

ASSOCIATION
OF AMERICAN
RAILROADS

John T. Gray
Senior Vice President - Policy & Economics

September 5, 2008

The Honorable Anne K. Quinlan
Acting Secretary
Surface Transportation Board
395 E Street, SW.
Washington, DC 20423-0001

Dear Ms. Quinlan:

This submission is the AAR forecast of the fourth quarter 2008 All-Inclusive Index and Rail Cost Adjustment Factor, filed in Ex Parte No. 290 (Sub-No. 5) (2008-4) *Quarterly Rail Adjustment Factor*. The versions of RCAF-related indices covered in this filing are: the All-Inclusive Index (initiated in the second quarter 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 fourth quarter 2008 results on the fourth quarter 2007 base, and shows the percentage changes from the previous quarter.

	<u>2008Q3</u>	<u>2008Q4</u>	<u>% Change</u>
All-Inclusive Index	115.6	115.5	-0.1
Preliminary RCAF	1.156	1.155	-0.1
Forecast Error Adjustment	-0.009	0.044	
RCAF (Unadjusted)	1.147	1.199	4.5
Productivity Adjustment Factor	2.1748	2.1813	
RCAF (Adjusted)	0.527	0.550	4.4
PAF-5	2.2955	2.3051	
RCAF-5	0.500	0.520	4.0

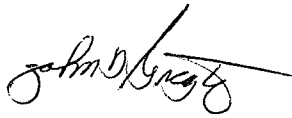
Page 2

September 5, 2008

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 is including a calculation of the RCAF-5 in its quarterly RCAF filing. The AAR and its members, however, do not believe the publication of a third RCAF index is required or permitted by the applicable statute (49 U.S.C. § 10708) and do not endorse its publication.

Two copies of the quarterly non-proprietary workpapers underlying this submission are filed herewith, in accordance with the ICC's order in Ex Parte No. 290 (Sub-No. 2), *Railroad Cost Recovery Procedures*, served February 8, 1990. A third copy of the working papers has been delivered to Paul Aguiar in the STB office handling this proceeding. All workpapers 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 long horizontal flourish extending to the right.

John T. Gray

Attachments

**Fourth Quarter 2008
All-Inclusive Index**

Ex Parte No. 290 (Sub-No. 5) (2008-4)

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

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

September 5, 2008

Table of Contents

Subject	Page
Introduction	1
Index Weights	2
All-Inclusive Index - Fourth Quarter 2008	3
Forecast vs. Actual All Inclusive Index - Second Quarter 2008	4
Productivity	5
Rail Cost Adjustment Factor - Fourth Quarter 2008	6
 Appendices	
A Labor	
B Fuel	
C Materials & Supplies	
D Equipment Rents	
E Depreciation	
F Interest	
G Other Expenses	
H Railroad and Union Abbreviations	

Introduction

On January 2, 1985, the Interstate Commerce Commission (ICC) [now the Surface Transportation Board (STB)] adopted the All-Inclusive Index of Railroad Costs 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 (but does not endorse) the RCAF-5, which was instituted by an STB decision served October 3, 1996 in Ex Parte No. 290 (Sub-No. 7), *Productivity Adjustment - Implementation*. This quarter's projection of railroad costs is for the fourth quarter 2008.

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 2007 (current) and 2006 (previous) weights are shown below. The previous (2006) weights were used for the fourth quarter of 2007 through the third quarter of 2008. Beginning with the fourth quarter of 2008, the 2007 weights are used. The weight for Fuel continued to go up as expected, increasing from 19.2 to 20.3 percent. Labor had the biggest change (possibly related to the downturn in traffic), decreasing 1.7 percentage points to 32.8 percent. All other changes were by less than 1 percentage point.

RCAF Weights		
	Previous 2006	Current 2007
Labor	34.5 %	32.8 %
Fuel	19.2	20.3
Materials & Supplies	5.0	5.0
Equipment Rents	7.8	7.2
Depreciation	10.6	11.0
Interest	2.7	2.7
Other	20.2	21.0

Reweighting 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 Fourth Quarter 2008

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.

	2007 Weights	Forecast		Percent Change
		Previous 2008Q3	Current 2008Q4	
1. Labor	32.8%	317.2	330.6	4.2 %
2. Fuel	20.3%	472.8	423.6	-10.4
3. M&S	5.0%	228.3	252.2	10.5
4. Equipment Rents	7.2%	199.5	207.4	4.0
5. Depreciation	11.0%	197.9	204.8	3.5
6. Interest	2.7%	90.2	88.0	-2.4
7. Other	21.0%	203.8	217.8	6.9
8. Weighted Average				
a. 1980 = 100		292.8	292.6	
b. 1980 = 100 (linked)		284.3	284.1 ¹	
c. 4Q07 = 100		115.6	115.5 ²	-0.1

Note: The 292.8 weighted average for 2008Q3 is recalculated with 2007 weights to eliminate any changes in the fourth quarter index that would be caused by changing weights. The original figure with 2006 weights is 291.8.

¹ To calculate the 1980 = 100 Linked Index:

$$\begin{aligned} \text{Index}_{80} &= (\text{Current Index} / \text{Previous Index}) * \text{the Previous Quarter Linked Index} \\ &= \quad 292.6 \quad \text{divided by} \quad 292.8 \quad \text{times} \quad 284.3 \\ &= \quad 284.1 \end{aligned}$$

² To calculate the 4Q07 = 100 index:

$$\begin{aligned} \text{Index}_{4Q07} &= (\text{Current Linked Index} / 4Q07 Linking Factor) * 100 \\ &= \quad 284.1 \quad \text{divided by} \quad 245.9 \quad \text{times} \quad 100 \\ &= \quad 115.5 \end{aligned}$$

Indexes based on other periods:

- 4Q02 based index = 284.1 / 192.1 x 100 = 147.9
- 4Q97 based index = 284.1 / 173.2 x 100 = 164.0
- 4Q92 based index = 284.1 / 156.9 x 100 = 181.1
- 4Q87 based index = 284.1 / 132.2 x 100 = 214.9

Forecast vs. Actual All-Inclusive Index Second Quarter 2008

Because of data availability, the forecast error adjustment has a two-quarter lag from each filing. As shown below, the second quarter actual index of 110.5 is 4.4 index points above the forecast value of 106.1. Therefore, the forecast error adjustment for fourth quarter 2008 is 4.4 index points.

	2006 Weights	Second Quarter 2008		Amt Difference
		Forecast	Actual	
1. Labor	34.5%	313.6	313.6	
2. Fuel	19.2%	361.1	412.2	
3. M&S	5.0%	225.1	225.1	
4. Equipment Rents ¹	7.8%	196.6	199.0	
5. Depreciation	10.6%	196.9	198.5	
6. Interest	2.7%	90.2	90.2	
7. Other	20.2%	199.7	203.1	
8. Weighted Average				
a. 1980 = 100		267.8	278.6	
b. 1980 = 100 (linked)		260.9	271.6 ²	
c. 4Q07 = 100 ³		106.1	110.5	4.4

Forecast error \longrightarrow **4.4 index points**

	2006 Weights	Second Quarter 2008	
		Forecast	Actual
Car-Hire	46.3%	181.0	181.4
Lease Rentals	53.7%	199.7	203.1
Weighted Average		191.0	193.1
Weighted Average (linked)		196.6	199.0

² Linked actual index = (actual index / previous actual index) x previous linked actual index.
 $271.6 = 278.6 / 258.8 \times 252.3$

³ The 4Q07 based indexes are 1980 based indexes divided by the 4Q07 linking factor (245.9/100). Other linking factors are: 4Q02 = 192.1; 4Q97 = 173.2; 4Q92 = 156.9; and 4Q87 = 132.2.

Productivity

On March 28, 2008, the Surface Transportation Board (STB) served a decision in Ex Parte 290 (Sub-No. 4) which added the year 2006 to the Productivity Adjustment Factor (PAF) and deleted the year 2001. This creates a geometric average annual productivity change for 2002 through 2006 of 1.2 percent – a 0.5 percentage point decrease from the 2001 through 2005 average of 1.7 percent. The components of this average annual value are shown on the following table in ratio format – therefore, 1.012 is the same as an increase of 1.2 percent. Productivity changes are calculated by dividing the output index by the input index. The average annual rate is calculated by multiplying each of the five productivity changes together and taking the result to the one fifth power. The quarterly 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 average annual growth rate. The difference between the PAF and the PAF-5 is the timing of the 5-year productivity trend.

Comparison of Output, Input, & Productivity			
2002 - 2006			
Year	Output Index (1)	Input Index (2)	Productivity ¹ Changes (3)
2002	1.012	1.006	1.006
2003	1.039	1.020	1.019
2004	1.033	1.057	0.977
2005	1.021	0.956	1.068
2006	1.018	1.024	0.994
Average			1.012
Previous Average (2001-2005)			1.017

¹ The values shown in Column 3 are based on full float calculations and may not exactly match numbers calculated using the rounded numbers displayed in Columns 1 and 2.

Calculation of PAF and PAF-5			
For 2002-2006, use fourth root of avg. productivity change = 1.0030			
For 2001-2005, use fourth root of avg. productivity change = 1.0042			
Quarter	Year	PAF	PAF-5
Q1	2008	2.1618	2.2763
Q2	2008	2.1683	2.2859
Q3	2008	2.1748	2.2955
Q4	2008	2.1813	2.3051
Q1	2009	2.1878	2.3120

Rail Cost Adjustment Factor

Fourth Quarter 2008

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 the All-Inclusive Index is on a 2007Q4=100 basis.

	Previous 2008Q3	Current 2008Q4	Percent Change
All-Inclusive Index ¹	115.6	115.5	-0.1
Preliminary RCAF ²	1.156	1.155	-0.1
Forecast Error Adjustment ³	<u>-0.009</u>	<u>0.044</u>	
RCAF (Unadjusted) ⁴	1.147	1.199	4.5
Productivity Adjustment Factor ⁵	2.1748	2.1813	
RCAF (Adjusted) ⁶	0.527	0.550	4.4
PAF-5 ⁷	2.2955	2.3051	
RCAF-5 ⁸	0.500	0.520	4.0

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.

Appendixes

Labor

Fourth Quarter 2008

The fourth quarter 2008 Labor Index is forecast to increase 4.2 percent. New national agreements for the United Transportation Union (UTU) and the Yardmasters Department (UTU-YMD) of the United Transportation Union were added to the Index. [For a list of common railroad and union abbreviations, see Appendix H.] In addition, the Labor Rate was rebenchmarked to new wage statistics and annual report data.

Rebenchmarking: Rebenchmarking, as well as updating the internal weights (i.e., the proportion of labor costs represented by wages and supplements, respectively), is reflected each year in the fourth quarter filing. The 2007 data underlying the fourth quarter rebenchmarking are obtained from the railroads' 112-Class Wage Statistics and the railroads' Annual Report Form R-1 (including railroad revisions through August 18) to the Surface Transportation Board. The source for the wage and supplements internal weights, like the external weights, is the Annual Report Form R-1 Summary.

New National Agreements: The UTU and UTU-Yardmasters signed new national labor agreements on July 1, 2008 that affect about one fourth of the total Class I railroad employees. The agreement included retroactive wage increases back to 2005, and changed employee health & welfare contribution rates. These agreements were signed July 1, but were not added to the third quarter index because of its June 5 filing date. Highlights of the new UTU and UTU-YDM agreements, which are similar to other national agreements, are as follows:

- Cost of Living Allowances rolled into pay on and after July 1, 2005 recovered from any retroactive wage increase payments;
- Retroactive general wage increase of 2.5 percent effective July 1, 2005;
- Retroactive general wage increase of 3.0 percent effective July 1, 2006;
- Retroactive general wage increase of 3.0 percent effective July 1, 2007;
- General wage increase of 4.0 percent effective July 1, 2008 [[This is considered retroactive in the RCAF since it is being added beginning Q4.];
- General wage increase of 4.5 percent effective July 1, 2009 [Added to RCAF at that time];
- Employee Health & Welfare Cost Sharing monthly rate of \$166.25 effective retroactive to January 1, 2007;
- Future adjustments to the Cost Sharing rate in 2008, 2009, and 2010, all on January 1;
- Unlike other national agreements, a Cost of Living Allowance will be paid beginning January 1, 2011, if needed.

Wage Index

The Wage Index portion of the Labor Index increased 5.1 percent from the previous quarter. The major causes of the increase were rebenchmarking and new national agreements with the UTU and UTU-Yardmasters (including back pay).

Labor

Fourth Quarter 2008

Wage Increases: Wages are typically not increased in the fourth quarter. A few independent agreements have August increases, meaning that their third quarter average uses the increased wage rate for only two of the quarter's three months. Fourth quarter average wage rates for independent agreements with August increases are therefore slightly higher than the third quarter, causing an increase in the quarterly wage rate. All other increases in the fourth quarter wage rate were caused by either rebenchmarking or new labor agreements. Rebenchmarking caused almost half of the increase in wages, while the new UTU and UTU contracts caused much of the remaining change. Four new independent labor agreements with wage increases were also added to the Wage Index.

Lump Sums: The lump sum rate increased by 0.6 cents as one amount was completely amortized and removed, while two amounts were added. A new bonus program for a portion of one railroad's dispatchers caused about half of the increase.

Back Pay: The back pay rate jumped 34.6 cents, mostly because of the two new national UTU and UTU-Yardmaster agreements that affected about one fourth of the total Class I railroad employees. In addition, four other amounts were added relating to new independent agreements. Some of this increase was offset by the complete amortization and removal of amounts relating to last year's new national labor agreements for seven unions and several independent agreements. Three more national agreement back pay amounts are on their last quarter of amortization, and will be removed from next quarter's (2009Q1) filing.

Other: Other wages contains the amortization of profit sharing payments that the BNSF Railway makes each year to its dispatchers, yardmasters, and engineers. This amount was unchanged.

Supplements Index

The Supplements Index is forecast to increase 2.9 percent from the third quarter filing. Rebenchmarking and higher Railroad Retirement costs (relating to higher wages) were the main causes of the increase.

Health & Welfare: Rebenchmarking caused the Health & Welfare rate to increase 11.1 cents, or 2.0 percent. The fourth quarter rate was 0.6 cents higher than the rebenchmarking rate. Most of this change was caused by the new UTU and UTU-Yardmaster contracts, which caused *employee* Health & Welfare cost sharing to decrease slightly (and therefore *employer* contributions to increase slightly).

Labor

Fourth Quarter 2008

Railroad Retirement: The Railroad Retirement rate had a 4.5 percent increase caused by rebenchmarking and higher taxable wages.

Unemployment Insurance: The Unemployment Insurance rate increased slightly because of rebenchmarking.

Other: The "Other" category is a reflection of all other fringe benefits, and currently contains employer contributions to employee 401(k) accounts, plus employer contributions to employee stock plans that are recorded as fringe benefits. The decrease of 5.8 cents was caused by lower employer contributions – a previous quarter employer contribution by one railroad to an employee stock ownership plan for one union is not part of the current quarter total. Rebenchmarking had a slight positive impact.

Labor Index Calculation

As shown in Table A-1 on the next page, the 5.1 percent increase in the Wage Index and the 2.9 percent increase in the Supplements Index combined to cause a 4.2 percent increase in the Labor Index. The linked fourth quarter 2008 index of 330.6 is determined by multiplying the third quarter linked index of 317.2 times the change between the fourth quarter labor index (344.6) and a third quarter labor index (330.6) recalculated using the original third quarter wages and supplements indexes weighted with the new 2007 weights. This method eliminates changes caused by the new weights, but captures changes caused by rebenchmarking. The purpose of the center "Updated to Reflect..." column in table A-1 is only to enable the reader to discern the impact of rebenchmarking.

Labor
Fourth Quarter 2008
Table A-1 Labor Index

	2008Q3		2008Q4	
	Used in Previous Index Filing	Updated to Reflect 2007 Actual Data	Based on 2007 Data	Pct Chg From Prev. Filing
<u>Base Wage</u> – Straight Time & Pay For Time Not Worked	\$31.700	\$32.468	\$33.016	4.2%
Adjustments:				
Lump Sum	0.116	0.120	0.122	5.2%
Back Pay	0.664	0.687	1.010	52.1%
Other	0.079	0.079	0.079	0.0%
Total Wages	\$32.559	\$33.354	34.227	5.1%
Health & Welfare Benefits	5.500	5.611	5.617	2.1%
RR Retirement & Medicare	6.609	6.774	6.906	4.5%
Unemployment Insurance	0.195	0.201	0.201	3.1%
Other	0.136	0.141	0.078	-42.6%
Total Supplements	\$12.440	\$12.727	\$12.802	2.9%
Total Labor	\$44.999	\$46.081	\$47.029	
Wage Index¹	278.6	285.4	292.9	5.1%
Supplements Index²	459.7	470.3	473.1	2.9%
Total labor Index, 2006 Weights ³	329.1			
Total labor Index, 2007 Weights ⁴	330.6	338.5	344.6	
Labor Index (linked)⁵	317.2		330.6	4.2%

¹ 1980 wage rate \$11.685

² 1980 supplements rate \$2.706

³ 2006 weights: wages, supplements 72.1% 27.9%

⁴ 2007 weights: wages, supplements 71.3% 28.7%

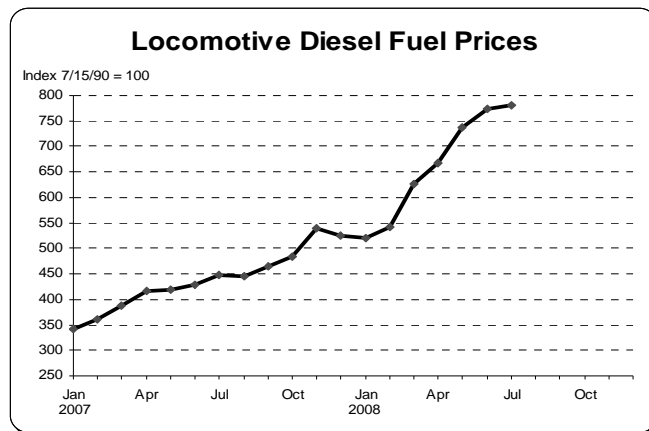
⁵ 2008Q4 linked Index = 2008Q3_{linked} x (2008Q4_{WT2007} / 2008Q3_{WT2007})
 = 317.2 x 344.6 / 330.6

Fuel Fourth Quarter 2008

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.

Crude oil* prices eclipsed the \$140 mark in late June and early July before falling to a \$105 to \$115 range in August and early September. Crude oil prices were around \$109 per barrel on the morning of September 4. Heating oil** followed a pattern similar to crude oil. The cause of the crude oil price decline was thought to be related to slower economic activity worldwide, plus American consumer resistance to higher prices for gasoline that resulted in less consumption. Americans also "dodged a bullet" as the domestic oil producing facilities in the Gulf Coast appeared to withstand Labor Day Hurricane Gustav, and a feared spike in oil prices did not occur.

Locomotive diesel fuel prices (available through July) continued to ascend, but the railroads believe prices for October (Q4) will be 10.4 percent below the third quarter forecast, or 12.0 percent below the average price actually experienced in July.



Forecast Fuel Index	423.6
Change from previous quarter forecast	-10.4%
Change from previous quarter actual	-12.0%

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

** Heating oil 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.

Materials & Supplies

Fourth Quarter 2008

The Materials & Supplies index jumped 10.5 percent – the largest increase since the third quarter of 1991. The size of the increase was caused by a 13 percent average increase in prices for Metal Products, and much of that can be attributed to prices for rail. Prices for Miscellaneous Products, led by ballast and locomotive lube oil, increased by 7.4 percent. Prices for Forest Products, which is nearly all crossties, increased 5.1 percent.

2008Q4 Materials & Supplies Index = 252.2

2008Q3 Materials & Supplies Index = 228.3

Difference	23.9 basis points
	or
	10.5 %

Equipment Rents Fourth Quarter 2008

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 the most recent month available. For the first quarter, December 1 of the previous year is used. For the second, third and fourth quarters; March 1, June 1, and September 1 are used, respectively. Using data retrieved from the latest CHARM file, an average rate per car is developed. Next, those average rates are grouped into car type categories to create an overall summary of car hire rates. The summary rates are then compared from quarter to quarter 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 Rent Index Calculation

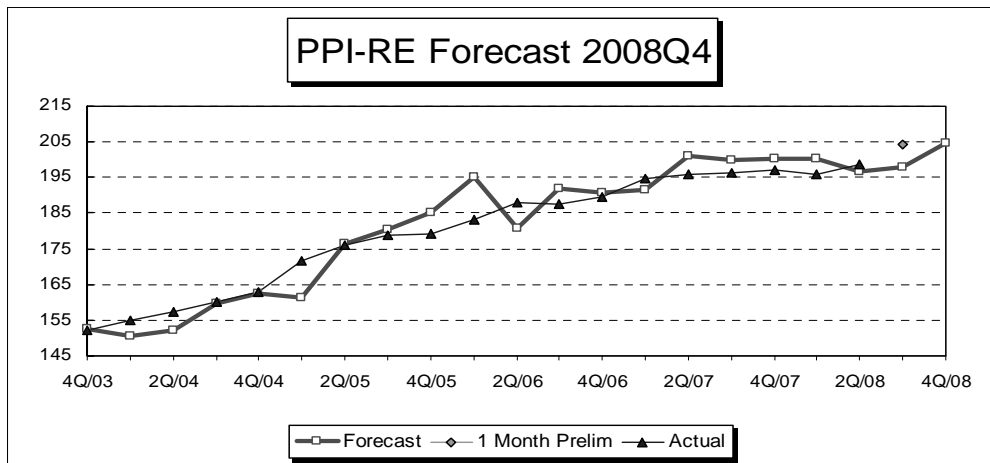
The table below calculates the Equipment Rent Index, and features new weights based on 2007. To eliminate any changes caused by the new weights, the third quarter weighted average (but not the linked value) has been recalculated using the new weights. The original third quarter weighted average using 2006 weights is 193.8. The Car Hire portion of the Index decreased 0.3 percent, because of lower rates for privately-owned cars. A 6.9 percent increase for the PPI-LF (See Appendix G) used as a proxy for Lease Rentals, combined with the 0.3 percent decrease for Car Hire, caused the Equipment Rent Index to increase 4.0 percent.

	2007 Weight	2008Q3	2008Q4	Percent Change
Car Hire	43.2%	182.3	181.7	-0.3 %
Lease Rentals	56.8%	203.8	217.8	6.9
Weighted Average		194.5	202.2	4.0
Weighted Average (Linked)		199.5	207.4	4.0

Depreciation Fourth Quarter 2008

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 reflects monthly PPI-RE figures that jumped dramatically in June after months of little change.

Forecast of Depreciation Index (1982=100)	185.1
Forecast of Depreciation Index (1980=100)	204.8
Change from previous quarter forecast	3.5%
Change from actual first month of previous quarter	0.2%
Change from same quarter of prior year (actual)	4.0%



Depreciation Fourth Quarter 2008

PPI INDUSTRIAL COMMODITIES LESS FUEL AND RELATED PRODUCTS AND POWER

Recommended model: Box-Jenkins

Forecast Model for PPIRE

ARIMA(0,1,0)*(0,0,2)

Term	Coefficient	Std. Error	t-Statistic	Significance
B[12]	-0.5168	0.0948	-5.4512	1.0000
B[24]	-0.7600	0.0526	-14.4523	1.0000

Within-Sample Statistics

Sample size 72	Number of parameters 2
Mean 157.9	Standard deviation 16.83
R-square 0.9952	Adjusted R-square 0.9951
Durbin-Watson 1.593	Ljung-Box(18)=26.94 P=0.92
Forecast error 1.179	BIC 1.234
MAPE 0.004969	RMSE 1.163
MAD 0.7796	

Actual Values for the Most Recent 6 Periods:

Date	Actual
2008-02	178.200
2008-03	177.600
2008-04	176.700
2008-05	177.700
2008-06	183.800
2008-07	184.700

Forecasted Values

Date	2.5 Lower	Forecast	97.5 Upper
2008-08	182.345	184.640	186.935
2008-09	181.607	184.851	188.096
2008-10	180.772	184.746	188.720
2008-11	180.347	184.936	189.525
2008-12	180.436	185.567	190.698
QTR AVG	180.518	185.083	189.648

Interest Fourth Quarter 2008

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 available. Typically in the fourth quarter filing, the interest rate is updated to the new level. The source for interest expense is Schedule 210, column b, from the R-1 annual report. The lines used from current R-1 annual reports are listed below. The source for average total debt is Schedule 200 from the R-1 annual report. The sums of data from columns b and c (ending and beginning balances) are combined and divided by 2 to compute an average balance. The line numbers are listed below. Beginning with fourth quarter 2008, the Interest Index is based on data for 2007.

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	
30	Current Loans and Notes Payable
39	Equipment Obligations and Other Long Term Debt Due Within One Year
41	Funded Debt Unmatured - Non-Current
42	Equipment Obligations - Non-Current
43	Capitalized Lease Obligatons - Non-Current
44	Debt in Default - Non-Current
45	Accounts Payable: Affiliated Companies - Non-Current
46	Unamortized Debt Premium - Non-Current

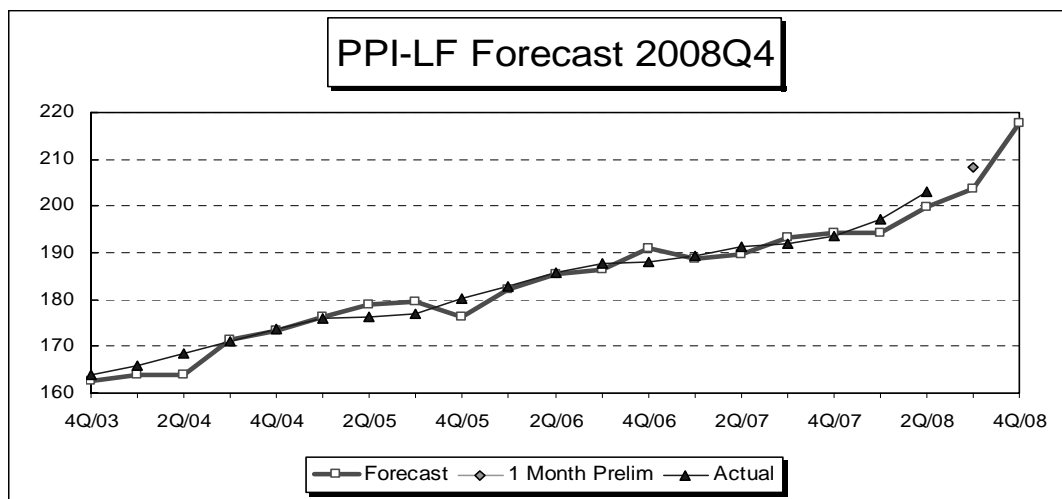
2007	Interest Rate	6.91%
1980	Interest Rate	7.85%
2008Q4	Interest Index	88.0
2008Q3	Interest Index	90.2
	Percent Change	-2.4%

Other Expenses Fourth Quarter 2008

The Producer Price Index for Industrial Commodities less Fuel 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. As shown on the graph below, recent quarterly forecasts have been too low, and this amplifies the change between forecasts. The figure forecast by the model for the fourth quarter reflects monthly PPI-LF figures that have been increasing by double-digit annual rates for most of 2008.

Forecast of Other Expense Index (1982=100)	194.3
Forecast of Other Expense Index (1980=100)	217.8
Change from previous quarter forecast	6.9%
Change from actual first month of previous quarter	4.6%
Change from same quarter of prior year (actual)	12.4%



Other Expenses Fourth Quarter 2008

**PPI INDUSTRIAL COMMODITIES LESS FUEL
AND RELATED PRODUCTS AND POWER**

Recommended model: Exponential Smoothing
 Forecast Model for PPILF
 Multiplicative Winters: Linear trend, Multiplicative seasonality
 Confidence limits proportional to indexes

Term	Coefficient	Std. Error	t-Statistic	Significance
a[1]	0.5819	0.1131	5.1458	1.0000
B[12]	0.8231	0.0539	15.2803	1.0000

Component	Smoothing Weight	Final Value
Level	0.94845	185.64
Trend	0.54489	2.1532
Seasonal	0.99988	

Seasonal Indexes

January - March	1.00073	1.00004	0.99988
April - June	0.99927	0.99990	0.99903
July - September	1.00034	1.00020	0.99955
October - December	1.00110	1.00065	0.99932

Within-Sample Statistics

Sample size 72	Number of parameters 3
Mean 159.4	Standard deviation 11.71
R-square 0.9983	Adjusted R-square 0.9983
Durbin-Watson 1.641	Ljung-Box(18)=27.59 P=0.9314
Forecast error 0.4888	BIC 0.5231
MAPE 0.002492	RMSE 0.4785
MAD 0.3996	

Actual Values for the Most Recent 6 Periods:

Date	Actual
2008-02	175.900
2008-03	177.400
2008-04	179.000
2008-05	181.600
2008-06	183.000
2008-07	185.700

Forecasted Values

Date	2.5 Lower	Forecast	97.5 Upper
2008-10	189.949	192.308	194.667
2008-11	191.578	194.375	197.173
2008-12	193.093	196.269	199.444
QTR AVG	191.540	194.317	197.095

Railroad and Union Abbreviations

Fourth Quarter 2008

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 Railway (Also noted as CPR. Owns the U.S. Class I railroad Soo Line.)
CSX	CSX Transportation
DMIR	Duluth, Missabe & Iron Range Company (Part of CN's Grand Trunk Corp.)
DWP	Duluth, Winnipeg & Pacific Railway (Part of CN's Grand Trunk Corp.)
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 (Canadian Pacific Railway's western U.S. operations.)
SSAM	Sault Saint Marie Bridge Company (Part of CN's Grand Trunk Corp.)
UP	Union Pacific Railroad
WC	Wisconsin Central and subsidiaries (Part of CN's Grand Trunk Corp.)

Major Unions Involved with Railroads

ATDA	American Train Dispatchers Association
BLET	Brotherhood of Locomotive Engineers and Trainmen Division 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
SMW	Sheet Metal Workers' International Association
TCU	Transportation Communication International Union
TCU-Carmen	Brotherhood of Railway Carmen Division of the Transportation Communications International Union
UTU	United Transportation Union
UTU-Yard	United Transportation Union Yardmaster Department (also noted as UTU-YMD)

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)