from two years to one year. The funding penalty will apply during the following fiscal year and each year thereafter until in compliance.

Sample Washington state penalty: Pavement

Impacted federal-aid funding program:	NHPP and STP
FAST Act avg. statewide apportionment NHPP	\$ 404,000,000
FAST Act avg. statewide apportionment STP	\$200,000,000
Sample penalty NHPP (for 2017)	\$109,000,000
Additional sample penalty STP	\$10,000,000
Total Sample penalty (NHPP & STP for 2017)	\$119,000,000
Penalty source	How penalty would be calculated
Interstate Maintenance, FFY2009 (\$101,116,232)	NHPP Penalty Calculation (4yrs beyond 2013 to determine amount for 2017) $\$101,116,232 \times (4 \times 2\%) = \$8,089,299$ $\$8,089,299 + \$101,116,232 = \$109,205,531$ STP Penalty Calculation $\$101,116,232 \times 10\% = \$10,111,632$

Data sources: FHWA National Performance Management Measures, HSIP, NHPP.
 Notes: No penalty has been assessed; for illustration purposes only. The Interstate Maintenance program no longer exists; it has been absorbed by the NHPP. FAST Act information was taken from Federal notice HCFB-11 dated Nov. 30, 2015 prior to post apportionment set-asides, penalties and sequestration and rounded to the nearest million.

From the apportionment for the NHPP, the State must obligate an amount equal to the apportionment for the Interstate Maintenance program in fiscal year 2009 (\$101,116,232), increased 2% for each year after fiscal year 2013, for the purposes described in the NHPP—only for projects on NHS

roadways. Within the sample penalty calculation table below, the NHPP penalty calculation reflects four addition years beyond 2013 to the year 2017. In addition, an amount equal to 10% of the Interstate Maintenance program in fiscal year 2009 will be transferred from STP funds to the apportionment for the NHPP. The Interstate Maintenance program no longer exists; it has been absorbed by the NHPP. Based on the current project delivery plan, the penalty would not result in changing project programming.

Bridge Condition Measure and Penalty Performance Measure

- In order to avoid a penalty, states must meet this minimum condition level: National Highway System (NHS) bridges not to exceed 10% structurally deficient, by deck area.

If a state does not meet the federal minimum bridge “poor” condition requirement for three consecutive years, a funding penalty will apply during the following fiscal year and each year thereafter until WSDOT is in compliance. The state must obligate and set aside an amount to 50% of the apportionment in fiscal year 2009 (\$155,987,505) for the Highway Bridge Program—from the NHPP apportionment—only for projects on NHS bridges. Based on the current project delivery plan the penalty would not result in changing project programming.

Sample Washington state penalty: Bridges

Impacted federal-aid funding program:	NHPP
FAST Act avg. statewide apportionment NHPP	\$404,000,000
FFY2017 sample penalty NHPP	\$77,993,753
Penalty source	How penalty would be calculated
Highway Bridge Program, FFY2009 (\$155,987,505)	Penalty Calculation $\$155,987,505 \times 50\% = \$77,993,753$

Data sources: FHWA National Performance Management Measures, HSIP, NHPP.
 Notes: No penalty has been assessed; for illustration purposes only. FAST Act information was taken from Federal notice HCFB-11 dated Nov. 30, 2015 prior to post apportionment set-asides, penalties and sequestration and rounded to the nearest million, FHWA computational tables for FFY2009.

Are there System Performance, CMAQ and Freight rule penalties?

Penalties for these rules do not include funding redistributions, but instead require WSDOT to document how it will achieve missed targets, and (for freight only) provide information on freight bottlenecks, policies and trends.

For more information

Funding and penalty information: Jay Alexander, Director, WSDOT Capital Program Development and Management Office (CPDM), at (360) 705-7121 or AlexanJa@wsdot.wa.gov
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 WSDOT MAP-21 webpage: <http://wsdot.wa.gov/accountability/MAP-21>

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