Inflationary Impact on Short Line Maintenance Tax Credit (45G)

Since its introduction in 2005, 45G has proven to be an exceptionally effective public policy, catalyzing over $8 billion in private infrastructure investment. However, restrictions on eligible track and 20 years of inflation have eroded its potency. H.R. 516 proposes to correct these shortcomings by modernizing the credit in three ways:

· **Include expenditures on all short line track as of 2024 as eligible for the credit,** capturing additional short lines created since 2015.

· **Update the credit for inflation.** Costs have increased significantly since 2005, yet the credit cap has remained at $3,500 per mile. The bill would increase the per mile cap to $6,100, based on the Surface Transportation Board's (STB's) Railroad Cost Adjustment Factor (RCAF).

· **Index the credit moving forward,** so the credit can achieve its intended goals.

Explanation of Railroad Cost Adjustment Factor (RCAF) Calculation

The RCAF is an index formulated to represent changes in railroad costs over time. The STB is required by law (Ex Parte No. 290, Subpart No. 5) to publish the RCAF on at least a quarterly basis. The subcomponents of the calculation include two cost measurements that are relevant – Materials & Labor, and more broadly, RCAF Less Fuel, which backs out the price-volatile fuel component of operations.

	2005 Costs	2023 Equivalent Cost	% Change
Materials & Labor	$3,500	$6,877	+96.5%
RCAF Less Fuel	$3,500	$6,085	+73.9%

Representatives Kelly and Thompson and Senators Crapo and Wyden have agreed to a conservative $6,100 as the updated per-mile cap for the tax year 2025, as is indicated in H.R. 516 in the current Congress and previously in H.R. 9522 and S. 5008 in the 118th Congress.

Recent Example: Everett Railroad Track Maintenance

The Everett Railroad operates in PA and sources wood ties, stone ballast, metal spikes, and contractor services from PA, OH, and WV. The following figures illustrate the cost increases over the last 20 years associated with these very basic upgrades that short lines routinely invest in to upgrade track to modern standards:

	2005 Costs	2024 Costs	% Change
Ballast	$6.35/ton	$15.55/ton	+145%
Ties	$35.85/each	$70.60/each	+97%
Spikes	$50.60/100# keg	$103/100# keg	+102%
Contracted Services	$33.00/hour	$75.00/hour	+127%

Cost Calculations for Inflation Using Railroad Cost Measurements Since 2005

Inflation Measure (Index 2005=100)

	CPI*	GDP Deflator	RR Cost Recovery Index: Overall	RR Cost Recovery Index: Materials & Labor**	RCAF Less Fuel***
2005	100.0	100.0	100.0	100.0	100.0
2006	103.2	103.1	105.4	103.7	103.0
2007	106.2	105.9	110.3	107.5	106.3
2008	110.2	107.9	125.5	115.2	112.1
2009	109.9	108.6	115.3	123.7	116.3
2010	111.7	109.9	123.4	124.7	120.6
2011	115.2	112.2	136.3	130.4	126.0
2012	117.6	114.3	139.8	133.8	128.6
2013	119.3	116.2	139.7	134.3	129.3
2014	121.2	118.2	140.9	137.7	130.2
2015	121.4	119.3	130.9	139.8	132.3
2016	122.9	120.5	128.5	138.9	133.7
2017	125.5	122.6	136.9	144.9	136.4
2018	128.6	125.4	145.9	149.7	139.1
2019	130.9	127.5	146.3	152.5	142.5
2020	132.5	129.2	142.1	154.0	141.8
2021	138.8	135.1	152.9	157.9	147.8
2022	149.9	144.7	177.4	170.3	156.7
2023	156.0	149.9	n/a	196.5	173.8

$3,500 in 2005 in Each Year's Dollars

	CPI*	GDP Deflator	RR Cost Recovery Index: Overall	RR Cost Recovery Index: Materials & Labor**	RCAF Less Fuel**
2005	$3,500	$3,500	$3,500	$3,500	$3,500
2006	$3,391	$3,395	$3,322	$3,375	$3,399
2007	$3,297	$3,306	$3,174	$3,255	$3,291
2008	$3,175	$3,243	$2,790	$3,038	$3,122
2009	$3,186	$3,223	$3,035	$2,830	$3,009
2010	$3,135	$3,185	$2,836	$2,808	$2,902
2011	$3,039	$3,120	$2,567	$2,684	$2,777
2012	$2,977	$3,063	$2,503	$2,616	$2,721
2013	$2,934	$3,012	$2,506	$2,606	$2,707
2014	$2,887	$2,960	$2,484	$2,542	$2,689
2015	$2,884	$2,933	$2,673	$2,504	$2,646
2016	$2,848	$2,906	$2,723	$2,520	$2,618
2017	$2,789	$2,854	$2,556	$2,415	$2,566
2018	$2,722	$2,791	$2,399	$2,338	$2,517
2019	$2,674	$2,744	$2,393	$2,296	$2,456
2020	$2,641	$2,709	$2,462	$2,273	$2,468
2021	$2,522	$2,590	$2,289	$2,217	$2,369
2022	$2,336	$2,420	$1,973	$2,056	$2,233
2023	$2,243	$2,334	n/a	$1,781	$2,013

What the $3,500 Tax Credit Would Have to Be Each Year If It Weren't to Lose Value

	CPI*	GDP Deflator	RR Cost Recovery Index: Overall	RR Cost Recovery Index: Materials & Labor**	RCAF Less Fuel***
2005	$3,500	$3,500	$3,500	$3,500	$3,500
2006	$3,613	$3,608	$3,688	$3,629	$3,604
2007	$3,716	$3,706	$3,859	$3,763	$3,722
2008	$3,859	$3,777	$4,391	$4,032	$3,923
2009	$3,845	$3,800	$4,036	$4,329	$4,071
2010	$3,908	$3,847	$4,320	$4,363	$4,221
2011	$4,031	$3,926	$4,772	$4,563	$4,411
2012	$4,115	$3,999	$4,893	$4,682	$4,501
2013	$4,175	$4,067	$4,889	$4,701	$4,525
2014	$4,243	$4,138	$4,932	$4,818	$4,556
2015	$4,248	$4,176	$4,582	$4,893	$4,629
2016	$4,301	$4,216	$4,499	$4,861	$4,680
2017	$4,393	$4,292	$4,792	$5,072	$4,775
2018	$4,500	$4,390	$5,107	$5,240	$4,867
2019	$4,582	$4,464	$5,120	$5,336	$4,989
2020	$4,638	$4,522	$4,975	$5,390	$4,964
2021	$4,856	$4,730	$5,352	$5,527	$5,172
2022	$5,245	$5,063	$6,209	$5,959	$5,485
2023	$5,461	$5,247	n/a	$6,877	$6,085

Raw Numbers

	CPI* (2015=100)	GDP Deflator (2017=100)	RCR (1977=100): Overall	RCR (1977=100): Materials & Labor**	RCAF Less Fuel***
2005	82.4	81.6	376.8	356.8	219.8
2006	85.1	84.1	397.0	370.0	226.3
2007	87.5	86.3	415.5	383.6	233.7
2008	90.8	88.0	472.7	411.0	246.3
2009	90.5	88.6	434.5	441.3	255.6
2010	92.0	89.6	465.1	444.8	265.0
2011	94.9	91.5	513.7	465.2	276.9
2012	96.9	93.2	526.8	477.3	282.6
2013	98.3	94.8	526.3	479.2	284.1
2014	99.9	96.4	531.0	491.2	286.0
2015	100.0	97.3	493.3	498.8	290.6
2016	101.3	98.2	484.3	495.5	293.8
2017	103.4	100.0	515.9	517.1	299.8
2018	105.9	102.3	549.8	534.2	305.6
2019	107.9	104.0	551.2	544.0	313.2
2020	109.2	105.4	535.6	549.5	311.7
2021	114.3	110.2	576.2	563.4	324.7
2022	123.5	118.0	668.4	607.5	344.4
2023	128.6	122.3	n/a	701.1	382.0

*Overall Consumer Price Index for all urban consumers
**Materials prices, wage rates and supplements combined excl. fuel
***Average of the four quarters. 2023 is average Q1-Q3. 1980=100

Because of inflation, the purchasing power of $1 in 2005 has diminished by 40-50% depending on measurement used. The yellow shaded cells above show what $3,500 in 2005 dollars is equal to in 2022 and 2023 dollars based on five different measures of inflation. Depending on the measure used, $3,500 in 2005 dollars is worth between $1,781 and $2,243 in 2023 dollars. The blue shaded cells show what $3,500 would have had to be if it were not to lose its original purchasing power because of inflation. When using the Railroad Cost for Materials and Labor (RCR) index as the inflation measure, the tax credit would have had to be $6,877 in 2023, and if using the RCAF Less Fuel, the tax credit would have had to be $6,085 in 2023 to have the purchasing power it had in 2005.