

ASSOCIATION
OF AMERICAN
RAILROADS

John T. Gray
Senior Vice President - Policy & Economics

March 5, 2018

245263

The Honorable Cynthia T. Brown
Chief, Section of Administration
Office of Proceedings
Surface Transportation Board
395 E Street, SW
Washington, DC 20423-0001

ENTERED
Office of Proceedings
March 5, 2018
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Public Record

Dear Ms. Brown:

This submission is the AAR forecast of the second quarter 2018 All-Inclusive Index and Rail Cost Adjustment Factor, filed in Ex Parte No. 290 (Sub-No. 5) (2018-2) *Quarterly Rail Cost Adjustment Factor*. The versions of RCAF-related indices covered in this filing are: the All-Inclusive Index (initiated in the second quarter of 1985), the Unadjusted RCAF (produced since October 1982), the Adjusted RCAF (first published in the second quarter of 1989), and the RCAF-5 (created by the STB in its Ex Parte No. 290 (Sub-No. 7) decision served October 3, 1996). The table below summarizes the second quarter 2018 results and compares to the previous quarter. Both quarters are shown on the new **4Q\2017=100 base**. The productivity-adjusted versions of 2018Q1 use the Board's revised/final 2015 productivity change data.

	<u>2018Q1</u>	<u>2018Q2</u>	<u>% Change</u>
All-Inclusive Index	103.8	103.9	0.1
Preliminary RCAF	1.038	1.039	0.1
Forecast Error Adjustment	-0.011	0.002	
RCAF (Unadjusted)	1.027	1.041	1.4
Productivity Adjustment Factor	2.3689 r	2.3665	
RCAF (Adjusted)	0.434 r	0.440	1.4
PAF-5	2.5374 r	2.5336	
RCAF-5	0.405 r	0.411	1.5

r - revised as directed in *Quarterly Rail Cost Adjustment Factor* - Ex Parte 290 (Sub-No. 5) served January 29, 2018.

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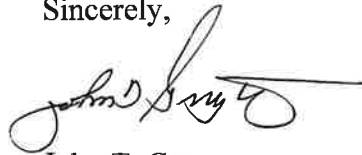
On January 29, 2018, the Board served two decisions affecting the RCAF. First, a final productivity change for 2015 was adopted that differed from the original used in the past four quarters. Page 5A in this submission is devoted to the revised productivity change and the resulting productivity adjustment factors. Second, the Board directed the AAR to recalculate and submit in this filing the RCAF figures affected by the change. The revised numbers are listed on page 5B.

As required every five years, the AAR rebased the RCAF in the previous quarter filing. Due to the fact that many people may need to compare the current RCAF to an older version that was calculated using a different base, the AAR provided an Attachment A that contained historical RCAFs converted to the new (4Q2017) base – similar to what was done in previous rebasings. Because the revised productivity change causes changes to five of the productivity-adjusted versions of the RCAF, we have included a new Attachment A for the convenience of all users.

In its October 3, 1996 decision in Ex Parte No. 290 (Sub-No. 7), Productivity Adjustment - Implementation, the STB noted its intent to publish, in addition to the RCAF (Unadjusted) and RCAF (Adjusted), an RCAF-5 (i.e., a calculation of the productivity adjusted RCAF values as if the agency had always used a 5-year rolling average to calculate the productivity adjustment). In response to a request by STB staff, the AAR includes a calculation of the RCAF-5 in its quarterly RCAF filings. The AAR and its members, however, do not believe the publication of a second productivity-adjusted RCAF is required or permitted by the applicable statute (49 U.S.C. § 10708) and do not endorse its publication.

We have notified Pedro Ramirez, in the STB office handling this proceeding, of our plan to e-file the submission and the non-proprietary work papers in accordance with the ICC's order in Ex Parte No. 290 (Sub-No. 2), Railroad Cost Recovery Procedures, served February 8, 1990. A second copy of the submission and non-proprietary work papers, plus selected highly confidential work papers, will be hand-delivered to a member of Mr. Ramirez's Data Collection and Auditing Team. All work papers are available for STB inspection. Questions should be directed to me or Clyde Crimmel (202 639-2309) of this office.

Sincerely,

A handwritten signature in black ink, appearing to read "John T. Gray", with a stylized flourish extending from the end.

John T. Gray

Attachments

Rail Cost Adjustment Factor — 2017Q4 Base

Attachment A
Page 1 of 6

Yr/Qtr (Col 1)	Preliminary RCAF (Col 2)	Forecast Error Adjustment (Col. 3)	RCAF (Unad- justed) (Col 4)	Productivity-Adjusted RCAF		STB's 2nd Productivity- Adjusted RCAF (Not endorsed by AAR)	
				Productivity Adjustment Factor (Col 5)	RCAF (Adjusted) (Col 6)	PAF-5 (Col 7)	RCAF-5 (Col 8)
2007	Q1	0.869	0.007	0.876	2.1259	0.412	2.2351
	Q2	0.870	-0.036	0.834	2.1348	0.391	2.2456
	Q3	0.885	-0.015	0.870	2.1438	0.406	2.2562
	Q4	0.914	0.015	0.929	2.1528	0.432	2.2668
2008	Q1	0.962	0.014	0.976	2.1618	0.451	2.2763
	Q2	0.986	0.015	1.001	2.1683	0.462	2.2859
	Q3	1.075	-0.008	1.067	2.1748	0.491	2.2955
	Q4	1.074	0.041	1.115	2.1813	0.511	2.3051
2009	Q1	0.937	0.013	0.950	2.1878	0.434	2.3120
	Q2	0.882	-0.092	0.790	2.1944	0.360	2.3189
	Q3	0.927	-0.055	0.872	2.2010	0.396	2.3259
	Q4	0.928	-0.002	0.926	2.2076	0.419	2.3329
2010	Q1	0.971	-0.005	0.966	2.2142	0.436	2.3399
	Q2	0.971	0.015	0.986	2.2208	0.444	2.3469
	Q3	0.991	0.003	0.994	2.2275	0.446	2.3539
	Q4	0.994	0.032	1.026	2.2342	0.459	2.3610
2011	Q1	1.030	-0.014	1.016	2.2409	0.453	2.3681
	Q2	1.075	0.017	1.092	2.2487	0.486	2.3752
	Q3	1.103	0.019	1.122	2.2566	0.497	2.3823
	Q4	1.100	0.025	1.125	2.2645	0.497	2.3894
2012	Q1	1.095	-0.007	1.088	2.2724	0.479	2.3978
	Q2	1.123	-0.020	1.103	2.2769	0.484	2.4062
	Q3	1.095	-0.006	1.089	2.2815	0.477	2.4146
	Q4	1.131	-0.006	1.125	2.2861	0.492	2.4231
2013	Q1	1.124	-0.002	1.122	2.2907	0.490	2.4279
	Q2	1.129	0.004	1.133	2.2957	0.494	2.4328
	Q3	1.113	-0.014	1.099	2.3008	0.478	2.4377
	Q4	1.126	-0.029	1.097	2.3059	0.476	2.4426
2014	Q1	1.108	-0.004	1.104	2.3110	0.478	2.4480
	Q2	1.122	-0.025	1.097	2.3168	0.473	2.4534
	Q3	1.119	-0.011	1.108	2.3226	0.477	2.4588
	Q4	1.109	-0.009	1.100	2.3284	0.472	2.4642
2015	Q1	1.074	-0.010	1.064	2.3342	0.456	2.4704
	Q2	1.025	-0.036	0.989	2.3382	0.423	2.4766
	Q3	1.020	-0.086	0.934	2.3422	0.399	2.4828
	Q4	0.996	-0.025	0.971	2.3462	0.414	2.4890
2016	Q1	0.992	-0.020	0.972	2.3502	0.414	2.4932
	Q2	0.959	-0.014	0.945	2.3584	0.401	2.4974
	Q3	0.994	-0.046	0.948	2.3667	0.401	2.5016
	Q4	0.985	0.005	0.990	2.3750	0.417	2.5059
2017	Q1	1.011	-0.012	0.999	2.3833	0.419	2.5147
	Q2	1.021	-0.004	1.017	2.3797 *	0.427 *	2.5235
	Q3	1.016	0.000	1.016	2.3761 *	0.428 *	2.5323
	Q4	1.010	-0.010	1.000	2.3725 *	0.421 *	2.5412
2018	Q1	1.038	-0.011	1.027	2.3689 *	0.434 *	2.5374 *
	Q2	1.039	0.002	1.041	2.3665	0.440	2.5336

* The Productivity Adjustment Factors for 2017Q2-2018Q1, and the PAF-5 for 2018Q1, were revised after the Surface Transportation Board served a revised productivity change on January 29, 2018. See *Railroad Cost Recovery Procedures - Productivity Adjustment*, Ex Parte 290 (Sub-No. 4), (STB served January 29, 2018). On the same day, the Board directed the AAR to recalculate and submit, in its next quarterly RCAF submission, the 2017 and 2018 RCAF figures affected by the revised productivity. See *Quarterly Rail Cost Adjustment Factor*, Ex Parte 290 (Sub-No. 5), (STB served January 29, 2018).

Rail Cost Adjustment Factor — 2017Q4 Base

Attachment A
Page 2 of 6

Yr/Qtr (Col 1)	Preliminary RCAF (Col 2)	Forecast Error Adjustment (Col. 3)	RCAF (Unad- justed) (Col 4)	Productivity-Adjusted RCAF		STB's 2nd Productivity- Adjusted RCAF (Not endorsed by AAR)		
				Productivity Adjustment Factor (Col 5)	RCAF (Adjusted) (Col 6)	PAF-5 (Col 7)	RCAF-5 (Col 8)	
1996	Q1	0.635	-0.003	0.632	1.3624	0.464	Did not exist.	
	Q2	0.633	-0.003	0.630	1.3820	0.456		
	Q3	0.639	-0.001	0.638	1.4019	0.455		
	Q4	0.644	0.004	0.648	1.4221	0.456		
1997	Q1	0.660	0.001	0.661	1.4426	0.458	1.4733	0.449
	Q2	0.657	0.005	0.662	1.4603	0.453	1.4945	0.443
	Q3	0.660	-0.001	0.659	1.4783	0.446	1.5160	0.435
	Q4	0.655	0.000	0.655	1.4965	0.438	1.5378	0.426
1998	Q1	0.653	-0.001	0.652	1.5149	0.430	1.5567	0.419
	Q2	0.648	0.004	0.652	1.5503	0.421	1.5758	0.414
	Q3	0.656	-0.002	0.654	1.5866	0.412	1.5952	0.410
	Q4	0.655	0.002	0.657	1.6237	0.405	1.6148	0.407
1999	Q1	0.654	-0.002	0.652	1.6617	0.392	1.6526	0.395
	Q2	0.651	0.000	0.651	1.6850	0.386	1.6913	0.385
	Q3	0.659	-0.003	0.656	1.7086	0.384	1.7309	0.379
	Q4	0.658	0.004	0.662	1.7325	0.382	1.7714	0.374
2000	Q1	0.678	0.004	0.682	1.7568	0.388	1.7962	0.380
	Q2	0.682	0.006	0.688	1.7719	0.388	1.8213	0.378
	Q3	0.687	0.002	0.689	1.7871	0.386	1.8468	0.373
	Q4	0.694	0.002	0.696	1.8025	0.386	1.8727	0.372
2001	Q1	0.707	0.003	0.710	1.8180	0.391	1.8888	0.376
	Q2	0.702	0.002	0.704	1.8305	0.385	1.9050	0.370
	Q3	0.707	-0.001	0.706	1.8431	0.383	1.9214	0.367
	Q4	0.704	0.003	0.707	1.8558	0.381	1.9379	0.365
2002	Q1	0.705	-0.001	0.704	1.8686	0.377	1.9513	0.361
	Q2	0.696	-0.002	0.694	1.8878	0.368	1.9648	0.353
	Q3	0.702	-0.007	0.695	1.9072	0.364	1.9784	0.351
	Q4	0.718	0.009	0.727	1.9268	0.377	1.9921	0.365
2003	Q1	0.721	0.003	0.724	1.9466	0.372	2.0126	0.360
	Q2	0.735	0.007	0.742	1.9557	0.379	2.0333	0.365
	Q3	0.731	0.010	0.741	1.9649	0.377	2.0542	0.361
	Q4	0.741	-0.003	0.738	1.9741	0.374	2.0754	0.356
2004	Q1	0.740	0.005	0.745	1.9834	0.376	2.0852	0.357
	Q2	0.745	0.005	0.750	1.9943	0.376	2.0950	0.358
	Q3	0.766	0.011	0.777	2.0053	0.387	2.1048	0.369
	Q4	0.781	0.016	0.797	2.0163	0.395	2.1147	0.377
2005	Q1	0.797	0.007	0.804	2.0274	0.397	2.1263	0.378
	Q2	0.812	0.021	0.833	2.0420	0.408	2.1380	0.390
	Q3	0.820	0.004	0.824	2.0567	0.401	2.1498	0.383
	Q4	0.852	0.009	0.861	2.0715	0.416	2.1616	0.398
2006	Q1	0.847	0.009	0.856	2.0864	0.410	2.1772	0.393
	Q2	0.846	0.009	0.855	2.0962	0.408	2.1929	0.390
	Q3	0.870	-0.004	0.866	2.1061	0.411	2.2087	0.392
	Q4	0.889	0.019	0.908	2.1160	0.429	2.2246	0.408

Beginning 1989Q2, a productivity adjustment was added to the RCAF. What was formerly called the RCAF is now called the "RCAF (Unadjusted)" because it does not have a productivity adjustment. The productivity-adjusted RCAF is called the "RCAF (Adjusted)".

In its October 3, 1996 decision, the Surface Transportation Board added another version of a productivity-adjusted RCAF called the "RCAF-5". This second productivity adjustment factor began being used with the 1997Q1 Rail Cost Adjustment Factor.

Sample Rebasing Calculations

Attachment A
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Preliminary RCAF:

Recommended Method

The All-Inclusive Index (AII) Forecast is divided by the appropriate Basing Factor.

Example calculations (AII and Basing Factors are listed on page 4):

2016Q1 on a 4Q17 basis = $262.5 / 264.5 = 0.9924386 = 0.992$

2016Q1 on a 4Q12 basis = $262.5 / 297.6 = 0.8820565 = 0.882$

2016Q1 on a 4Q97 basis = $262.5 / 173.2 = 1.5155889 = 1.516$

Alternative Method

An alternative method can be used to convert a Preliminary RCAF from one basis to another basis without knowing the All-Inclusive Index. This method will occasionally have small rounding differences, and is not recommended except as a "check" or as an approximation.

New Base Index = (Old Basing Factor / New Basing Factor) x Old Base Index.

Example for converting 2016Q1 on a 4Q12 basis to a 4Q17 basis:

$(297.6 / 264.5) \times 0.882 = 0.9923750 = 0.992$

Forecast Error Adjustment:

Recommended Method

1. Use the All-Inclusive Indexes (AII) for the two quarters prior to the quarter to be adjusted.
2. The All Actual is divided by the appropriate Basing Factor and rounded 3 digits after decimal.
3. The All Forecast is divided by the appropriate Basing Factor and rounded.
4. Take the result from step 2 and subtract the result from step 3.

Example calculation for 2016Q1:

1. Use A-I Index from 2 quarters prior, 2015Q3: 264.4 = Actual, 269.7 = Forecast

2. Actual = $264.4 / 264.5 = 0.9996219 = 1.000$

3. Forecast = $269.7 / 264.5 = 1.0196597 = 1.020$

4. Forecast Error = $1.000 - 1.020 = -0.020$

Alternative Method

This method has occasional rounding differences, and is not recommended except as a check or an approximation. The new base Forecast Error Adjustment equals:

(Old Basing Factor / New Basing Factor) x Old Forecast Error Adjustment.

Example for converting 2015Q3 on a 4Q12 basis, which was used for 2016Q1, to a 4Q17 basis:

Forecast Error 4Q17 basis = $(297.6 / 264.5) \times -0.018 = -0.0202526 = -0.020$

RCAF (Unadjusted)

RCAF (Unadjusted) = Preliminary RCAF + Forecast Error Adjustment.

Example for 2016Q1, on a 4Q17 basis: $0.992 + -0.020 = 0.972$

Productivity Adjustment Factor

Use the Productivity Adjustment Factor as originally calculated for each quarter.

For 2016Q1, the Productivity Adjustment Factor is 2.3502.

RCAF (Adjusted)

RCAF (Adjusted) = RCAF (Unadjusted) / Productivity Adjustment Factor.

Example for 2016Q1, on a 4Q17 basis: $0.972 / 2.3502 = 0.4135818 = 0.414$

PAF-5

Use the STB's alternative productivity adjustment factor, PAF-5, as originally calculated.

For 2016Q1, the Productivity Adjustment Factor is 2.4932.

RCAF-5

RCAF-5 = RCAF (Adjusted) / PAF-5

Example for 2016Q1, on a 4Q17 basis: $0.414 / 2.4932 = 0.1660361 = 0.166$

Indexes & Factors for RCAF

Attachment A
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Yr/Qtr	All-Inclusive Index 1980 = 100		Prod. Adj. Factor	PAF-5	Original Basis		Basing Factor	
	Forecast	Actual			Prelim RCAF	Forecast Error		
1991	Q1	151.2	150.1	1.0755	-	1.144	0.001	132.2
	Q2	149.1	148.8	1.0871	-	1.128	0.015	132.2
	Q3	153.0	152.8	1.0988	-	1.157	-0.009	132.2
	Q4	155.5	156.1	1.1107	-	1.176	-0.002	132.2
1992	Q1	154.5	154.1	1.1227	-	1.169	-0.001	132.2
	Q2	152.9	153.7	1.1348	-	1.157	0.005	132.2
	Q3	153.5	154.1	1.1471	-	1.161	-0.003	132.2
	Q4	156.1	156.5	1.1595	-	1.181	0.006	132.2
1993	Q1	158.1	158.4	1.1720	-	1.008	0.004	156.9
	Q2	157.3	157.5	1.1847	-	1.003	0.002	156.9
	Q3	158.6	158.0	1.1975	-	1.011	0.002	156.9
	Q4	160.7	161.0	1.2104	-	1.024	0.001	156.9
1994	Q1	162.1	162.1	1.2253	-	1.033	-0.004	156.9
	Q2	160.4	160.7	1.2404	-	1.022	0.002	156.9
	Q3	164.1	164.6	1.2557	-	1.046	0.000	156.9
	Q4	163.7	164.4	1.2711	-	1.043	0.002	156.9
1995	Q1	165.5	166.2	1.2867	-	1.055	0.003	156.9
	Q2	167.1	167.6	1.3052	-	1.065	0.005	156.9
	Q3	168.8	168.0	1.3240	-	1.076	0.004	156.9
	Q4	168.9	168.2	1.3431	-	1.076	0.003	156.9
1996	Q1	168.0	167.6	1.3624	-	1.071	-0.005	156.9
	Q2	167.4	168.4	1.3820	-	1.067	-0.004	156.9
	Q3	169.0	169.4	1.4019	-	1.077	-0.003	156.9
	Q4	170.4	171.7	1.4221	-	1.086	0.006	156.9
1997	Q1	174.7	174.4	1.4426	1.4733	1.113	0.003	156.9
	Q2	173.7	173.7	1.4603	1.4945	1.107	0.008	156.9
	Q3	174.6	174.4	1.4783	1.5160	1.113	-0.001	156.9
	Q4	173.2	174.2	1.4965	1.5378	1.104	0.000	156.9
1998	Q1	172.7	172.1	1.5149	1.5567	0.997	-0.001	173.2
	Q2	171.5	171.8	1.5503	1.5758	0.990	0.006	173.2
	Q3	173.4	172.9	1.5866	1.5952	1.001	-0.003	173.2
	Q4	173.3	173.2	1.6237	1.6148	1.001	0.002	173.2
1999	Q1	173.0	172.3	1.6617	1.6526	0.999	-0.003	173.2
	Q2	172.1	173.2	1.6850	1.6913	0.994	-0.001	173.2
	Q3	174.2	175.4	1.7086	1.7309	1.006	-0.004	173.2
	Q4	174.1	175.6	1.7325	1.7714	1.005	0.006	173.2
2000	Q1	179.4	179.8	1.7568	1.7962	1.036	0.007	173.2
	Q2	180.3	180.8	1.7719	1.8213	1.041	0.009	173.2
	Q3	181.6	182.5	1.7871	1.8468	1.048	0.002	173.2
	Q4	183.5	184.1	1.8025	1.8727	1.059	0.003	173.2
2001	Q1	186.9	186.8	1.8180	1.8888	1.079	0.006	173.2
	Q2	185.6	186.4	1.8305	1.9050	1.072	0.004	173.2
	Q3	186.9	186.8	1.8431	1.9214	1.079	0.000	173.2
	Q4	186.1	185.7	1.8558	1.9379	1.074	0.004	173.2
2002	Q1	186.4	184.7	1.8686	1.9513	1.076	0.000	173.2
	Q2	184.2	186.4	1.8878	1.9648	1.064	-0.002	173.2
	Q3	185.6	186.4	1.9072	1.9784	1.072	-0.010	173.2
	Q4	189.9	191.7	1.9268	1.9921	1.096	0.012	173.2
2003	Q1	190.6	193.3	1.9466	2.0126	0.992	0.004	192.1
	Q2	194.3	193.6	1.9557	2.0333	1.011	0.009	192.1
	Q3	193.3	194.6	1.9649	2.0542	1.006	0.014	192.1
	Q4	195.9	197.2	1.9741	2.0754	1.020	-0.003	192.1

Indexes & Factors for RCAF

Attachment A

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Yr/Qtr	All-Inclusive Index 1980 = 100		Prod. Adj. Factor	PAF-5	Original Basis		Basing Factor	
	Forecast	Actual			Prelim RCAF	Forecast Error		
2004	Q1	195.6	198.7	1.9834	2.0852	1.018	0.007	192.1
	Q2	197.1	201.3	1.9943	2.0950	1.026	0.007	192.1
	Q3	202.6	204.5	2.0053	2.1048	1.055	0.016	192.1
	Q4	206.5	212.2	2.0163	2.1147	1.075	0.022	192.1
2005	Q1	210.7	211.9	2.0274	2.1263	1.097	0.010	192.1
	Q2	214.9	217.2	2.0420	2.1380	1.119	0.030	192.1
	Q3	217.0	219.2	2.0567	2.1498	1.130	0.006	192.1
	Q4	225.3	227.8	2.0715	2.1616	1.173	0.012	192.1
2006	Q1	223.9	223.1	2.0864	2.1772	1.166	0.011	192.1
	Q2	223.8	228.7	2.0962	2.1929	1.165	0.013	192.1
	Q3	230.0	232.0	2.1061	2.2087	1.197	-0.005	192.1
	Q4	235.2	225.6	2.1160	2.2246	1.224	0.026	192.1
2007	Q1	229.9	226.0	2.1259	2.2351	1.197	0.011	192.1
	Q2	230.0	234.1	2.1348	2.2456	1.197	-0.050	192.1
	Q3	234.0	237.7	2.1438	2.2562	1.218	-0.021	192.1
	Q4	241.7	245.6	2.1528	2.2668	1.258	0.022	192.1
2008	Q1	254.4	252.3	2.1618	2.2763	1.035	0.015	245.9
	Q2	260.9	271.6	2.1683	2.2859	1.061	0.016	245.9
	Q3	284.3	287.8	2.1748	2.2955	1.156	-0.009	245.9
	Q4	284.1	259.7	2.1813	2.3051	1.155	0.044	245.9
2009	Q1	247.8	233.2	2.1878	2.3120	1.008	0.014	245.9
	Q2	233.4	232.8	2.1944 a	2.3189	0.949	-0.099	245.9
	Q3	245.3	243.8	2.2010 a	2.3259	0.998	-0.060	245.9
	Q4	245.5	249.4	2.2076 a	2.3329	0.998	-0.002	245.9
2010	Q1	256.9	257.6	2.2142 a	2.3399 a	1.045	-0.007	245.9
	Q2	256.8	265.3	2.2208	2.3469	1.044	0.016	245.9
	Q3	262.0	258.3	2.2275	2.3539	1.065	0.003	245.9
	Q4	262.9	267.5	2.2342	2.3610	1.069	0.035	245.9
2011	Q1	272.4	277.4	2.2409	2.3681	1.108	-0.015	245.9
	Q2	284.4	291.0	2.2487	2.3752	1.157	0.019	245.9
	Q3	291.7	289.8	2.2566	2.3823	1.186	0.020	245.9
	Q4	291.0 b	285.7 b	2.2645	2.3894	1.183	0.026	245.9
2012	Q1	289.5 b	288.0 b	2.2724	2.3978	1.177	-0.007	245.9
	Q2	297.0 b	295.5 b	2.2769	2.4062	1.208	-0.021	245.9
	Q3	289.6 b	289.0 b	2.2815	2.4146	1.178	-0.006	245.9
	Q4	299.1 b	300.1 b	2.2861	2.4231	1.216	-0.006	245.9
2013	Q1	297.4 b	293.7 b	2.2907	2.4279	0.999	-0.002	297.6 b
	Q2	298.6 b	290.9 b	2.2957	2.4328	1.003	0.003	297.6 b
	Q3	294.4 b	293.2	2.3008	2.4377	0.989	-0.012	297.6 b
	Q4	297.9 c	291.3	2.3059	2.4426	1.001 b	-0.026	297.6 b
2014	Q1	293.0 d	290.2	2.3110	2.4480	0.985 d	-0.004	297.6
	Q2	296.8	294.4	2.3168	2.4534	0.997	-0.022	297.6
	Q3	296.1	293.4	2.3226	2.4588	0.995	-0.010	297.6
	Q4	293.2	283.9	2.3284	2.4642	0.985	-0.008	297.6

a - restated by STB in Docket No. EP 290 (Sub-No. 4) served January 20, 2012.

b - restated by AAR, as directed by STB, in EP No. EP 290 (Sub-No. 5)(2014-1) submitted December 5, 2013. STB approved in Docket No. EP 290 (Sub-No. 5)(2014-1) served December 20, 2013.

c - restated by AAR, as directed by STB, in EP No. EP 290 (Sub-No. 5)(2014-2) submitted March 18, 2014. This caused a change to number that had been restated in 2014-1 submission. STB approved in decision served March 20, 2014.

d - restated by AAR, as directed by STB, in EP No. EP 290 (Sub-No. 5)(2014-2) submitted March 18, 2014. STB approved in Docket No. EP 290 (Sub-No. 5)(2014-2) served March 20, 2014.

Indexes & Factors for RCAF

Attachment A
Page 6 of 6

		All-Inclusive Index 1980 = 100		Prod. Adj.	Original Basis			
Yr/Qtr		Forecast	Actual	Factor	PAF-5	Prelim RCAF	Forecast Error	Basing Factor
2015	Q1	284.2	261.3	2.3342	2.4704	0.955	-0.009	297.6
	Q2	271.0	264.4	2.3382	2.4766	0.911	-0.031	297.6
	Q3	269.7	264.4	2.3422	2.4828	0.906	-0.077	297.6
	Q4	263.4	259.8	2.3462	2.4890	0.885	-0.023	297.6
2016	Q1	262.5	250.1	2.3502	2.4932	0.882	-0.018	297.6
	Q2	253.7	255.0	2.3584	2.4974	0.852	-0.012	297.6
	Q3	263.0	259.7	2.3667	2.5016	0.884	-0.042	297.6
	Q4	260.6	259.5	2.3750	2.5059	0.876	0.005	297.6
2017	Q1	267.4	267.5	2.3833	2.5147	0.899	-0.011	297.6
	Q2	270.1	267.4	2.3797 e	2.5235	0.908	-0.004	297.6
	Q3	268.7	265.7	2.3761 e	2.5323	0.903	0.000	297.6
	Q4	267.1	267.7	2.3725 e	2.5412	0.898	-0.009	297.6
2018	Q1	274.5		2.3689 e	2.5374 e	1.038	-0.011	264.5
	Q2	274.9		2.3665	2.5336	1.039	0.002	264.5

e - These productivity adjustment factors were revised because the STB revised its productivity change calculation. See Railroad Cost Recovery Procedures - Productivity Adjustment, STB Ex Parte No. 290 (Sub-No. 4) served January 29, 2018. See also Quarterly Rail Cost Adjustment Factor, Ex Parte 290 (Sub-No. 5), served January 29, 2018.

Preliminary RCAF = All-Inclusive Index Forecast / Basing Factor
Forecast Error = (A-II Actual/Basing Factor) - (A-II Forecast/Basing Factor)
 where each is rounded to 3 digits after the decimal
 where A-II for forecast error calculation is from 2 quarters earlier
RCAF Unadjusted = Preliminary RCAF less Forecast Error
RCAF Adjusted = RCAF Unadjusted / Productivity Adjustment Factor
RCAF-5 = RCAF Unadjusted / PAF-5

Note: Each RCAF is rounded to 3 digits after the decimal. Productivity Adjustment Factors are always 4 digits after the decimal.

Basing Factors

10/1/80 = 102.7
 10/1/82 = 120.9
 4Q/87 = 132.2
 4Q/92 = 156.9
 4Q/97 = 173.2
 4Q/02 = 192.1
 4Q/07 = 245.9
 4Q/12r = 297.6
 4Q/17 = 264.5

**Second Quarter 2018
All-Inclusive Index**

Ex Parte No. 290 (Sub-No. 5) (2018-2)

**Quarterly Rail Cost Adjustment Factor
Surface Transportation Board**

**Policy and Economics Department
Association of American Railroads**

March 5, 2018

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Introduction

On January 2, 1985, the Interstate Commerce Commission (ICC) adopted the All-Inclusive Index as the basis for the Rail Cost Adjustment Factor (RCAF). The quarterly projection of railroad costs, as documented herein, employs the All-Inclusive Index as required by the regulations. Also presented in this submission is the RCAF, both Adjusted and Unadjusted, as required by the ICC in its decision in Ex Parte No. 290 (Sub-No. 4), Rail Cost Recovery Procedures - Productivity Adjustment, served March 24, 1989. In addition, the AAR has included the RCAF-5, which was instituted by a Surface Transportation Board decision served October 3, 1996 in Ex Parte No. 290 (Sub-No. 7), *Productivity Adjustment - Implementation*. The AAR and its members do not believe the additional productivity-adjusted index is required or permitted by the applicable statute, and do not endorse its publication.

This quarter's projection of railroad costs is for the second quarter 2018. Several more labor unions have ratified new labor agreements, and those have been added to the Labor Index component.

In a decision served January 29, 2018, the Board adopted a final productivity change for 2015 that differed from the original used with the previous four quarters of RCAF calculations. The revised productivity change (for 2015) and its impact on the productivity adjustment factors are addressed on page 5A herein.

In a second decision served January 29, 2018, the Board directed the AAR to recalculate and submit the productivity-adjusted RCAFs that were affected by the revised productivity change. The revised RCAFs are addressed on page 5B herein and a revised Attachment A.

In a decision served February 8, 2018, the Board decided the productivity change for 2016 and the resulting five-year rolling geometric average annual productivity change. The 2016 productivity change is addressed on page 5, and the resulting productivity adjustment factors are based on the 2015 revised productivity changes updated to the appropriate quarter with the latest quarterly change.

Index Weights

In the Ex Parte No. 290 (Sub-No. 2) final rules, issued in April 1981, the Interstate Commerce Commission mandated that the weights of each major cost component be updated annually. These "external" weights are calculated using data from Schedules 410 and 210 of the R-1 annual report filed with the Surface Transportation Board by the Class I railroads. The weights are typically updated with the fourth quarter projection.

The 2016 (current) and 2015 (previous) weights are shown below. Weights calculated from 2015 data were used for the fourth quarter of 2016 through the third quarter of 2017. Beginning with the fourth quarter of 2017, weights calculated using 2016 data are used.

Traffic and fuel prices were down again in 2016, causing expenses for most categories to decline. The Fuel and Materials & Supplies categories had double-digit percentage decreases in expenses, and this caused them to be the two categories that had decreases in weights. Depreciation and Interest, the two categories with increased expenses in 2016, had increases in their weights. While Labor, Equipment Rents, and Other all had 5 to 6 percent decreases in expenses, their weights increased because of the larger drops for Fuel and Materials & Supplies. Weights for Labor and Other are the highest they have been since 2004, while Fuel's weight is the lowest it has been since 2003. Depreciation's weight, perhaps pushed by recent spending for Positive Train Control, is the highest it has ever been.

Weights for RCAF's All-Inclusive Index		
	2016	2015
Labor	35.6 %	35.0 %
Fuel	10.7	13.4
Materials & Supplies	5.0	5.4
Equipment Rents	5.9	5.8
Depreciation	15.6	13.9
Interest	2.2	1.9
Other	25.0	24.6
Total	100.0	100.0

Reweightings of the index is accomplished by calculating both the current quarter (normally the fourth) and prior (normally the third) quarter indexes with the new weights. The relative change between the two quarters is then multiplied times the prior quarter (usually the third) *linked* index. Use of this method ensures that the weight change, by itself, does not cause a change in the level of the All-Inclusive Index.

Internal weights in the labor and equipment rents components are updated at the same time as the external weights. When these weights are changed, they are also linked using the procedure described above in order to eliminate the effect of the change in weighting.

All-Inclusive Index Second Quarter 2018

The components and values of the current and previous All-Inclusive Indexes are shown below. Details of the construction of each component of the index are contained in the Appendices.

		Forecast		
	2016 Weights	Previous 2018Q1	Current 2018Q2	Percent Change
1. Labor	35.6%	423.8	422.5	-0.3 %
2. Fuel	10.7%	248.4	248.9	0.2
3. M&S	5.0%	251.0	258.0	2.8
4. Equipment Rents	5.9%	226.7	228.9	1.0
5. Depreciation	15.6%	226.8	224.6	-1.0
6. Interest	2.2%	60.5	60.5	0.0
7. Other	25.0%	226.9	229.5	1.1
8. Weighted Average				
a. 1980 = 100		296.8	297.2	
b. 1980 = 100 (linked)		274.5	274.9 ¹	
c. 4Q17 = 100		103.8	103.9 ²	0.1

¹ Index80 = (Current Index / Previous Index) * the Previous Quarter Linked Index
 = (297.2 / 296.8) x 274.5
 = 274.9

² To calculate the 4Q17 = 100 index:
 Index4Q17 = (Current Linked Index / 4Q17 Basing Factor) * 100
 = 274.9 divided by 264.5 times 100
 = 103.9

Indexes based on other periods:

- 4Q12 based index = 274.9 / 297.6 x 100 = 92.4
- 4Q07 based index = 274.9 / 245.9 x 100 = 111.8
- 4Q02 based index = 274.9 / 192.1 x 100 = 143.1
- 4Q97 based index = 274.9 / 173.2 x 100 = 158.7
- 4Q92 based index = 274.9 / 156.9 x 100 = 175.2

Forecast vs. Actual All-Inclusive Index Fourth Quarter 2017

Because of data availability, the forecast error adjustment has a two-quarter lag from each filing. As shown below, the fourth quarter actual index of 101.2 is 0.2 index points above the forecast value of 101.0. Therefore, the forecast error adjustment for second quarter 2018 is 0.2 index points.

	2016 Weights	Fourth Quarter 2017		Amt Difference
		Forecast	Actual	
1. Labor	35.6%	415.1	415.1	
2. Fuel	10.7%	215.5	233.3	
3. M&S	5.0%	254.8	254.8	
4. Equipment Rents ¹	5.9%	223.9	226.6	
5. Depreciation	15.6%	226.3	224.7	
6. Interest	2.2%	60.5	60.5	
7. Other	25.0%	221.4	225.8	
8. Weighted Average				
a. 1980 = 100		288.8	291.7	
b. 1980 = 100 (linked)		267.1	267.7 ²	
c. 4Q17 = 100 ³		101.0	101.2	0.2

Forecast error —————→ **0.2 index points**

Notes: New weights have been utilized. The standard linking procedure has been used to eliminate any changes to indexes that would be caused by updating weights. The Q3 unlinked weighted averages for the All-Inclusive Indexes (forecast and actual) and for Equipment Rents (forecast and actual) were recalculated using the new (2016) weights.

Because of the rebasing required every five years, Item 8c of the forecast will not match the original filing. Items 1 through 8b match because they are not affected by the rebasing.

¹	2016 Weights	Fourth Quarter 2017	
		Forecast	Actual
Car-Hire	58.3%	206.9	207.5
Lease Rentals	41.7%	221.4	225.8
Weighted Average		212.9	215.1
Weighted Average (linked)		223.9	226.6

² Linked actual index = (actual index / previous actual index) x previous linked actual index.

$$267.7 = 291.7 / 289.5 \times 265.7$$

³ The 4Q17 based indexes are 1980 based indexes divided by the 4Q17 basing factor (264.5/100).
 Other basing factors are: 4Q12 = 297.6; 4Q07 = 245.9; 4Q02 = 192.1; 4Q97 = 173.2; and 4Q92 = 156.9.

Productivity

On February 8, 2018, the Surface Transportation Board (STB) served a decision in Ex Parte 290 (Sub-No. 4) which proposed to adopt -0.4 percent as the geometric average productivity change for the five most recent years available. Their five year rolling geometric average calculation added the year 2016 and removed the year 2011. The components of this average annual value are shown on the following table in ratio format – therefore, 0.996 is the same as a decrease of 0.4 percent. Productivity changes are calculated by multiplying each of the five productivity changes together and taking the result to the one-fifth power. The productivity adjustment factors (PAF) for each quarter are calculated by increasing the previous quarter's PAF by quarterly versions of the annual rate, which are the fourth root of the geometric average annual growth rate. The difference between the PAF and the PAF-5 is the timing of the five-year productivity trend. The revised 2018Q1 PAF and PAF-5 are discussed on page 5A.

Comparison of Output, Input, & Productivity			
2012 - 2016			
Year	Output Index (1)	Input Index (2)	Productivity Changes (3)
2012	1.007	0.999	1.008
2013	1.022	1.018	1.003
2014	1.055	1.036	1.018
2015	0.913 _r	0.972	0.939 _r
2016	0.955	0.941	1.015
Average			0.996
Previous Average (2011-2015)			0.994 _r
r - The STB revised the output index for 2015 in a decision served January 29, 2018. See next page.			

Calculation of PAF and PAF-5

For 2012-2016, use fourth root of avg. productivity change = 0.9990

For 2011-2015, use fourth root of avg. productivity change = 0.9985

Quarter	Year	PAF	PAF-5
Q1	2018	2.3689 _r	2.5374 _r
Q2	2018	2.3665	2.5336
Q3	2018	2.3641	2.5298
Q4	2018	2.3617	2.5260
Q1	2019	2.3593	2.5235

Revised Productivity

On January 29, 2018, the Surface Transportation Board (STB) served a decision in Ex Parte 290 (Sub-No. 4) which finalized a revised calculation proposed in a decision served September 29, 2017. The revised calculation resulted in a productivity change for 2015 of 0.939 (a decrease of 6.1 percent), and a five year rolling geometric average of 0.994 for 2011-2015 (a decrease of 0.6 percent per year). The components of this average annual value are shown on the following table in ratio format – therefore, 1.014 is the same as an increase of 1.4 percent. Productivity changes are calculated by multiplying each of the five productivity changes together and taking the result to the one-fifth power. The quarter productivity adjustment factors (PAF) are calculated by increasing the previous quarter's PAF by quarterly versions of the annual rate, which are the fourth root of the geometric average annual growth rate. The difference between the PAF and the PAF-5 is the timing of the five-year productivity trend.

Comparison of Output, Input, & Productivity			
2011 - 2015			
Year	Output Index (1)	Input Index (2)	Productivity Changes (3)
2011	1.041	1.039	1.001
2012	1.007	0.999	1.008
2013	1.022	1.018	1.003
2014	1.055	1.036	1.018
2015	0.913 _r	0.972	0.939 _r
Average			0.994_r
Previous Average (2010-2014)			1.014

r - revised 1/29/2018

Calculation of Revised PAF and PAF-5					
For 2011-2015, use fourth root of avg. productivity change = 0.9985					
For 2010-2014, use fourth root of avg. productivity change = 1.0035					
Qtr	Year	PAF	PAF-5	No Change 2010-2014	
Q1	2017	2.3833	2.5147	Revised 2011-2015	
Q2	2017	2.3797	2.5235		
Q3	2017	2.3761	2.5323		
Q4	2017	2.3725	2.5412		
Q1	2018	2.3689	2.5374		

Also on January 29, 2018, the Surface Transportation Board served a decision in Ex Parte 290 (Sub-No. 5) that ordered the AAR to recalculate and submit the 2017 and 2018 RCAF figures that were affected by the new change in productivity. See next page.

Revised Rail Cost Adjustment Factor Second Quarter 2018

In a decision served January 29, 2018, the Surface Transportation Board (STB) ordered the AAR to recalculate and submit the 2017 and 2018 RCAF figures that were affected by the productivity change for 2015 that was adopted in another decision served that day in Ex Parte 290 (Sub-No. 4). See previous page for revised productivity adjustment factors.

	Original 4Q/2012=100			Revised 4Q/2012=100		
	2017Q2	2017Q3	2017Q4	2017Q2	2017Q3	2017Q4
RCAF (Unadjusted)	0.904	0.903	0.889	no change	no change	no change
Productivity Adj. Factor	2.3952	2.4072	2.4192	2.3797	2.3761	2.3725
RCAF (Adjusted)	0.377	0.375	0.367	0.380	0.380	0.375
PAF-5	2.5235	2.5323	2.5412	no change	no change	no change
RCAF-5	0.358	0.357	0.350	no change	no change	no change

Note: Revised 2017Q2 and 2017Q3 RCAF-A round to the same number. 2017Q2 before rounding is 0.37988, while 2017Q3 is 0.38003.

	Original* 4Q/2017=100				Revised 4Q/2017=100			
	2017Q2	2017Q3	2017Q4	2018Q1	2017Q2	2017Q3	2017Q4	2018Q1
RCAF (Unadjusted)	1.017	1.016	1.000	1.027	no change	no change	no change	no change
Productivity Adj. Factor	2.3952	2.4072	2.4192	2.4313	2.3797	2.3761	2.3725	2.3689
RCAF (Adjusted)	0.425	0.422	0.413	0.422	0.427	0.428	0.421	0.434
PAF-5	2.5235	2.5323	2.5412	2.5539	no change	no change	no change	2.5374
RCAF-5	0.403	0.401	0.394	0.402	no change	no change	no change	0.405

* The RCAF is required to be rebased every five years. Beginning with 2018Q1, the RCAF was rebased to a 4Q/2017=100 basis. "Original" RCAF numbers for 2017Q2-2017Q4 (and earlier quarters) can be found in Attachment A of the AAR's 2018Q1 submission, where original numbers were restated to the new basis for comparison purposes. The 2017Q4 RCAF can also be found on the cover letter of that filing, where it is stated in the new base. For the convenience of RCAF users, we have included a new Attachment A in this filing that also contains the revised numbers.

A summary of the revised RCAF values in their original basis is as follows:

2017Q2 RCAF-A, 4Q/12 basis, revised from 0.377 to 0.380
 2017Q3 RCAF-A, 4Q/12 basis, revised from 0.375 to 0.380
 2017Q4 RCAF-A, 4Q/12 basis, revised from 0.367 to 0.375
 2018Q1 RCAF-A, 4Q/17 basis, revised from 0.422 to 0.434
 2018Q1 RCAF-5, 4Q/17 basis, revised from 0.402 to 0.405

Rail Cost Adjustment Factor

Second Quarter 2018

Four RCAF values are presented in this filing. Two are not modified for productivity (Preliminary RCAF and RCAF Unadjusted), and two incorporate a productivity calculation (RCAF Adjusted and RCAF-5). The All-Inclusive Index and all four RCAF values, plus the percent change for each, are shown below. Note that beginning with the 2018Q1 index, the **All-Inclusive Index was rebased to a 2017Q4=100 basis** as required in the applicable statute.

	Previous 2018Q1	Current 2018Q2	Percent Change
All-Inclusive Index ¹	103.8	103.9	0.1
Preliminary RCAF ²	1.038	1.039	0.1
Forecast Error Adjustment ³	<u>-0.011</u>	<u>0.002</u>	
RCAF (Unadjusted) ⁴	1.027	1.041	1.4
Productivity Adjustment Factor ⁵	<u>2.3689</u>	<u>2.3665</u>	
RCAF (Adjusted) ⁶	0.434 r	0.440	1.4
PAF-5 ⁷	2.5374 r	2.5336	
RCAF-5 ⁸	0.405 r	0.411	1.5

¹ See All-Inclusive Index on page 3.

² All-Inclusive Index divided by the All-Inclusive Index in the base period (100.0).

³ The current figure is from Forecast vs. Actual All-Inclusive Index in this filing (page 4). The previous quarter figure is shown in a similar section of the previous quarter's filing.

⁴ Preliminary RCAF plus the forecast error adjustment.

⁵ See Productivity on page 5.

⁶ RCAF (Unadjusted) divided by the Productivity Adjustment Factor (PAF).

⁷ See Productivity on page 5.

⁸ RCAF (Unadjusted) divided by the PAF-5.

^r revised as directed in *Quarterly Rail Cost Adjustment Factor* - Ex Parte 290 (Sub-No. 5) served January 29, 2018.

Appendixes

Labor

Second Quarter 2018

The second quarter 2018 Labor Index decreased 0.3 percent from the previous quarter. The decrease was caused mostly by lower health & welfare costs.

Wage Rate Index

The Wage Rate Index portion of the Labor Index is up 1.0 percent. More new labor agreements with retroactive wage increases caused much of the increase.

New National Agreements: Shortly after the previous quarter RCAF filing, a second coalition of labor unions announced a tentative national agreement. In January, two of the unions from that group (TCU and BRC) ratified their agreements, and have been added to the Wage Rate. In addition, members of the NCFO (from the first coalition) ratified their agreement, and it has also been added to the Wage Rate. (For union abbreviations, see Appendix H.) Like the agreements ratified in the previous quarter, the new contracts have a wage increase, effective January 2015, that was received at that time, and was mutually negotiated to apply as the first increase in this new five-year agreement. The new agreements also have two retroactive (July 2016 and July 2017) wage increases of 2 percent. The future wage increases (July 2018 and July 2019) are for 2.5 and 3.0 percent, respectively. The newly added unions account for almost 11 percent of straight time hours, so they will not have as big of an impact as those added in the previous quarter.

Wage Increases: There are no national union wage increases scheduled for the second quarter 2018. However, the three newly-ratified national labor agreements have two retroactive general wage increases, and those have been applied to the index effective April 1, 2018. Only one new independent labor agreement, which was similar to the national agreements, was added to the index.¹

Lump Sums: The second quarter lump sum rate is up by 7.7 cents from the previous quarter. Four amounts (one quarterly and three annual) were fully amortized and removed, but they were replaced by bonuses for the new year or quarter.² Although most of the new lump sums were similar to the amounts they replaced, one of the performance bonuses was better this year – and it was the main cause of the increase. A fifth lump sum, a one-time bonus for qualified non-executive employees, was also added – but it increased the lump sum rate by less than 0.3 cents, and was too small to have any impact on the Wage Rate Index or Labor Index.

Back Pay: The second quarter back pay rate increased from 61.5 cents to 79.9 cents because of the retroactive wage increases in the three new national labor agreements, plus one independent agreement. The back pay amounts were the result of a 2 percent wage increase retroactive to July 1, 2016, and a second increase retroactive to July 1, 2017.

¹ The AAR benchmarked independent unions in independent groups in the Q4 rebenchmarking. Since that time, some formerly independent unions for certain railroads have joined the national agreement. Although those unions continue to be benchmarked in an independent group for index calculation purposes, their wage rates are being updated by the national agreement wage increases.

² Index procedure, decided by the Interstate Commerce Commission in 1988, is to amortize lump sums and/or back pay over four quarters using the rates for 13-week (a.k.a. 3-month) U.S. Treasury bills.

Labor

Second Quarter 2018

Other: In wages, "Other" contains the amortization of incentive compensation payments that one railroad (similar to lump sums) makes each year to its dispatchers, yardmasters, and locomotive engineers. This rate is unchanged from the previous quarter.

Supplements Index

The Supplements Index decreased 2.0 percent. The main cause of the decrease was lower rates for health & welfare.

Health & Welfare: On December 13, 2017, after the 2018Q1 RCAF had already been filed on December 5, the AAR received a revised schedule of health & welfare rates. The new rates reflect an unexpected cost savings caused by the ratification of new national labor agreements. The new rates (see pages 4 and 5 of this appendix) are utilized in this 2018Q2 filing. The forecast error adjustment for 2018Q3, which uses "actual" for 2018Q1, will have a Labor component calculated using the correct health & welfare rates. The 2018Q2 Health & Welfare rate is 4.9 percent lower.

Railroad Retirement: The Railroad Retirement rate increased 6.2 cents (or 0.7 percent). The change was caused by higher taxable earnings resulting from new labor agreements that increased wages and caused back pay. Tax rates and maximum taxable earnings were updated at the beginning of 2018, and have not changed in the second quarter. Page 4 of this appendix lists tax rates and maximum taxable earnings for 2016 through 2018.

Unemployment Insurance: The Unemployment Insurance tax rate is unchanged from the previous quarter. Page 4 of this appendix lists tax rates and maximum taxable earnings for 2016 through 2018.

Other: The "Other" category is a reflection of all other fringe benefits, and currently contains known employer contributions to employee 401(k) accounts and employer contributions to employee stock plans that are recorded as fringe benefits. The second quarter rate is 0.9 cents lower.

Labor Index Calculation

As shown in Table A-1 on the next page, a higher Wage Rate Index and a lower Supplements Index combined to cause a 0.3 percent decrease for the Labor Index. The linked second quarter 2018 Labor Index is 422.5, which is 0.3 percent higher than one year ago.

Labor

Second Quarter 2018

Table A-1 Labor Index

	2018Q1	2018Q2	Change	
			Percent	Amount
<u>Base Wage</u> – Straight Time & Pay For Time Not Worked	\$40.852	\$40.997	0.4%	\$0.145
Adjustments:				
Lump Sum	0.313	0.390	24.6%	\$0.077
Back Pay	0.615	0.799	29.9%	\$0.184
Other	0.136	0.136	0.0%	\$0.000
Total Wages	<u>41.916</u>	<u>42.322</u>	1.0%	\$0.406
Health & Welfare Benefits	8.515	8.101	-4.9%	-\$0.414
RR Retirement & Medicare	8.584	8.646	0.7%	\$0.062
Unemployment Insurance	0.364	0.364	0.0%	\$0.000
Other	0.199	0.190	-4.5%	-\$0.009
Total Supplements	<u>\$17.662</u>	<u>\$17.301</u>	-2.0%	-\$0.361
Total Labor (as info only)	\$59.578	\$59.623		
Wage Index¹	358.7	362.2	1.0%	
Supplements Index²	652.7	639.4	-2.0%	
Total labor Index, 2016 Weights ³	444.5	443.1		
Labor Index (linked)⁴	423.8	422.5	-0.3%	

¹ 1980 wage rate \$11.685

² 1980 supplements rate \$2.706

³ 2016 weights: wages, supplements 70.8% 29.2%

⁴ 2018Q2 linked Index = 2018Q1 linked x (2018Q2 / 2018Q1)
= 423.8 x 443.1 / 444.5

Labor
Second Quarter 2018
Supplement Comparisons

Health and Welfare Rates

Plan	Railroad Payment Per Employee Per Month				
	2016	2017	2018	Change	
				'16-'17	'17-'18
Group Health & Welfare	\$1,481.05	\$1,693.72	\$1,584.71	14.4%	-6.4%
Early Retirement Major Medical	134.70	166.75	135.96	23.8%	-18.5%
Group Dental	56.97	65.12	63.67	14.3%	-2.2%
Group Vision	8.41	8.44	8.44	0.4%	0.0%
Supplemental Sickness					
Maintenance of Way	32.87	40.00	51.63	21.7%	29.1%
Shop Crafts	49.11	60.00	75.48	22.2%	25.8%
Signalmen	29.48	37.00	44.34	25.5%	19.8%
Yardmasters	34.22	34.22	34.22	0.0%	0.0%

Railroad Retirement and Medicare

	Earnings Base			Employer Rate		
	2016	2017	2018	2016	2017	2018
Tier I	\$118,500	\$127,200	\$128,700	6.20%	6.20%	6.20%
Tier II	88,200	94,500	95,400	13.10%	13.10%	13.10%
Medicare	no limit	no limit	no limit	1.45%	1.45%	1.45%

Unemployment Insurance

Monthly Taxable Earnings Base			Weighted Avg. Class I Rate		
2016	2017	2018	2016	2017	2018
\$1,455	\$1,545	\$1,560	2.73%	3.37%	3.76%

Labor Second Quarter 2018

NATIONAL RAILWAY LABOR CONFERENCE EMPLOYEE BENEFITS DEPARTMENT

251 – 18th Street, South, Suite 750, Arlington, VA 22202 ~~~ PHONE: (571) 336-7600

David B. Marcus
Director Employee Benefits
(571) 336-7596
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Benefits Administrator
(571) 336-7625
Email: sparks@rmrlc.org

December 13, 2017

Mr. Clyde Crimmel
Director Statistical Information
Policy & Communications Department
AAR-5th Floor
50 F Street N.W.
Washington, D.C. 20009

Dear Mr. Crimmel:

The revised employer Payment Rates which are effective January 1, 2018 are as follows:

Railroad Employees National Health & Welfare Plan & National Railway Carriers/United Transportation Union H&W Plan Non-Hospital Road	\$1,584.71
Railroad Employees National Early Retirement Major Medical Benefit Plan Non-Hospital Road	\$ 135.96
Aetna - National Dental Plan	\$ 63.67
Aetna - Supplemental Sickness Plans	
ShopCrafts	\$ 75.48
Signalmen	\$ 44.34
Maintenance of Way	\$ 51.63
Trustmark - Supplemental Sickness Plans Yardmasters	\$ 34.22
EyeMed - National Vision Plan	\$ 8.44

If you have any questions or need clarification, please contact me.

Very truly yours,



Susan E. Parks

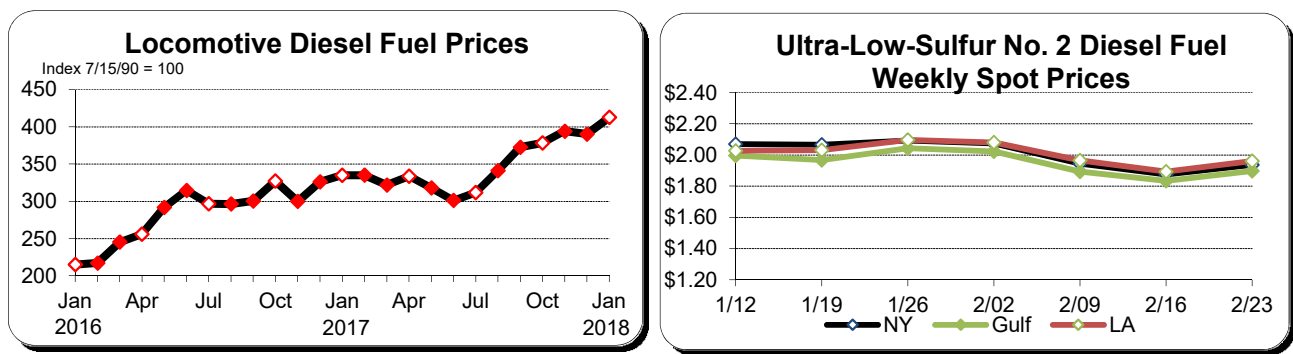
cc: Glen Williams

Fuel

Second Quarter 2018

The forecast for fuel is based on: (1) a survey of railroad fuel purchasing officers concerning current price and volume levels, (2) expectations of railroad purchasing officers based on their own forecast models and discussions with their major suppliers, and (3) a consensus of petroleum industry experts and general business publications. Fuel purchases are assumed to remain in inventory for 30 days before the fuel is consumed (and therefore expensed). Therefore, prices *paid* in the first month of each quarter are for fuel *expensed* in the second (or middle) month of the quarter, and the middle month expensed is used to represent each quarter.

The average locomotive diesel fuel price for January 2016 was the lowest in over 10 years. Since that time, prices have trended upward. While average prices for locomotive diesel fuel are available only through January 2018, data through four weeks of February are available for related fuel types. According to the Energy Information Administration, weekly spot prices for Ultra-Low-Sulfur Diesel Fuel* for the week ended February 23 are 3 to 6 percent lower than they were in mid-January. Heating oil prices are also down.* The chart below (on left) shows the AAR's Monthly Locomotive Diesel Fuel Price Index from January 2016 through January 2018. The second chart (on right) shows recent spot prices for Ultra-Low-Sulfur No. 2 Diesel Fuel as reported by the Energy Information Administration.



Increases in U.S. crude oil production has held down prices in 2018.** Recent daily spot prices for Ultra-Low-Sulfur No. 2 diesel fuel are 1 to 4 percent lower than their January average, depending on the region. Railroads expect lower prices for locomotive diesel fuel. Prices for Q2 (April 2018) are expected to be 2.2 percent lower than the average price railroads actually paid in January. Because the Q1 (January) forecast was too low, the Q2 forecast is 0.2 percent higher than the previous (Q1) forecast.

Forecast Fuel Index (1980 = 100)	248.9
Change from previous quarter forecast	0.2%
Change from previous quarter actual	-2.2%

* Heating oil, Ultra-Low-Sulfur No. 2 Diesel Fuel, and locomotive diesel fuel are part of a group of closely related products, commonly labeled as distillates, that differ mostly by their sulfur content. Because of these similarities, these fuels are produced together and have similar pricing trends.

** Diesel fuel used by locomotives is made from refined crude oil, and therefore usually has some price correlation.

Materials & Supplies

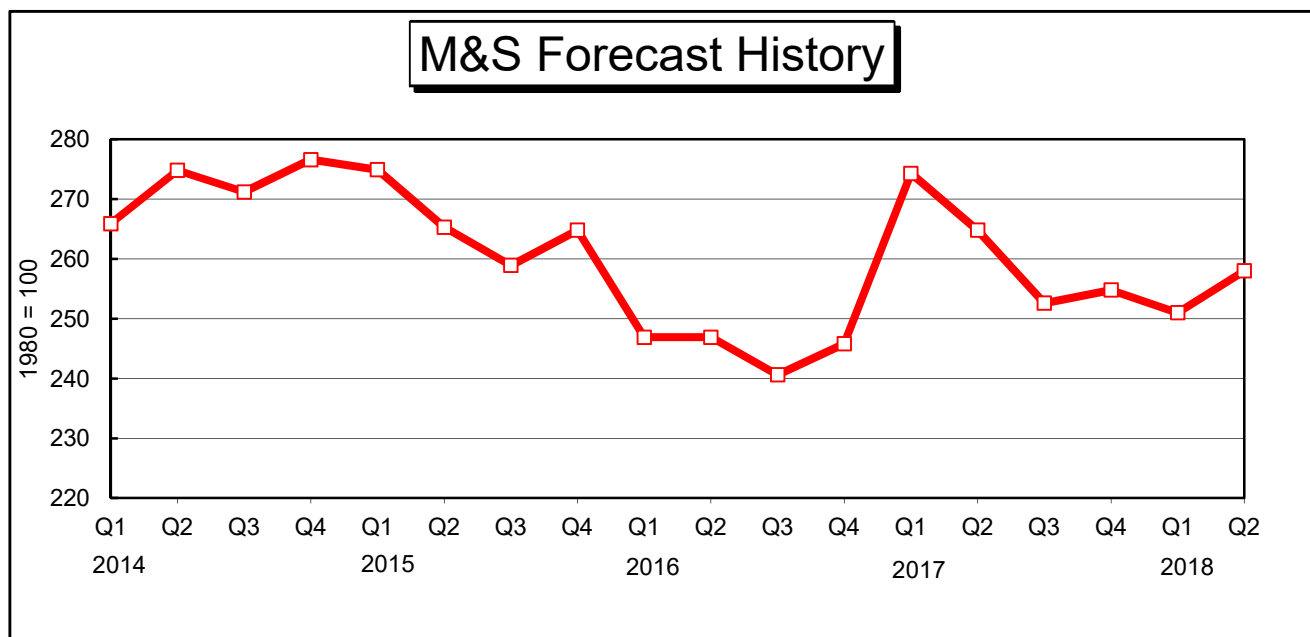
Second Quarter 2018

The second quarter 2018 Materials & Supplies Index is up 2.8 percent from the previous quarter. Moving in the opposite directions compared to the first quarter, the Forest Products and Miscellaneous Products indices were up, while the Metal Products Index was down. The index for Forest Products rose 6.2 percent, while the Miscellaneous Products Index was up 5.5 percent. While those two components were higher, much of their growth was offset by a 1.4 percent decrease for Metal Products, which has the highest weight. Despite the increase, the Material & Supplies Index remains lower than its values for all of 2014 and 2015 except 2015's third quarter.

2018Q2 Materials & Supplies Index = 258.0

2018Q1 Materials & Supplies Index = 251.0

Difference	7.0 basis points
	or
	2.8 %



Equipment Rents

Second Quarter 2018

The Equipment Rents Index consists of two components – car hire and lease rentals. The methodology used to create these two components and the final Equipment Rents Index are explained below.

Car Hire

The car hire component is indexed using data from the Car Hire Accounting Rate Master (CHARM) file. Car hire rates for the forecast quarter are estimated based on data for active freight cars using the most recent data available. For the first quarter, December 1 of the previous year is typically used. For the second, third and fourth quarters; March 1, June 1, and September 1 are usually used, respectively. Using data retrieved from the latest CHARM file, an average rate per car is developed. Next, those average rates are grouped into four car type categories to create an overall summary of car hire rates. The summary rates are then compared from quarter to quarter, and weighted, to determine the Car Hire Index.

Lease Rentals

The lease rentals portion of the Equipment Rents Index uses the Producer Price Index for Industrial Commodities less Fuel and Related Products and Power (PPI-LF). The Commission adopted this surrogate in its decision served March 13, 1987. The AAR uses six years of historical data to derive its forecast for the PPI-LF. The forecast is used not only for lease rentals, but also for the "Other" component of the All-Inclusive Index. Appendix G discusses the forecast in more detail.

Equipment Rents Index Calculation

The table below shows the results of the Equipment Rents Index calculation. The second quarter Car Hire portion of the Index rose 0.8 percent because of higher rates for privately-owned cars. A 1.1 percent increase for the projected PPI-LF (See Appendix G) used as a proxy for Lease Rentals, combined with the 0.8 percent increase for Car Hire, caused the Equipment Rents Index to increase 1.0 percent.

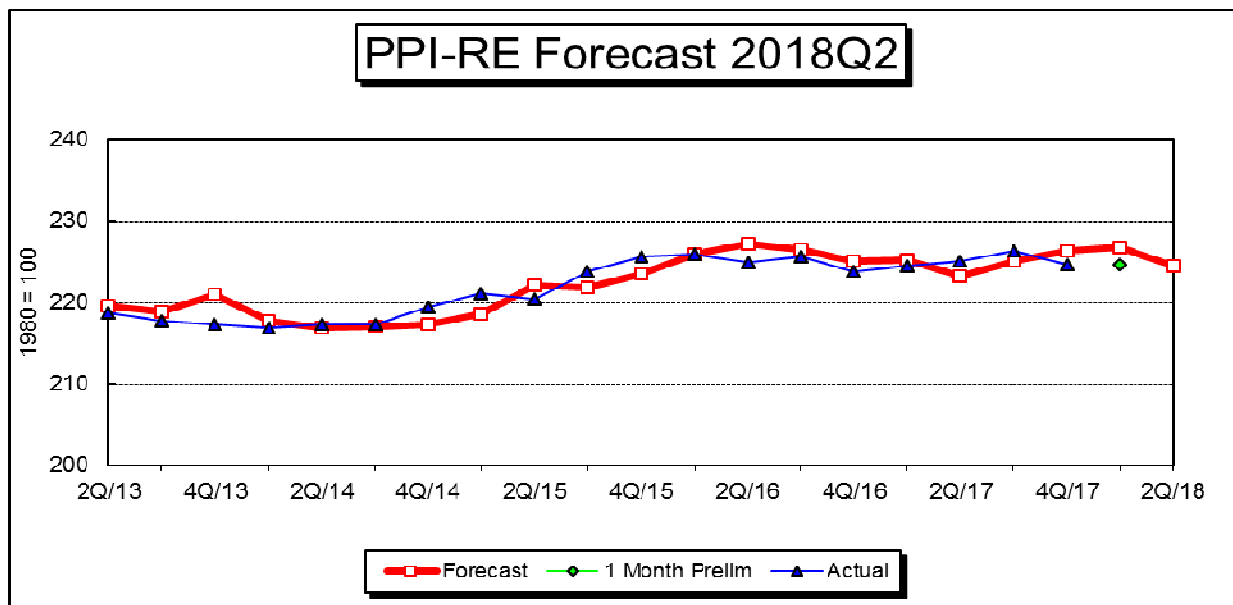
	2016			Percent
	Weight	2018Q1	2018Q2	Change
Car Hire	58.3%	207.5	209.2	0.8 %
Lease Rentals	41.7%	226.9	229.5	1.1
Weighted Average		215.6	217.7	1.0
Weighted Average (Linked)		226.7	228.9	1.0

Depreciation

Second Quarter 2018

The Producer Price Index for Railroad Equipment (PPI-RE) is used to index depreciation expense. The PPI-RE is forecast using an ARIMA (Auto-Regressive Integrated Moving Average) process where a statistical package picks the model that best fits the historical data set (see next page), and that model is then used for the forecast. The historical data set contains 6 years of monthly data (a sample size of 72), where the most recent available data point is the first month of the quarter prior to the forecast quarter. For a first quarter forecast, the most recent month of data available would be for October of the prior year. For a second quarter forecast, January would normally be the most recent period available. April and July would be the most recent months available for third and fourth quarter forecasts, respectively. The output from the forecast model is shown on page 2 of this appendix on a 1982=100 basis. The figure forecast by the model is a 1.0 percent decrease from the previous quarter's forecast, and reflects monthly values where recent months are all lower than the August peak.

Forecast of Depreciation Index (1982=100)	203.0
Forecast of Depreciation Index (1980=100)	224.6
Change from previous quarter forecast	-1.0%
Change from actual first month of previous quarter	0.0%
Change from same quarter of prior year (actual)	-0.2%



Depreciation

Second Quarter 2018

PPI RAILROAD EQUIPMENT

Using rule-based logic, the program narrowed down the choice to exponential smoothing or Box-Jenkins. The program performed an out-of-sample test to select between these two approaches. The rolling out-of-sample test used a maximum horizon of 12 and generated 78 forecasts for each method. The cumulative MAD for Exponential smoothing was 0.83, and for Box-Jenkins was 0.87.

Based on the lower Mean Absolute Deviation, Exponential Smoothing was selected.

Forecast Model for PPIRE

Exponential smoothing: No trend, Additive seasonality
NA(0.785, 0.330)

Component	Smoothing Wgt		Final Value
Level	0.78540		203.0
Seasonal	0.32970		
Seasonal Indexes			
Jan - Mar	0.05934	0.25570	-0.17110
Apr - Jun	-0.15810	0.11930	0.10620
Jul - Sep	-0.00890	0.01814	-0.32380
Oct - Dec	0.38340	-0.22310	-0.05698

Within-Sample Statistics

Sample size	72	No. parameters	2
Mean	199.18	Std. deviation	4.41
R-square	0.95	Adj. R-square	0.95
Durbin-Watson	2.03	Ljung-Box(18)	28.90 P=0.95
Forecast error	0.98	BIC	1.03
MAPE	0.36	SMAPE	0.36
RMSE	0.97	MAD	0.71
MAD/Mean Ratio	0.00		

Actual Values for the Most Recent 6 Periods:

Date	Actual
2017-Aug	204.5
2017-Sep	203.8
2017-Oct	203.9
2017-Nov	202.8
2017-Dec	202.7
2018-Jan	203.1

Forecasted Values

Date	2.5 Lower	Forecast	97.5 Upper
2018-Feb	201.246	203.261	205.276
2018-Mar	200.272	202.834	205.396
2018-Apr	199.836	202.847	205.859
2018-May	199.723	203.125	206.527
2018-Jun	199.359	203.112	206.864
QTR AVG	199.639	203.028	206.417

Interest

Second Quarter 2018

The Interstate Commerce Commission, in its decision served February 28, 1989, revised the All-Inclusive Index methodology to include a specific interest component, which is to track changes in the average interest rate from year to year. The interest rate is essentially the embedded cost of debt, i.e., total interest expense divided by average total long term debt.

The interest rate is calculated for the most recent year and used until the next year's figures are finalized. The source data are from a summary of the annual reports (Form R-1) submitted by each of the Class I railroads. Although the data set is received at the end of March, it is not used until the September filing. This enables data to be entered into a database and reviewed – and any revisions made, if necessary, before the data are used in the Index. The current Interest Index is based on 2016 data, and was updated in the Q4 filing submitted on September 5, 2017. The Interest Index based on 2016 is at an all-time low. Although the index is based on embedded rates instead of entirely on current market conditions, it is no coincidence that rates for U.S. 20-year bonds were also at their lowest over the last 25 years.

The R-1 source for interest expense is Schedule 210, column b. The lines currently used are listed below. The source for average total debt is Schedule 200. The sums of data from columns b and c (ending and beginning balances) are combined and divided by 2 to compute an average balance. Line numbers listed below will have some differences from previous years because the Surface Transportation Board changed some of the line numbers and account definitions.

Interest Expense (Schedule 210)

Line	
42	Total Fixed Charges
44	Contingent Interest
less	
22	Release of Premium on Funded Debt

Average Total Debt (Schedule 200)

Line	
29	Current Liabilities, Loans and Notes Payable
38	Equipment Obligations and Other Long Term Debt Due Within One Year
40	Non-Current Liabilities: Funded Debt Unmatured
41	Non-Current Liabilities: Equipment Obligations
42	Non-Current Liabilities: Capitalized Lease Obligations
43	Non-Current Liabilities: Debt in Default
44	Non-Current Liabilities: Accounts Payable: Affiliated Companies
45	Non-Current Liabilities: Unamortized Debt Premium

2016	Interest Rate	4.75%
1980	Interest Rate	7.85%
2018Q2	Interest Index	60.5
2018Q1	Interest Index	60.5
	Percent Change	0.0%

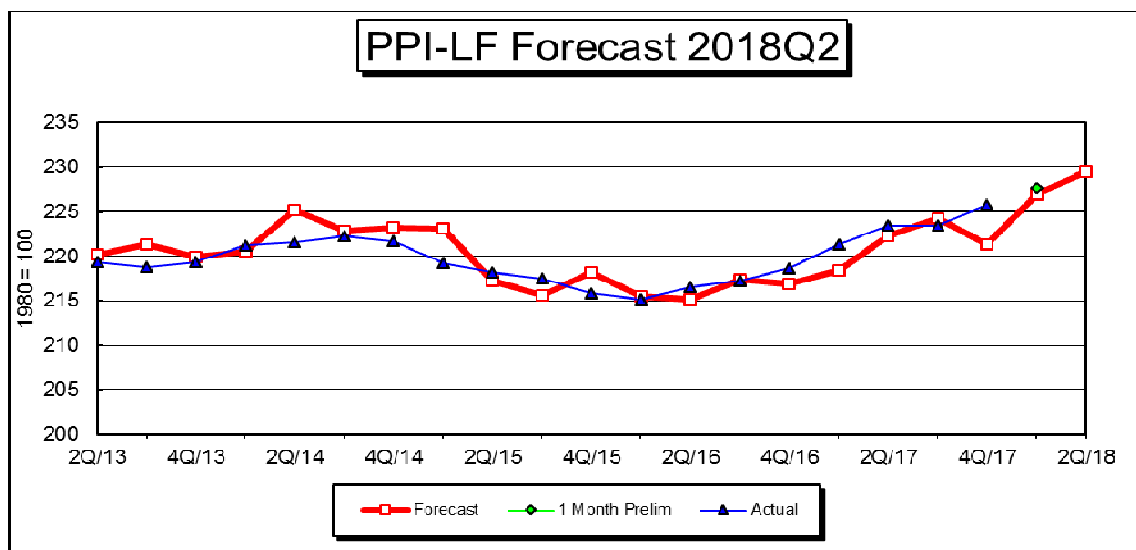
Other Expenses

Second Quarter 2018

The Producer Price Index for Industrial Commodities less Fuels and Related Products and Power (PPI-LF) is used to index purchased services, casualties and insurance, loss and damage, taxes (other than income and payroll), general and administrative expenses, and lease rentals. These expenses, when grouped together, are usually called "Other" expenses.

Like the PPI-RE, the PPI-LF is forecast using an ARIMA process on 6 years of monthly data (a sample size of 72) with the most recent available monthly data being the first month of the quarter prior to the forecast quarter. For a first quarter forecast, the most recent month of data available would be for October of the prior year. For a second quarter forecast, January would normally be the most recent month available. April and July would be the most recent months available for third and fourth quarter forecasts respectively. The output from the forecast model is shown on page 2 of this appendix for 1982=100. Monthly PPI-LF figures have been increasing at an accelerating rate, and this is reflected in the forecast.

Forecast of Other Expense Index (1982=100)	204.7
Forecast of Other Expense Index (1980=100)	229.5
Change from previous quarter forecast	1.1%
Change from actual first month of previous quarter	0.8%
Change from same quarter of prior year (actual)	2.7%



Other Expenses

Second Quarter 2018

PPI INDUSTRIAL COMMODITIES LESS FUELS AND RELATED PRODUCTS AND POWER

Using rule-based logic, the program narrowed down the choice to exponential smoothing or Box-Jenkins. An out-of-sample test was used to select between these two approaches.

A rolling out-of-sample test used a maximum horizon of 12 and generated 78 forecasts for each method.

Cumulative MAD: Exponential smoothing = 2.26; Box-Jenkins = 1.27.

Based on the lower Mean Absolute Deviation, Box-Jenkins was selected.

Forecast Model for PPILF

Box-Jenkins

ARIMA(1, 1, 0)

Model Details

Term	Coefficient	Std. Error	t-Statistic	Significance
a[1]	0.6527	0.09054	7.209	1

Within-Sample Statistics

Sample size	72	No. parameters	1
Mean	195.92	Std. deviation	2.51
R-square	0.97	Adj. R-square	0.97
Durbin-Watson	1.94	Ljung-Box(18)	18.7 P=0.59
Forecast error	0.44	BIC	0.45
MAPE	0.17	SMAPE	0.17
RMSE	0.43	MAD	0.34
MAD/Mean Ratio	0		

Actual Values for the Most Recent 6 Periods:

Date	Actual
2017-Aug	199.7
2017-Sep	200.0
2017-Oct	200.9
2017-Nov	201.4
2017-Dec	201.9
2018-Jan	203.0

Forecasted Values

Date	2.5 Lower	Forecast	97.5 Upper
2018-Feb	202.860	203.718	204.576
2018-Mar	202.530	204.187	205.844
2018-Apr	202.058	204.493	206.927
2018-May	201.528	204.692	207.857
2018-Jun	200.981	204.823	208.664
QTR AVG	201.522	204.669	207.816

Railroad and Union Abbreviations

Second Quarter 2018

Railroads

BLE	Bessemer & Lake Erie Railroad (Part of CN's Grand Trunk Corp.)
BNSF	BNSF Railway Company
CC	Chicago, Central & Pacific (Part of CN's Grand Trunk Corp. Sometimes noted as CC&P.)
CN	Canadian National Railway (Commonly known as CN, owns Grand Trunk Corporation.)
CNGT	AAR's abbreviation for Grand Trunk Corporation (Almost all of CN's U.S. operations.)
CP	Canadian Pacific (Also noted as CPR. Owns the U.S. Class I railroad Soo Line.)
CPSL	AAR's abbreviation for Soo Line Corporation (CP's U.S. operations including SOO, D&H, and DME.)
CSX	CSX Transportation
D&H	Delaware & Hudson (Part of Canadian Pacific's U.S. operations, included beginning 2011Q4.)
DME	Dakota, Minnesota & Eastern (Part of Canadian Pacific's U.S. operations, included beginning 2011Q4.)
GTW	Grand Trunk Western Railroad (Part of CN's Grand Trunk Corp.)
IC	Illinois Central Railroad (Part of CN's Grand Trunk Corp.)
KCS	Kansas City Southern Railway
NS	Norfolk Southern Combined Railroad Subsidiaries (a.k.a. Norfolk Southern Railway or NS Rail)
SOO	Soo Line Railroad (The largest part of Canadian Pacific's U.S. operations.)
UP	Union Pacific Railroad
WC	Wisconsin Central and subsidiaries (Part of CN's Grand Trunk Corp.)

Note: A portion of the DM&E was sold during 2014.

Note: The sale of the southern portion of the D&H received regulatory approval on May 15, 2015.

Major Unions Involved with Railroads

ATDA	American Train Dispatchers Association
BLET	Brotherhood of Locomotive Engineers and Trainmen Div. of the International Brotherhood of Teamsters
BMWED	Brotherhood of Maintenance of Way Employees Division of the International Brotherhood of Teamsters
BRS	Brotherhood of Railroad Signalmen
IAM	International Association of Machinists and Aerospace Workers
IBBM	International Brotherhood of Boilermakers, Iron Ship Builders, Blacksmiths, Forgers & Helpers
IBEW	International Brotherhood of Electrical Workers
NCFO	National Conference of Firemen and Oilers
SMART-TD	International Association of Sheet Metal, Air, Rail, and Transportation Workers - Transportation Division*
SMW	Sheet Metal Workers' International Association
TCU	Transportation Communication International Union
TCU-Carmen	Brotherhood of Railway Carmen Division of the Transportation Communications International Union

Predecessor Unions (Some AAR databases use these old abbreviations.)

BLE	Brotherhood of Locomotive Engineers (predecessor to BLET)
BMWE	Brotherhood of Maintenance of Way Employees (predecessor to BMWED)
BRC	Brotherhood of Railway Carmen (predecessor to TCU-Carmen)
IBFO	International Brotherhood of Firemen and Oilers (predecessor to NCFO)
UTU	United Transportation Union (merged into SMART)
UTU-YMD	United Transportation Union Yardmaster Department (see SMART-TD)

* Represents employees formerly represented by the UTU (conductors and brakemen) and also has a separate yardmasters department.

AAR Workpapers Sent to STB for 2018 Q2 RCAF

March 5, 2018

1. Index Calculation Spreadsheet (index_calc.xlsx, 2 pages)
2. Special calculation with revised PAF, RCAF-A, and RCAF-5 caused by productivity change. (4 pages)
3. Summary of ST and PFTNW Hourly Rates (Summary.xlsx)
4. RCAF Taxable Wages adjustment calculation (TaxableRate.xlsx)
5. National Contracts spreadsheet, 2 sections (2 and 5 pages)
6. Wall Street Journal - 13 week Treasury Bill Rate from recent auction (a.k.a. 3-Mo. T-Bill)
7. 2018/Q2 RCAF Lump Sum Amortization summary, public version (1 page)
8. 2018/Q2 RCAF Back Pay Amortization summary, public version (1 page)
9. Back Pay calculation for National NCFO (portion for RR benchmarked as national)
10. Back Pay calculation for National TCU (portion for RR benchmarked as national)
11. Back Pay calculation for National BRC/TCU-Carmen (portion for RR benchmarked as national)
 Note: calculations for other unions not included herein because of individual RR data
12. Health & Welfare worksheet (1 page)
13. Railroad Retirement spreadsheet (5 pages)
14. Unemployment Insurance Tax worksheet (1 page)
15. 2-page SAS run for 2018 Q2 Unemployment Insurance Tax
16. 2 pages from EIA including spot prices for various distillates
17. Summary of Materials & Supplies - "U.S. Summary by Composition Category" (1 page)
18. RCAF Car Hire Forecast Spreadsheet for Equipment Rents (2 pages) plus source data page
19. 5 pages of PPI-RE for Depreciation including graph page, input/output, and BLS source data
20. 5 pages of PPI-LF for Other (and Lease Rentals) incl. graph page, input/output, BLS source data
21. Forecast Error calc. and workpapers (10 pages: calc, index actual, fuel, 3 car hire, 2 deprec, 2 other)
22. New National Labor Agreement pages (GWI, ECS, signatures, participants) 16 pages

All Inclusive Index and RCAF using 2016 Benchmarks and Weights

	16 Wts.	3Q/17	16 Wts. 3Q/17	% Chg	4Q/17	% Chg	1Q/18	% Chg	2Q/18	% Chg	3Q/18	% Chg
Labor	0.356	422.80	422.8	0.0%	415.1	-1.8%	423.8	2.1%	422.5	-0.3%	0.0	-100.0%
Fuel	0.107	202.30	202.3	0.0%	215.5	6.5%	248.4	15.3%	248.9	0.2%	--	
M&S	0.050	252.60	252.6	0.0%	254.8	0.9%	251.0	-1.5%	258.0	2.8%	--	
Equip. Rents	0.059	223.80	223.8	0.0%	223.9	0.0%	226.7	1.3%	228.9	1.0%	0.0	-100.0%
Depreciation	0.156	225.10	225.1	0.0%	226.3	0.5%	226.8	0.2%	224.6	-1.0%	--	
Interest	0.022	60.60	60.6	0.0%	60.5	-0.2%	60.5	0.0%	60.5	0.0%	60.5	0.0%
Other	0.250	224.30	224.3	0.0%	221.4	-1.3%	226.9	2.5%	229.5	1.1%	--	
Weighted Avg.	1.000	289.30	290.5	0.4%	288.8	-0.6%	296.8	2.8%	297.2	0.1%	1.3	-99.6%
Linked		268.70			267.1	-0.6%	274.5	2.8%	274.9	0.1%	1.2	-99.6%
Basing Factor												
10/1/80 basis	102.7	261.6			260.1	-0.6%	267.3	2.8%	267.7	0.1%	1.2	-99.6%
10/1/82	120.9	222.2			220.9	-0.6%	227.0	2.8%	227.4	0.2%	1.0	-99.6%
4Q/87	132.2	203.3			202.0	-0.6%	207.6	2.8%	207.9	0.1%	0.9	-99.6%
4Q/92	156.9	171.3			170.2	-0.6%	175.0	2.8%	175.2	0.1%	0.8	-99.5%
4Q/97	173.2	155.1			154.2	-0.6%	158.5	2.8%	158.7	0.1%	0.7	-99.6%
4Q/02	192.1	139.9			139.0	-0.6%	142.9	2.8%	143.1	0.1%	0.6	-99.6%
4Q/07	245.9	109.3			108.6	-0.6%	111.6	2.8%	111.8	0.2%	0.5	-99.6%
4Q/12	297.6	90.3			89.8	-0.6%	92.2	2.7%	92.4	0.2%	0.4	-99.6%
4Q/17 basis	264.5	101.6			101.0	-0.6%	103.8	2.8%	103.9	0.1%	0.5	-99.5%
Car Hire	0.583	204.50	204.5	0.0%	206.9	1.2%	207.5	0.3%	209.2	0.8%	--	
Lease Rents	0.417	224.30	224.3	0.0%	221.4	-1.3%	226.9	2.5%	229.5	1.1%	0.0	--
Weighted Avg Eq Rents		212.80	212.8	0.0%	212.9	0.0%	215.6	1.3%	217.7	1.0%	0.0	--
Linked Equipment Rents		223.80			223.9	0.0%	226.7	1.3%	228.9	1.0%	0.0	-100.0%
Preliminary RCAF		1.016			1.010	-0.59%	1.038	2.8%	1.039	0.1%	0.005	-99.5%
Forecast Error Adj.		0.000			(0.010)		(0.011)		0.002			
RCAF Unadjusted		1.016			1.000	-1.57%	1.027	2.7%	1.041	1.4%	0.005	-99.5%
PAF		2.3761			2.3725	-0.15%	2.3689	-0.15%	2.3665	-0.10%	--	
RCAF Adjusted		0.428			0.421	-1.64%	0.434	3.1%	0.440	1.4%	#DIV/0!	--
PAF-5		2.5323			2.5412	0.35%	2.5374	-0.15%	2.5336	-0.15%	--	
RCAF-5		0.401			0.394	-1.75%	0.405	2.8%	0.411	1.5%	#DIV/0!	--

On 1/29/2018, the STB ordered AAR to recalculate and refile the RCAF based on a revised productivity number. The PAF originally for 2017Q3 was 2.4072 and for 2017Q4 it was 2.4192. For 2018Q1, the original PAF was 2.4313 and the

RCAF All-Inclusive Index's Labor Index Based on 2016 Benchmarks

	16 Wts.	3Q/17	3Q/17 Rebench As Info Only	% Chg	4Q/17	% Chg	1Q/18	% Chg	2Q/18	% Chg	3Q/18	% Chg
Straight Time		\$33.734	\$33.547	-0.6%	\$33.547	-0.6%	\$34.205	2.0%	\$34.331	0.4%		--
PFTNW		\$6.987	\$6.511	-6.8%	\$6.511	-6.8%	\$6.647	2.1%	\$6.666	0.3%		--
Total		\$40.721	\$40.058	-1.6%	\$40.058	-1.6%	\$40.852	2.0%	\$40.997	0.4%	\$0.000	--
Adjustments												
Lump Sum		\$0.284	\$0.311		\$0.312		\$0.313		\$0.390			
Back Pay		\$0.010	\$0.011		\$0.011		\$0.615		\$0.799			
Other		\$0.124	\$0.135		\$0.136		\$0.136		\$0.136			
Total Wages		\$41.139	\$40.515	-1.5%	\$40.517	-1.5%	\$41.916	3.5%	\$42.322	1.0%	\$0.000	--
Pre-Tax Reduction		(\$1.364)	(\$1.361)		(\$1.361)		(\$1.361)		(\$1.361)			
Taxable Wages		\$39.775	\$39.154		\$39.156		\$40.555		\$40.961		\$0.000	
H & W		\$8.851	\$8.793	-0.7%	\$8.793	-0.7%	\$8.515	-3.2%	\$8.101	-4.9%		--
RR Ret & Medicare		\$8.554	\$8.344	-2.5%	\$8.345	-2.4%	\$8.584	2.9%	\$8.646	0.7%		--
Unemp. Insurance		\$0.321	\$0.323	0.6%	\$0.323	0.6%	\$0.364	12.7%	\$0.364	0.0%		--
Other		\$0.275	\$0.301	9.5%	\$0.136	-50.5%	\$0.199	46.3%	\$0.190	-4.5%		--
Total		\$18.001	\$17.761	-1.3%	\$17.597	-2.2%	\$17.662	0.4%	\$17.301	-2.0%	\$0.000	--
Adjustments												
Total Supplements		\$18.001	\$17.761	-1.3%	\$17.597	-2.2%	\$17.662	0.4%	\$17.301	-2.0%	\$0.000	--
Total Labor		\$59.140	\$58.276	-1.5%	\$58.114	-1.7%	\$59.578	2.5%	\$59.623	0.1%	\$0.000	--
Wage Rate Index	0.7080	352.1	346.7	-1.5%	346.7	-1.5%	358.7	3.5%	362.2	1.0%	0.0	--
Supplements Index	0.2920	665.2	656.4	-1.3%	650.3	-2.2%	652.7	0.4%	639.4	-2.0%	0.0	--
Total Labor Index '15 Wts.		441.3										
Total Labor Index '16 Wts.		443.5	437.1	-1.4%	435.4	-1.8%	444.5	2.1%	443.1	-0.3%	0.0	--
Labor Index (Linked)		422.8			415.1	-1.8%	423.8	2.1%	422.5	-0.3%	0.0	-100.0%

4Q/12 Basis All Inclusive Index and RCAF using 2015 Benchmarks and Weights

Blue Shaded sections not affected by Revised Productivity Change												
15 Wts.												
	15 Wts.	3Q/16	3Q/16	% Chg	4Q/16	% Chg	1Q/17	% Chg	2Q/17	% Chg	3Q/17	% Chg
Labor	0.350	415.20	415.2	0.0%	405.1	-2.4%	421.2	4.0%	421.4	0.0%	422.8	0.3%
Fuel	0.134	195.60	195.6	0.0%	200.1	2.3%	197.2	-1.4%	218.2	10.6%	202.3	-7.3%
M&S	0.054	240.60	240.6	0.0%	245.8	2.2%	274.3	11.6%	264.8	-3.5%	252.6	-4.6%
Equip. Rents	0.058	216.80	216.8	0.0%	223.4	3.0%	224.3	0.4%	222.6	-0.8%	223.8	0.5%
Depreciation	0.139	226.50	226.5	0.0%	225.1	-0.6%	225.3	0.1%	223.2	-0.9%	225.1	0.9%
Interest	0.019	57.50	57.5	0.0%	60.6	5.4%	60.6	0.0%	60.6	0.0%	60.6	0.0%
Other	0.246	217.40	217.4	0.0%	216.9	-0.2%	218.4	0.7%	222.3	1.8%	224.3	0.9%
Weighted Avg.	1.000	275.50	283.2	2.8%	280.6	-0.9%	287.9	2.6%	290.8	1.0%	289.3	-0.5%
Linked		263.00			260.6	-0.9%	267.4	2.6%	270.1	1.0%	268.7	-0.5%
	Basing Factor											
10/1/80 basis	102.7	256.1			253.7	-0.9%	260.4	2.6%	263.0	1.0%	261.6	-0.5%
10/1/82	120.9	217.5			215.6	-0.9%	221.2	2.6%	223.4	1.0%	222.2	-0.5%
4Q/87	132.2	198.9			197.1	-0.9%	202.3	2.6%	204.3	1.0%	203.3	-0.5%
4Q/92	156.9	167.6			166.1	-0.9%	170.4	2.6%	172.1	1.0%	171.3	-0.5%
4Q/97	173.2	151.8			150.5	-0.9%	154.4	2.6%	155.9	1.0%	155.1	-0.5%
4Q/02	192.1	136.9			135.7	-0.9%	139.2	2.6%	140.6	1.0%	139.9	-0.5%
4Q/07	245.9	107.0			106.0	-0.9%	108.7	2.5%	109.8	1.0%	109.3	-0.5%
4Q/12 basis	297.6	88.4			87.6	-0.9%	89.9	2.6%	90.8	1.0%	90.3	-0.6%
Car Hire	0.582	198.00	198.0	0.0%	209.1	5.6%	209.6	0.2%	204.1	-2.6%	204.5	0.2%
Lease Rents	0.418	217.40	217.4	0.0%	216.9	-0.2%	218.4	0.7%	222.3	1.8%	224.3	0.9%
Weighted Avg Eq Rents		206.40	206.1	-0.1%	212.4	3.1%	213.3	0.4%	211.7	-0.8%	212.8	0.5%
Linked Equipment Rents		216.80			223.4	3.0%	224.3	0.4%	222.6	-0.8%	223.8	0.5%
Preliminary RCAF		0.884			0.876	-0.90%	0.899	2.6%	0.908	1.0%	0.903	-0.6%
Forecast Error Adj.		(0.042)			0.005		(0.011)		(0.004)		0.000	
RCAF Unadjusted		0.842			0.881	4.63%	0.888	0.8%	0.904	1.8%	0.903	-0.1%
PAF		2.3667			2.3750	0.35%	2.3833	0.35%	2.3797	-0.15%	2.3761	-0.2%
RCAF Adjusted		0.356			0.371	4.21%	0.373	0.5%	0.380	1.9%	0.380	0.0%
PAF-5		2.5016			2.5059	0.17%	2.5147	0.35%	2.5235	0.35%	2.5323	0.35%
RCAF-5		0.337			0.352	4.45%	0.353	0.3%	0.358	1.4%	0.357	-0.3%

4Q/12 Basis All Inclusive Index and RCAF using 2016 Benchmarks and Weights

Blue Shaded sections not affected by Revised Productivity Change						
	16 Wts.	3Q/17	3Q/17	% Chg	4Q/17	% Chg
Labor	0.356	422.80	422.8	0.0%	415.1	-1.8%
Fuel	0.107	202.30	202.3	0.0%	215.5	6.5%
M&S	0.050	252.60	252.6	0.0%	254.8	0.9%
Equip. Rents	0.059	223.80	223.8	0.0%	223.9	0.0%
Depreciation	0.156	225.10	225.1	0.0%	226.3	0.5%
Interest	0.022	60.60	60.6	0.0%	60.5	-0.2%
Other	0.250	224.30	224.3	0.0%	221.4	-1.3%
Weighted Avg.	1.000	289.30	290.5	0.4%	288.8	-0.6%
Linked		268.70			267.1	-0.6%
	Basing Factor					
10/1/80 basis	102.7	261.6			260.1	-0.6%
10/1/82	120.9	222.2			220.9	-0.6%
4Q/87	132.2	203.3			202.0	-0.6%
4Q/92	156.9	171.3			170.2	-0.6%
4Q/97	173.2	155.1			154.2	-0.6%
4Q/02	192.1	139.9			139.0	-0.6%
4Q/07	245.9	109.3			108.6	-0.6%
4Q/12	297.6	90.3			89.8	-0.6%
Car Hire	0.583	204.50	204.5	0.0%	206.9	1.2%
Lease Rents	0.417	224.30	224.3	0.0%	221.4	-1.3%
Weighted Avg Eq Rents		212.80	212.8	0.0%	212.9	0.0%
Linked Equipment Rents		223.80			223.9	0.0%
Preliminary RCAF		0.903			0.898	-0.55%
Forecast Error Adj.		0.000			(0.009)	
RCAF Unadjusted		0.903			0.889	-1.55%
PAF		2.3761			2.3725	-0.15%
RCAF Adjusted		0.380			0.375	-1.32%
PAF-5		2.5323			2.5412	0.35%
RCAF-5		0.357			0.350	-1.96%

**** 4Q/17 Basis ** All Inclusive Index and RCAF using 2015 Benchmarks and Weights**

Blue Shaded sections not affected by Revised Productivity Change												
	15 Wts.											
	15 Wts.	3Q/16	3Q/16	% Chg	4Q/16	% Chg	1Q/17	% Chg	2Q/17	% Chg	3Q/17	% Chg
Labor	0.350	415.20	415.2	0.0%	405.1	-2.4%	421.2	4.0%	421.4	0.0%	422.8	0.3%
Fuel	0.134	195.60	195.6	0.0%	200.1	2.3%	197.2	-1.4%	218.2	10.6%	202.3	-7.3%
M&S	0.054	240.60	240.6	0.0%	245.8	2.2%	274.3	11.6%	264.8	-3.5%	252.6	-4.6%
Equip. Rents	0.058	216.80	216.8	0.0%	223.4	3.0%	224.3	0.4%	222.6	-0.8%	223.8	0.5%
Depreciation	0.139	226.50	226.5	0.0%	225.1	-0.6%	225.3	0.1%	223.2	-0.9%	225.1	0.9%
Interest	0.019	57.50	57.5	0.0%	60.6	5.4%	60.6	0.0%	60.6	0.0%	60.6	0.0%
Other	0.246	217.40	217.4	0.0%	216.9	-0.2%	218.4	0.7%	222.3	1.8%	224.3	0.9%
Weighted Avg.	1.000	275.50	283.2	2.8%	280.6	-0.9%	287.9	2.6%	290.8	1.0%	289.3	-0.5%
Linked		263.00			260.6	-0.9%	267.4	2.6%	270.1	1.0%	268.7	-0.5%
	Basing Factor											
10/1/80 basis	102.7	256.1			253.7	-0.9%	260.4	2.6%	263.0	1.0%	261.6	-0.5%
10/1/82	120.9	217.5			215.6	-0.9%	221.2	2.6%	223.4	1.0%	222.2	-0.5%
4Q/87	132.2	198.9			197.1	-0.9%	202.3	2.6%	204.3	1.0%	203.3	-0.5%
4Q/92	156.9	167.6			166.1	-0.9%	170.4	2.6%	172.1	1.0%	171.3	-0.5%
4Q/97	173.2	151.8			150.5	-0.9%	154.4	2.6%	155.9	1.0%	155.1	-0.5%
4Q/02	192.1	136.9			135.7	-0.9%	139.2	2.6%	140.6	1.0%	139.9	-0.5%
4Q/07	245.9	107.0			106.0	-0.9%	108.7	2.5%	109.8	1.0%	109.3	-0.5%
4Q/12 basis	297.6	88.4			87.6	-0.9%	89.9	2.6%	90.8	1.0%	90.3	-0.6%
4Q/17 basis	264.5	99.4			98.5	-0.9%	101.1	2.6%	102.1	1.0%	101.6	-0.5%
Car Hire	0.582	198.00	198.0	0.0%	209.1	5.6%	209.6	0.2%	204.1	-2.6%	204.5	0.2%
Lease Rents	0.418	217.40	217.4	0.0%	216.9	-0.2%	218.4	0.7%	222.3	1.8%	224.3	0.9%
Weighted Avg Eq Rents		206.40	206.1	-0.1%	212.4	3.1%	213.3	0.4%	211.7	-0.8%	212.8	0.5%
Linked Equipment Rents		216.80			223.4	3.0%	224.3	0.4%	222.6	-0.8%	223.8	0.5%
Preliminary RCAF		0.994			0.985	-0.91%	1.011	2.6%	1.021	1.0%	1.016	-0.5%
Forecast Error Adj.		(0.042)			0.005		(0.012)		(0.004)		0.000	
RCAF Unadjusted		0.952			0.990	3.99%	0.999	0.9%	1.017	1.8%	1.016	-0.1%
PAF		2.3667			2.3750	0.35%	2.3833	0.35%	2.3797	-0.15%	2.3761	-0.2%
RCAF Adjusted		0.402			0.417	3.73%	0.419	0.5%	0.427	1.9%	0.428	0.2%
PAF-5		2.5016			2.5059	0.17%	2.5147	0.35%	2.5235	0.35%	2.5323	0.35%
RCAF-5		0.381			0.395	3.67%	0.397	0.5%	0.403	1.5%	0.401	-0.5%

**** 4Q/17 Basis ** All Inclusive Index and RCAF using 2016 Benchmarks and Weights**

Blue Shaded sections not affected by Revised Productivity Change								
	16 Wts.							
	16 Wts.	3Q/17	3Q/17	% Chg	4Q/17	% Chg	1Q/18	% Chg
Labor	0.356	422.80	422.8	0.0%	415.1	-1.8%	423.8	2.1%
Fuel	0.107	202.30	202.3	0.0%	215.5	6.5%	248.4	15.3%
M&S	0.050	252.60	252.6	0.0%	254.8	0.9%	251.0	-1.5%
Equip. Rents	0.059	223.80	223.8	0.0%	223.9	0.0%	226.7	1.3%
Depreciation	0.156	225.10	225.1	0.0%	226.3	0.5%	226.8	0.2%
Interest	0.022	60.60	60.6	0.0%	60.5	-0.2%	60.5	0.0%
Other	0.250	224.30	224.3	0.0%	221.4	-1.3%	226.9	2.5%
Weighted Avg.	1.000	289.30	290.5	0.4%	288.8	-0.6%	296.8	2.8%
Linked		268.70			267.1	-0.6%	274.5	2.8%
	Basing Factor							
10/1/80 basis	102.7	261.6			260.1	-0.6%	267.3	2.8%
10/1/82	120.9	222.2			220.9	-0.6%	227.0	2.8%
4Q/87	132.2	203.3			202.0	-0.6%	207.6	2.8%
4Q/92	156.9	171.3			170.2	-0.6%	175.0	2.8%
4Q/97	173.2	155.1			154.2	-0.6%	158.5	2.8%
4Q/02	192.1	139.9			139.0	-0.6%	142.9	2.8%
4Q/07	245.9	109.3			108.6	-0.6%	111.6	2.8%
4Q/12	297.6	90.3			89.8	-0.6%	92.2	2.7%
4Q/17 basis	264.5	101.6			101.0	-0.6%	103.8	2.8%
Car Hire	0.583	204.50	204.5	0.0%	206.9	1.2%	207.5	0.3%
Lease Rents	0.417	224.30	224.3	0.0%	221.4	-1.3%	226.9	2.5%
Weighted Avg Eq Rents		212.80	212.8	0.0%	212.9	0.0%	215.6	1.3%
Linked Equipment Rents		223.80			223.9	0.0%	226.7	1.3%
Preliminary RCAF		1.016			1.010	-0.59%	1.038	2.8%
Forecast Error Adj.		0.000			(0.010)		(0.011)	
RCAF Unadjusted		1.016 ✓			1.000 ✓	-1.57%	1.027 ✓	2.7%
PAF		2.3761			2.3725	-0.15%	2.3689	-0.15%
RCAF Adjusted		0.428			0.421	-1.64%	0.434	3.1%
PAF-5		2.5323 ✓			2.5412 ✓	0.35%	2.5374	-0.15%
RCAF-5		0.401 ✓			0.394 ✓	-1.75%	0.405	2.8%

Hourly Rate for 2018 Q2

Straight Time and Time Paid For But Not Worked

2018Q2 Straight Time Hourly Rate (from national spreadsheet) \$34.150
 New National Labor Agreements for some unions, which include two retroactive GWIs of 2%

Adjustments to 2016 base:

Adjustments added 2017 Q1

CN Railroads	A few COLAs and GWIs	0.006
Misc. Indep BLET, dispatchers, yardmasters	No change	0.000
Soo Corp.	No change	0.000

Adjustments added 2017 Q2

CN Railroads	No change	0.000
Misc. Indep BLET, dispatchers, yardmasters	No change	0.000
Soo Corp.	No change	0.000

Adjustments added 2017 Q3

CN Railroads	A few COLAs and GWIs	0.001
Misc. Indep BLET, dispatchers, yardmasters	3% GWI for 1 RR's BLET	0.026
Soo Corp.	No change	0.000

Adjustments added 2017 Q4

CN Railroads	No change	0.000
Misc. Indep BLET, dispatchers, yardmasters	No change	0.000
Soo Corp.	No change	0.000

Adjustments added 2018 Q1

CN Railroads	COLAs for several unions	0.005
Misc. Indep BLET, dispatchers, yardmasters	New contracts for some unions	0.131
Soo Corp.	No change	0.000

Adjustments added 2018 Q2

CN Railroads	Some unions joined national agreements	0.007
Misc. Indep BLET, dispatchers, yardmasters	One new agreement	0.005
Soo Corp.	No change	0.000

Adjusted STHR Total **\$34.331**

Pay For Time Not Worked

PFTNW (from national spreadsheet)				\$6.631
Ratio Adj STHR to Nat STHR	34.331 /	34.150	=	1.00530

Adjusted Pay For Time Not Worked **\$6.666**

Notes:

1. CN Railroads includes B&LE, CC&P, GTW, IC, and WC.
2. The Miscellaneous group consists of independent (for wages) BLET, and one railroad's dispatchers and yardmasters.
3. Soo Corp. includes SOO, D&H and DM&E although Soo Line participates in national agreements.

RCAF Taxable Wages

(To Use for Railroad Retirement and Unemployment Insurance Payroll Tax Calculations)

In the RCAF calculation, Total Wages are the wages paid, while Taxable Wages are the wages on which to base payroll tax calculations. The difference is caused by pre-tax employee contributions to help pay Health & Welfare costs. This page calculates that wage rate difference.

The national agreements feature employee Health & Welfare cost sharing. Some of the independent agreements adopt the dollar amount contributed under the national agreement, and some have their own employee contribution rate. This Cost Sharing is a pre-tax employee contribution to Health & Welfare insurance premiums paid by the employer. The employee contribution reduces employer Health & Welfare costs, while the Health & Welfare insurance premiums paid to the provider are unchanged. In the RCAF calculation, the reduction to the employer's Health & Welfare costs affect the Supplements portion of the Labor component of the index. The Taxable Wage Rate is used for Railroad Retirement and Unemployment Insurance calculations.

Reduction Calculation for 2Q/2018

U.S. ST Hours =

295,539,752

Wage Statistics are for 2016

Union Group	Employees	Mo. Rate	Annual \$
National BLET (BNSF, CSX, KCS, NS, SOO, UP)	23,363	(\$228.89)	(\$64,170,684.84)
National BMW (BNSF, CSX, KCS, NS, SOO, UP)	22,734	(\$228.89)	(\$62,443,023.12)
National BRS (BNSF, CSX, KCS, NS, SOO, UP)	7,335	(\$228.89)	(\$20,146,897.80)
National IAM (BNSF, CSX, KCS, NS, SOO, UP)	6,691	(\$228.89)	(\$18,378,035.88)
National IBBM (BNSF, CSX, KCS, NS, SOO, UP)	863	(\$228.89)	(\$2,370,384.84)
National IBEW (BNSF, CSX, KCS, NS, SOO, UP)	5,522	(\$228.89)	(\$15,167,166.96)
National NCFO (BNSF, CSX, KCS, NS, SOO, UP)	2,395	(\$228.89)	(\$6,578,298.60)
National SMW (BNSF, CSX, KCS, NS, SOO, UP)	975	(\$228.89)	(\$2,678,013.00)
National TCU (BNSF, CSX, KCS, NS, SOO, UP)	4,766	(\$228.89)	(\$13,090,676.88)
National TCU-CAR (BNSF, CSX, KCS, NS, SOO, UP)	8,859	(\$228.89)	(\$24,332,838.12)
National UTU (BNSF, CSX, KCS, NS, SOO, UP)	35,162	(\$228.89)	(\$96,578,762.16)
Yardmasters (BNSF, CSX, KCS, NS, SOO, UP)	1,756	(\$228.89)	(\$4,823,170.08)
National ATDA (wt. avg. BNSF, CSX, KCS, NS, SOO)	1,718	(\$228.89)	(\$4,718,796.24)
Independent CNGT (wt avg all union categories)	6,110	(\$226.75)	(\$16,625,310.00)
Independent SLC (wt avg all DH & DME union categories)	655	(\$263.86)	(\$2,073,939.60)
Total Union	128,904		(\$354,175,998.12)
All Other @ \$4,016,163.08 total per month			(\$48,193,956.96)
Total			(\$402,369,955.08)

Reduction in Wage Rate Per ST Hour

-\$1.36147490

Deduct this amount from the Wage Rate

-\$1.361

National Contracts U.S.

Straight Time Hourly Rate															Check
Weight	UTU	TCU	BLET	SMWIA	BRS	BMWE	TCU-CAR	NCFO	IAM	IBBM	IBEW	ATDA	YDMSTR	OTHER	Sum
	0.22141	0.03378	0.16351	0.00607	0.05113	0.14649	0.05876	0.01518	0.04268	0.00540	0.03574	0.01429	0.0113	0.19427	1.00000
2016 Avg.	29.073	29.233	32.388	30.323	31.540	27.934	30.046	25.063	30.523	29.630	30.774	41.405	39.629	47.094	454.658
12/31/16	29.073	29.233	32.441	30.323	31.540	27.934	30.046	25.063	30.523	29.630	30.774	41.405	39.629	47.094	454.710
1/1/17	29.073	29.233	32.441	30.323	31.540	27.934	30.046	25.063	30.523	29.630	30.774	41.405	39.629	47.094	
4/1/17	29.073	29.233	32.441	30.323	31.540	27.934	30.046	25.063	30.523	29.630	30.774	41.405	39.629	47.094	
7/1/17	29.073	29.233	32.441	30.323	31.540	27.934	30.046	25.063	30.523	29.630	30.774	41.405	39.629	47.094	
10/1/17	29.073	29.233	32.441	30.323	31.540	27.934	30.046	25.063	30.523	29.630	30.774	41.405	39.629	47.094	
1/1/18	30.181	29.233	32.470	30.323	32.729	27.934	30.046	25.063	30.523	29.630	30.774	42.491	40.691	48.036	
4/1/18	30.181	30.212	32.470	30.323	32.729	27.934	31.176	26.048	30.523	29.630	30.774	42.491	40.691	48.036	
7/1/18	30.181	30.212	32.470	30.323	32.729	27.934	31.176	26.048	30.523	29.630	30.774	42.491	40.691	48.036	

Weighted Straight Time Hourly Rate															
	UTU	TCU	BLET	SMWIA	BRS	BMWE	TCU-CAR	NCFO	IAM	IBBM	IBEW	ATDA	YDMSTR	OTHER	Total
2016 Avg.	6.437	0.988	5.296	0.184	1.613	4.092	1.765	0.380	1.303	0.160	1.100	0.592	0.448	9.149	33.506
12/31/16	6.437	0.988	5.304	0.184	1.613	4.092	1.765	0.380	1.303	0.160	1.100	0.592	0.448	9.149	33.514
1/1/17	6.437	0.988	5.304	0.184	1.613	4.092	1.765	0.380	1.303	0.160	1.100	0.592	0.448	9.149	33.514
4/1/17	6.437	0.988	5.304	0.184	1.613	4.092	1.765	0.380	1.303	0.160	1.100	0.592	0.448	9.149	33.514
7/1/17	6.437	0.988	5.304	0.184	1.613	4.092	1.765	0.380	1.303	0.160	1.100	0.592	0.448	9.149	33.514
10/1/17	6.437	0.988	5.304	0.184	1.613	4.092	1.765	0.380	1.303	0.160	1.100	0.592	0.448	9.149	33.514
1/1/18	6.682	0.988	5.309	0.184	1.673	4.092	1.765	0.380	1.303	0.160	1.100	0.607	0.460	9.332	34.036
4/1/18	6.682	1.021	5.309	0.184	1.673	4.092	1.832	0.395	1.303	0.160	1.100	0.607	0.460	9.332	34.150
7/1/18	6.682	1.021	5.309	0.184	1.673	4.092	1.832	0.395	1.303	0.160	1.100	0.607	0.460	9.332	34.150

Note: The 2016 Average and 12/31/16 Straight Time Hourly Rates are the industry rates, and include all Class I railroad employees. The rates for 1/1/17 through 7/1/18 are based on the industry year-end rates updated by NATIONAL UNION wage increases using contract information. These national increases are diluted using "percent national" ratios to account for non-national union contracts. The impacts of non-national (or independent contract) increases after 2016 are not shown on this page and are handled separately.

National Contracts U.S.

Pay For Time Not Worked Hourly Rate															Check Sum
Weight	UTU	TCU	BLET	SMWIA	BRS	BMWE	TCU-CAR	NCFO	IAM	IBBM	IBEW	ATDA	YDMSTR	OTHER	
2016 Avg.	0.22141	0.03378	0.16351	0.00607	0.05113	0.14649	0.05876	0.01518	0.04268	0.00540	0.03574	0.01429	0.0113	0.19427	1.00000
12/31/16	10.055	5.553	11.616	4.149	6.356	4.931	4.045	3.036	4.613	4.014	4.805	6.873	8.148	1.297	79.491
1/1/17	10.055	5.553	11.635	4.149	6.356	4.931	4.045	3.036	4.613	4.014	4.805	6.873	8.148	1.297	
4/1/17	10.055	5.553	11.635	4.149	6.356	4.931	4.045	3.036	4.613	4.014	4.805	6.873	8.148	1.297	
7/1/17	10.055	5.553	11.635	4.149	6.356	4.931	4.045	3.036	4.613	4.014	4.805	6.873	8.148	1.297	
10/1/17	10.055	5.553	11.635	4.149	6.356	4.931	4.045	3.036	4.613	4.014	4.805	6.873	8.148	1.297	
1/1/18	10.438	5.553	11.645	4.149	6.596	4.931	4.045	3.036	4.613	4.014	4.805	7.053	8.366	1.323	
4/1/18	10.438	5.739	11.645	4.149	6.596	4.931	4.197	3.156	4.613	4.014	4.805	7.053	8.366	1.323	
7/1/18	10.438	5.739	11.645	4.149	6.596	4.931	4.197	3.156	4.613	4.014	4.805	7.053	8.366	1.323	

Pay For Time Not Worked Hourly Rate															
	UTU	TCU	BLET	SMWIA	BRS	BMWE	TCU-CAR	NCFO	IAM	IBBM	IBEW	ATDA	YDMSTR	OTHER	Total
2016 Avg.	2.226	0.188	1.899	0.025	0.325	0.722	0.238	0.046	0.197	0.022	0.172	0.098	0.092	0.252	6.502
12/31/16	2.226	0.188	1.902	0.025	0.325	0.722	0.238	0.046	0.197	0.022	0.172	0.098	0.092	0.252	6.505
1/1/17	2.226	0.188	1.902	0.025	0.325	0.722	0.238	0.046	0.197	0.022	0.172	0.098	0.092	0.252	6.505
4/1/17	2.226	0.188	1.902	0.025	0.325	0.722	0.238	0.046	0.197	0.022	0.172	0.098	0.092	0.252	6.505
7/1/17	2.226	0.188	1.902	0.025	0.325	0.722	0.238	0.046	0.197	0.022	0.172	0.098	0.092	0.252	6.505
10/1/17	2.226	0.188	1.902	0.025	0.325	0.722	0.238	0.046	0.197	0.022	0.172	0.098	0.092	0.252	6.505
1/1/18	2.311	0.188	1.904	0.025	0.337	0.722	0.238	0.046	0.197	0.022	0.172	0.101	0.095	0.257	6.614
4/1/18	2.311	0.194	1.904	0.025	0.337	0.722	0.247	0.048	0.197	0.022	0.172	0.101	0.095	0.257	6.631
7/1/18	2.311	0.194	1.904	0.025	0.337	0.722	0.247	0.048	0.197	0.022	0.172	0.101	0.095	0.257	6.631

U.S. National Contract

UTU

	Percentage Increase	Cents Increase	Applicable	ST HR	PFTNW HR
2016 Industry Avg.				29.07314	10.05469
12/31/16 Industry Rate				29.07327	10.05474
1/1/17	The 4.04% GWI combines two retroactive GWI's of 2% for 7/1/2016 and 7/1/2017 in the new labor agreement.		94.280%	29.07327	10.05474
4/1/17			94.280%	29.07327	10.05474
7/1/17			94.280%	29.07327	10.05474
10/1/17			94.280%	29.07327	10.05474
1/1/18	4.04%		94.280%	30.18064	10.43772
4/1/18			94.280%	30.18064	10.43772
7/1/18			94.280%	30.18064	10.43772

TCU

	Percentage Increase	Cents Increase	Applicable	ST HR	PFTNW HR
2016 Industry Avg.				29.23338	5.55310
12/31/16 Industry Rate				29.23338	5.55310
1/1/17			82.842%	29.23338	5.55310
4/1/17			82.842%	29.23338	5.55310
7/1/17			82.842%	29.23338	5.55310
10/1/17			82.842%	29.23338	5.55310
1/1/18			82.842%	29.23338	5.55310
4/1/18	4.04%		82.842%	30.21177	5.73896
7/1/18			82.842%	30.21177	5.73896

BLET

	Percentage Increase	Cents Increase	Applicable	ST HR	PFTNW HR
2016 Industry Avg.				32.38830	11.61593
12/31/16 Industry Rate				32.44074	11.63474
1/1/17			2.230%	32.44074	11.63474
4/1/17			2.230%	32.44074	11.63474
7/1/17			2.230%	32.44074	11.63474
10/1/17			2.230%	32.44074	11.63474
1/1/18	4.04%		2.230%	32.46997	11.64522
4/1/18			2.230%	32.46997	11.64522
7/1/18			2.230%	32.46997	11.64522

U.S. National Contract

SMWIA

	Percentage Increase	Cents Increase	Applicable	ST HR	PFTNW HR
2016 Industry Avg.				30.32327	4.14896
12/31/16 Industry Rate				30.32327	4.14896
1/1/17			98.301%	30.32327	4.14896
4/1/17			98.301%	30.32327	4.14896
7/1/17			98.301%	30.32327	4.14896
10/1/17			98.301%	30.32327	4.14896
1/1/18			98.301%	30.32327	4.14896
4/1/18			98.301%	30.32327	4.14896
7/1/18			98.301%	30.32327	4.14896

BRS

	Percentage Increase	Cents Increase	Applicable	ST HR	PFTNW HR
2016 Industry Avg.				31.54047	6.35647
12/31/16 Industry Rate				31.54047	6.35647
1/1/17			93.309%	31.54047	6.35647
4/1/17			93.309%	31.54047	6.35647
7/1/17			93.309%	31.54047	6.35647
10/1/17			93.309%	31.54047	6.35647
1/1/18	4.04%		93.309%	32.72944	6.59609
4/1/18			93.309%	32.72944	6.59609
7/1/18			93.309%	32.72944	6.59609

BMWE

	Percentage Increase	Cents Increase	Applicable	ST HR	PFTNW HR
2016 Industry Avg.				27.93431	4.93131
12/31/16 Industry Rate				27.93431	4.93131
1/1/17			91.612%	27.93431	4.93131
4/1/17			91.612%	27.93431	4.93131
7/1/17			91.612%	27.93431	4.93131
10/1/17			91.612%	27.93431	4.93131
1/1/18			91.612%	27.93431	4.93131
4/1/18			91.612%	27.93431	4.93131
7/1/18			91.612%	27.93431	4.93131

U.S. National Contract

TCU-Carmen

	Percentage Increase	Cents Increase	Applicable	ST HR	PFTNW HR
2016 Industry Avg.				30.04585	4.04463
12/31/16 Industry Rate				30.04585	4.04463
1/1/17			93.082%	30.04585	4.04463
4/1/17			93.082%	30.04585	4.04463
7/1/17			93.082%	30.04585	4.04463
10/1/17			93.082%	30.04585	4.04463
1/1/18			93.082%	30.04585	4.04463
4/1/18	4.04%		93.082%	31.17572	4.19673
7/1/18			93.082%	31.17572	4.19673

NCFO

	Percentage Increase	Cents Increase	Applicable	ST HR	PFTNW HR
2016 Industry Avg.				25.06329	3.03622
12/31/16 Industry Rate				25.06329	3.03622
1/1/17			97.245%	25.06329	3.03622
4/1/17			97.245%	25.06329	3.03622
7/1/17			97.245%	25.06329	3.03622
10/1/17			97.245%	25.06329	3.03622
1/1/18			97.245%	25.06329	3.03622
4/1/18	4.04%		97.245%	26.04796	3.15550
7/1/18			97.245%	26.04796	3.15550

IAM

	Percentage Increase	Cents Increase	Applicable	ST HR	PFTNW HR
2016 Industry Avg.				30.52312	4.61283
12/31/16 Industry Rate				30.52312	4.61283
1/1/17			96.130%	30.52312	4.61283
4/1/17			96.130%	30.52312	4.61283
7/1/17			96.130%	30.52312	4.61283
10/1/17			96.130%	30.52312	4.61283
1/1/18			96.130%	30.52312	4.61283
4/1/18			96.130%	30.52312	4.61283
7/1/18			96.130%	30.52312	4.61283

U.S. National Contract

IBBM

	Percentage Increase	Cents Increase	Applicable	ST HR	PFTNW HR
2016 Industry Avg.				29.63043	4.01375
12/31/16 Industry Rate				29.63043	4.01375
1/1/17			93.061%	29.63043	4.01375
4/1/17			93.061%	29.63043	4.01375
7/1/17			93.061%	29.63043	4.01375
10/1/17			93.061%	29.63043	4.01375
1/1/18			93.061%	29.63043	4.01375
4/1/18			93.061%	29.63043	4.01375
7/1/18			93.061%	29.63043	4.01375

IBEW

	Percentage Increase	Cents Increase	Applicable	ST HR	PFTNW HR
2016 Industry Avg.				30.77399	4.80515
12/31/16 Industry Rate				30.77399	4.80515
1/1/17			95.049%	30.77399	4.80515
4/1/17			95.049%	30.77399	4.80515
7/1/17			95.049%	30.77399	4.80515
10/1/17			95.049%	30.77399	4.80515
1/1/18			95.049%	30.77399	4.80515
4/1/18			95.049%	30.77399	4.80515
7/1/18			95.049%	30.77399	4.80515

ATDA

	Percentage Increase	Cents Increase	Applicable	ST HR	PFTNW HR
2016 Industry Avg.				41.40520	6.87293
12/31/16 Industry Rate				41.40520	6.87293
1/1/17			64.908%	41.40520	6.87293
4/1/17			64.908%	41.40520	6.87293
7/1/17			64.908%	41.40520	6.87293
10/1/17			64.908%	41.40520	6.87293
1/1/18	4.04%		64.908%	42.49097	7.05316
4/1/18			64.908%	42.49097	7.05316
7/1/18			64.908%	42.49097	7.05316

YDMSTRS

	Percentage Increase	Cents Increase	Applicable	ST HR	PFTNW HR
2016 Industry Avg.				39.62949	8.14812
12/31/16 Industry Rate				39.62949	8.14812
1/1/17			66.322%	39.62949	8.14812
4/1/17			66.322%	39.62949	8.14812
7/1/17			66.322%	39.62949	8.14812
10/1/17			66.322%	39.62949	8.14812
1/1/18	4.04%		66.322%	40.69133	8.36644
4/1/18			66.322%	40.69133	8.36644
7/1/18			66.322%	40.69133	8.36644

OTHER

	Percentage Increase	Cents Increase	Applicable	ST HR	PFTNW HR
2016 Industry Avg.				47.09367	1.29707
12/31/16 Industry Rate				47.09367	1.29707
1/1/17			100.000%	47.09367	1.29707
4/1/17			100.000%	47.09367	1.29707
7/1/17			100.000%	47.09367	1.29707
10/1/17			100.000%	47.09367	1.29707
1/1/18	2.00%		100.000%	48.03555	1.32302
4/1/18			100.000%	48.03555	1.32302
7/1/18			100.000%	48.03555	1.32302

Check Sums

	Increase	Applicable	ST HR	PFTNW HR
2016 AVG			454.65790	79.49118
12/31/16			454.71048	
		1168.372%		
		ok matches	ok matches	ok matches
			ok matches	

Should match check sum on National Increase Applicability for U.S. Total page.

All three should match check sums on U.S. Benchmark page.

-0.15	-0.06	1.3
-0.09	-0.01	1.8
18.13	10.32	11.0
...	Closed	-4.7
15.70	10.09	-0.9
5.53	10.13	1.0
-2.38	-0.63	-2.8
-2.09	-0.55	-1.5
18.73	-0.48	-1.4
15.40	-0.48	-1.1
16.36	-0.53	-4.1
7.90	1.20	-0.1
18.96	-1.00	3.3
13.51	-0.66	-2.9
-4.26	-0.34	9.1
15.90	-0.26	-2.4
-2.04	-0.36	-0.8
18.07	-0.87	-5.0
17.04	-0.64	-5.7
7.60	0.64	-2.0
...	Closed	-3.3
...	Closed	4.0
6.10	-0.69	-0.8
8.96	1.97	-2.7
4.37	1.29	2.5
0.99	0.87	-1.0
...	Closed	-2.1

Yen, per dollar	100.57	0.51	0.47	-2.42
U.K. pound, in dollars	1.40	-0.003	-0.24	3.60
	Last Week		YTD	
	Close	Net chg	% chg	% chg
DJ Commodity	632.31	21.54	3.53	1.11
TR/CC CRB Index	193.58	5.07	2.69	-0.15
Crude oil, \$ per barrel	61.68	2.48	4.19	2.09
Natural gas, \$/MMBtu	2.558	-0.026	-1.01	-13.38
Gold, \$ per troy oz.	1353.20	40.10	3.05	3.59
U.S. Dollar Index	89.08	-1.36	-1.51	-3.31
WSJ Dollar Index	83.05	-1.14	-1.36	-3.40
Euro, per dollar	0.8059	-0.0103	-1.27	-3.27
Yen, per dollar	106.28	-2.52	-2.32	-5.70
U.K. pound, in dollars	1.40	0.020	1.47	3.85
	52-Week			
	Low	Close	High	% Chg
DJ Commodity	532.01	645.87	8.61	
TR/CC CRB Index	166.50	200.52	0.76	
Crude oil, \$ per barrel	42.53	66.14	15.51	
Natural gas, \$/MMBtu	2.55	3.63	-9.74	
Gold, \$ per troy oz.	1200.10	1362.40	9.34	
U.S. Dollar Index	88.59	102.15	-11.76	
WSJ Dollar Index	82.70	92.17	-8.74	
Euro, per dollar	0.80	0.95	-14.46	
Yen, per dollar	106.12	114.95	-5.79	
U.K. pound, in dollars	1.22	1.43	-13.06	

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announced on February 15; settles on February 28

1.570

Borrowing Benchmarks | WSJ.com/bonds

Money Rates

February 19, 2018

Key annual interest rates paid to borrow or lend money in U.S. and international markets. Rates below are a guide to general levels but don't always represent actual transactions.

International rates

	Week	52-Week	
	Latest	ago	High Low
Prime rates			
U.S.	4.50	4.50	4.50 3.75
Canada	3.45	3.45	3.45 2.70
Japan	1.475	1.475	1.475 1.475

Policy Rates

Euro zone	0.00	0.00	0.00 0.00
Switzerland	0.50	0.50	0.50 0.50
Britain	0.50	0.50	0.50 0.25
Australia	1.50	1.50	1.50 1.50

Other short-term rates

Libor

One month	1.59563	1.58750	1.59563 0.77722
Three month	1.89213	1.83338	1.89213 1.05011
Six month	2.11863	2.04863	2.11863 1.35711
One year	2.39813	2.31906	2.39813 1.69511

Euro Libor

One month	-0.403	-0.404	-0.388 -0.420
Three month	-0.377	-0.383	-0.351 -0.387
Six month	-0.322	-0.331	-0.245 -0.339
One year	-0.258	-0.253	-0.110 -0.263

Euro interbank offered rate (Euribor)

One month	-0.369	-0.369	-0.366 -0.375
Three month	-0.329	-0.329	-0.325 -0.332
Six month	-0.274	-0.278	-0.237 -0.279
One year	-0.193	-0.191	-0.106 -0.194

Feb. 16, 2018

Inflation

	Jan. Index	Chg From (%)	
	level	Dec. '17	Jan. '17
U.S. consumer price index			
All items	247.867	0.54	2.1
Core	254.638	0.43	1.8

International rates

	Week	52-Week	
	Latest	ago	High Low
Prime rates			
U.S.	4.50	4.50	4.50 3.75
Canada	3.45	3.45	3.45 2.70
Japan	1.475	1.475	1.475 1.475

Policy Rates

Euro zone	0.00	0.00	0.00 0.00
Switzerland	0.50	0.50	0.50 0.50
Britain	0.50	0.50	0.50 0.25
Australia	1.50	1.50	1.50 1.50

Overnight repurchase

U.S.	1.52	1.44	1.62 0.48
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Notes on data:

U.S. prime rate is the base rate on corporate loans posted by at least 70% of the 10 largest U.S. banks, and is effective December 14, 2017. Other prime rates aren't directly comparable; lending practices vary widely by location. Discount rate is effective December 14, 2017. DTCC GCF Repo Index is Depository Trust & Clearing Corp.'s weighted average for overnight trades in applicable CUSIPs. Value traded is in billions of U.S. dollars. Federal funds rates are Tullett Prebon rates as of 5:30 p.m. ET. Futures on the DTCC GCF Repo Index are traded on NYSE Liffe US.

Sources: Federal Reserve; Bureau of Labor Statistics; DTCC; SIX Financial Information; Tullett Prebon Information, Ltd.

U.S. government rates

Discount

2.00	2.00	2.00	1.25
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Federal funds

Effective rate	1.4200	1.4200	1.4500 0.6000
High	1.5625	1.5625	1.6500 0.8125
Low	1.3000	1.3900	1.4100 0.4500
Bid	1.4200	1.4100	1.4300 0.5600
Offer	1.4400	1.4300	1.4400 0.6700

Treasury bill auction

4 weeks	1.360	1.480	1.480 0.400
13 weeks	1.570	1.500	1.570 0.515
26 weeks	1.785	1.650	1.785 0.645

Secondary market

Fannie Mae

30-year mortgage yields			
30 days	4.009	3.972	4.071 3.253
60 days	4.046	3.991	4.108 3.281

Other short-term rates

	Week	52-Week	
	Latest	ago	High Low

Call money

3.25	3.25	3.25	2.50
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Commercial paper (AA financial)

90 days	1.80	1.66	1.84 0.72
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Libor

One month	1.59375	1.58320	1.59375 0.77722
Three month	1.88494	1.82000	1.88494 1.05011
Six month	2.10613	2.03831	2.10613 1.35711
One year	2.39063	2.31349	2.39063 1.69511

Euro Libor

One month	-0.402	-0.405	-0.388 -0.420
Three month	-0.376	-0.382	-0.351 -0.387
Six month	-0.325	-0.333	-0.244 -0.339
One year	-0.256	-0.254	-0.110 -0.263

Euro interbank offered rate (Euribor)

One month	-0.369	-0.370	-0.366 -0.375
Three month	-0.328	-0.329	-0.325 -0.332
Six month	-0.274	-0.278	-0.237 -0.279
One year	-0.192	-0.191	-0.106 -0.194

	Value	52-Week	
	Latest	Traded	High Low

DTCC GCF Repo Index

Treasury	1.475	24.300	1.836 0.489
MBS	1.490	89.390	1.852 0.496

	Open	Implied	
	Settle	Change	Interest Rate

DTCC GCF Repo Index Futures

Treasury Feb	98.565	0.005	4390 1.435
Treasury Mar	98.415	unch.	2816 1.585
Treasury Apr	98.255	-0.005	576 1.745

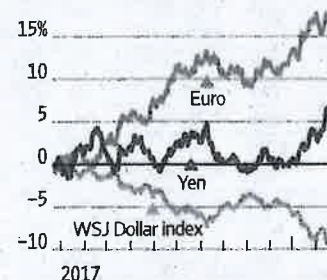
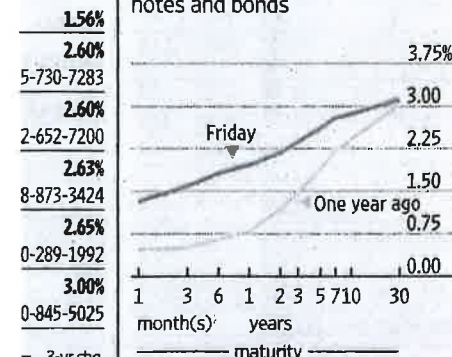
Benchmark Yields and Rates

Treasury yield curve

Yield to maturity of current bills, notes and bonds

Forex Race

Yen, euro vs. dollar; dollar vs. major U.S. trading partners



Sources: Ryan ALM; Tullett Prebon; WSJ Market Data Group

Corporate Borrowing Rates and Yields

		Yield (%)	Spread +/-	Treasuries,		Total Return
	Bond total return index	Last	Wk ago	In basis pts, 52-wk Range	Last	Low High 52-wk 3-yr
10-yr Treasury, Ryan ALM		2.877	2.829			-1.76 -0.64
DJ Corporate		3.600	3.529			2.46 2.38
Aggregate, Barclays Capital		3.130	3.060	36	34	45 1.04 1.23
High Yield 100, Merrill Lynch		6.013	6.319	336	304	394 3.996 3.900
Fixed-Rate MBS, Barclays		3.350	3.310	25	20	34 0.48 1.05
Muni Master, Merrill		2.433	2.389	14	5	18 2.447 1.837
EMBI Global, J.P. Morgan		5.947	6.021	309	289	340 4.222 5.674

Sources: J.P. Morgan; Ryan ALM; S&P Dow Jones Indices; Barclays Capital; Merrill Lynch

RCAF Lump Sum Amortization 2018/Q2

	Quarter of Payment	Quarter Amortization Began	Amount	Annual Per ST Hour	1 Quarter Per ST Hour	U.S. ST Hours	
NS - BLET 2017Q1 PPI	2017Q2	2017Q3				295,539,752	2016
NS - BLET 2017Q2 PPI	2017Q3	2017Q4				295,539,752	2016
NS - BLET 2017Q3 PPI	2017Q4	2018Q1				295,539,752	2016
CSX - BLET 2018	2018Q1	2018Q2				295,539,752	2016
KCS 2018Q2	2017Q4	2018Q2				295,539,752	2016
NS - BLET 2017Q4 PPI	2018Q1	2018Q2				295,539,752	2016
NS - BLET 2018 Ave PPI	2018Q1	2018Q2				295,539,752	2016
NS - BLET 2018 TPB	2018Q1	2018Q2				295,539,752	2016
Total			\$114,034,406	0.38585			

Should be slightly less
than amortized amount.

Fell out

NS - BLET 2016Q4 PPI	2017Q1	2017Q2		295,539,752	2016
NS - BLET 2017 Ave PPI	2017Q1	2017Q2		295,539,752	2016
NS - BLET 2017 TPB	2017Q1	2017Q2		295,539,752	2016
CSX - BLET 2017	2017Q1	2017Q2		295,539,752	2016

Interest Rate

2016/Q1	0.140
2016/Q2	0.320
2016/Q3	0.350
2016/Q4	0.310
2017/Q1	0.480
2017/Q2	0.540
2017/Q3	0.920
2017/Q4	1.070
2018/Q1	1.285
2018/Q2	1.570
2018/Q3	
2018/Q4	

Lump Sum Adjustment for 2018/Q2 → 0.389599
or
0.390

**RCAF Back Pay Amortization
2018/Q2**

	Quarter of Payment	Quarter Amortization Began	Amount	Annual Per ST Hour	1 Quarter Per ST Hr.	U.S. ST Hours	
National UTU-YMD 2017	2018Q1	2018Q1	\$4,335,581	0.01467004	0.05868	295,539,752	2016
National UTU 2017	2018Q1	2018Q1	\$96,372,104	0.32608847	1.30435	295,539,752	2016
National BRS 2017	2018Q1	2018Q1	\$22,525,654	0.07621869	0.30487	295,539,752	2016
National BLET 2017	2018Q1	2018Q1	\$51,247,884	0.17340437	0.69362	295,539,752	2016
National ATDA 2017	2018Q1	2018Q1	\$5,926,972	0.02005474	0.08022	295,539,752	2016
National BRC (TCU-CAR) 2018	2018Q2	2018Q2	\$28,888,465	0.09774815	0.39099	295,539,752	2016
National TCU 2018	2018Q2	2018Q2	\$16,365,434	0.05537473	0.22150	295,539,752	2016
National NCFO 2017	2018Q2	2018Q2	\$6,257,945	0.02117463	0.08470	295,539,752	2016
DME - all unions 2018	2018Q1	2018Q2				295,539,752	2016
UP Yardmasters 2018	2018Q2	2018Q2				295,539,752	2016
Total			\$233,941,999	0.79157541			

Should be slightly less
than amortized amount.

Fell out

DME - all unions 2017	2017Q1	2017Q2				295,539,752	2016
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Note: "UTU" is now called SMART-TD

Interest Rate

2016/Q1	0.140
2016/Q2	0.320
2016/Q3	0.350
2016/Q4	0.310
2017/Q1	0.480
2017/Q2	0.540
2017/Q3	0.920
2017/Q4	1.070
2018/Q1	1.285
2018/Q2	1.570
2018/Q3	
2018/Q4	

Back Pay Adjustment for 2018/Q2

0.79914

or

0.799

Back Pay for National NCFO Added to RCAF 2018Q2

National NCFO New Contract Signed 12/14/2017

ST Hours Paid ✓ 4,363,019 2016 Wage Statistics and benchmark
 2016 ST Hourly Rate ✓ \$25.03587 2016 Wage Statistics and benchmark
 2016 PFTNW HR ✓ \$3.04526 2016 Wage Statistics and benchmark
 Ratio PFTNW/STHR 0.1216357 calc. from wage statistics
 STHR 12/31/2016 ✓ \$25.03587 from YearEnd2016.xlsx (no increase in 2016)

7/1/16 G.W.I. 2.00% new contract, ARTICLE I Section 2
 7/1/17 G.W.I. 2.00% new contract, ARTICLE I Section 3

Includes all railroads benchmarked as "national" in the RCAF labor benchmarks (BNSF, CSX, KCS, NS, UP). BLE, GTW, IC&CCP, are benchmarked as independent although they are now in this national agreement, so backpay for them is calculated separately.

Qtr.	Total Hourly Rate in 2017 Contract			Total Hourly Rate Paid			Difference	Wage	H&W	Net
	ST	PFTNW	Total	ST	PFTNW	Total		Back Pay \$	Offset \$	Back Pay \$
2016Q1	\$25.0359	\$3.0453	\$28.0811	\$25.0359	\$3.0453	\$28.0811	\$0.0000	\$0.00	\$0.00	\$0.00
2016Q2	25.0359	3.0453	28.0811	25.0359	3.0453	28.0811	0.0000	\$0.00	\$0.00	0.00
2016Q3	25.5366	3.1062	28.6428	25.0359	3.0453	28.0811	0.5616	\$612,592.49	\$0.00	612,592.49
2016Q4	25.5366	3.1062	28.6428	25.0359	3.0453	28.0811	0.5616	\$612,592.49	\$0.00	612,592.49
2017Q1	25.5366	3.1062	28.6428	25.0359	3.0453	28.0811	0.5616	\$612,592.49	\$0.00	612,592.49
2017Q2	25.5366	3.1062	28.6428	25.0359	3.0453	28.0811	0.5616	\$612,592.49	\$0.00	612,592.49
2017Q3	26.0473	3.1683	29.2156	25.0359	3.0453	28.0811	1.1345	\$1,237,436.83	\$0.00	1,237,436.83
2017Q4	26.0473	3.1683	29.2156	25.0359	3.0453	28.0811	1.1345	\$1,237,436.83	\$0.00	1,237,436.83
2018Q1	26.0473	3.1683	29.2156	25.0359	3.0453	28.0811	1.1345	\$1,237,436.83	\$0.00	1,237,436.83
Total										\$6,162,680.45

H&W Employee Cost Sharing		No. of	Old Contract	New Contract	Quarterly
From	Thru	Employees	Mo. Rate	Mo. Rate	Amount
No H&W offset since the cost sharing amounts are the same at the end of the old contract and in this new contract.					

Back Pay for National TCU Added to RCAF 2018Q2

National TCU New Contract Signed 1/22/2018

ST Hours Paid ✓ 8,270,579 2016 Wage Statistics and benchmark
 2016 ST Hourly Rate ✓ \$28.31931 2016 Wage Statistics and benchmark
 2016 PFTNW HR ✓ \$6.23129 2016 Wage Statistics and benchmark
 Ratio PFTNW/STHR 0.2200368 calc. from wage statistics
 STHR 12/31/2016 \$28.31931 from YearEnd2016.xlsx (no increase in 2016)

7/1/16 G.W.I. 2.00% new contract, ARTICLE I Section 2
 7/1/17 G.W.I. 2.00% new contract, ARTICLE I Section 3

Includes all railroads benchmarked as "national" in the RCAF labor benchmarks (BNSF, CSX, KCS, NS, & UP). BLE, GTW, IC&CCP, and WC are benchmarked as independent although they are now in this national agreement, so backpay for them is calculated separately.

Qtr.	Total Hourly Rate in 2017 Contract			Total Hourly Rate Paid			Difference	Wage	H&W	Net
	ST	PFTNW	Total	ST	PFTNW	Total		Back Pay \$	Offset \$	Back Pay \$
2016Q1	\$28.3193	\$6.2313	\$34.5506	\$28.3193	\$6.2313	\$34.5506	\$0.0000	\$0.00	\$0.00	\$0.00
2016Q2	28.3193	6.2313	34.5506	28.3193	6.2313	34.5506	0.0000	\$0.00	\$0.00	0.00
2016Q3	28.8857	6.3559	35.2416	28.3193	6.2313	34.5506	0.6910	\$1,428,767.49	\$0.00	1,428,767.49
2016Q4	28.8857	6.3559	35.2416	28.3193	6.2313	34.5506	0.6910	\$1,428,767.49	\$0.00	1,428,767.49
2017Q1	28.8857	6.3559	35.2416	28.3193	6.2313	34.5506	0.6910	\$1,428,767.49	\$0.00	1,428,767.49
2017Q2	28.8857	6.3559	35.2416	28.3193	6.2313	34.5506	0.6910	\$1,428,767.49	\$0.00	1,428,767.49
2017Q3	29.4634	6.4830	35.9464	28.3193	6.2313	34.5506	1.3958	\$2,886,110.33	\$0.00	2,886,110.33
2017Q4	29.4634	6.4830	35.9464	28.3193	6.2313	34.5506	1.3958	\$2,886,110.33	\$0.00	2,886,110.33
2018Q1	29.4634	6.4830	35.9464	28.3193	6.2313	34.5506	1.3958	\$2,886,110.33	\$0.00	2,886,110.33
Total										\$14,373,400.95

H&W Employee Cost Sharing		No. of	Old Contract	New Contract	Quarterly
From	Thru	Employees	Mo. Rate	Mo. Rate	Amount
No H&W offset since the cost sharing amounts are the same at the end of the old contract and in this new contract.					

Back Pay for National TCU-CAR Added to RCAF 2018Q2

National BRC New Contract Signed 1/22/2018

ST Hours Paid ✓ 16,163,626 2016 Wage Statistics and benchmark
 2016 ST Hourly Rate ✓ \$30.03612 2016 Wage Statistics and benchmark
 2016 PFTNW HR ✓ \$4.10591 2016 Wage Statistics and benchmark
 Ratio PFTNW/STHR 0.1366991 calc. from wage statistics
 STHR 12/31/2016 ✓ \$30.03612 from YearEnd2016.xlsx (no increase in 2016)

7/1/16 G.W.I. 2.00% new contract, ARTICLE I Section 2
 7/1/17 G.W.I. 2.00% new contract, ARTICLE I Section 3

Includes all railroads benchmarked as "national" in the RCAF labor benchmarks (BNSF, CSX, KCS, NS, & UP). BLE, GTW, IC&CCP, and WC are benchmarked as independent although they are now in this national agreement, so backpay for them is calculated separately.

Qtr.	Total Hourly Rate in 2017 Contract			Total Hourly Rate Paid			Difference	Wage	H&W	Net
	ST	PFTNW	Total	ST	PFTNW	Total		Back Pay \$	Offset \$	Back Pay \$
2016Q1	\$30.0361	\$4.1059	\$34.1420	\$30.0361	\$4.1059	\$34.1420	\$0.0000	\$0.00	\$0.00	\$0.00
2016Q2	30.0361	4.1059	34.1420	30.0361	4.1059	34.1420	0.0000	\$0.00	\$0.00	0.00
2016Q3	30.6368 ✓	4.1880	34.8249	30.0361	4.1059	34.1420	0.6828	\$2,759,295.33	\$0.00	2,759,295.33
2016Q4	30.6368	4.1880	34.8249	30.0361 ✓	4.1059	34.1420	0.6828	\$2,759,295.33	\$0.00	2,759,295.33
2017Q1	30.6368	4.1880	34.8249	30.0361	4.1059	34.1420	0.6828	\$2,759,295.33	\$0.00	2,759,295.33
2017Q2	30.6368	4.1880	34.8249	30.0361	4.1059	34.1420	0.6828	\$2,759,295.33	\$0.00	2,759,295.33
2017Q3	31.2496 ✓	4.2718	35.5214	30.0361	4.1059	34.1420	1.3793	\$5,573,776.56	\$0.00	5,573,776.56
2017Q4	31.2496	4.2718	35.5214	30.0361	4.1059	34.1420	1.3793	\$5,573,776.56	\$0.00	5,573,776.56
2018Q1	31.2496	4.2718	35.5214	30.0361	4.1059	34.1420	1.3793	\$5,573,776.56	\$0.00	5,573,776.56
Total										\$27,758,510.97

H&W Employee Cost Sharing		No. of Employees	Old Contract	New Contract	Quarterly Amount
From	Thru		Mo. Rate	Mo. Rate	
No H&W offset since the cost sharing amounts are the same at the end of the old contract and in this new contract.					

Health and Welfare 2018Q2

	Employees Receiving			Total	
	Pay 2016	Monthly Contribution 2016 Avg. 2018		2016 Avg.	2018
1. All Employees					
a. Group health	156,278	\$1,481.05	\$1,584.71 ✓	\$231,455,531.90	\$247,655,309.38
b. Group dental	156,278	56.97	63.67	8,903,157.66	9,950,220.26
c. Early retirement major medical	156,278	134.70	135.96 ✓	21,050,646.60	21,247,556.88
d. Group vision	156,278	8.41	8.44	1,314,297.98	1,318,986.32
2. Supplemental Sickness					
a. Signalmen	7,773	29.48	44.34	229,148.04	344,654.82
b. Shopcrafts	23,960	49.11	75.48	1,176,675.60	1,808,500.80
c. MOW	24,275	32.87	51.63	797,919.25	1,253,318.25
d. Yardmasters	1,874	34.22	34.22	64,128.28	64,128.28
3. Short-Term Disability					
a. Engineers (CSX, KCS, SOO, UP)	11,930	40.00	40.00	477,200.00	477,200.00
4. Monthly Total Premiums				265,468,705.31	284,119,874.99
5. Monthly Employee Contributions To H&W					
a. National BLET (BNSF, CSX, KCS, NS, SOO, UP)	23,363	(\$213.45)	(\$228.89)	(\$4,986,832.35)	(5,347,557.07)
b. National BMWE (BNSF, CSX, KCS, NS, SOO, UP)	22,734	(\$213.45)	(\$228.89)	(\$4,852,572.30)	(5,203,585.26)
c. National BRS (BNSF, CSX, KCS, NS, SOO, UP)	7,335	(\$213.45)	(\$228.89)	(\$1,565,655.75)	(1,678,908.15)
d. National IAM (BNSF, CSX, KCS, NS, SOO, UP)	6,691	(\$213.45)	(\$228.89)	(\$1,428,193.95)	(1,531,502.99)
e. National IBBM (BNSF, CSX, KCS, NS, SOO, UP)	863	(\$213.45)	(\$228.89)	(\$184,207.35)	(197,532.07)
f. National IBEW (BNSF, CSX, KCS, NS, SOO, UP)	5,522	(\$213.45)	(\$228.89)	(\$1,178,670.90)	(1,263,930.58)
g. National NCFO (BNSF, CSX, KCS, NS, SOO, UP)	2,395	(\$213.45)	(\$228.89)	(\$511,212.75)	(548,191.55)
h. National SMW (BNSF, CSX, KCS, NS, SOO, UP)	975	(\$213.45)	(\$228.89)	(\$208,113.75)	(223,167.75)
i. National TCU (BNSF, CSX, KCS, NS, SOO, UP)	4,766	(\$213.45)	(\$228.89)	(\$1,017,302.70)	(1,090,889.74)
j. National TCU-CAR (BNSF, CSX, KCS, NS, SOO, UP)	8,859	(\$213.45)	(\$228.89)	(\$1,890,953.55)	(2,027,736.51)
k. National UTU (BNSF, CSX, KCS, NS, SOO, UP)	35,162	(\$213.45)	(\$228.89)	(\$7,505,328.90)	(8,048,230.18)
l. Yardmasters (BNSF, CSX, KCS, NS, SOO, UP)	1,756	(\$213.45)	(\$228.89)	(\$374,818.20)	(401,930.84)
m. National ATDA (wt. avg. BNSF, CSX, KCS, NS, SOO)	1,718	(\$213.45)	(\$228.89)	(\$366,707.10)	(\$393,233.02)
n. Independent CNGT (wt avg all union categories)	6,110	(\$211.84)	(\$226.75)	(\$1,294,342.40)	(1,385,442.50)
o. Independent SLC (wt avg all DH & DME union categories)	655	(\$228.06)	(\$263.86)	(\$149,379.30)	(172,828.30)
p.					
Total Major Union	128,904			(\$27,514,291.25)	(\$29,514,666.51)
All Other Employee Contributions*				(\$4,016,163.08)	(\$4,016,163.08)
6. Net Employer Monthly Payments				\$233,938,250.98	\$250,589,045.40
7. Ratio Projected Year to Base Year, Based on Net Monthly Payments					1.07118
8. H&W hourly rate for base year 2016				\$7.563	
9. H&W hourly rate for projected quarter					\$8.101

* Non-union employee contributions net of opt-outs. The \$27,514,291.25 in major union contributions, plus \$4,016,163.08 in all other employee contributions, totals to the 12-month average of the total employee contributions reported to the AAR in its WF survey.

Railroad Retirement and Medicare for RCAF

Inputs:

RRB Earnings Distribution Year 2015
 Wage Statistics Year 2016
 Current Year 2018
 Employees Receiving Pay* 156,278

* from 2016 wage statistics

Tier I Maximum Taxable Earnings for 2018 128,700
 Tier II Maximum Taxable Earnings for 2018 95,400
 Medicare Maximum Taxable Earnings for 2018 no limit
 Tier I Employer Tax Rate for 2018 6.20%
 Tier II Employer Tax Rate for 2018 13.10%
 Medicare Employer Tax Rate for 2018 1.45%

USA RCAF	Wage Rate	Update Factor	Railroad Retirement Tax	Hourly Rate	
2015	\$39.887				
2016	\$39.231	0.98355	\$626,560,300	\$8.192	hourly rate from SUPPL2016.xlsx
1Q/2018	\$40.555	1.01675	\$656,519,780	\$8.584	Rate = Taxable Rate
2Q/2018	\$40.961	1.02693	\$661,260,249	\$8.646	
3Q/2018		0.00000	--	\$0.000	
4Q/2018		0.00000	--	\$0.000	

Railroad Retirement & Medicare, U.S.

From 2015 Earnings Distribution			1Q/2018 Updated Using Earnings Distribution & Wage Statistics, plus Current Wage Rates with Current Tax Info									
Earnings Groups	Avg Ann. Earnings	% of Total Employees	Employees Recvg. Pay	Annual Earnings	Avg Qtly Earnings	Tier I Taxable	Tier II Taxable	Medicare Taxable	Total Taxable Earnings (Taxable x Employees)			
									Tier I	Tier II	Medicare	
\$0 - 41,699	\$32,898	2.073	3,240	\$33,449	\$8,362	\$8,362	\$8,362	\$8,362	\$27,090,666	\$27,090,666	\$27,090,666	
41,700 - 43,699	\$43,084	0.612	956	43,806	10,951	10,951	10,951	10,951	10,474,139	10,474,139	10,474,139	
43,700 - 45,699	\$44,719	0.754	1,178	45,468	11,367	11,367	11,367	11,367	13,394,124	13,394,124	13,394,124	
45,700 - 47,699	\$46,516	0.942	1,472	47,295	11,824	11,824	11,824	11,824	17,406,207	17,406,207	17,406,207	
47,700 - 49,699	\$48,812	1.130	1,766	49,629	12,407	12,407	12,407	12,407	21,910,684	21,910,684	21,910,684	
49,700 - 51,699	\$50,602	1.178	1,841	51,449	12,862	12,862	12,862	12,862	23,679,027	23,679,027	23,679,027	
51,700 - 53,699	\$52,846	1.319	2,061	53,731	13,433	13,433	13,433	13,433	27,689,034	27,689,034	27,689,034	
53,700 - 55,699	\$54,776	1.743	2,724	55,693	13,923	13,923	13,923	13,923	37,926,135	37,926,135	37,926,135	
55,700 - 57,699	\$56,687	2.167	3,387	57,636	14,409	14,409	14,409	14,409	48,797,017	48,797,017	48,797,017	
57,700 - 59,699	\$58,718	1.790	2,797	59,701	14,925	14,925	14,925	14,925	41,751,797	41,751,797	41,751,797	
59,700 - 61,699	\$60,855	3.580	5,595	61,874	15,469	15,469	15,469	15,469	86,542,648	86,542,648	86,542,648	
61,700 - 63,699	\$62,705	4.710	7,361	63,755	15,939	15,939	15,939	15,939	117,320,516	117,320,516	117,320,516	
63,700 - 65,699	\$64,735	3.910	6,110	65,819	16,455	16,455	16,455	16,455	100,546,463	100,546,463	100,546,463	
65,700 - 67,699	\$66,581	3.957	6,184	67,696	16,924	16,924	16,924	16,924	104,656,751	104,656,751	104,656,751	
67,700 - 69,699	\$68,768	3.627	5,668	69,920	17,480	17,480	17,480	17,480	99,079,735	99,079,735	99,079,735	
69,700 - 71,699	\$70,711	3.721	5,815	71,895	17,974	17,974	17,974	17,974	104,519,551	104,519,551	104,519,551	
71,700 - 73,699	\$72,644	3.344	5,226	73,861	18,465	18,465	18,465	18,465	96,497,687	96,497,687	96,497,687	
73,700 - 75,699	\$74,617	3.721	5,815	75,867	18,967	18,967	18,967	18,967	110,293,099	110,293,099	110,293,099	
75,700 - 77,699	\$76,720	3.957	6,184	78,005	19,501	19,501	19,501	19,501	120,593,953	120,593,953	120,593,953	
77,700 - 79,699	\$78,703	2.826	4,416	80,021	20,005	20,005	20,005	20,005	88,351,582	88,351,582	88,351,582	
79,700 - 81,699	\$80,790	2.496	3,901	82,143	20,536	20,536	20,536	20,536	80,103,792	80,103,792	80,103,792	
81,700 - 83,699	\$82,667	2.826	4,416	84,051	21,013	21,013	21,013	21,013	92,801,548	92,801,548	92,801,548	
83,700 - 85,699	\$84,656	2.449	3,827	86,074	21,518	21,518	21,518	21,518	82,356,412	82,356,412	82,356,412	
85,700 - 87,699	\$86,571	3.109	4,859	88,021	22,005	22,005	22,005	22,005	106,916,330	106,916,330	106,916,330	
87,700 - 89,699	\$88,770	2.591	4,049	90,257	22,564	22,564	22,564	22,564	91,365,980	91,365,980	91,365,980	
89,700 - 91,699	\$90,664	2.638	4,123	92,182	23,046	23,046	23,046	23,046	95,008,082	95,008,082	95,008,082	
91,700 - 93,699	\$92,682	2.779	4,343	94,234	23,559	23,559	23,559	23,559	102,313,945	102,313,945	102,313,945	
93,700 - 95,699	\$94,776	2.025	3,165	96,363	24,091	24,091	23,850	24,091	76,238,491	75,476,414	76,238,491	
95,700 - 97,699	\$96,754	1.649	2,577	98,374	24,594	24,594	23,850	24,594	63,378,283	61,462,028	63,378,283	
97,700 - 99,699	\$98,799	3.015	4,712	100,454	25,113	25,113	23,850	25,113	118,328,879	112,375,994	118,328,879	
99,700 - 101,699	\$100,824	2.025	3,165	102,513	25,628	25,628	23,850	25,628	81,103,545	75,476,414	81,103,545	
101,700 - 103,699	\$102,818	1.083	1,692	104,540	26,135	26,135	23,850	26,135	44,233,214	40,365,904	44,233,214	
103,700 - 105,699	\$104,762	1.319	2,061	106,516	26,629	26,629	23,850	26,629	54,890,788	49,162,168	54,890,788	
105,700 - 107,699	\$106,724	2.355	3,680	108,511	27,128	27,128	23,850	27,128	99,839,843	87,776,274	99,839,843	
107,700 - 109,699	\$108,858	1.272	1,988	110,681	27,670	27,670	23,850	27,670	55,004,516	47,410,369	55,004,516	
109,700 - 111,699	\$110,533	1.696	2,650	112,384	28,096	28,096	23,850	28,096	74,467,829	63,213,826	74,467,829	
111,700 - 113,699	\$112,778	0.895	1,399	114,667	28,667	28,667	23,850	28,667	40,095,747	33,358,711	40,095,747	
113,700 - 115,699	\$114,802	1.083	1,692	116,725	29,181	29,181	23,850	29,181	49,388,837	40,365,904	49,388,837	
\$115,700 - over	\$165,875	11.634	18,181	168,653	42,163	32,175	23,850	42,163	584,985,983	433,625,973	766,585,996	
TOTAL	\$87,427	100.000	156,278						3,291,342,857	3,069,456,881	3,472,942,870	
									Employer Tax Rate	6.20%	13.10%	1.45%
									Quarterly Payment	\$204,063,257	\$402,098,851	\$50,357,672

Total Tier I, Tier II, and Medicare Paid this Quarter

\$656,519,780

Railroad Retirement & Medicare, U.S.

From 2015 Earnings Distribution			2Q/2018 Updated Using Earnings Distribution & Wage Statistics, plus Current Wage Rates with Current Tax Info									
Earnings Groups	Avg Ann. Earnings	% of Total Employees	Employees Recvg. Pay	Annual Earnings	Avg Qtly Earnings	Tier I Taxable	Tier II Taxable	Medicare Taxable	Total Taxable Earnings (Taxable x Employees)			
									Tier I	Tier II	Medicare	
\$0 - 41,699	\$32,898	2.073	3,240	\$33,784	\$8,446	\$8,446	\$8,446	\$8,446	\$27,361,873	\$27,361,873	\$27,361,873	
41,700 - 43,699	\$43,084	0.612	956	44,244	11,061	11,061	11,061	11,061	10,578,996	10,578,996	10,578,996	
43,700 - 45,699	\$44,719	0.754	1,178	45,923	11,481	11,481	11,481	11,481	13,528,214	13,528,214	13,528,214	
45,700 - 47,699	\$46,516	0.942	1,472	47,768	11,942	11,942	11,942	11,942	17,580,462	17,580,462	17,580,462	
47,700 - 49,699	\$48,812	1.130	1,766	50,126	12,532	12,532	12,532	12,532	22,130,034	22,130,034	22,130,034	
49,700 - 51,699	\$50,602	1.178	1,841	51,965	12,991	12,991	12,991	12,991	23,916,080	23,916,080	23,916,080	
51,700 - 53,699	\$52,846	1.319	2,061	54,269	13,567	13,567	13,567	13,567	27,966,231	27,966,231	27,966,231	
53,700 - 55,699	\$54,776	1.743	2,724	56,251	14,063	14,063	14,063	14,063	38,305,817	38,305,817	38,305,817	
55,700 - 57,699	\$56,687	2.167	3,387	58,213	14,553	14,553	14,553	14,553	49,285,528	49,285,528	49,285,528	
57,700 - 59,699	\$58,718	1.790	2,797	60,299	15,075	15,075	15,075	15,075	42,169,778	42,169,778	42,169,778	
59,700 - 61,699	\$60,855	3.580	5,595	62,494	15,623	15,623	15,623	15,623	87,409,035	87,409,035	87,409,035	
61,700 - 63,699	\$62,705	4.710	7,361	64,393	16,098	16,098	16,098	16,098	118,495,023	118,495,023	118,495,023	
63,700 - 65,699	\$64,735	3.910	6,110	66,478	16,620	16,620	16,620	16,620	101,553,043	101,553,043	101,553,043	
65,700 - 67,699	\$66,581	3.957	6,184	68,374	17,093	17,093	17,093	17,093	105,704,480	105,704,480	105,704,480	
67,700 - 69,699	\$68,768	3.627	5,668	70,620	17,655	17,655	17,655	17,655	100,071,631	100,071,631	100,071,631	
69,700 - 71,699	\$70,711	3.721	5,815	72,615	18,154	18,154	18,154	18,154	105,565,906	105,565,906	105,565,906	
71,700 - 73,699	\$72,644	3.344	5,226	74,600	18,650	18,650	18,650	18,650	97,463,735	97,463,735	97,463,735	
73,700 - 75,699	\$74,617	3.721	5,815	76,626	19,157	19,157	19,157	19,157	111,397,254	111,397,254	111,397,254	
75,700 - 77,699	\$76,720	3.957	6,184	78,786	19,696	19,696	19,696	19,696	121,801,230	121,801,230	121,801,230	
77,700 - 79,699	\$78,703	2.826	4,416	80,822	20,206	20,206	20,206	20,206	89,236,078	89,236,078	89,236,078	
79,700 - 81,699	\$80,790	2.496	3,901	82,965	20,741	20,741	20,741	20,741	80,905,719	80,905,719	80,905,719	
81,700 - 83,699	\$82,667	2.826	4,416	84,893	21,223	21,223	21,223	21,223	93,730,593	93,730,593	93,730,593	
83,700 - 85,699	\$84,656	2.449	3,827	86,935	21,734	21,734	21,734	21,734	83,180,889	83,180,889	83,180,889	
85,700 - 87,699	\$86,571	3.109	4,859	88,902	22,226	22,226	22,226	22,226	107,986,679	107,986,679	107,986,679	
87,700 - 89,699	\$88,770	2.591	4,049	91,160	22,790	22,790	22,790	22,790	92,280,654	92,280,654	92,280,654	
89,700 - 91,699	\$90,664	2.638	4,123	93,105	23,276	23,276	23,276	23,276	95,959,217	95,959,217	95,959,217	
91,700 - 93,699	\$92,682	2.779	4,343	95,178	23,794	23,794	23,794	23,794	103,338,220	103,338,220	103,338,220	
93,700 - 95,699	\$94,776	2.025	3,165	97,328	24,332	24,332	23,850	24,332	77,001,721	75,476,414	77,001,721	
95,700 - 97,699	\$96,754	1.649	2,577	99,359	24,840	24,840	23,850	24,840	64,012,769	61,462,028	64,012,769	
97,700 - 99,699	\$98,799	3.015	4,712	101,459	25,365	25,365	23,850	25,365	119,513,481	112,375,994	119,513,481	
99,700 - 101,699	\$100,824	2.025	3,165	103,539	25,885	25,885	23,850	25,885	81,915,480	75,476,414	81,915,480	
101,700 - 103,699	\$102,818	1.083	1,692	105,586	26,397	26,397	23,850	26,397	44,676,037	40,365,904	44,676,037	
103,700 - 105,699	\$104,762	1.319	2,061	107,583	26,896	26,896	23,850	26,896	55,440,305	49,162,168	55,440,305	
105,700 - 107,699	\$106,724	2.355	3,680	109,598	27,399	27,399	23,850	27,399	100,839,350	87,776,274	100,839,350	
107,700 - 109,699	\$108,858	1.272	1,988	111,789	27,947	27,947	23,850	27,947	55,555,172	47,410,369	55,555,172	
109,700 - 111,699	\$110,533	1.696	2,650	113,509	28,377	28,377	23,850	28,377	75,213,333	63,213,826	75,213,333	
111,700 - 113,699	\$112,778	0.895	1,399	115,815	28,954	28,954	23,850	28,954	40,497,149	33,358,711	40,497,149	
113,700 - 115,699	\$114,802	1.083	1,692	117,893	29,473	29,473	23,850	29,473	49,883,273	40,365,904	49,883,273	
\$115,700 - over	\$165,875	11.634	18,181	170,341	42,585	32,175	23,850	42,585	<u>584,985,983</u>	<u>433,625,973</u>	<u>774,260,362</u>	
TOTAL		100.000	156,278						Total Taxable Earnings	3,318,436,456	3,088,972,380	3,507,710,835
									Employer Tax Rate	6.20%	13.10%	1.45%
									Quarterly Payment	\$205,743,060	\$404,655,382	\$50,861,807

Total Tier I, Tier II, and Medicare Paid this Quarter

\$661,260,249

Railroad Retirement & Medicare, U.S.

From 2015 Earnings Distribution			3Q/2018 Updated Using Earnings Distribution & Wage Statistics, plus Current Wage Rates with Current Tax Info									
Earnings Groups	Avg Ann. Earnings	% of Total Employees	Employees Recvg. Pay	Annual Earnings	Avg Qtly Earnings	Tier I Taxable	Tier II Taxable	Medicare Taxable	Total Taxable Earnings (Taxable x Employees)			
									Tier I	Tier II	Medicare	
\$0 - 41,699	\$32,898	2.073 %	3,240	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
41,700 - 43,699	\$43,084	0.612	956	0	0	0	0	0	0	0	0	
43,700 - 45,699	\$44,719	0.754	1,178	0	0	0	0	0	0	0	0	
45,700 - 47,699	\$46,516	0.942	1,472	0	0	0	0	0	0	0	0	
47,700 - 49,699	\$48,812	1.130	1,766	0	0	0	0	0	0	0	0	
49,700 - 51,699	\$50,602	1.178	1,841	0	0	0	0	0	0	0	0	
51,700 - 53,699	\$52,846	1.319	2,061	0	0	0	0	0	0	0	0	
53,700 - 55,699	\$54,776	1.743	2,724	0	0	0	0	0	0	0	0	
55,700 - 57,699	\$56,687	2.167	3,387	0	0	0	0	0	0	0	0	
57,700 - 59,699	\$58,718	1.790	2,797	0	0	0	0	0	0	0	0	
59,700 - 61,699	\$60,855	3.580	5,595	0	0	0	0	0	0	0	0	
61,700 - 63,699	\$62,705	4.710	7,361	0	0	0	0	0	0	0	0	
63,700 - 65,699	\$64,735	3.910	6,110	0	0	0	0	0	0	0	0	
65,700 - 67,699	\$66,581	3.957	6,184	0	0	0	0	0	0	0	0	
67,700 - 69,699	\$68,768	3.627	5,668	0	0	0	0	0	0	0	0	
69,700 - 71,699	\$70,711	3.721	5,815	0	0	0	0	0	0	0	0	
71,700 - 73,699	\$72,644	3.344	5,226	0	0	0	0	0	0	0	0	
73,700 - 75,699	\$74,617	3.721	5,815	0	0	0	0	0	0	0	0	
75,700 - 77,699	\$76,720	3.957	6,184	0	0	0	0	0	0	0	0	
77,700 - 79,699	\$78,703	2.826	4,416	0	0	0	0	0	0	0	0	
79,700 - 81,699	\$80,790	2.496	3,901	0	0	0	0	0	0	0	0	
81,700 - 83,699	\$82,667	2.826	4,416	0	0	0	0	0	0	0	0	
83,700 - 85,699	\$84,656	2.449	3,827	0	0	0	0	0	0	0	0	
85,700 - 87,699	\$86,571	3.109	4,859	0	0	0	0	0	0	0	0	
87,700 - 89,699	\$88,770	2.591	4,049	0	0	0	0	0	0	0	0	
89,700 - 91,699	\$90,664	2.638	4,123	0	0	0	0	0	0	0	0	
91,700 - 93,699	\$92,682	2.779	4,343	0	0	0	0	0	0	0	0	
93,700 - 95,699	\$94,776	2.025	3,165	0	0	0	723	0	0	2,287,385	0	
95,700 - 97,699	\$96,754	1.649	2,577	0	0	0	1,733	0	0	4,466,997	0	
97,700 - 99,699	\$98,799	3.015	4,712	0	0	0	2,778	0	0	13,090,373	0	
99,700 - 101,699	\$100,824	2.025	3,165	0	0	0	3,813	0	0	12,066,198	0	
101,700 - 103,699	\$102,818	1.083	1,692	0	0	0	4,832	0	0	8,177,442	0	
103,700 - 105,699	\$104,762	1.319	2,061	0	0	0	5,825	0	0	12,006,757	0	
105,700 - 107,699	\$106,724	2.355	3,680	0	0	0	6,827	0	0	25,126,646	0	
107,700 - 109,699	\$108,858	1.272	1,988	0	0	0	7,918	0	0	15,738,949	0	
109,700 - 111,699	\$110,533	1.696	2,650	0	0	0	8,773	0	0	23,253,510	0	
111,700 - 113,699	\$112,778	0.895	1,399	0	0	0	9,920	0	0	13,875,474	0	
113,700 - 115,699	\$114,802	1.083	1,692	0	0	0	10,954	0	0	18,540,301	0	
\$115,700 - over	\$165,875	11.634	18,181	0	0	20,399	23,850	0	370,874,392	433,625,973	0	
TOTAL		100.000	156,278						Total Taxable Earnings	370,874,392	582,256,006	
									Employer Tax Rate	6.20%	13.10%	
									Quarterly Payment	\$22,994,212	\$76,275,537	
											\$0	

Total Tier I, Tier II, and Medicare Paid this Quarter

\$99,269,749

Railroad Retirement & Medicare, U.S.

From 2015 Earnings Distribution			4Q/2018 Updated Using Earnings Distribution & Wage Statistics, plus Current Wage Rates with Current Tax Info									
Earnings Groups	Avg Ann. Earnings	% of Total Employees	Employees Recvg. Pay	Annual Earnings	Avg Qtly Earnings	Tier I Taxable	Tier II Taxable	Medicare Taxable	Total Taxable Earnings (Taxable x Employees)			
									Tier I	Tier II	Medicare	
\$0 - 41,699	\$32,898	2.073	3,240	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
41,700 - 43,699	\$43,084	0.612	956	0	0	0	0	0	0	0	0	0
43,700 - 45,699	\$44,719	0.754	1,178	0	0	0	0	0	0	0	0	0
45,700 - 47,699	\$46,516	0.942	1,472	0	0	0	0	0	0	0	0	0
47,700 - 49,699	\$48,812	1.130	1,766	0	0	0	0	0	0	0	0	0
49,700 - 51,699	\$50,602	1.178	1,841	0	0	0	0	0	0	0	0	0
51,700 - 53,699	\$52,846	1.319	2,061	0	0	0	0	0	0	0	0	0
53,700 - 55,699	\$54,776	1.743	2,724	0	0	0	0	0	0	0	0	0
55,700 - 57,699	\$56,687	2.167	3,387	0	0	0	0	0	0	0	0	0
57,700 - 59,699	\$58,718	1.790	2,797	0	0	0	0	0	0	0	0	0
59,700 - 61,699	\$60,855	3.580	5,595	0	0	0	0	0	0	0	0	0
61,700 - 63,699	\$62,705	4.710	7,361	0	0	0	0	0	0	0	0	0
63,700 - 65,699	\$64,735	3.910	6,110	0	0	0	0	0	0	0	0	0
65,700 - 67,699	\$66,581	3.957	6,184	0	0	0	0	0	0	0	0	0
67,700 - 69,699	\$68,768	3.627	5,668	0	0	0	0	0	0	0	0	0
69,700 - 71,699	\$70,711	3.721	5,815	0	0	0	0	0	0	0	0	0
71,700 - 73,699	\$72,644	3.344	5,226	0	0	0	0	0	0	0	0	0
73,700 - 75,699	\$74,617	3.721	5,815	0	0	0	0	0	0	0	0	0
75,700 - 77,699	\$76,720	3.957	6,184	0	0	0	0	0	0	0	0	0
77,700 - 79,699	\$78,703	2.826	4,416	0	0	0	0	0	0	0	0	0
79,700 - 81,699	\$80,790	2.496	3,901	0	0	0	0	0	0	0	0	0
81,700 - 83,699	\$82,667	2.826	4,416	0	0	0	0	0	0	0	0	0
83,700 - 85,699	\$84,656	2.449	3,827	0	0	0	0	0	0	0	0	0
85,700 - 87,699	\$86,571	3.109	4,859	0	0	0	0	0	0	0	0	0
87,700 - 89,699	\$88,770	2.591	4,049	0	0	0	0	0	0	0	0	0
89,700 - 91,699	\$90,664	2.638	4,123	0	0	0	0	0	0	0	0	0
91,700 - 93,699	\$92,682	2.779	4,343	0	0	0	0	0	0	0	0	0
93,700 - 95,699	\$94,776	2.025	3,165	0	0	0	0	0	0	0	0	0
95,700 - 97,699	\$96,754	1.649	2,577	0	0	0	0	0	0	0	0	0
97,700 - 99,699	\$98,799	3.015	4,712	0	0	0	0	0	0	0	0	0
99,700 - 101,699	\$100,824	2.025	3,165	0	0	0	0	0	0	0	0	0
101,700 - 103,699	\$102,818	1.083	1,692	0	0	0	0	0	0	0	0	0
103,700 - 105,699	\$104,762	1.319	2,061	0	0	0	0	0	0	0	0	0
105,700 - 107,699	\$106,724	2.355	3,680	0	0	0	0	0	0	0	0	0
107,700 - 109,699	\$108,858	1.272	1,988	0	0	0	0	0	0	0	0	0
109,700 - 111,699	\$110,533	1.696	2,650	0	0	0	0	0	0	0	0	0
111,700 - 113,699	\$112,778	0.895	1,399	0	0	0	0	0	0	0	0	0
113,700 - 115,699	\$114,802	1.083	1,692	0	0	0	0	0	0	0	0	0
\$115,700 - over	\$165,875	11.634	18,181	0	0	0	13,199	0	0	239,968,438	0	0
TOTAL		100.000	156,278						0	239,968,438	0	0
Total Taxable Earnings									6.20%	13.10%	1.45%	
Employer Tax Rate									\$0	\$31,435,865	\$0	
Quarterly Payment												
Total Tier I, Tier II, and Medicare Paid this Quarter										\$31,435,865		

RCAF Unemployment Insurance Tax

	<u>Unemployment Ins.</u>			RRB	Factor	Avg. Ann.	Un. Ins.
	<u>Tax</u>	<u>Earnings</u>	Hourly	Sample	To Update	Taxable	Hourly
	<u>Rate</u>	<u>Base</u>	<u>Earnings</u>	<u>Year</u>	<u>RRB Sample</u>	<u>Earnings</u>	<u>Rate</u>
			\$36.269	(2012)			
2013 Avg.	0.67%	\$16,860	\$36.760		1.013538	\$15,578.13	\$0.057
3Q/14 reb.	0.68%	\$17,280	\$38.308		1.056219	\$15,976.08	\$0.059
4Q/14	0.68%	\$17,280	\$38.319		1.056522	\$15,976.25	\$0.059
1Q/15	2.31%	\$17,460	\$39.385		1.085914	\$16,152.67	\$0.204
2Q/15	2.31%	\$17,460	\$39.595		1.091704	\$16,155.78	\$0.204
3Q/15	2.31%	\$17,460	\$39.581		1.091318	\$16,155.57	\$0.204
			\$36.760	(2013)			
2014 Avg.	0.68%	\$17,280	\$38.866		1.057291	\$16,395.26	\$0.059
3Q/15 reb.	2.31%	\$17,460	\$40.503		1.101823	\$16,583.82	\$0.203
4Q/15	2.31%	\$17,460	\$40.590		1.104189	\$16,585.04	\$0.203
1Q/16	2.73%	\$17,460	\$40.888		1.112296	\$16,589.15	\$0.240
2Q/16	2.73%	\$17,460	\$40.731		1.108025	\$16,586.99	\$0.240
3Q/16	2.73%	\$17,460	\$40.545		1.102965	\$16,584.41	\$0.240
			\$38.866	(2014)			
2015 Avg.	2.31%	\$17,460	\$39.887		1.026257	\$16,460.37	\$0.208
3Q/16 reb.	2.73%	\$17,460	\$39.731		1.022244	\$16,458.00	\$0.246
4Q/16	2.73%	\$17,460	\$39.703		1.021523	\$16,457.57	\$0.246
1Q/17	3.37%	\$18,540	\$39.736		1.022372	\$17,436.31	\$0.321
2Q/17	3.37%	\$18,540	\$39.738		1.022424	\$17,436.34	\$0.321
3Q/17	3.37%	\$18,540	\$39.775		1.023376	\$17,436.97	\$0.321
			\$39.887	(2015)			
2016 Avg.	2.73%	\$17,460	\$39.231		0.983554	\$16,664.96	\$0.247
3Q/17 reb.	3.37%	\$18,540	\$39.154		0.981623	\$17,655.72	\$0.323
4Q/17	3.37%	\$18,540	\$39.156		0.981673	\$17,655.75	\$0.323
1Q/18	3.76%	\$18,720	\$40.555		1.016747	\$17,843.78	\$0.364
2Q/18	3.76%	\$18,720	\$40.961		1.026926	\$17,850.31	\$0.364
3Q/18					0.000000		\$0.000

Note: Average Annual Taxable Earnings is calculated from the RRB 1% sample data, by multiplying the average annual earnings in the file times the "Factor", and limiting the amount to the earnings base. Thus, the annual hourly earnings used for the calculation of the Factor is for the RRB sample year, and the Factor brings the earnings in the RRB 1% sample file to the current quarter's level.

The MEANS Procedure

Variable	N	Sum	Mean
FactorA	2752	2706.74	0.9835540
FactorQ	2752	2826.10	1.0269260
Capa	2752	48049920.00	17460.00
Capq	2752	51517440.00	18720.00

The MEANS Procedure

Variable	N	Sum	Mean
ANUAL_US	2752	45861976.95	16664.96
QTRLY_US	2752	49124049.09	17850.31



PETROLEUM & OTHER LIQUIDS

OVERVIEW

DATA

ANALYSIS & PROJECTIONS

GLOSSARY

FAQS

Spot Prices

(Crude Oil in Dollars per Barrel, Products in Dollars per Gallon)

Period: Weekly

Download Series History

Definitions, Sources & Notes

Product by Area		01/12/18	01/19/18	01/26/18	02/02/18	02/09/18	02/16/18	View History
Crude Oil								
WTI - Cushing, Oklahoma		63.26	63.77	65.14	65.32	62.01	60.56	1986-2018
Brent - Europe		69.47	69.39	70.04	68.0	65.50	62.72	1987-2018
Conventional Gasoline								
New York Harbor, Regular		1.860	1.901	1.973	1.958	1.826	1.759	1985-2018
U.S. Gulf Coast, Regular		1.821	1.872	1.928	1.906	1.778	1.706	1985-2018
RBOB Regular Gasoline								
Los Angeles		1.903	1.845	2.038	2.088	1.933	1.787	2003-2018
No. 2 Heating Oil								
New York Harbor		2.019	2.011	2.035	2.003	1.856	1.800	1986-2018
Ultra-Low-Sulfur No. 2 Diesel Fuel								
New York Harbor		2.070	2.065	2.091	2.074	1.944	1.874	2006-2018
U.S. Gulf Coast		1.995	1.966	2.042	2.022	1.893	1.833	2006-2018
Los Angeles		2.027	2.031	2.095	2.080	1.964	1.892	1996-2018
Kerosene-Type Jet Fuel								
U.S. Gulf Coast		1.946	1.928	1.995	1.973	1.844	1.781	1990-2018
Propane								
Mont Belvieu, Texas		0.920	0.925	0.842	0.850	0.776	0.841	1992-2018

Click on the source key icon to learn how to download series into Excel, or to embed a chart or map on your website.

Spot Prices

(Crude Oil in Dollars per Barrel, Products in Dollars per Gallon)

Period: Weekly

Download Series History		Definitions, Sources & Notes						
Product by Area		01/19/18	01/26/18	02/02/18	02/09/18	02/16/18	02/23/18	View History
Crude Oil								
WTI - Cushing, Oklahoma	 ☐	63.77	65.14	65.32	62.01	60.56	62.47	1986-2018
Brent - Europe	 ☐	69.39	70.04	68.0	65.50	62.72	65.52	1987-2018
Conventional Gasoline								
New York Harbor, Regular	 ☐	1.901	1.973	1.958	1.826	1.759	1.805	1986-2018
U.S. Gulf Coast, Regular	 ☐	1.872	1.928	1.906	1.778	1.706	1.761	1986-2018
RBOB Regular Gasoline								
Los Angeles	 ☐	1.845	2.038	2.088	1.933	1.787	1.899	2003-2018
No. 2 Heating Oil								
New York Harbor	 ☐	2.011	2.035	2.003	1.856	1.800	1.841	1986-2018
Ultra-Low-Sulfur No. 2 Diesel Fuel								
New York Harbor	 ☐	2.065	2.091	2.074	1.944	1.874	1.935	2006-2018
U.S. Gulf Coast	 ☐	1.966	2.042	2.022	1.893	1.833	1.897	2006-2018
Los Angeles	 ☐	2.031	2.095	2.080	1.964	1.892	1.961	1996-2018
Kerosene-Type Jet Fuel								
U.S. Gulf Coast	 ☐	1.928	1.995	1.973	1.844	1.781	1.852	1990-2018
Propane								
Mont Belvieu, Texas	 ☐	0.925	0.842	0.850	0.776	0.841	0.836	1992-2018

U.S.

Summary by Composition Category

	MS-2016		Prev. Idx	2018Q1		Calculation		Relative of Change
	MS Amount	Weight		Cur Idx		Prev. Idx	Cur Idx	
Forest Products	778,802,463	0.1337	301.28	319.84		40.28	42.76	
Metal Products	3,300,469,719	0.5666	173.06	170.62		98.06	96.67	
Misc. Products	1,745,997,298	0.2997	354.78	374.19		106.33	112.14	
Total	5,825,269,480	1.0000	244.67	251.57				1.0282
Total Linked			236.52	243.19				
'77 = 100 Link Fact.= 1.423			336.57	346.06				
'80 = 100 Link Fact.= 1.061			250.95	258.02				

As info only	Change
Forest Products	6.16%
Metal Products	-1.41%
Misc. Products	<u>5.47%</u>
Total ('80=100)	2.82%
Rounded 80 Indices	2.8%
Rounded 77 Indices	2.8%

RCAF (Forecast)

	1980	June 3Q/17	Sept. 4Q/17	Dec. 1Q/18	Mar. 2Q/18	June 3Q/18
RATE						
RR-OWNED TIME	31.00	64.00	64.00	64.00	64.00	--
RR-OWNED MILEAGE	4.69	6.70	6.70	6.70	6.70	--
PRIVATELY-OWNED CARS	25.47	53.60	54.31	54.38	55.15	--
AUTORACKS	47.00	83.56	84.81	86.65	83.77	--
INDEX						
RR-OWNED TIME	100.0	206.5	206.5	206.5	206.5	--
RR-OWNED MILEAGE	100.0	142.9	142.9	142.9	142.9	--
PRIVATELY-OWNED CARS	100.0	210.4	213.2	213.5	216.5	--
AUTORACKS	100.0	177.8	180.4	184.4	178.2	--
CAR HIRE INDEX (old wts) 2015	100.0	204.5	--	--	--	--
CAR HIRE INDEX (new wts) 2016	100.0	203.2	205.6	206.2	207.9	--
CAR HIRE INDEX (LINKED)	100.0	204.5	206.9	207.5	209.2	--

Note: The Car Hire Index for third quarter using *old weights* and *linked* should match that quarter's filing. The third quarter *new weights* version is used in the fourth quarter linked index calculation to ensure that the transition from old weights to new weights does not impact the linked index.

Note: Indexes are rounded, rates are full float.

Equipment Rents Data From CHARM

	2017 (first day of month)						2018 (first day of month)							
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug
Railroad Equipment														
No. of Cars (cars with rates only)														
Superstructures (Vehicular Flats)	8,341	8,815	9,030	9,254	9,520	9,614	9,796	9,891	10,098					
Rate (in cents)														
Superstructures #3 - Auto Rack	54.0	62.0	65.0	67.0	71.0	73.0	75.0	75.0	77.0					
All other #1 - Time	64.0	64.0	64.0	64.0	64.0	64.0	64.0	64.0	64.0					
All other #2 - Mileage	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7					
Private Equipment														
No. of Cars (cars with rates only)														
Superstructures (Vehicular Flats)	56,048	56,095	56,066	55,978	55,842	55,875	55,956	55,925	55,813					
Covered Hoppers	397,633	400,103	402,279	403,818	405,332	407,888	411,930	413,529	415,267					
Tank Cars	405,127	405,272	405,476	405,805	405,481	405,753	406,074	406,011	406,019					
Others	291,842	291,943	291,843	292,787	292,671	293,501	293,142	293,781	294,358					
Rate (in cents)														
Superstructures #1 - Time	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0					
Superstructures #2 - Mileage	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4					
Superstructures #3 - Auto Rack	88.0	88.0	88.0	89.0	89.0	89.0	89.0	85.0	85.0					
Covered Hoppers #2 - Mileage	45.5	45.6	45.7	45.8	45.9	45.9	46.0	46.0	45.9					
Tank Cars #2 - Mileage	85.2	85.3	86.8	86.9	87.0	87.0	87.1	87.2	89.4					
Others #1 - Time	87.0	87.0	87.0	87.0	87.0	87.0	88.0	87.0	87.0					
Others #2 - Mileage	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1					
AVERAGE RATES														
Private Superstructures	21.14	21.14	21.14	21.14	21.14	21.14	21.14	21.14	21.14	0.00	0.00	0.00	0.00	0.00
Private Others	27.41	27.41	27.41	27.41	27.41	27.41	27.64	27.41	27.41	0.00	0.00	0.00	0.00	0.00
Private Total	53.70	53.76	54.31	54.36	54.42	54.38	54.50	54.45	55.15	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Autoracks	83.60	84.47	84.81	85.88	86.38	86.65	86.91	83.50	83.77	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

WEIGHTS	"Old Wts"	"New Wts"
	2015	2016
For RCAF & RCR		
RR-owned Time	0.124	0.091
RR-owned Mileage	0.062	0.058
Privately-owned Cars	0.776	0.762
Autoracks	0.038	0.089
----- Check sum	1.000	1.000

Weights for Equipment Rents (not used in Car Hire calculation)		
	2015	2016
Car Hire - U.S.	0.582	0.583
Lease Rentals - U.S.	0.418	0.417
----- Check sum	1.000	1.000

Note: The 4 bold lines are used for the Car Hire Rate. Private Total uses a weighted average of the Covered Hoppers, Tank Cars, Combined Private Superstructures, and Combined Private Others rates.

CHARM Process - (Hire Rate Report Average Car Rental Rates for 03/2018

Ownership	Car Group	Car Count	Time Rate (cents/hour)	Mileage Rate (\$/mile)	Auto Rack Rate (cents/hour)
Railroad	Vehicular Flats	10,098	113	0.069	77
Railroad	Number of Zero-Rated Vehicular Flats	184	.	.	.
Railroad	All Other Cars	423,241	64	0.067	.
Railroad	Number of Zero-Rated Other Cars	16,572	.	.	.
Railroad	Total Railroad Equipment	450,095	.	.	.
		.	.	.	.
Private	Vehicular Flats	55,813	84	0.014	85
Private	Number of Zero-Rated Vehicular Flats	170	.	.	.
Private	Covered Hoppers	415,267	0	0.459	.
Private	Number of Zero-Rated Covered Hoppers	12,528	.	.	.
Private	Tanks	406,019	0	0.894	.
Private	Number of Zero-Rated Tanks	8,444	.	.	.
Private	All Other Cars	294,358	87	0.081	.
Private	Number of Zero-Rated Other Cars	23,593	.	.	.
Private	Total Private Equipment	1,216,192	.	.	.

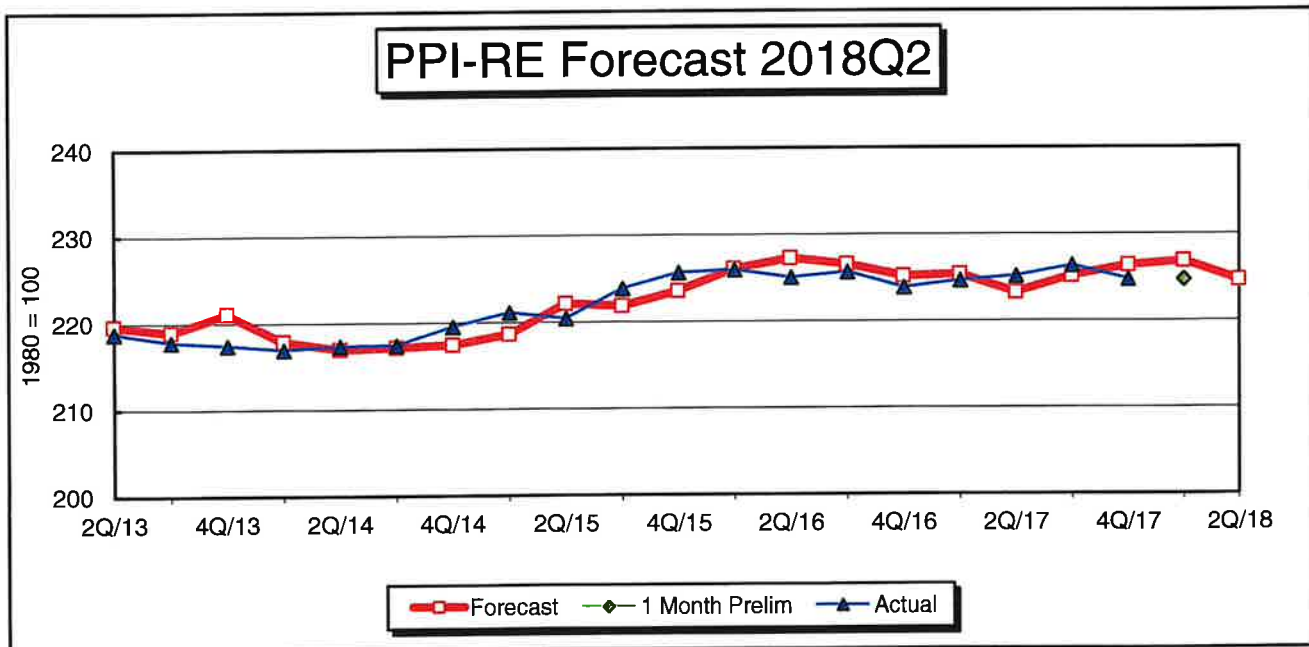
Notes
This report excludes these car types: D (Locomotives), M (MoW, EOTs, etc.), U (Containers), Z (Trailers).
All TTX equipment (including ABOX, RBOX, GONX) is contained in the Private section of report.
Equipment can be zero rated due to owners supplying incorrect or insufficient information to the car accounting process.
Zero-rated equipment includes those with Umler Rate_Indicator of 6 and 0 (zero).
Zero-rated equipment is excluded from the averages shown in this report.
Equipment must be Active in Umler to be included in this report; Pre-registered and Inactive cars are excluded.

PPI-RE Forecast (for Depreciation Component)

	Forecast	Actual	1 Month Prelim
2Q/13	219.6	218.8	
3Q/13	218.9	217.8	
4Q/13	221.0	217.4	
1Q/14	217.8	216.9	
2Q/14	216.9	217.3	
3Q/14	217.1	217.4	
4Q/14	217.4	219.5	
1Q/15	218.6	221.1	
2Q/15	222.1	220.4	
3Q/15	221.8	223.8	
4Q/15	223.5	225.6	
1Q/16	226.0	225.9	
2Q/16	227.2	225.0	
3Q/16	226.5	225.6	
4Q/16	225.1	223.8	
1Q/17	225.3	224.6	
2Q/17	223.2	225.1	
3Q/17	225.1	226.3	
4Q/17	226.3	224.7	
1Q/18	226.8		224.7
2Q/18	224.6		

1980 Base

	PPI-RE Forecast		Percent Change			
	(82=100)	(80=100)	Yr Ago Actual	Latest Month Actual	2nd Prev Qtr Actual	Previous Forecast
2018Q2						
Low	199.6	220.8	-1.9%			
Midpoint	203.0	224.6	-0.2%	0.0%	0.0%	-1.0%
High	206.4	228.3	1.4%			



Forecast Report for PPIRE

Description: PPIRE

Expert Analysis

Using rule-based logic I have narrowed down the choice to exponential smoothing or Box-Jenkins. I will perform an out-of-sample test to select between these two approaches.

The cumulative MAD for Exponential smoothing was 0.83 and for Box-Jenkins was 0.87. The rolling out-of-sample test used a maximum horizon of 12 and generated 78 forecasts for each method.

Based on the lower MAD, I will use Exponential Smoothing.

Model Details

Expert selection

Exponential smoothing: No trend, Additive seasonality
NA(0.785, 0.330)

Component	Smoothing Wgt		Final Value
Level	0.7854		203
Seasonal	0.3297		
Seasonal Indexes			
Jan - Mar	0.05934	0.2557	-0.1711
Apr - Jun	-0.1581	0.1193	0.1062
Jul - Sep	-0.008904	0.01814	-0.3238
Oct - Dec	0.3834	-0.2231	-0.05698

Within-Sample Statistics

Sample size	72	No. parameters	2
Mean	199.18	Std. deviation	4.41
R-square	0.95	Adj. R-square	0.95
Durbin-Watson	2.03	Ljung-Box(18)	28.9 P=0.95
Forecast error	0.98	BIC	1.03
MAPE	0.36	SMAPE	0.36
RMSE	0.97	MAD	0.71
MAD/Mean Ratio	0		

Historic Data

Date	Historic
2012-Feb	190.1
2012-Mar	190.6
2012-Apr	191.8
2012-May	191.6
2012-Jun	191.5
2012-Jul	192
2012-Aug	190.4
2012-Sep	190.9

2012-Oct	194.9
2012-Nov	193.9
2012-Dec	194.1
2013-Jan	196
2013-Feb	195.2
2013-Mar	195.8
2013-Apr	195.2
2013-May	198.1
2013-Jun	196.3
2013-Jul	195.4
2013-Aug	194.5
2013-Sep	194.6
2013-Oct	195.1
2013-Nov	195.2
2013-Dec	196.9
2014-Jan	196
2014-Feb	197.4
2014-Mar	196.8
2014-Apr	196.2
2014-May	196.7
2014-Jun	196.8
2014-Jul	197.8
2014-Aug	197.9
2014-Sep	198.3
2014-Oct	199.3
2014-Nov	199.9
2014-Dec	199.5
2015-Jan	200.8
2015-Feb	200.5
2015-Mar	199.5
2015-Apr	200.5
2015-May	200
2015-Jun	201.4
2015-Jul	201.6
2015-Aug	202.8
2015-Sep	202.8
2015-Oct	204.4
2015-Nov	203.9
2015-Dec	204.5
2016-Jan	204
2016-Feb	204.2
2016-Mar	203.3
2016-Apr	203
2016-May	203.5
2016-Jun	203.5
2016-Jul	203.5
2016-Aug	204.4
2016-Sep	203.7
2016-Oct	203.7
2016-Nov	201.5
2016-Dec	201.8

2017-Jan	201.9
2017-Feb	204.1
2017-Mar	203.3
2017-Apr	203.4
2017-May	203.5
2017-Jun	204.6
2017-Jul	203.6
2017-Aug	204.5
2017-Sep	203.8
2017-Oct	203.9
2017-Nov	202.8
2017-Dec	202.7
2018-Jan	203.1

Forecast Data

Date	2.5 Lower	Forecast	97.5 Upper
2018-Feb	201.246	203.261	205.276
2018-Mar	200.272	202.834	205.396
2018-Apr	199.836	202.847	205.859
2018-May	199.723	203.125	206.527
2018-Jun	199.359	203.112	206.864
2018-Jul	198.924	202.996	207.069
2018-Aug	198.655	203.023	207.392
2018-Sep	198.035	202.682	207.328
2018-Oct	198.48	203.389	208.297
2018-Nov	197.625	202.782	207.94
2018-Dec	197.553	202.948	208.343
2019-Jan	197.442	203.065	208.687

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PPI Commodity Data

Series Id: WPU144

Not Seasonally Adjusted

Series Title: PPI Commodity data for Transportation equipment-Railroad equipment, not seasonally adjusted

Group: Transportation equipment

Item: Railroad equipment

Base Date: 198200

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Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2017	201.9	204.1	203.3	203.4	203.5	204.6	203.6	204.5	203.8	203.9(P)	202.8(P)	202.7(P)
2018	203.1(P)											

P : Preliminary. All indexes are subject to revision four months after original publication.

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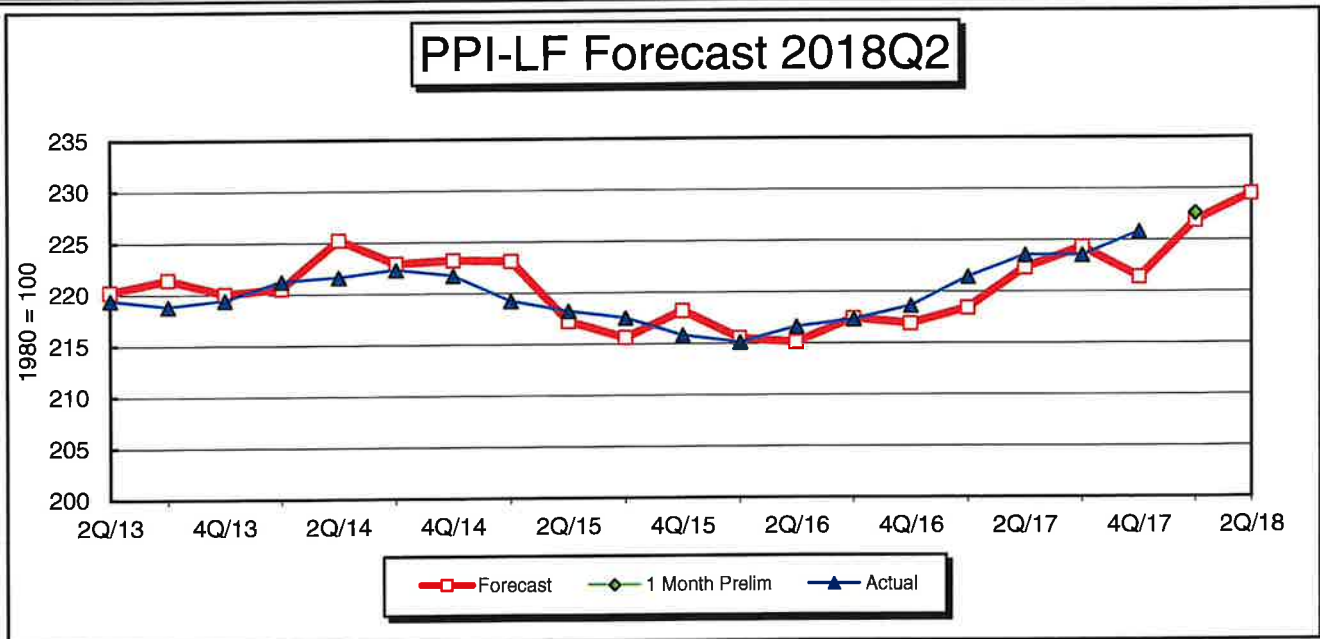
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PPI-LF Forecast (for Other and Lease Rentals Components)

	Forecast	Actual	1 Month Prelim
2Q/13	220.2	219.4	
3Q/13	221.4	218.8	
4Q/13	220.0	219.4	
1Q/14	220.5	221.2	
2Q/14	225.2	221.6	
3Q/14	222.9	222.3	
4Q/14	223.2	221.7	
1Q/15	223.1	219.2	
2Q/15	217.2	218.2	
3Q/15	215.6	217.5	
4Q/15	218.2	215.8	
1Q/16	215.5	215.1	
2Q/16	215.1	216.6	
3Q/16	217.4	217.3	
4Q/16	216.9	218.6	
1Q/17	218.4	221.4	
2Q/17	222.3	223.5	
3Q/17	224.3	223.5	
4Q/17	221.4	225.8	
1Q/18	226.9		227.6
2Q/18	229.5		

1980 Base

	PPI-LF Forecast		Percent Change			
	(82=100)	(80=100)	Yr Ago Actual	Latest Month Actual	2nd Prev Qtr Actual	Previous Forecast
2018Q2						
Low	201.5	225.9	1.1%			
Midpoint	204.7	229.5	2.7%	0.8%	1.6%	1.1%
High	207.8	233.0	4.3%			



Forecast Report for PPILF

Description: PPILF

Expert Analysis

Using rule-based logic I have narrowed down the choice to exponential smoothing or Box-Jenkins. I will perform an out-of-sample test to select between these two approaches.

The cumulative MAD for Exponential smoothing was 2.26 and for Box-Jenkins was 1.27. The rolling out-of-sample test used a maximum horizon of 12 and generated 78 forecasts for each method.

Based on the lower MAD, I will use Box-Jenkins.

Model Details**Expert selection****Box-Jenkins****ARIMA(1, 1, 0)**

Term	Coefficient	Std. Error	t-Statistic	Significance
a[1]	0.6527	0.09054	7.209	1

Within-Sample Statistics

Sample size	72	No. parameters	1
Mean	195.92	Std. deviation	2.51
R-square	0.97	Adj. R-square	0.97
Durbin-Watson	1.94	Ljung-Box(18)	18.7 P=0.59
Forecast error	0.44	BIC	0.45
MAPE	0.17	SMAPE	0.17
RMSE	0.43	MAD	0.34
MAD/Mean Ratio	0		

Historic Data

Date	Historic
2012-Feb	194.7
2012-Mar	195.7
2012-Apr	195.8
2012-May	195.4
2012-Jun	193.7
2012-Jul	193.3
2012-Aug	193.3
2012-Sep	193.7
2012-Oct	193.9
2012-Nov	194
2012-Dec	194.2
2013-Jan	195.3
2013-Feb	196.1
2013-Mar	196.1
2013-Apr	195.9

2013-May	195.5
2013-Jun	195.4
2013-Jul	195.2
2013-Aug	195.3
2013-Sep	195.1
2013-Oct	195.4
2013-Nov	195.5
2013-Dec	195.9
2014-Jan	197.2
2014-Feb	197.6
2014-Mar	197.3
2014-Apr	197.7
2014-May	197.6
2014-Jun	197.7
2014-Jul	198.2
2014-Aug	198.4
2014-Sep	198.3
2014-Oct	198.2
2014-Nov	197.4
2014-Dec	196.7
2015-Jan	196
2015-Feb	195.4
2015-Mar	195
2015-Apr	194.8
2015-May	194.9
2015-Jun	195.2
2015-Jul	194.9
2015-Aug	193.9
2015-Sep	193.1
2015-Oct	192.9
2015-Nov	192.3
2015-Dec	191.9
2016-Jan	191.9
2016-Feb	191.8
2016-Mar	192.1
2016-Apr	192.8
2016-May	193.4
2016-Jun	193.7
2016-Jul	193.7
2016-Aug	194
2016-Sep	193.9
2016-Oct	194.3
2016-Nov	194.9
2016-Dec	195.6
2017-Jan	196.8
2017-Feb	197.8
2017-Mar	198.7
2017-Apr	199.3
2017-May	199.2
2017-Jun	199.4
2017-Jul	199.2

2017-Aug	199.7
2017-Sep	200
2017-Oct	200.9
2017-Nov	201.4
2017-Dec	201.9
2018-Jan	203

Forecast Data

Date	2.5 Lower	Forecast	97.5 Upper
2018-Feb	202.86	203.718	204.576
2018-Mar	202.53	204.187	205.844
2018-Apr	202.058	204.493	206.927
2018-May	201.528	204.692	207.857
2018-Jun	200.981	204.823	208.664
2018-Jul	200.441	204.908	209.374
2018-Aug	199.918	204.963	210.008
2018-Sep	199.418	204.999	210.581
2018-Oct	198.94	205.023	211.106
2018-Nov	198.486	205.039	211.591
2018-Dec	198.054	205.049	212.043
2019-Jan	197.642	205.055	212.468

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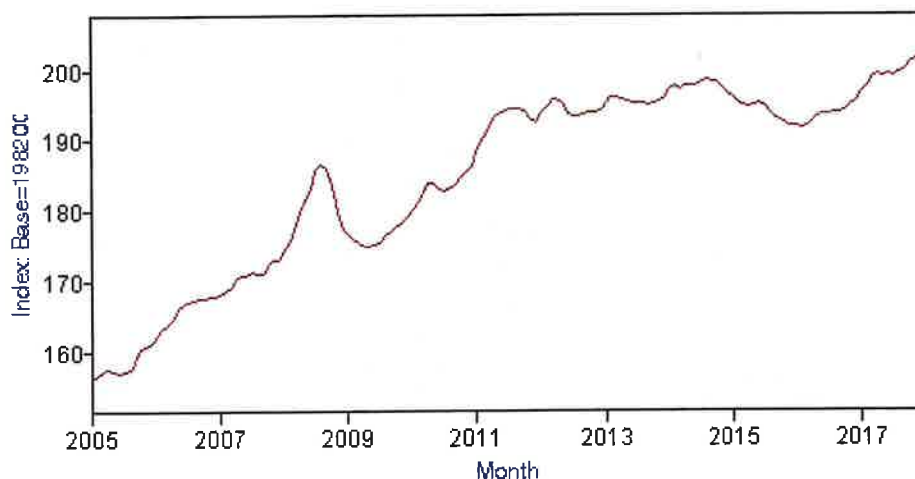
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PPI Commodity Data

Series Id: WPU03T15M05
 Not Seasonally Adjusted
Series Title: PPI Commodity data for Industrial commodities less fuels, not seasonally adjusted
Group: Industrial Commodities less fuels
Item: Industrial commodities less fuels
Base Date: 198200



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Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2005	156.4	156.9	157.4	157.6	157.4	157.0	157.3	157.5	158.7	160.5	161.0	161.3
2006	162.5	163.2	163.8	164.8	166.4	166.8	167.1	167.5	167.6	167.7	167.8	167.9
2007	168.2	168.6	169.4	170.3	170.8	171.0	171.4	171.1	171.2	172.2	173.1	173.1
2008	174.7	175.9	177.4	179.8	181.8	183.2	185.9	186.6	186.2	183.7	179.9	177.4
2009	176.9	176.1	175.6	175.0	174.9	175.2	175.5	176.6	177.2	177.7	178.1(R)	178.9
2010	180.2	181.2	182.4	183.8	184.0	183.1	182.7	183.1	183.5	184.6	185.4	186.3
2011	188.6	190.2	191.2	193.0	193.7	193.9	194.6	194.5	194.6	193.9	193.2	192.7
2012	193.8	194.7	195.7	195.8	195.4	193.7	193.3	193.3	193.7	193.9	194.0	194.2
2013	195.3	196.1	196.1	195.9	195.5	195.4	195.2	195.3	195.1	195.4	195.5	195.9
2014	197.2	197.6	197.3	197.7	197.6	197.7	198.2	198.4	198.3	198.2	197.4	196.7
2015	196.0	195.4	195.0	194.8	194.9	195.2	194.9	193.9	193.1	192.9	192.3	191.9
2016	191.9	191.8	192.1	192.8	193.4	193.7	193.7	194.0	193.9	194.3	194.9	195.6
2017	196.8	197.8	198.7	199.3	199.2	199.4	199.2	199.7	200.0	200.9(P)	201.4(P)	201.9(P)
2018	203.0(P)											

R : Revised

Forecast Error Calculation

	2016 Weight	Fourth Quarter 2017		Difference		Notes
		2017Q4 Forecast	2017Q4 Actual	Pt.	Pct.	
Labor	35.6%	415.1	415.1	0.0	0%	* actual=forecast
Fuel	10.7%	215.5	233.3	17.8	8%	from 1st month of quarter
M&S	5.0%	254.8	254.8	0.0	0%	* actual=forecast
Equip Rents	5.9%	223.9	226.6	2.7	1%	from Equipment Rents below
Depreciation	15.6%	226.3	224.7	-1.6	-1%	PPI-RE
Interest	2.2%	60.5	60.5	0.0	0%	
Other	25.0%	221.4	225.8	4.4	2%	PPI-LF
Weighted Avg	100.0%					
1980 = 100		288.8	291.7			calculated
1980 = 100 (linked)		267.1	267.7			calculated
4Q17 = 100	2.645	101.0	101.2			calculated
4Q12 = 100	2.976	89.8	90.0			calculated
4Q07 = 100	2.459	108.6	108.9			calculated
4Q02 = 100	1.921	139.0	139.4			calculated
4Q97 = 100	1.732	154.2	154.6			calculated
Forecast Error		0.2				calculated
						0.002 = RCAF adj.
Prior Quarter						
1980 = 100		290.5	289.5 **			Re-calculated using new weights
1980 = 100 (linked)		268.7	265.7			
4Q17 = 100		101.6	100.5			calculated
4Q12 = 100		90.3	89.3			calculated
4Q07 = 100		109.3	108.1			calculated
4Q02 = 100		139.9	138.3			calculated
4Q97 = 100		155.1	153.4			calculated
Equipment Rents						
Car Hire	58.3%	206.9	207.5			from Equipment Rents/CHARM
Lease Rentals	41.7%	221.4	225.8			(equals PPI-LF from above)
Weighted Average		212.9	215.1			calculated
Linked		223.9	226.6			calculated
Prior Quarter						
Weighted Average		212.8	212.8 **			Re-calculated using new weights
Linked		223.8	224.2			
Sum of Weights	ok					** if fourth quarter, weighted avg for prior needs to use new weights, linked is ok
Sum of ER Wt.	ok					

Factors to change from
1982=100 to 1980 = 100

0.9040

0.8920

89.8 in Q4 filing
on old basis. Also
matches Q4 in Q1
filing (101.0) on
new basis.

All-Inclusive Index (Actual)

	16 Wts	3Q/17 15 Wts	3Q/17 16 Wts	% Chg.	4Q/17 16 Wts	% Chg.	1Q/18 16 Wts	% Chg.	2Q/18 16 Wts	% Chg.	3Q/18 16 Wts	% Chg.
Labor	35.6%	422.8	422.8	0.0%	415.1 ✓	-1.8%	419.6	1.1%		NA		NA
Fuel	10.7%	192.4	192.4	0.0%	233.3 ✓	21.3%		NA		NA		NA
M&S	5.0%	252.6	252.6	0.0%	254.8 ✓	0.9%		NA		NA		NA
Equipment Rents	5.9%	224.2	224.2	0.0%	226.6	1.1%	0.0	NA	#DIV/0!	NA	#DIV/0!	NA
Depreciation	15.6%	226.3	226.3	0.0%	224.7 ✓	-0.7%		NA		NA		NA
Interest	2.2%	60.6	60.6	0.0%	60.5	-0.2%	60.5	0.0%	60.5	0.0%	60.5	0.0%
Other	25.0%	223.5	223.5	0.0%	225.8 ✓	1.0%		NA		NA		NA
	<u>1.0000</u>											
Weighted Avg.		288.0 ✓	289.5	0.5%	291.7	0.8%	150.7	-48.3%	#DIV/0!	NA	#DIV/0!	NA
Linked		265.7 ✓			267.7	0.8%	138.3	-48.3%	#DIV/0!	NA	#DIV/0!	NA
10/1/80	1.027	258.7			260.7	0.8%	134.7	-48.3%	#DIV/0!	NA	#DIV/0!	NA
10/1/82	1.209	219.8			221.4	0.7%	114.4	-48.3%	#DIV/0!	NA	#DIV/0!	NA
4Q/87	1.322	201.0			202.5	0.7%	104.6	-48.3%	#DIV/0!	NA	#DIV/0!	NA
4Q/92	1.569	169.3			170.6	0.8%	88.1	-48.4%	#DIV/0!	NA	#DIV/0!	NA
4Q/97	1.732	153.4			154.6	0.8%	79.8	-48.4%	#DIV/0!	NA	#DIV/0!	NA
4Q/02	1.921	138.3			139.4	0.8%	72.0	-48.4%	#DIV/0!	NA	#DIV/0!	NA
4Q/07	2.459	108.1			108.9	0.7%	56.2	-48.4%	#DIV/0!	NA	#DIV/0!	NA
4Q/12	2.976	89.3			90.0	0.8%	46.5	-48.3%	#DIV/0!	NA	#DIV/0!	NA
4Q/17	2.645	100.5 ✓			101.2	0.7%	52.3	-48.3%	#DIV/0!	NA	#DIV/0!	NA

Equipment Rents

Car Hire	58.3%	205.2 ✓	205.2	0.0%	207.5 ✓	1.1%	NA		NA		NA	
Lease Rentals	41.7%	223.5 ✓	223.5	0.0%	225.8	1.0%	0.0	NA	0.0	NA	0.0	NA
	1.0000											
ER Weighted Avg		212.8	212.8	0.0%	215.1	1.1%	0.0	NA	0.0	NA	0.0	NA
ER Linked		224.2 ✓			226.6	1.1%	0.0	NA	#DIV/0!	NA	#DIV/0!	NA

Impact/Check of weight change	15 Wts	16 Wts
Labor	147.980	150.517
Fuel	25.782	20.587
Material & Supplies	13.640	12.630
Equipment Rents	13.004	13.228
Depreciation	31.456	35.303
Interest	1.151	1.333
Other	54.981	55.875
Weighted Avg.	287.994	289.472
ER Weighted Avg.	212.8494	212.8311

As info only

RCAF Fuel (Actual All-Inclusive Index)

October 2017

Monthly Report

	October 2017 Price (cents) (1)	1/1/81 Price (cents) (2)	1/91 New Method Linking Factors (3)	October 2017 Index 1/1/81=100 (4)	Linking Factor 1980=100 (5)	October 2017 1980=100 Current Index (6)
U.S.	190.94	89.34	99.415	212.47	1.096	232.87

(4) = (1) / (2) x (3)

(6) = (4) x (5)

Final Actual All-inclusive Index Used for RCAF's Forecast Error Adjustment

	October 2017 1980=100 Current Index	Adjustment Factor	October 2017 1980=100 Linked Index
U.S.	232.87	1.00192	233.32 ←

January	=	Q1
April	=	Q2
July	=	Q3
October	=	Q4

RCAF (Actual)

		1980	Aug 3Q/17	Nov 4Q/17	Feb 1Q/18	May 2Q/18	Aug 3Q/18
RATE							
RR-OWNED TIME		31.00	64.00	64.00	--	--	--
RR-OWNED MILEAGE		4.69	6.70	6.70	--	--	--
PRIVATELY-OWNED CARS		25.47	53.76	54.42	--	--	--
AUTORACKS		47.00	84.47	86.38	--	--	--
INDEX							
RR-OWNED TIME		100.0	206.5	206.5	--	--	--
RR-OWNED MILEAGE		100.0	142.9	142.9	--	--	--
PRIVATELY-OWNED CARS		100.0	211.1	213.6	--	--	--
AUTORACKS		100.0	179.7	183.8	--	--	--
CAR HIRE INDEX (old wts)	2015	100.0	205.1	--	--	--	--
CAR HIRE INDEX (new wts)	2016	100.0	203.9	206.2	--	--	--
CAR HIRE INDEX (LINKED)		100.0	205.2	207.5	--	--	--

Note: Indexes are rounded, rates are full float.

Equipment Rents Data From CHARM

	2017 (first day of month)						2018 (first day of month)							
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug
Railroad Equipment														
No. of Cars (cars with rates only)														
Superstructures (Vehicular Flats)	8,341	8,815	9,030	9,254	9,520	9,614								
Rate (in cents)														
Superstructures #3 - Auto Rack	54.0	62.0	65.0	67.0	71.0	73.0								
All other #1 - Time	64.0	64.0	64.0	64.0	64.0	64.0								
All other #2 - Mileage	6.7	6.7	6.7	6.7	6.7	6.7								
Private Equipment														
No. of Cars (cars with rates only)														
Superstructures (Vehicular Flats)	56,048	56,095	56,066	55,978	55,842	55,875								
Covered Hoppers	397,633	400,103	402,279	403,818	405,332	407,888								
Tank Cars	405,127	405,272	405,476	405,805	405,481	405,753								
Others	291,842	291,943	291,843	292,787	292,671	293,501								
Rate (in cents)														
Superstructures #1 - Time	84.0	84.0	84.0	84.0	84.0	84.0								
Superstructures #2 - Mileage	1.4	1.4	1.4	1.4	1.4	1.4								
Superstructures #3 - Auto Rack	88.0	88.0	88.0	89.0	89.0	89.0								
Covered Hoppers #2 - Mileage	45.5	45.6	45.7	45.8	45.9	45.9								
Tank Cars #2 - Mileage	85.2	85.3	86.8	86.9	87.0	87.0								
Others #1 - Time	87.0	87.0	87.0	87.0	87.0	87.0								
Others #2 - Mileage	8.1	8.1	8.1	8.1	8.1	8.1								
AVERAGE RATES														
Private Superstructures	21.14	21.14	21.14	21.14	21.14	21.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Private Others	27.41	27.41	27.41	27.41	27.41	27.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Private Total	53.70	53.76	54.31	54.36	54.42	54.38	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Autoracks	83.60	84.47	84.81	85.88	86.38	86.65	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

WEIGHTS	*Old Wts*	*New Wts*
	2015	2016
For RCAF & RCR		
RR-owned Time	0.124	0.091
RR-owned Mileage	0.062	0.058
Privately-owned Cars	0.776	0.762
Autoracks	0.038	0.089
----- Check sum	1.000	1.000

Weights for Equipment Rents (not used in Car Hire calculation)		
	2015	2016
Car Hire - U.S.	0.582	0.583
Lease Rentals - U.S.	0.418	0.417
----- Check sum	1.000	1.000

Note: The 4 bold lines are used for the Car Hire Rate. Private Total uses a weighted average of the Covered Hoppers, Tank Cars, Combined Private Superstructures, and Combined Private Others rates.

CHARM Process - Hire Rate Report

Average Car Rental Rates for 11/2017

Ownership	Car Group	Car Count	Time Rate (cents/hour)	Mileage Rate (\$/mile)	Auto Rack Rate (cents/hour)
Railroad	Vehicular Flats	9,520	113	0.072	71
Railroad	Number of Zero-Rated Vehicular Flats	79	.	.	.
Railroad	All Other Cars	427,079	64	0.067	.
Railroad	Number of Zero-Rated Other Cars	17,079	.	.	.
Railroad	Total Railroad Equipment	453,757	.	.	.
		.	.	.	.
Private	Vehicular Flats	55,842	84	0.014	89
Private	Number of Zero-Rated Vehicular Flats	57	.	.	.
Private	Covered Hoppers	405,332	0	0.459	.
Private	Number of Zero-Rated Covered Hoppers	14,324	.	.	.
Private	Tanks	405,481	0	0.870	.
Private	Number of Zero-Rated Tanks	8,802	.	.	.
Private	All Other Cars	292,671	87	0.081	.
Private	Number of Zero-Rated Other Cars	23,940	.	.	.
Private	Total Private Equipment	1,206,449	.	.	.

Notes

This report excludes these car types: D (Locomotives), M (MoW, EOTs, etc.), U (Containers), Z (Trailers).

All TTX equipment (including ABOX, RBOX, GONX) is contained in the Private section of report.

Equipment can be zero rated due to owners supplying incorrect or insufficient information to the car accounting process.

Zero-rated equipment includes those with Umler Rate_Indicator of 6 and 0 (zero).

Zero-rated equipment is excluded from the averages shown in this report.

Equipment must be Active in Umler to be included in this report; Pre-registered and Inactive cars are excluded.

RCAF - Depreciation

Series ID : wpu144

Not Seasonally Adjusted

Group : Transportation equipment

Item : Railroad equipment

		Forecast Year 2018			
		As reported at end of month 82=100			
		Nov.	Feb.	May	Aug.
For Forecast	→	18Q1	18Q2	18Q3	18Q4
For Actual	→	17Q3	17Q4	18Q1	18Q2
January	2017	201.9	201.9	201.9	201.9
February	2017	204.1	204.1	204.1	204.1
March	2017	203.3	203.3	203.3	203.3
April	2017	203.4	203.4	203.4	203.4
May	2017	203.5	203.5	203.5	203.5
June	2017	204.6	204.6	204.6	204.6
July	2017	204.6	203.6	203.6	203.6
August	2017	204.6	204.5	204.5	204.5
September	2017	204.6	203.8	203.8	203.8
October	2017	203.9	203.9		
November	2017		202.8		
December	2017		202.7		
January	2018		203.1		
February	2018				
March	2018				
April	2018				
May	2018				
June	2018				
July	2018				
Actual Qtr.		204.6	203.1	NA	NA

1980=100

Actual Qtr.	226.3	224.7	NA	NA
First Mo. next qtr.	225.6	224.7	NA	NA

0.904 =1980

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PPI Commodity Data

Series Id: WPU144

Not Seasonally Adjusted

Series Title: PPI Commodity data for Transportation equipment-Railroad equipment, not seasonally adjusted

Group: Transportation equipment

Item: Railroad equipment

Base Date: 198200

Download: [xls](#)

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2017	201.9	204.1	203.3	203.4	203.5	204.6	203.6	204.5	203.8	203.9(P)	202.8(P)	202.7(P)
2018	203.1(P)											

P : Preliminary. All indexes are subject to revision four months after original publication.

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RCAF - Other

Series ID : wpu03t15m05

Not Seasonally Adjusted

Group : Industrial Commodities less fuels

Item : Industrial commodities less fuels

Forecast Year 2018

As reported at end of month 82=100

		Nov.	Feb.	May	Aug.
For Forecast →		18Q1	18Q2	18Q3	18Q4
For Actual →		17Q3	17Q4	18Q1	18Q2
January	2017	196.8	196.8	196.8	196.8
February	2017	197.8	197.8	197.8	197.8
March	2017	198.7	198.7	198.7	198.7
April	2017	199.3	199.3	199.3	199.3
May	2017	199.2	199.2	199.2	199.2
June	2017	199.4	199.4	199.4	199.4
July	2017	199.0	199.2	199.2	199.2
August	2017	199.5	199.7	199.7	199.7
September	2017	199.7	200.0	200.0	200.0
October	2017	200.9	200.9		
November	2017		201.4		
December	2017		201.9		
January	2018		203.0		
February	2018				
March	2018				
April	2018				
May	2018				
June	2018				
July	2018				
Actual Qtr.		199.4	201.4	NA	NA

1980=100

Actual Qtr.	223.5	225.8	NA	NA
First Mo. next qtr.	225.2	227.6	NA	NA

0.892 =1980

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PPI Commodity Data

Series Id: WPU03T15M05

Not Seasonally Adjusted

Series Title: PPI Commodity data for Industrial commodities less fuels, not seasonally adjusted

Group: Industrial Commodities less fuels

Item: Industrial commodities less fuels

Base Date: 198200

Download:  [xlsx](#)

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2017	196.8	197.8	198.7	199.3	199.2	199.4	199.2	199.7	200.0	200.9(P)	201.4(P)	201.9(P)
2018	203.0(P)											

P : Preliminary. All indexes are subject to revision four months after original publication.

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[Disability.gov](#)

MEDIATION AGREEMENT

THIS AGREEMENT, made this 14th day of December, 2017, by and between the participating carriers listed in Exhibit A attached hereto and represented by the National Carriers' Conference Committee, and the employees shown thereon and represented by the National Conference of Firemen and Oilers District, Local 32BJ, Service Employees International Union, witnesseth:

IT IS HEREBY AGREED:

ARTICLE I – WAGES**Section 1 – First General Wage Increase**

Effective January 1, 2015, all standard rates of pay in effect on December 31, 2014 for employees represented by the NCF&O were increased by three (3) percent pursuant to Article I, Section 6 of the January 5, 2012 National NCF&O Agreement. This 3% general wage increase was mutually negotiated to apply as the first-year increase of this five-year Agreement, the term of which runs from January 1, 2015 through December 31, 2019.

Section 2 – Second General Wage Increase

On July 1, 2016, all hourly, daily, weekly, and monthly rates of pay in effect on the preceding day for employees covered by this Agreement shall be increased in the amount of two (2) percent applied so as to give effect to this increase in pay irrespective of the method of payment. The increase provided for in this Section 2 shall be applied as follows:

(a) **Hourly Rates** -

Add 2 percent to the existing hourly rates of pay.

(b) **Daily Rates** -

Add 2 percent to the existing daily rates of pay.

(c) Weekly Rates -

Add 2 percent to the existing weekly rates of pay.

(d) Monthly Rates -

Add 2 percent to the existing monthly rates of pay.

(e) Disposition of Fractions -

Rates of pay resulting from application of paragraphs (a) to (d), inclusive, above which end in fractions of a cent shall be rounded to the nearest whole cent, fractions less than one-half cent shall be dropped, and fractions of one-half cent or more shall be increased to the nearest full cent.

(f) Application of Wage Increase -

The increase in wages provided for in this Section 2 shall be applied in accordance with the wage or working conditions agreement in effect between each carrier and the labor organization party hereto. Special allowances not included in fixed hourly, daily, weekly or monthly rates of pay for all services rendered, and arbitraries representing duplicate time payments, will not be increased. Overtime hours will be computed in accordance with individual schedules for all overtime hours paid for.

Section 3 – Third General Wage Increase

Effective July 1, 2017, all hourly, daily, weekly and monthly rates of pay in effect on June 30, 2017 for employees covered by this Agreement shall be increased by two (2) percent applied in the same manner as provided for in Section 2 hereof and applied so as to give effect to this increase irrespective of the method

of payment.

Section 4 – Fourth General Wage Increase

Effective July 1, 2018, all hourly, daily, weekly and monthly rates of pay in effect on June 30, 2018 for employees covered by this Agreement shall be increased in the amount of two-and-one-half (2.5) percent applied in the same manner as provided for in Section 2 hereof and applied so as to give effect to this increase irrespective of the method of payment.

Section 5 – Fifth General Wage Increase

Effective July 1, 2019, all hourly, daily, weekly and monthly rates of pay in effect on June 30, 2019 for employees covered by this Agreement shall be increased in the amount of three (3) percent applied in the same manner as provided for in Section 2 hereof and applied so as to give effect to this increase irrespective of the method of payment.

ARTICLE II - HEALTH AND WELFARE

Part A – Employee Sharing of Plan Costs

Section 1 – Monthly Employee Cost-Sharing Contributions

The employee monthly cost-sharing contribution amount shall be \$228.89 until such time as otherwise mutually agreed by the parties during negotiations commencing when this Agreement becomes amendable pursuant to Article III.

Section 2 – Other Terms

Existing arrangements regarding the method of making employee cost-sharing contributions on a pre-tax basis shall be continued subject to the provisions of the Railway Labor Act.

Part B – Plan Changes

EXHIBIT A
(NCF&O)

CARRIERS REPRESENTED BY THE NATIONAL CARRIERS' CONFERENCE COMMITTEE IN CONNECTION WITH NOTICES SERVED ON OR SUBSEQUENT TO NOVEMBER 1, 2014 BY AND ON BEHALF OF SUCH CARRIERS UPON THE NATIONAL CONFERENCE OF FIREMEN & OILERS, SEIU, AND NOTICES SERVED ON OR SUBSEQUENT TO NOVEMBER 1, 2014 BY THE GENERAL CHAIRMEN, OR OTHER RECOGNIZED REPRESENTATIVES, OF THE NATIONAL CONFERENCE OF FIREMEN & OILERS DISTRICT, LOCAL 32BJ, SEIU UPON SUCH CARRIERS.

Subject to indicated footnotes, this authorization is co-extensive with notices filed and with provisions of current schedule agreements applicable to employees represented by the National Conference of Firemen & Oilers, SEIU.

Alton & Southern Railway Company
The Belt Railway Company of Chicago
Bessemer and Lake Erie Railroad Company d.b.a. C.N.
BNSF Railway Company
Consolidated Rail Corporation
CSX Transportation, Inc.
Delaware & Hudson Railroad Company d.b.a. C.P. - 1
Grand Trunk Western Railroad Company d.b.a. C.N.
Illinois Central Railroad Company and Chicago, Central & Pacific Railroad Company d.b.a. C.N.
Indiana Harbor Belt Railroad Company
The Kansas City Southern Railway Company
 Kansas City Southern Railway
 Louisiana and Arkansas Railway
 MidSouth Rail Corporation
 Gateway Western Railway
 SouthRail Corporation
 The Texas Mexican Railway Company
 Joint Agency

Met NCF O

Norfolk Southern Railway Company

The Alabama Great Southern Railroad Company

Central of Georgia Railroad Company

The Cincinnati, New Orleans & Texas Pacific Railway Company

Georgia Southern and Florida Railway Company

Interstate Railroad Company

Tennessee, Alabama and Georgia Railway Company

Tennessee Railway Company

Northeast Illinois Regional Commuter Railroad Corporation (METRA) – 1

Soo Line Railroad Company d.b.a. C.P. - 1

Terminal Railroad Association of St. Louis

Union Pacific Railroad Company

* * * * *

Notes:

- 1 - Health & Welfare and Supplemental Sickness only

FOR THE CARRIERS:

**FOR THE NATIONAL CON-
FERENCE OF FIREMEN &
OILERS DISTRICT, LOCAL
32BJ, SEIU:**

A. Kenneth Graden

John Huber

**December 14, 2017
Arlington, VA**

MEDIATION AGREEMENT

THIS AGREEMENT, made this 22nd day of January, 2018, by and between the participating carriers listed in Exhibit A attached hereto and made a part hereof, and represented by the National Carriers' Conference Committee, and the employees of such carriers shown thereon and represented by the Transportation Communications Union/IAM, witnesseth:

IT IS HEREBY AGREED:

→ clerks only

ARTICLE I - WAGES**Section 1 - First General Wage Increase**

Effective January 1, 2015, all hourly, daily, weekly, and monthly rates of pay in effect on December 31, 2014 for employees represented by the TCU/IAM were increased by three (3) percent pursuant to Article I, Section 6 of the January 4, 2012 National TCU/IAM Agreement. This 3% general wage increase was mutually negotiated to apply as the first-year increase of this five-year Agreement, the term of which runs from January 1, 2015 through December 31, 2019.

Section 2 – Second General Wage Increase

Effective July 1, 2016, all hourly, daily, weekly, and monthly rates of pay in effect on June 30, 2016 for employees covered by this Agreement shall be increased in the amount of two (2) percent applied so as to give effect to this increase in pay irrespective of the method of payment. The increase provided for in this Section 2 shall be applied as follows:

(a) **Hourly Rates -**

Add 2 percent to the existing hourly rates of pay.

Nat. TCU

(b) **Daily Rates -**

Add 2 percent to the existing daily rates of pay.

(c) **Weekly Rates -**

Add 2 percent to the existing weekly rates of pay.

(d) **Monthly Rates -**

Add 2 percent to the existing monthly rates of pay.

(e) **Red Caps -**

Hourly rates of pay, or guarantees, for Red Caps shall be increased by two (2) percent.

(f) **Disposition of Fractions -**

Rates of pay resulting from application of paragraphs (a) to (e) inclusive, above, which end in fractions of a cent shall be rounded to the nearest whole cent, fractions less than one-half cent shall be dropped, and fractions of one-half cent or more shall be increased to the nearest full cent.

(g) **Application of Wage Increases -**

The increase in wages provided for in this Section 2 shall be applied in accordance with the wage or working conditions agreement in effect between each carrier and the labor organization party hereto. Special allowances not included in fixed hourly, daily, weekly, or monthly rates of pay for all services rendered, and arbitraries representing duplicate time payments, will not be increased. Overtime hours will be computed in accordance with individual schedules for all overtime hours paid for.

Section 3 - Third General Wage Increase

Effective July 1, 2017, all hourly, daily, weekly, and monthly rates of pay in

effect on June 30, 2017 for employees covered by this Agreement shall be increased in the amount of two (2) percent applied so as to give effect to this increase irrespective of the method of payment. The increase provided for in this Section 3 shall be applied in the same manner as provided for in Section 2 hereof.

Section 4 – Fourth General Wage Increase

Effective July 1, 2018, all hourly, daily, weekly, and monthly rates of pay in effect on June 30, 2018 for employees covered by this Agreement shall be increased in the amount of two-and-one-half (2.5) percent applied so as to give effect to this increase irrespective of the method of payment. The increase provided for in this Section 4 shall be applied in the same manner as provided for in Section 2 hereof.

Section 5 - Fifth General Wage Increase

Effective July 1, 2019, all hourly, daily, weekly, and monthly rates of pay in effect on June 30, 2019 for employees covered by this Agreement shall be increased in the amount of three (3) percent applied so as to give effect to this increase irrespective of the method of payment. The increase provided for in this Section 5 shall be applied in the same manner as provided for in Section 2 hereof.

ARTICLE II - HEALTH AND WELFARE

Part A – Employee Sharing of Plan Costs

Section 1 – Monthly Employee Cost-Sharing Contributions

The employee monthly cost-sharing contribution amount shall be \$228.89 until such time as otherwise mutually agreed by the parties during negotiations commencing when this Agreement becomes amendable pursuant to Article III.

Section 2 – Other Terms

Existing arrangements regarding the method of making employee cost-sharing contributions on a pre-tax basis shall be continued subject to the provisions of the Railway Labor Act.

EXHIBIT A
(CLERKS)

RAILROADS REPRESENTED BY THE NATIONAL CARRIERS' CONFERENCE COMMITTEE IN CONNECTION WITH NOTICES SERVED ON OR SUBSEQUENT TO NOVEMBER 1, 2014 BY AND ON BEHALF OF SUCH CARRIERS UPON THE TRANSPORTATION-COMMUNICATIONS UNION/IAM AND NOTICES SERVED ON OR SUBSEQUENT TO NOVEMBER 1, 2014 BY THE GENERAL CHAIRMEN, OR OTHER RECOGNIZED REPRESENTATIVES OF THE TRANSPORTATION-COMMUNICATIONS UNION/IAM UPON SUCH CARRIERS.

Subject to indicated footnotes, this authorization is co-extensive with notices filed and with provisions of current schedule agreements applicable to employees represented by the Transportation-Communications Union/IAM.

Alton & Southern Railway Company - 3
The Belt Railway Company of Chicago
Bessemer and Lake Erie Railroad Company d.b.a. C.N.
BNSF Railway Company - 1, 3
Brownsville and Matamoros Bridge Company
Central California Traction Company
Consolidated Rail Corporation
CSX Transportation, Inc.
 The Chesapeake and Ohio Railway Company (former)
 CSXT North (former Conrail)
 Louisville and Nashville Railroad Company (former)
 Seaboard Coast Line Railroad Company (former)
Grand Trunk Western Railroad Company d.b.a. C.N. - 3
Illinois Central Railroad Company and Chicago, Central & Pacific Railroad
 Company d.b.a. C.N.
Indiana Harbor Belt Railroad Company
The Kansas City Southern Railway Company
Kansas City Terminal Railway Company

New Orleans Public Belt Railroad
Norfolk & Portsmouth Belt Line Railroad Company
Norfolk Southern Corporation
 Norfolk Southern Railway Company
 The Alabama Great Southern Railroad Company
 Central of Georgia Railroad Company
 The Cincinnati, New Orleans & Texas Pacific Railway Company
 Georgia Southern and Florida Railway Company
 Tennessee, Alabama and Georgia Railway Company
Northeast Illinois Regional Commuter Railroad Corporation (METRA) – 2
Northern Indiana Commuter Transportation District – 2
Portland Terminal Railroad Company
Port Terminal Railroad Association – 3
Soo Line Railroad Company d.b.a. C.P. - 2
Terminal Railroad Association of St. Louis - 3
Texas City Terminal Railway Company
Union Pacific Railroad Company - 5
Western Fruit Express Company
Wichita Terminal Association
Wisconsin Central Ltd. as successor to Duluth, Missabe & Iron Range Railway and
Duluth, Winnipeg & Pacific Railway d.b.a. C.N.
Winston Salem Southbound Railway Company
Wisconsin Central Ltd. as successor to Duluth, Missabe & Iron Range Railway
d.b.a. C.N. - 4

* * * * *

Notes:

- 1 - Excludes any Section 6 Notices covering intermodal employees working under or covered by the Agreements effective January 5, 2007; January 1, 2009 or January 1, 2010, January 1, 2011, March 1, 2011, July 1, 2011, September 1, 2011, August 27, 2012, January 1, 2014, or any similar subsequent agreements.
- 2 - Health & Welfare only

- 3 Includes Patrolmen (former RPIU)
- 4 Ore Dockers
- 5 Excludes any Section 6 Notices covering employees working under or covered by the Agreement effective January 1, 2013.

FOR THE CARRIERS:

A. Kenneth Shadix

**January 22, 2018
Arlington, VA**

**FOR THE TRANSPORTA-
TION COMMUNICATIONS
UNION/IAM:**

R. A. Cardelli

MEDIATION AGREEMENT

THIS AGREEMENT, made this 22nd day of January, 2018, by and between the participating carriers listed in Exhibit A attached hereto and made a part hereof, and represented by the National Carriers' Conference Committee, and the employees of such carriers shown thereon and represented by the Brotherhood Railway Carmen - Division of Transportation Communications Union/IAM, witnesseth:

IT IS HEREBY AGREED:

ARTICLE I - WAGES

Section 1 - First General Wage Increase

Effective January 1, 2015, all hourly, daily, weekly, and monthly rates of pay in effect on December 31, 2014 for employees represented by the BRC were increased by three (3) percent pursuant to Article I, Section 6 of the January 4, 2012 National BRC Agreement. This 3% general wage increase was mutually negotiated to apply as the first-year increase of this five-year Agreement, the term of which runs from January 1, 2015 through December 31, 2019.

Section 2 - Second General Wage Increase

Effective July 1, 2016, all hourly, daily, weekly, and monthly rates of pay of employees covered by this Agreement other than freight carmen in effect on June 30, 2016 shall be increased in the amount of two (2) percent applied so as to give effect to this increase in pay irrespective of the method of payment. Rates of pay of freight carmen shall be increased by the money amount of increase in the rates of pay of passenger carmen, so that the money differential existing as of the first increase date between the rates of passenger carmen and the rates of freight carmen will be preserved. The increase provided for in this Section 2 shall be applied as follows:

(a) **Hourly Rates** -

Add 2 percent to the existing hourly rates of pay.

(b) **Daily Rates** -

Add 2 percent to the existing daily rates of pay.

(c) **Weekly Rates** -

Add 2 percent to the existing weekly rates of pay.

(d) **Monthly Rates** -

Add 2 percent to the existing monthly rates of pay.

(e) **Disposition of Fractions** -

Rates of pay resulting from application of paragraphs (a) to (d), inclusive, above which end in fractions of a cent shall be rounded to the nearest whole cent, fractions less than one-half cent shall be dropped, and fractions of one-half cent or more shall be increased to the nearest full cent.

(f) **Application of Wage Increase** -

The increase in wages provided for in this Section 2 shall be applied in accordance with the wage or working conditions agreement in effect between each carrier and the labor organization party hereto. Special allowances not included in fixed hourly, daily, weekly, or monthly rates of pay for all services rendered, and arbitraries representing duplicate time payments, will not be increased. Overtime hours will be computed in accordance with individual schedules for all overtime hours paid for.

Section 3 – Third General Wage Increase

Effective July 1, 2017, all hourly, daily, weekly and monthly rates of pay in effect on June 30, 2017, for employees covered by this Agreement shall be increased by two (2) percent applied so as to give effect to this increase irrespective of the method of payment. Rates of freight carmen shall be increased in the same manner as provided in Section 2 hereof. The increase provided for in this Section 3 shall be applied in the same manner as provided for in Section 2 hereof.

Section 4 – Fourth General Wage Increase

Effective July 1, 2018, all hourly, daily, weekly, and monthly rates of pay in effect on June 30, 2018, for employees covered by this Agreement shall be increased in the amount of two-and-one-half (2.5) percent applied so as to give effect to this increase irrespective of the method of payment. Rates of freight carmen shall be increased in the same manner as provided in Section 2 hereof. The increase provided for in this Section 4 shall be applied in the same manner as provided for in Section 2 hereof.

Section 5 - Fifth General Wage Increase

Effective July 1, 2019, all hourly, daily, weekly, and monthly rates of pay in effect on June 30, 2019, for employees covered by this Agreement shall be increased in the amount of three (3) percent applied so as to give effect to this increase irrespective of the method of payment. Rates of freight carmen shall be increased in the same manner as provided in Section 2 hereof. The increase provided for in this Section 5 shall be applied in the same manner as provided for in Section 2 hereof.

ARTICLE II - HEALTH AND WELFARE

Part A – Employee Sharing of Plan Costs

Section 1 – Monthly Employee Cost-Sharing Contributions

The employee monthly cost-sharing contribution amount shall be \$228.89 until such time as otherwise mutually agreed by the parties during negotiations

EXHIBIT A
(CARMEN)

RAILROADS REPRESENTED BY THE NATIONAL CARRIERS' CONFERENCE COMMITTEE IN CONNECTION WITH NOTICES SERVED ON OR SUBSEQUENT TO NOVEMBER 1, 2014 BY AND ON BEHALF OF SUCH CARRIERS UPON THE BROTHERHOOD RAILWAY CARMEN – DIVISION OF TRANSPORTATION-COMMUNICATIONS UNION/IAM, AND NOTICES SERVED ON OR SUBSEQUENT TO NOVEMBER 1, 2014 BY THE GENERAL CHAIRMEN, OR OTHER RECOGNIZED REPRESENTATIVES OF THE BRC-TCU/IAM UPON SUCH CARRIERS.

Subject to indicated footnotes, this authorization is co-extensive with notices filed and with provisions of current schedule agreements applicable to employees represented by the Brotherhood Railway Carmen – Division of Transportation-Communications Union/IAM.

Alton and Southern Railway Company
The Belt Railway Company of Chicago
Bessemer and Lake Erie Railroad Company d.b.a. C.N.
BNSF Railway Company - 4
Consolidated Rail Corporation - 2
CSX Transportation, Inc.
Delaware & Hudson Railroad Company d.b.a. C.P. - 3
Gary Railway Company – 1
Grand Trunk Western Railroad Company d.b.a. C.N.
Illinois Central Railroad Company and Chicago, Central & Pacific Railroad
Company d.b.a. C.N.
Indiana Harbor Belt Railroad Company
The Kansas City Southern Railway Company
Kansas City Southern Railway
Louisiana and Arkansas Railway
MidSouth Rail Corporation
Gateway Western Railway
SouthRail Corporation

The Texas Mexican Railway Company
Joint Agency
New Orleans Public Belt Railroad
Norfolk Southern Railway Company
The Alabama Great Southern Railroad Company
Central of Georgia Railroad Company
The Cincinnati, New Orleans & Texas Pacific Railway Company
Georgia Southern and Florida Railway Company
Interstate Railroad Company
Tennessee, Alabama and Georgia Railway Company
Tennessee Railway Company
Northeast Illinois Regional Commuter Railroad Corporation (METRA) - 3
Northern Indiana Commuter Transportation District - 3
Port Terminal Railroad Association
Soo Line Railroad Company d.b.a. C.P. - 3
Terminal Railroad Association of St. Louis
Union Pacific Railroad Company
Western Fruit Express Company
Wisconsin Central Ltd. d.b.a. C.N.

* * * * *

Notes:

- 1 - Health & Welfare only
- 2 - Includes employees represented by the Transport Workers Union of America
- 3 - Health & Welfare and Supplemental Sickness only
- 4 - Excludes any Section 6 Notices covering employees working under or covered by the Train Inspections at Third Parties Agreement effective June 3, 2014, or any similar subsequent agreements.