

# Calculating Smoothness Compliance Price Adjustment for HMA

Include in all Projects with Paving that:

- Have at least 1 Mile of Paving length.
- Region Construction Manager requires item use.
- Minimum unimpeded test vehicle speed of 35 MPH.

When using **Surface Smoothness** or Standard Bid Item:

#6518 — SMOOTHNESS COMPLIANCE ADJUSTMENT,

You will first need to:

Determine the total Lane Miles of HMA to be placed, and select a **Pay Adjustment Schedule** to use.

**EXAMPLE:**

5 Miles of paving on a 4—Lane Interstate Roadway  
= 20 Lane Miles, Using Schedule 1

For budgeting purposes, select the largest bonus the Contractor could receive to use as the for the Smoothness calculation in your project estimate. In this case, using Schedule 1, it would be an International Roughness Indicator (IRI) of less than 30 In. of roughness per Lane Mile.

**RESULT:**

\$600 is paid for every 1/10th mile so:  
\$600 x 10 = \$6000 per Lane Mile.  
\$6000 x 20 Lane Miles = \$120,000

For #6518 — SMOOTHNESS COMPLIANCE ADJUSTMENT Use: **\$120,000**

*Based historical performance, if actual dollars paid out for this item trend less than the maximum budgeted, an adjusted percentage of the maximum may be used based on that history.*

**ASSOCIATED GSP's & AMENDMENTS**

5-04.3(13).GR5	5-04.3(13).INST3.GR5
5-04.3(13).INST1.GR5	5-04.3(13).OPT13.GR5
5-04.3(13).OPT1.FR5	5-04.4.OPT1.GR5
5-04.3(13).INST2.GR5	5-04.5OPT1.FR5
5-04.3(13).OPT7.FR5	

**Pay Adjustment Schedule**

See Full Schedule @ [5-04.5.OPT1.FR5](#)

Incentive payment will be made for Sections that have An IRI between 0 and 59 in. of roughness per lane mile. No Incentive, or a Disincentive deduction will be applied for Sections that have an IRI between 66 and 95.

IRI for each 0.10 mi. Section in./mi.	Pay adj. Schedule 1 \$/0.10 mi.	Pay adj. Schedule 2 \$/0.10 mi.	Pay adj. Schedule 3 \$/0.10 mi.
< 30 in.	\$600	\$600	\$600
30	600	600	600
31	580	580	580
32	560	560	560
90	-500	-300	0
91	-520	-320	0
92	-540	-340	0
93	-560	-360	0
94	-580	-380	0
95	-600	-400	0
> 95	• Corrective Action		
IRI is measured every 1/10th mile and the Incentive—Disincentive is Calculated in inches of roughness (IRI) per Lane Mile.	Pay adjustment is paid by the 1/10th mile according to in. of roughness that falls out of the IRI compliance for each Lane Mile.		

**Pay Adjustment Schedule 1** = Interstate highways, new pavement construction or multiple lift pavement overlays (at least one (1) leveling course + wearing course).

*Note: Pre-leveling allowances are not to be counted as a leveling course paving lift with respect to this definition.*

**Pay Adjustment Schedule 2** = Single lift pavement overlays with allowance for surface variance corrections with smoothness averaging devices (paving skis) or full width pavement milling (including shoulder) with single lift replacement overlay.

Note: Sufficient preleveling and/or pavement thickness variance allowances should be included to repair obvious existing deficiencies (humps, valleys, ruts etc.)

**Pay Adjustment Schedule 3** = Smoothness will be difficult to attain or when risk associated with meeting a smoothness criteria is unknown. Examples include matching to existing concrete gutter lines; sections with multiple surface utility structures; intersections; multiple skip sections resulting in short paving lengths; and milling/replacement paving where both the shoulder and adjacent lane is not also milled. Bonus incentives are applied to encourage maximum effort to obtain smooth pavements in difficult applications.