

SURFACE TRANSPORTATION BOARD

DECISION

Docket No. EP 290 (Sub-No. 5)

(2022-4)

QUARTERLY RAIL COST ADJUSTMENT FACTOR

Digest:<sup>1</sup> The rail cost adjustment factor (RCAF) is an index formulated to represent changes in railroad costs incurred by the nation’s largest railroads over a specified period of time. The Surface Transportation Board (Board) is required by law to publish the RCAF on at least a quarterly basis. Each quarter, the Association of American Railroads computes three types of RCAF figures and submits those figures to the Board for approval. The Board has reviewed the submission and adopts the RCAF figures for the fourth quarter of 2022.

Decided: September 19, 2022

In Railroad Cost Recovery Procedures, 1 I.C.C.2d 207 (1984), the Interstate Commerce Commission (ICC) outlined the procedures for calculating the all-inclusive index of railroad input prices and the method for computing the rail cost adjustment factor (RCAF). Under the procedures, the Association of American Railroads (AAR) is required to calculate the index on a quarterly basis and submit it to the agency on the fifth day of the last month of each calendar quarter. In Railroad Cost Recovery Procedures—Productivity Adjustment, 5 I.C.C.2d 434 (1989), aff’d sub nom. Edison Electric Institute v. ICC, 969 F.2d 1221 (D.C. Cir. 1992), the ICC adopted procedures that require the adjustment of the quarterly index for a measure of productivity.

The provisions of 49 U.S.C. § 10708 direct the Surface Transportation Board (Board) to continue to publish both an unadjusted RCAF and a productivity-adjusted RCAF. In Productivity Adjustment—Implementation, 1 S.T.B. 739 (1996), the Board decided to publish a second productivity-adjusted RCAF called the RCAF-5. Consequently, three indices are now filed with the Board: the RCAF (Unadjusted); the RCAF (Adjusted); and the RCAF-5. The RCAF (Unadjusted) is an index reflecting cost changes experienced by the railroad industry, without reference to changes in rail productivity. The RCAF (Adjusted) is an index that reflects national average productivity changes as originally developed and applied by the ICC, the calculation of which is currently based on a five-year moving average. The RCAF-5 is an index

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<sup>1</sup> The digest constitutes no part of the decision of the Board but has been prepared for the convenience of the reader. It may not be cited to or relied upon as precedent. See Pol’y Statement on Plain Language Digs. in Decisions, EP 696 (STB served Sept. 2, 2010).

that also reflects national average productivity changes; however, those productivity changes are calculated as if a five-year moving average had been applied consistently from the productivity adjustment's inception in 1989.

The index of railroad input prices, RCAF (Unadjusted), RCAF (Adjusted), and RCAF-5 for the fourth quarter of 2022 are shown in Table A of the Appendix to this decision. Table B shows the second quarter 2022 index and the RCAF calculated on both an actual and a forecasted basis. The difference between the actual calculation and the forecasted calculation is the forecast error adjustment.

The weights for each major cost component of the all-inclusive cost index, on which the RCAF is based, are updated annually to reflect the changing mix of index components. See 49 U.S.C. § 10708. This includes re-benchmarking the wages and supplemental rates used in the labor index in the fourth quarter of each year. The weights used by AAR are based on the distribution of railway expenses for the year 2021. Similarly, AAR has used wage and supplemental rates for the year 2021 to calculate hourly labor rates that reflect the changing mix of employees.

AAR's calculations, including its re-weighting and re-benchmarking calculations, have been examined by the Board's Office of Economics, and the Board finds that AAR has complied with agency procedures with respect to the available data for 2021. The Board finds that the fourth quarter 2022 RCAF (Unadjusted) is 1.295, an increase of 3.6% from the third quarter 2022 RCAF (Unadjusted) of 1.250. The RCAF (Adjusted) is calculated, in part, using the RCAF (Unadjusted) and a five-year moving geometric average of productivity change for U.S. Class I railroads from 2016-2020, which is 1.025 (2.5% per year). The fourth quarter 2022 RCAF (Adjusted) is 0.527, an increase of 2.9% from the third quarter 2022 RCAF (Adjusted) of 0.512.<sup>2</sup>

In accordance with Productivity Adjustment—Implementation, 1 S.T.B. at 748-49, the RCAF-5 for this quarter will use a productivity trend for the years 2015-2019, which is 1.008 (0.8% per year). The RCAF-5 for the fourth quarter of 2022 is 0.503, an increase of 3.3% from the third quarter 2022 RCAF-5 of 0.487.<sup>3</sup>

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<sup>2</sup> The fourth quarter 2022 RCAF Adjusted (0.527) is calculated by dividing the fourth quarter 2022 RCAF Unadjusted (1.295) by the fourth quarter productivity adjustment factor (PAF) of 2.4588. The fourth quarter 2022 PAF is calculated by multiplying the third quarter 2022 productivity adjustment of 2.4436 by the fourth root (1.0062) of the 2016-2020 annual average productivity growth rate of 2.5%.

<sup>3</sup> The fourth quarter 2022 RCAF-5 (0.503) is calculated by dividing the fourth quarter 2022 RCAF Unadjusted (1.295) by the fourth quarter productivity adjustment factor-5 (PAF-5) of 2.5738. The fourth quarter 2022 PAF-5 is calculated by multiplying the third quarter 2022 PAF-5 of 2.5687 by the fourth root (1.0020) of the 2015-2019 annual average productivity growth rate of 0.8%.

This action is categorically excluded from environmental review under 49 C.F.R. § 1105.6(c).

Authority: 49 U.S.C. § 10708.

It is ordered:

1. The Board finds that the fourth quarter 2022 RCAF (Unadjusted) is 1.295, RCAF (Adjusted) is 0.527, and RCAF-5 is 0.503.

2. Notice of this decision will be published in the Federal Register.

3. The effective date of this decision is October 1, 2022.

By the Board, Board Members Fuchs, Hedlund, Oberman, Primus, and Schultz.

**APPENDIX****TABLE A**

**EP 290 (Sub-No. 5) (2022-4)**  
**All Inclusive Index of Railroad Input Costs**  
 (Endnotes Following Table B)

<b>LINE NO.</b>	<b>INDEX COMPONENT</b>	<b>2021 WEIGHTS</b>	<b>THIRD QUARTER 2022 FORECAST</b>	<b>FOURTH QUARTER 2022 FORECAST</b>
1	LABOR	31.4%	472.4	479.6
2	FUEL	14.2%	459.6	475.2
3	MATERIALS AND SUPPLIES	4.5%	305.0	335.3
4	EQUIPMENT RENTS	4.9%	256.0	253.8
5	DEPRECIATION	17.5%	233.2	233.3
6	INTEREST	2.4%	51.1	50.1
7	OTHER ITEMS <sup>1</sup>	25.1%	302.4	290.6
8	WEIGHTED AVERAGE	100.0%	357.8	360.6
9	LINKED INDEX <sup>2</sup>		328.7	331.3
10	PRELIMINARY RAIL COST ADJUSTMENT FACTOR <sup>3</sup>		124.3	125.3
11	FORECAST ERROR ADJUSTMENT <sup>4</sup>		0.007	0.042
12	RCAF (UNADJUSTED) (LINE 10 + LINE 11)		1.250	1.295
13	RCAF (ADJUSTED)		0.512	0.527
14	RCAF-5		0.487	0.503

**TABLE B**

**EP 290 (Sub-No. 5) (2022-4)**  
**Comparison of Second Quarter 2022 Index**  
**Calculated on Both a Forecasted and an Actual Basis**

<b>LINE NO.</b>	<b>INDEX COMPONENT</b>	<b>2020 WEIGHTS</b>	<b>SECOND QUARTER 2022 FORECAST</b>	<b>SECOND QUARTER 2022 ACTUAL</b>
1	LABOR	32.4%	470.4	470.4
2	FUEL	9.7%	345.3	463.8
3	MATERIALS AND SUPPLIES	4.5%	292.0	292.0
4	EQUIPMENT RENTS	5.2%	251.1	251.6
5	DEPRECIATION	18.5%	232.9	233.3
6	INTEREST	2.7%	51.1	51.1
7	OTHER ITEMS	27.0%	290.1	290.6
8	WEIGHTED AVERAGE	100.0%	334.9	346.6
9	LINKED INDEX		313.8	324.8
10	RAIL COST ADJUSTMENT FACTOR		118.6	122.8

**Endnotes:**

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<sup>1</sup> “Other Items” is a combination of Purchased Services, Casualties and Insurance, General and Administrative, Other Taxes, Loss and Damage, and Special Charges, price changes for all of which are measured by the Producer Price Index for Industrial Commodities Less Fuel and Related Products and Power.

<sup>2</sup> Linking is necessitated by a change to the 2021 weights beginning in the fourth quarter of 2022. The following formula was used for the current quarter’s index:

$$\frac{\text{4th Qr. 2022 Index (2021 Weights)}}{\text{3rd Qr. 2022 Index (2021 Weights)}} \text{ Times 3rd Quarter Linked Index (1980 = 100 Linked) Equals Linked Index (Current Quarter)}$$

Or

$$\frac{360.6}{357.8} \times 328.7 = 331.3$$

<sup>3</sup> The first quarter 2018 RCAF was re-based using the October 1, 2017 level of 264.5 in accordance with the requirements of the Staggers Rail Act of 1980 (10/1/2017 = 100).

<sup>4</sup> The fourth quarter 2022 forecast error adjustment was calculated as follows: (a) second quarter 2022 RCAF using forecasted data equals 118.6; (b) second quarter 2022 RCAF using actual data equals 122.8; and (c) the difference equals the forecast error (b-a) of 4.2. Because the actual second quarter value is greater than the forecast value, the difference is added to the Preliminary RCAF.