

ASSOCIATION
OF AMERICAN
RAILROADS

John T. Gray
Senior Vice President - Policy & Economics

June 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 third quarter 2008 All-Inclusive Index and Rail Cost Adjustment Factor, filed in Ex Parte No. 290 (Sub-No. 5) (2008-3) *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 third quarter 2008 results on the fourth quarter 2007 base, and shows the percentage changes from the previous quarter.

	<u>2008Q2</u>	<u>2008Q3</u>	<u>% Change</u>
All-Inclusive Index	106.1	115.6	9.0
Preliminary RCAF	1.061	1.156	9.0
Forecast Error Adjustment	0.016	-0.009	
RCAF (Unadjusted)	1.077	1.147	6.5
Productivity Adjustment Factor	2.1683	2.1748	
RCAF (Adjusted)	0.497	0.527	6.0
PAF-5	2.2859	2.2955	
RCAF-5	0.471	0.500	6.2

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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 Mac Frampton 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". The signature is fluid and cursive, with a prominent flourish at the end.

John T. Gray

Attachments

**Third Quarter 2008
All-Inclusive Index**

Ex Parte No. 290 (Sub-No. 5) (2008-3)

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

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

June 5, 2008

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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 third 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 2006 (current) and 2005 (previous) weights are shown below. The previous (2005) weights were used for the fourth quarter of 2006 through the third quarter of 2007. Beginning with the fourth quarter of 2007, the 2006 weights are used. As those familiar with the U.S. economy in 2006 would expect; Fuel and Materials & Supplies increased their weight – especially Fuel. Labor, despite a 5.4 percent increase in the amount of labor expenses, decreased as a percentage of total expenses because of double-digit increases in Fuel and Materials & Supplies expenses. The biggest weight changes were Fuel's increase of 3.2 percentage points, and Other's decrease of 1.5 percentage points. Absolute changes for all of the remaining categories were by less than one percentage point.

RCAF Weights		
	Previous 2005	Current 2006
Labor	35.3 %	34.5 %
Fuel	16.0	19.2
Materials & Supplies	4.6	5.0
Equipment Rents	8.2	7.8
Depreciation	11.1	10.6
Interest	3.1	2.7
Other	21.7	20.2

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 Third 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.

	2006 Weights	Forecast		Percent Change
		Previous 2008Q2	Current 2008Q3	
1. Labor	34.5%	313.6	317.2	1.1 %
2. Fuel	19.2%	361.1	472.8	30.9
3. M&S	5.0%	225.1	228.3	1.4
4. Equipment Rents	7.8%	196.6	199.5	1.5
5. Depreciation	10.6%	196.9	197.9	0.5
6. Interest	2.7%	90.2	90.2	0.0
7. Other	20.2%	199.7	203.8	2.1
8. Weighted Average				
a. 1980 = 100		267.8	291.8	
b. 1980 = 100 (linked)		260.9	284.3 ¹	
c. 4Q07 = 100		106.1	115.6 ²	9.0

¹ To calculate the 1980 = 100 Linked Index:

$$\begin{aligned} \text{Index80} &= (\text{Current Index} / \text{Previous Index}) * \text{the Previous Quarter Linked Index} \\ &= 291.8 \quad \text{divided by} \quad 267.8 \quad \text{times} \quad 260.9 \\ &= 284.3 \end{aligned}$$

² To calculate the 4Q07 = 100 index:

$$\begin{aligned} \text{Index4Q07} &= (\text{Current Linked Index} / \text{4Q07 Linking Factor}) * 100 \\ &= 284.3 \quad \text{divided by} \quad 245.9 \quad \text{times} \quad 100 \\ &= 115.6 \end{aligned}$$

Indexes based on other periods:

- 4Q02 based index = $284.3 / 192.1 \times 100 = 148.0$
- 4Q97 based index = $284.3 / 173.2 \times 100 = 164.1$
- 4Q92 based index = $284.3 / 156.9 \times 100 = 181.2$
- 4Q87 based index = $284.3 / 132.2 \times 100 = 215.1$

Forecast vs. Actual All-Inclusive Index First Quarter 2008

Because of data availability, the forecast error adjustment has a two-quarter lag from each filing. As shown below, the first quarter actual index of 102.6 is 0.9 index points below the forecast value of 103.5. Therefore, the forecast error adjustment for third quarter 2008 is -0.9 index points.

	2006 Weights	First Quarter 2008		Amt Difference
		Forecast	Actual	
1. Labor	34.5%	312.8	312.8	
2. Fuel	19.2%	334.8	321.4	
3. M&S	5.0%	218.5	218.5	
4. Equipment Rents ¹	7.8%	193.1	194.8	
5. Depreciation	10.6%	200.1	196.1	
6. Interest	2.7%	90.2	90.2	
7. Other	20.2%	194.3	197.1	
8. Weighted Average				
a. 1980 = 100		261.1	258.8	
b. 1980 = 100 (linked)		254.4	252.3 ²	
c. 4Q07 = 100 ³		103.5	102.6	-0.9

Forecast error \longrightarrow **-0.9 index points**

1	2006 Weights	First Quarter 2008	
		Forecast	Actual
Car-Hire	46.3%	179.9	179.7
Lease Rentals	53.7%	194.3	197.1
Weighted Average		187.6	189.0
Weighted Average (linked)		193.1	194.8

² Linked actual index = (actual index / previous actual index) x previous linked actual index.
 $252.3 = 258.8 / 251.9 \times 245.6$

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 Third 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 2008Q2	Current 2008Q3	Percent Change
All-Inclusive Index ¹	106.1	115.6	9.0
Preliminary RCAF ²	1.061	1.156	9.0
Forecast Error Adjustment ³	<u>0.016</u>	<u>-0.009</u>	
RCAF (Unadjusted) ⁴	1.077	1.147	6.5
Productivity Adjustment Factor ⁵	2.1683	2.1748	
RCAF (Adjusted) ⁶	0.497	0.527	6.0
PAF-5 ⁷	2.2859	2.2955	
RCAF-5 ⁸	0.471	0.500	6.2

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

Third Quarter 2008

The third quarter 2008 Labor Index is forecast to increase 1.1 percent. Many labor agreements have wage increases of 4 percent scheduled for July.

Wage Index

The Wage Index portion of the Labor Index increased 1.6 percent from the previous quarter. While many union employees will receive a general wage increase in July, profit sharing payments were lower.

Wage Increases: All national unions except the UTU, UTU-Yardmasters, and IAM are scheduled to receive a general wage increase of 4 percent effective July 1. [See Appendix H for railroad and union abbreviations.] The UTU has a tentative national agreement, but because voting will not be completed until after June 9, that agreement has not been added to the Wage Index. In addition to the national agreements, many independent agreements also have a 4 percent general wage increase scheduled for July 1. Ten new independent agreements have been added to the index.

Lump Sums: The lump sum rate decreased by 4.3 cents mostly because a signing bonus, involving an independent agreement for one railroad, was completely amortized and removed from the Index. Two lump sum amounts were added because of bonuses from new independent agreements, but these affected a total of only 48 people, and therefore did not have much impact on the Index.

Back Pay: The back pay rate increased slightly. Two amounts were completely amortized and removed from the rate, but back pay amounts for 10 new independent agreements were added. The new agreements involved various unions for SOO and CN's railroads, plus the UP's yardmasters.

Other: Other wages contains the amortization of profit sharing payments that the BNSF Railway makes each year to its dispatchers, yardmasters, and engineers. Last year's payment has now been completely amortized and removed from the rate. This year's payment is much less than previous years, causing the rate to drop by over 50 percent.

Supplements Index

The Supplements Index is forecast to increase 0.5 percent from the second quarter filing. An increase in Railroad Retirement costs (relating to higher wages) was reduced by lower employer costs for health & welfare and other fringe benefits.

Health & Welfare: Higher employee Health & Welfare cost sharing contributions for members of the IAM caused much of the slight decrease in employer costs for health & welfare. The ten new independent labor agreements also had some impact.

Labor

Third Quarter 2008

Railroad Retirement: The July wage increases and the resulting higher taxable wages caused the Railroad Retirement rate increase.

Unemployment Insurance: The Unemployment Insurance rate was unchanged for the quarter.

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 1.2 cents was total employer contributions that were slightly less than the previous quarter.

Labor Index Calculation

As shown in Table A-1 on the next page, the 1.6 percent increase in the Wage Index and the 0.5 percent increase in the Supplements Index combined to cause a 1.1 percent increase in the Labor Index. The linked third quarter 2008 index is 317.2.

Labor Third Quarter 2008

Table A-1 Labor Index

	2008Q2	2008Q3	Change	
			Percent	Amount
<u>Base Wage</u> – Straight Time & Pay For Time Not Worked	\$31.078	\$31.700	2.0%	\$0.622
Adjustments:				
Lump Sum	0.159	0.116	-27.0%	-0.043
Back Pay	0.641	0.664	3.6%	0.023
Other	0.170	0.079	-53.5%	-0.091
Total Wages	<u>32.048</u>	<u>32.559</u>	1.6%	0.511
Health & Welfare Benefits	5.506	5.500	-0.1%	-0.006
RR Retirement & Medicare	6.533	6.609	1.2%	0.076
Unemployment Insurance	0.195	0.195	0.0%	0.000
Other	0.148	0.136	-8.1%	-0.012
Total Supplements	<u>\$12.382</u>	<u>\$12.440</u>	0.5%	0.058
Total Labor	\$44.430	\$44.999		
Wage Index¹	274.3	278.6	1.6%	
Supplements Index²	457.6	459.7	0.5%	
Total labor Index, 2006 Weights ³	325.4	329.1		
Labor Index (linked)⁴	313.6	317.2	1.1%	

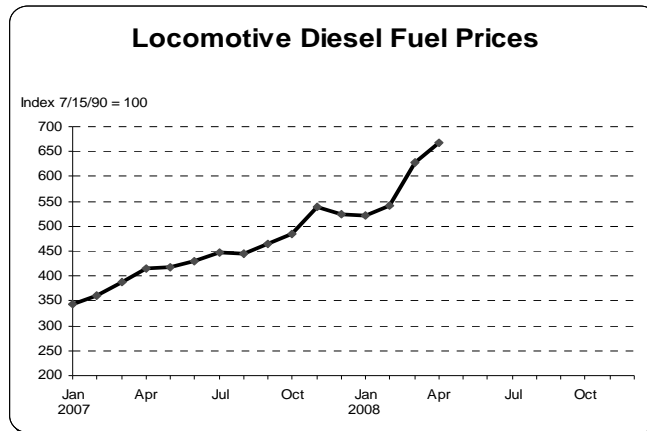
¹ 1980 wage rate \$11.685
² 1980 supplements rate \$2.706
³ 2006 weights: wages, supplements 72.1% 27.9%
⁴ 2008Q3 linked Index = 2008Q2 linked x (2008Q3 / 2008Q2)
= 313.6 x 329.1 / 325.4

Fuel Third 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 have increased significantly over the last three months. According to the Energy Information Administration, West Texas Intermediate spot prices are 25 percent higher than they were at the time of the last RCAF filing**. One Wall Steet firm predicted a possible \$200 price within the next two years. Heating oil*** followed a pattern similar to crude oil.

Locomotive diesel fuel prices (available through April) have ascended 28 percent since January, to record-breaking levels.



The railroads believe that July (third quarter) locomotive diesel fuel prices will be 30.9 percent higher than the April (second quarter) forecast, but only 14.7 percent higher than second quarter price actually experienced. This difference is caused by a second quarter forecast that was too low.

Forecast Fuel Index	472.8
Change from previous quarter forecast	30.9%
Change from previous quarter actual	14.7%

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

** West Texas Intermediate Spot Prices: March 5, 2008 = \$104.45; and May 28, 2008 = \$131.00.

*** 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

Third Quarter 2008

The Materials & Supplies Index index increased 1.4 percent from the previous quarter level. Higher prices for rail and ties were major contributors to the increase.

2008Q3 Materials & Supplies Index = 228.3

2008Q2 Materials & Supplies Index = 225.1

Difference	3.2 basis points
	or
	1.4 %

Equipment Rents Third 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

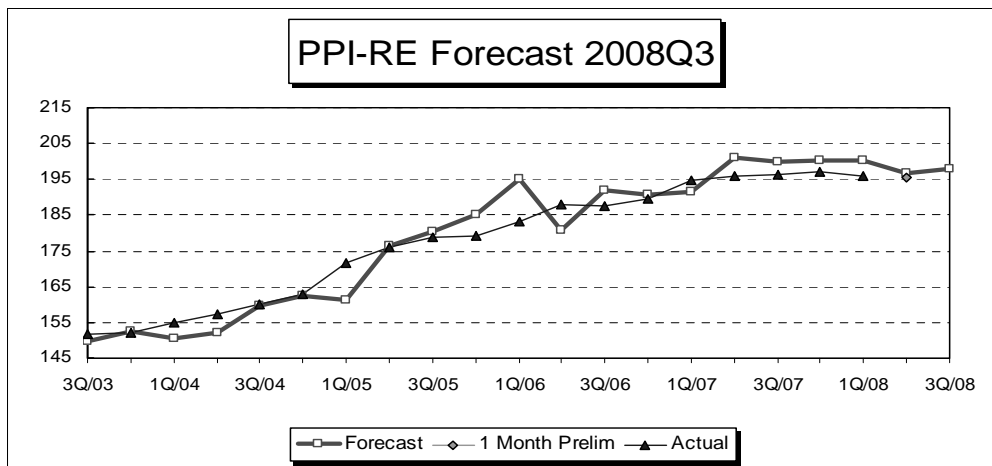
The table below lists the components of the Equipment Rents index, including weights. The Car Hire portion of the Index increased 0.7 percent, mostly because of rate increases for privately-owned tank cars. A 2.1 percent increase for the PPI-LF (See Appendix G) used as a proxy for Lease Rentals, combined with the increase for Car Hire, caused the Equipment Rent Index to increase 1.5 percent.

	2006	2008Q2	2008Q3	Percent
	Weight			Change
Car Hire	46.3%	181.0	182.3	0.7 %
Lease Rentals	53.7%	199.7	203.8	2.1
Weighted Average		191.0	193.8	1.5
Weighted Average (Linked)		196.6	199.5	1.5

Depreciation Third 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 recent monthly PPI-RE figures that either decreased, or increased at lower rates.

Forecast of Depreciation Index (1982=100)	178.9
Forecast of Depreciation Index (1980=100)	197.9
Change from previous quarter forecast	0.5%
Change from actual first month of previous quarter	1.2%
Change from same quarter of prior year (actual)	0.7%



Depreciation Third 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]	-0.5894	0.0995	-5.9256	1.0000
B[24]	-0.7963	0.0525	-15.1760	1.0000

Within-Sample Statistics

Sample size 72	Number of parameters 2
Mean 155.9	Standard deviation 16.57
R-square 0.9962	Adjusted R-square 0.9962
Durbin-Watson 1.673	Ljung-Box(18)=24.67 P=0.8657
Forecast error 1.027	BIC 1.075
MAPE 0.004602	RMSE 1.013
MAD 0.7073	

Actual Values for the Most Recent 6 Periods:

Date	Actual
2007-11	177.700
2007-12	177.500
2008-01	177.700
2008-02	178.100
2008-03	176.100
2008-04	176.700

Forecasted Values

Date	2.5 Lower	Forecast	97.5 Upper
2008-05	175.648	177.647	179.645
2008-06	175.771	178.598	181.424
2008-07	175.396	178.858	182.319
2008-08	174.760	178.757	182.754
2008-09	174.593	179.062	183.531
QTR AVG	174.916	178.892	182.868

Interest Third 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 2007, the Interest Index is based on data for 2006.

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

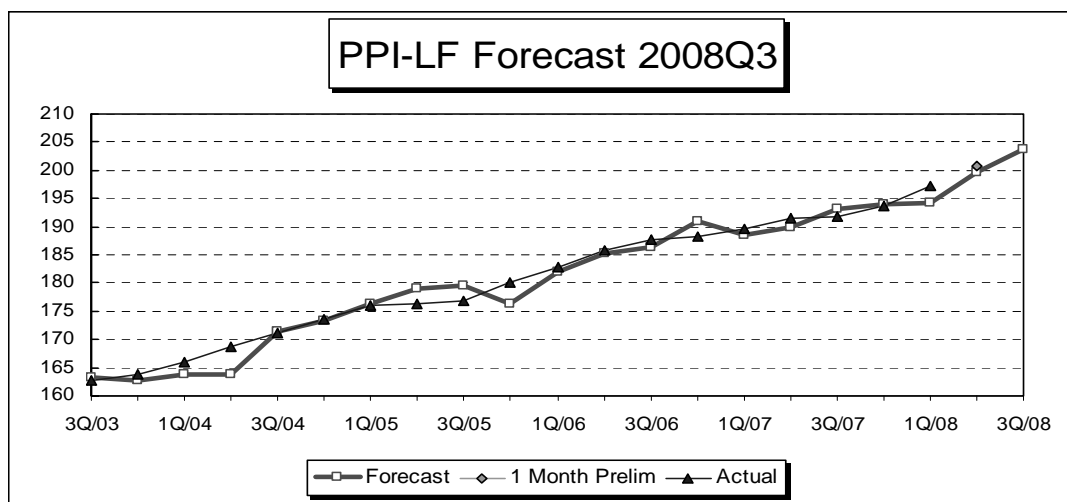
2006	Interest Rate	7.08%
1980	Interest Rate	7.85%
2008Q3	Interest Index	90.2
2008Q2	Interest Index	90.2
	Percent Change	0.0%

Other Expenses Third 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. The figure forecast by the model reflects monthly PPI-LF figures where three of the most recent four months increased at a double-digit annual rate.

Forecast of Other Expense Index (1982=100)	181.8
Forecast of Other Expense Index (1980=100)	203.8
Change from previous quarter forecast	2.1%
Change from actual first month of previous quarter	1.5%
Change from same quarter of prior year (actual)	6.2%



Other Expenses Third Quarter 2008

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

Recommended model: Box-Jenkins

Forecast Model for PPILF

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

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

Within-Sample Statistics

Sample size 72	Number of parameters 3
Mean 157.7	Standard deviation 11
R-square 0.999	Adjusted R-square 0.9989
Durbin-Watson 1.932	* Ljung-Box(18)=31.08 P=0.9718
Forecast error 0.3578	BIC 0.3744
MAPE 0.001566	RMSE 0.3528
MAD 0.2543	

Actual Values for the Most Recent 6 Periods:

Date	Actual
2007-11	173.100
2007-12	173.100
2008-01	174.600
2008-02	175.700
2008-03	177.100
2008-04	179.000

Forecasted Values

Date	2.5 Lower	Forecast	97.5 Upper
2008-05	179.530	180.294	181.057
2008-06	179.448	180.878	182.307
2008-07	179.354	181.403	183.451
2008-08	179.125	181.735	184.345
2008-09	179.073	182.191	185.309
QTR AVG	179.184	181.776	184.368

Railroad and Union Abbreviations

Third 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)