# Rail Cost Adjustment Factor — 2012Q4r Base

			Forecast	RCAF	Productivity-Adjusted RCAF Productivity		STB's 2nd Productivity- Adjusted RCAF	
		Preliminary	Error	(Unad-	Adjustment	RCAF	(Not endors	
Yr/Qtr		RCAF	Adjustment	justed)	Factor	(Adjusted)	PAF-5	RCAF-5
(Col 1	)	(Col 2)	(Col. 3)	(Col 4)	(Col 5)	(Col 6)	(Col 7)	(Col 8)
2005		0.708	0.006	0.714	2.0274	0.352	2.1263	0.336
	Q2	0.722	0.019	0.741	2.0420	0.363	2.1380	0.347
	Q3	0.729	0.004	0.733	2.0567	0.356	2.1498	0.341
	Q4	0.757	0.008	0.765	2.0715	0.369	2.1616	0.354
2006	Q1	0.752	0.008	0.760	2.0864	0.364	2.1772	0.349
	Q2	0.752	0.008	0.760	2.0962	0.363	2.1929	0.347
	Q3	0.773	-0.002	0.771	2.1061	0.366	2.2087	0.349
	Q4	0.790	0.016	0.806	2.1160	0.381	2.2246	0.362
2007	Q1	0.773	0.007	0.780	2.1259	0.367	2.2351	0.349
	Q2	0.773	-0.032	0.741	2.1348	0.347	2.2456	0.330
	Q3	0.786	-0.014	0.772	2.1438	0.360	2.2562	0.342
	Q4	0.812	0.014	0.826	2.1528	0.384	2.2668	0.364
0000								
2008		0.855	0.013	0.868	2.1618	0.402	2.2763	0.381
	Q2	0.877	0.013	0.890	2.1683	0.410	2.2859	0.389
	Q3	0.955	-0.007	0.948	2.1748	0.436	2.2955	0.413
	Q4	0.955	0.036	0.991	2.1813	0.454	2.3051	0.430
2009		0.833	0.012	0.845	2.1878	0.386	2.3120	0.365
	Q2	0.784	-0.082	0.702	2.1944	0.320	2.3189	0.303
	Q3	0.824	-0.049	0.775	2.2010	0.352	2.3259	0.333
	Q4	0.825	-0.002	0.823	2.2076	0.373	2.3329	0.353
2010	Q1	0.863	-0.005	0.858	2.2142	0.387	2.3399	0.367
	Q2	0.863	0.013	0.876	2.2208	0.394	2.3469	0.373
	Q3	0.880	0.003	0.883	2.2275	0.396	2.3539	0.375
	Q4	0.883	0.028	0.911	2.2342	0.408	2.3610	0.386
2011	Q1	0.915	-0.012	0.903	2.2409	0.403	2.3681	0.381
	Q2	0.956	0.016	0.972	2.2487	0.432	2.3752	0.409
	Q3	0.980	0.017	0.997	2.2566	0.442	2.3823	0.419
	Q4	0.978	0.022	1.000	2.2645	0.442	2.3894	0.419
2012	Q1	0.973	-0.006	0.967	2.2724	0.426	2.3978	0.403
	Q2	0.998	-0.018	0.980	2.2769	0.430	2.4062	0.407
	Q3	0.973	-0.005	0.968	2.2815	0.424	2.4146	0.401
	Q4	1.005	-0.005	1.000	2.2861	0.437	2.4231	0.413
2013	Q1	0.999	-0.002	0.997	2.2907	0.435	2.4279	0.411
_0.0	Q2	1.003	0.003	1.006	2.2957	0.438	2.4328	0.414
	Q3	0.989	-0.012	0.977	2.3008	0.425	2.4377	0.401
	Q4	1.001	-0.026	0.975	2.3059	0.423	2.4426	0.399
2014	O1	0.985	-0.004	0.981	2.3110	0.424	2.448	0.401
2014	Q2	0.985	-0.022	0.975	2.3110	0.421	2.4534	0.401
	Q3	0.995	-0.022	0.985	2.3226	0.424	2.4588	0.401
	Q3 Q4	0.985	-0.008	0.983	2.3284	0.420	2.4642	0.401
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2015		0.955	-0.009	0.946	2.3342	0.405	2.4704	0.383
	Q2	0.911	-0.031	0.880	2.3382	0.376	2.4766	0.355
	Q3	0.906	-0.077	0.829	2.3422	0.354	2.4828	0.334
	Q4	0.885	-0.023	0.862	2.3462	0.367	2.4890	0.346
2016	Q1	0.882	-0.018	0.864	2.3502	0.368	2.4932	0.347

# Rail Cost Adjustment Factor — Notes

**Preliminary RCAF** - The Preliminary Rail Cost Adjustment Factor (RCAF) is the All-Inclusive Index divided by 100. The All-Inclusive Index is a price index forecast on the 5th day of the month prior to each quarter.

**Forecast Error Adjustment** - An adjustment made to the Preliminary RCAF that accounts for the forecast error in the forecast 2 quarters prior. The forecast error is calculated by comparing the forecast to the actual index.

**RCAF (Unadjusted)** - The Rail Cost Adjustment Factor with a forecast error adjustment, but without a productivity adjustment. The RCAF (Unadjusted) is equal to the sum of the Preliminary RCAF plus the Forecast Error Adjustment.

**Productivity Adjustment Factor** - The factor, determined by the Surface Transportation Board (STB), that is used to convert the RCAF (Unadjusted) from a price index to a productivity-adjusted cost adjustment factor.

**RCAF (Adjusted)** - A cost adjustment factor that is a price index adjusted for productivity. The RCAF (Adjusted) is calculated by dividing the RCAF (Unadjusted) by the Productivity Adjustment Factor.

**PAF-5** - A second productivity adjustment factor that treats its calculation as if the Surface Transportation Board used a 5-year rolling average change in productivity since the inception of the productivity adjustment. The major difference between the Productivity Adjustment Factor and the PAF-5 is timing: the starting points are different, and the quarter where the 5-year rolling average change is updated is different. The figures used to calculate the 5-year rolling average change to update the PAF-5 are identical to those used for the Productivity Adjustment Factor.

**RCAF-5** - A second productivity-adjusted RCAF that reflects national average productivity changes as if a 5-year rolling average change had been applied consistently since the productivity adjustment's inception in the second quarter of 1989. The RCAF-5 is calculated by dividing the RCAF (Unadjusted) by the PAF-5.

#### Reminder:

Beginning with the 2013Q1 RCAF filing (December 5, 2012), the RCAF is stated on a 2012Q4 basis - as required by law. The old basis was 2007Q4. When comparing 2013 RCAFs to earlier years, make sure you are comparing indexes that are stated on the same basis. The page before this page has everything recalculated to a consistent 2012Q4 basis. Older RCAF filings will use the appropriate basis at the time of the filing, which will not be 2012Q4 until the first quarter of 2013. Attachment A in the AAR's December 5, 2012 RCAF filing contained historical data converted to a 2012Q4 basis, but it is now incorrect. Also included are example calculations and historical data necessary to calculate an index on any basis.

### Note 1:

In a decision served December 20, 2013, the Surface Transportation Board revised portions of its Rail Cost Adjustment Factor for 2011Q4 through 2013Q4. The revisions also caused the 2012Q4 basing factor to be revised. Although RCAFs prior to 2011Q4 did not change as stated in their original basis, figures restated to the current 2012Q4r basis may have small changes from the original conversion made with the original basing factor. Appendix AE in the AAR's December 5, 2013, RCAF filing contains historical data converted to a 2012Q4r basis for comparison purposes. Also included are example calculations and historical data necessary to calculate an index on any basis.

## Note 2:

In a decision served March 20, 2014, the Surface Transportation Board revised the weights used for its All-Inclusive Index, causing revisions to portions of its Rail Cost Adjustment Factor for 2014Q1. Appendix AA in the AAR's March 17, 2014, RCAF filing provides more background. The Board confirmed the 2014Q1 revised number by using it as the forecast in its 2014Q3 forecast error calculation decided June 20, 2014.