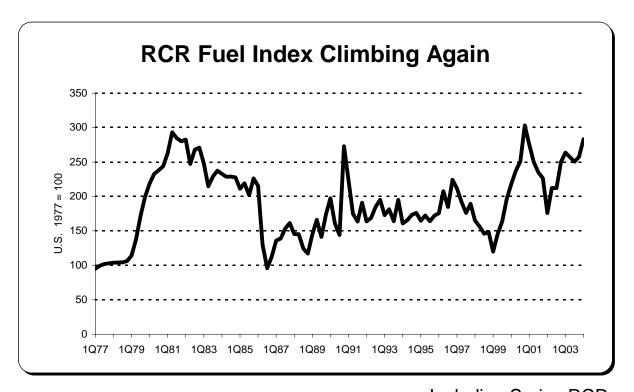




AAR RAILROAD COST INDEXES



Including Series RCR, The All-Inclusive Index, and The Rail Cost Adjustment Factor



SCOPE OF AAR INDEXES

Structure of Indexes

AAR price indexes measure changes in railroad inflation, i.e., changes in the price level of inputs to railroad operations. Accordingly, labor is measured on an hourly basis; fuel in terms of price per gallon; materials and supplies by prices for a market basket of items; and other components of operating expense, where practicable, on the basis of units of use. The indexes are intended to be limited to inflation-caused changes and do not generally reflect changes in total expenses, the actual disbursement of monies, and/or extraordinary charges not caused by price level changes.

Railroad Cost Recovery (RCR) Indexes

The RCR index series is based on two different types of prices: (1) chargeout prices and wage rates, which represent the prices of expensed items at the time they are actually consumed and charged to the expense accounts, and (2) spot prices for materials and supplies and fuel, which represent the price of the supplies at the time they are purchased. The chargeout price index series includes ten component indexes, each representing an element of railroad freight service expense, and 13 composite indexes, comprised of various combinations of the component indexes. Each index is published on both a quarterly and annual basis for the U.S. and two districts (East and West). The spot price index series is comprised of ten indexes – a diesel fuel index, three composition-based and four function-based materials and supplies indexes, and two total materials and supplies indexes, one with and one without fuel. The spot price indexes are published on a quarterly basis for the U.S. and two districts (East and West). (The Eastern District includes the former Southern District, which was published separately prior to the third quarter 1986.)

The RCR index data are compiled into three tables, which are included in this publication:

Table A – Annual Indexes of Chargeout Prices and Wage Rates

Table B – Spot Price Indexes of Fuel and Materials & Supplies

Table C – Quarterly Indexes of Chargeout Prices and Wage Rates

It is the policy of the AAR to revise the RCR indexes where material errors are discovered. The revisions will be made in the edition of this publication immediately following the recognition of the error.

RCAF and the All-Inclusive Index

The All-Inclusive Index (AII), the first step in creating the RCAF, is comprised of seven component indexes and one composite index (which is expressed on several different base periods). The indexes are published on a quarterly basis for the U.S. only; annual average indexes are not computed for the AII. Each quarter, the AAR is required to file the AII with the Surface Transportation Board (STB), formerly the Interstate Commerce Commission. Filings are available on the AAR's Web site at: www.aar.org/AboutTheIndustry/RailCostIndexes.asp. Each quarter's filing contains detailed explanations of the forecast for that quarter, as well as the actual data from the second quarter prior. Certain index data from the filing are included in this publication in the following tables:

Table D – Current Quarter All-Inclusive Index

Table E – Forecast vs. Actual All-Inclusive Index (2 Quarters Prior)

Table F – All-Inclusive Index on Various Bases

All-Inclusive Index Less Fuel

In this publication, the AAR also calculates a version of the All-Inclusive Index that does not include fuel. This All-Inclusive Index Less Fuel (AII-LF) is calculated exactly the same, with matching component indexes, as the All-Inclusive Index used with the RCAF — with the exception of the exclusion of the fuel component. Index data for the AII-LF are included in this publication in the following tables:

Table AA – Current Quarter All-Inclusive Index Less Fuel

Table AB – Forecast vs. Actual All-Inclusive Index Less Fuel (2 Quarters Prior)

Table AC – All-Inclusive Index Less Fuel on Various Bases

Table AD – All-Inclusive Index Less Fuel With Forecast Error Adjustment

Rail Cost Adjustment Factor (RCAF)

Generally, the STB serves a decision issuing the RCAF prior to the publication deadline of the *AAR Railroad Cost Indexes*. Whenever possible, a synopsis of the decision and the new RCAF are included in this publication. The following tables have been provided to detail the calculation of the RCAF:

Table G – Rail Cost Adjustment Factor (4Q/1987=100)

Table H – Rail Cost Adjustment Factor (10/1/1982=100)

Table I – Rail Cost Adjustment Factor (4Q/1992=100)

Table J – Rail Cost Adjustment Factor (4Q/1997=100)

Table K – Rail Cost Adjustment Factor (4Q/2002=100)

The Surface Transportation Board in its October 3, 1996 Ex Parte No. 290 (Sub-No. 7) decision created an additional productivity-adjusted RCAF (RCAF-5) which reflects RCAF values that would have been produced if the agency had always used a 5-year rolling average from the second quarter 1989 inception of the productivity-adjusted RCAF. The results of these calculations are shown in Tables G, I, J and K. Although the AAR believes this new index series is neither required nor permitted by the applicable statute, and has filed a protest before the STB asserting same, the RCAF-5 series is provided herein as information.

COST COMPONENTS

Labor

The labor indexes reflect changes in the average unit price of wages and wage supplements (fringe benefits). The RCR labor indexes are published annually using annual wage statistics and fringe benefit data from annual reports. The RCR and RCAF have quarterly labor indexes that use annual data updated in accordance with labor union contracts and benefit cost changes. Preliminary annual indexes, which are simple averages of the four quarters, are published before the actual data become available.

The unit price of wages consists of two components: (1) an hourly rate for straight time (ST) compensation, which is ST compensation divided by ST hours paid for, and (2) an hourly rate for pay for time not worked (PFTNW), such as vacation and holidays, which is PFTNW compensation divided by ST hours paid for. The Wages index is the sum of the two rates for the current period divided by the sum of the two rates in the base period.

The Wage Supplements component is comprised of contributions for health and welfare benefits, payroll taxes for Railroad Retirement and Medicare, unemployment insurance, and other wage supplements. The index includes the employer portion of these payments on a per ST-hour-paid basis.

Fuel

The fuel index represents the change in the average price per gallon of No. 2 diesel fuel. Beginning in February 1991, the price includes Federal excise taxes, transportation, and handling charges. There are three series of indexes calculated for railroad fuel – spot, quarterly chargeout, and annual chargeout. The first is based on current prices, measured in the second month of the quarter. The second reflects the original purchase price of fuel charged to railroad operating expenses during the middle month of the quarter. The purchase price is measured in the first month of the quarter, thereby reflecting an average one-month inventory lag before the fuel is charged to expense. Annual versions of the indexes, part of the RCR, are simple averages of the four quarterly chargeout indexes.

Materials and Supplies

Changes in materials and supplies prices are measured by three indexes. The first measures spot prices as of the reporting date for each quarter. The quarterly Indexes of Spot Prices of Railroad Fuel, Materials and Supplies include a breakdown of materials and supplies into three composition categories (Forest Products, Metal Products, and Miscellaneous Products), and four functional categories (Maintenance of Way Items, Freight Car Items, Locomotive Items, and All Other Items). The second series is comprised of quarterly chargeout price indexes, reflecting the original purchase price of materials charged to railroad operating expense accounts during the quarter; a three-month lag is assumed for the average time in inventory before an item is charged to an expense account. Thus, the previous quarter's spot price is the current quarter's chargeout price. The third series presents annual chargeout price indexes, representing the average price of materials and supplies charged to expense accounts during the calendar year. The annual Materials and Supplies indexes are calculated using a simple average of the four quarterly chargeout indexes.

Other Operating Expenses

There are six separate indexes published in the RCR and four individual indexes calculated for the AII as components of other operating expenses. The six RCR indexes are: Equipment Rents, Purchased Services, Depreciation, Interest, Taxes (other than income and payroll), and All Other operating expenses. The four AII indexes are Equipment Rents, Depreciation, Interest, and All Other operating expenses. Purchased services and taxes are included in all other operating expenses in the AII.

Equipment Rents has two components – Car Hire and Lease Rentals. The Car Hire index is a weighted average of car hire rates for various car types obtained from the CHARM (Car Hire Accounting Rate Master) file. The Lease Rentals component is indexed by the change in a Producer Price Index (PPI) – in the RCR by the PPI-Rail Equipment (PPI-RE) and in the AII by the PPI-Industrial Commodities less Fuel and Related Products and Power (PPI-LF).

Purchased Services in the RCR are indexed by the change in one of the composite indexes – Material Prices, Wage Rates and Supplements Combined, excluding Fuel.

The indexes for depreciation, interest, and taxes in the RCR reflect expenses per physical unit, such as locomotive depreciation per horsepower. The data on expenses and physical capacity are collected quarterly from the Class I railroads. In the AII, the Depreciation index is based on the change in the PPI-RE, while interest is determined annually from railroad data on the embedded cost of debt.

All other operating expenses are indexed by changes in a Producer Price Index – in the RCR by the PPI-All Commodities, and in the AII by the PPI-LF.

INDEX WEIGHTS

The weights used to calculate the indexes are based on freight operating expenses plus fixed charges for all Class I railroads. RCR weights are changed at five year intervals (unless there is a major shift in weights prior to that time which would necessitate an earlier change), while the STB requires that the AII weights be updated annually. Beginning in the fourth quarter 2003, the AII used 2002 weights. The 1998 weights were employed in the RCR for the first time in the first quarter 2000. The RCR utilized 1993 weights from 1995 through 1999. Whenever weights are updated, a linking procedure is used so that the weight changes, by themselves, do not cause the index levels to change. The tables below detail the external weighting scheme for the two indexes:

TABLE 1 - RCR External Weighting Factors (1998)

	U.S.	East	West
Wages	29.9 %	31.8 %	28.6 %
Wage Supplements	9.9	10.4	9.6
Fuel	7.0	4.9	8.5
Materials & Supplies	5.5	5.8	5.3
Equipment Rents	10.8	8.6	12.3
Purchased Service	10.6	12.7	9.1
Depreciation	10.6	10.5	10.7
Interest	4.8	3.7	5.5
Taxes	2.1	2.2	2.0
All Other Expenses	8.8	9.4	8.4

TABLE 2 - (RCAF/AII)
All-Inclusive Index
Weighting Factors (2002)

Labor	38.0 %
Fuel	9.0
Materials & Supplies	4.6
Equipment Rents	10.3
Depreciation	10.9
Interest	3.7
All Other Expenses	23.5

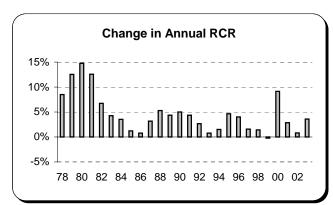
TABLE 3 (All-LF)
All-Inclusive Index Less Fuel
Weighting Factors (2002)

Labor	41.8 %
Materials & Supplies	5.0
Equipment Rents	11.3
Depreciation	12.0
Interest	4.1
All Other Expenses	25.8

ANALYSIS OF SERIES RCR TRENDS

Fourth Quarter 2003 RCR (U.S.) - The Railroad Cost Recovery Index (RCR) decreased 0.2 percent in the fourth quarter 2003. The decreases were caused by lower levels for Wage Supplements, Depreciation, Interest, and Taxes (other than income and payroll). Supplements decreased because of new employee Health & Welfare cost sharing featured in the Brotherhood of Railroad Signalmen and the United Transportation Union contracts.

Final Annual 2003 RCR (U.S.) - On an annual basis, the 2003 RCR was 3.6 percent higher than the previous year. All but two of the components that comprise the overall RCR index increased from the prior year. Fuel had the highest percentage increase: jumping 21.0 percent to the highest level since 1982, and eclipsing a recent peak from 2000. Although fourth quarter 2000 is still the all-time highest *quarterly* Fuel index, 2003 fuel prices remained high throughout the year, causing the *annual* version to surpass 2000's recent high. Wage Rates increased 2.9 percent from the prior year. Two unions signed new agreements prior to 2003, and received general wage increases in July. New contracts settled in 2003 for several other railroad unions featured a July wage increase and retroactive wage increases. Other unions continued to receive cost-of-living allowance (COLA) increases. The wage increases were not the cause of higher wage supplements costs because the Tier II Railroad Retirement tax rate was actually lower in 2003. Wage Supplements increased by only 3.8 percent. Increases in Wage Supplements, which had been increasing at a higher rate, were tempered somewhat by the lower Tier II rate plus the addition of employee Health & Welfare cost sharing in accordance with the new labor agreements.



The final Wage Rate and Wage Supplement indexes were calculated directly from 2003 annual report and wage data supplied by the railroads. The preliminary versions were four-quarter averages benchmarked to 2002 data and updated for wage increases and changes in employer payroll tax rates and Health & Welfare contribution rates. Annual versions of the remaining components are four-quarter averages.

First Quarter 2004 QMPW (U.S.) - The first quarter Index of Materials Prices, Wage Rates and Supplements Combined, Including Fuel (QMPQ) increased by 3.8 percent. All components of the index increased. Fuel prices continued their assent, rising 9.9 percent. The Materials & Supplies index grew 3.6 percent. Wage Rates and Wage Supplements increased 2.1 and 2.9 percent, respectively. The increase in Wage Rates was caused by a combination of a new national contract for the Brotherhood of Locomotive Engineers that featured wage increases and bonuses, non-union increases, small COLA increases for some of the smaller unions, independent wage increases and bonuses, and rebenchmarking wages to new preliminary 2003 wage statistics. Wage Supplements, which were also rebenchmarked to preliminary 2003 wage statistics and annual report data, increased despite a lower Tier II tax rate as Health & Welfare costs contined to climb.

Table A
ANNUAL INDEXES OF CHARGEOUT PRICES AND WAGE RATES (1977=100)
UNITED STATES

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Wage rates Wage supplements	244.4 356.8	24 35										1.3 .0
Fuel Materials and supplies	178.1 179.8	17 18										.2 .6
Equipment rents Purchased services	217.8 253.2	22 25										.7 .5
Depreciation Interest	240.3 222.9	25 20										.4
Taxes (other than income and payroll) All other operating expenses	179.7 180.4	18 18										.4
Wage rates and supplements All materials (incl. fuel)	269.1 171.7	26 17										.0 .2
Matl. prices & wage rates combined (excl. fuel) Matl. prices & wage rates combined (incl. fuel)	230.3 222.7	23 22			Sa	mp	le	Co	ру			.6 .8
Materials prices, wage rates and supplements combined (excl. fuel) Materials prices, wage rates and supplements	253.2	25				_						.5
combined (incl. fuel) - QMPW	245.1	24										.6
Taxes, purchased serv. and other expenses Equip. rents, deprec. and interest Equip. rents, taxes, deprec., purch. serv.,	207.2 228.2	20 23										.1 .7
interest & other expenses Total excl. fuel	219.2 239.9	22 24										.4 .1
Total excl. interest Total excl. interest and depreciation	237.2 235.2	23 23										.9 .3
Railroad Cost Recovery Index	236.3	238										

Note: The final annual wage rates and wage supplements are derived from the Annual Wage Statistics and the Annual Report Form R-1, consequently the final annual values may not equal the average of the four quarterly figures. The preliminary annual indexes, which appear in the December publication each year (indicated by a "p"), are averages of the four quarters.

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Table A
ANNUAL INDEXES OF CHARGEOUT PRICES AND WAGE RATES (1977=100)
EAST

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Wage rates Wage supplements	236.5 333.9	23										7.3 .8
Fuel	170.3	16										.4
Materials and supplies	161.1	16										.0
Equipment rents	216.7	22										.7
Purchased services	240.6	24										.3
Depreciation	241.6	25										.3
Interest	161.6	15										.7
Taxes (other than income and payroll)	190.1	19										.9
All other operating expenses	180.4	18										.8
Wage rates and supplements	257.8	26										.5
All materials (incl. fuel)	157.9	15										.0
Matl. prices & wage rates combined (excl. fuel)	220.1	22			O -			^ -				.2
Matl. prices & wage rates combined (incl. fuel) Materials prices, wage rates and supplements	214.3	21			Sa	mp)le	Co	py			.2
combined (excl. fuel) Materials prices, wage rates and supplements	240.6	24										.3
combined (incl. fuel) - QMPW	234.4	23										.8
Taxes, purchased serv. and other expenses	200.3	20										.7
Equip. rents, deprec. and interest Equip. rents, taxes, deprec., purch. serv.,	206.0	21										.3
interest & other expenses	207.6	21										.8
Total excl. fuel	228.7	23										.5
Total excl. interest	228.9	23										.9
Total excl. interest and depreciation	226.1	22										.6
Railroad Cost												
Recovery Index	226.0	225										4

Note: The final annual wage rates and wage supplements are derived from the Annual Wage Statistics and the Annual Report Form R-1, consequently the final annual values may not equal the average of the four quarterly figures. The preliminary annual indexes, which appear in the December publication each year (indicated by a "p"), are averages of the four quarters.

Table A
ANNUAL INDEXES OF CHARGEOUT PRICES AND WAGE RATES (1977=100)
WEST

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Wage rates Wage supplements Fuel Materials and supplies	251.3 377.7 184.4 208.9	25 36 18 21	254.0	264.9	<u> </u>	274.2	204.6	202.2	204.6	2444	246.7	338.6 .9 .3 .0
Equipment rents Purchased services Depreciation Interest Taxes (other than income and payroll) All other operating expenses	218.9 266.8 229.3 291.3 170.7 180.4	22 26 24 26 17 18										.4 .5 .3 .0 .8
Wage rates and supplements All materials (incl. fuel) Matl. prices & wage rates combined (excl. fuel) Matl. prices & wage rates combined (incl. fuel) Materials prices, wage rates and supplements combined (excl. fuel) Materials prices, wage rates and supplements combined (incl. fuel) - QMPW	279.3 189.1 242.1 232.3 266.8	27 19 24 23 26 25			Sa	mp	ole	Со	ру			.5 .8 .4 .7 .5
Taxes, purchased serv. and other expenses Equip. rents, deprec. and interest Equip. rents, taxes, deprec., purch. serv., interest & other expenses Total excl. fuel Total excl. interest Total excl. interest Railroad Cost	210.5 239.3 227.2 250.2 244.3 243.8	21 24 22 25 24 24										.5 .3 .4 .7 .4 .5
Recovery Index	246.1	24										

Note: The final annual wage rates and wage supplements are derived from the Annual Wage Statistics and the Annual Report Form R-1, consequently the final annual values may not equal the average of the four quarterly figures. The preliminary annual indexes, which appear in the December publication each year (indicated by a "p"), are averages of the four quarters.

Table B
SPOT PRICE INDEXES OF FUEL AND MATERIALS AND SUPPLIES (1977=100)
UNITED STATES

		M	ATERIALS & BY FUN		S		IALS & SUI		TOTAL MA & SUP	_
	DIESEL FUEL	MAINT OF WAY ITEMS	FRT CAR ITEMS	LOCO ITEMS	ALL OTHER ITEMS	FOREST PROD	METAL PROD	MISC PROD	EXCLUD FUEL	INCLUD FUEL
02/15/99 05/15/99 08/15/99 11/15/99	116.8 1 52.0 18 20	240.8	167.5 167.4	159.9 160.9	147.0	299.8	167.4 171.4	221.1	197.9	167.1
02/15/00 05/15/00 08/15/00 11/15/00	24 24 26 3									3 3 5 0
02/15/01 05/15/01 08/15/01 11/15/01	26 26 24 20			S	ampl	le Cop	οу			7 3 2 4
02/15/02 05/15/02 08/15/02 11/15/02	11 21 22 24									2 0 0 1
02/15/03 05/15/03 08/15/03 11/15/03	3° 24 27 20									4 2 4 1
02/15/04 05/15/04 08/15/04 11/15/04	292.7	Z04. I	172.1	104.3	155.0	311.2	100.4	Z4Z.Ÿ	201.9	241.8

Source: Periodic confidential price quotations from Class I carriers on diesel fuel and 38 operating and maintenance items. The same items are contained in both the functional and composition groupings.

Table B
SPOT PRICE INDEXES OF FUEL AND MATERIALS AND SUPPLIES (1977=100)
EAST

		M	ATERIALS & BY FUN		S		IALS & SUI		TOTAL MA	
	DIESEL FUEL	MAINT OF WAY ITEMS	FRT CAR ITEMS	LOCO ITEMS	ALL OTHER ITEMS	FOREST PROD	METAL PROD	MISC PROD	EXCLUD FUEL	INCLUD FUEL
02/15/99 05/15/99 08/15/99 11/15/99 02/15/00 05/15/00 08/15/00 11/15/00 02/15/01 05/15/01	108.1 140.6 16 19 24 23 24 30 26 24	213.0 213.0	153.7 153.2	161.6 160.0	139.6	299.7 281.8	169.8 176.4	143.1 140.8	179.7 180.7	157.4 169.4 3 1 2 5 7 3
08/15/01 11/15/01 02/15/02 05/15/02 08/15/02 11/15/02 02/15/03 05/15/03	26 25 20 18 20 21 22 22 30 23			S	Samp	le Cop	Э			9 0 7 3 2 6 0
08/15/03 11/15/03 02/15/04 05/15/04 08/15/04 11/15/04	3(2: 2: 2: 279. 1	200.0	100.1	100.0	103.1	505.5	175.5	137.0	100.5	7 3 211.3

Source: Periodic confidential price quotations from Class I carriers on diesel fuel and 38 operating and maintenance items. The same items are contained in both the functional and composition groupings.

Table B
SPOT PRICE INDEXES OF FUEL AND MATERIALS AND SUPPLIES (1977=100)
WEST

		M	ATERIALS & BY FUN		S		IALS & SUI		_	ATERIALS PPLIES
	DIESEL FUEL	MAINT OF WAY ITEMS	FRT CAR ITEMS	LOCO ITEMS	ALL OTHER ITEMS	FOREST PROD	METAL PROD	MISC PROD	EXCLUD FUEL	INCLUD FUEL
02/15/99 05/15/99 08/15/99 11/15/99 02/15/00 05/15/00 08/15/00 11/15/00 02/15/01	122.2 160.5 19 2: 2! 2! 2! 2: 3:	273.7	177.8	167.1	155.8	304.1	170.8	284.2	229.1	184.0
05/15/01 08/15/01 11/15/01 02/15/02 05/15/02 08/15/02 11/15/02 02/15/03 05/15/03 08/15/03	2: 2: 2: 2: 2: 2: 2: 2: 2: 2: 2: 2: 2:			S	amp	le Cop	Э			1 6 2 8 9 0 0 6 9
08/15/03 11/15/03 02/15/04 05/15/04 08/15/04 11/15/04	302.9	200.9	100.0	101.9	134.0	312.9	171.0	310.1	259.0	200.6

Source: Periodic confidential price quotations from Class I carriers on diesel fuel and 38 operating and maintenance items. The same items are contained in both the functional and composition groupings.

Table C
QUARTERLY INDEXES OF CHARGEOUT PRICES AND WAGE RATES (1977=100)
UNITED STATES

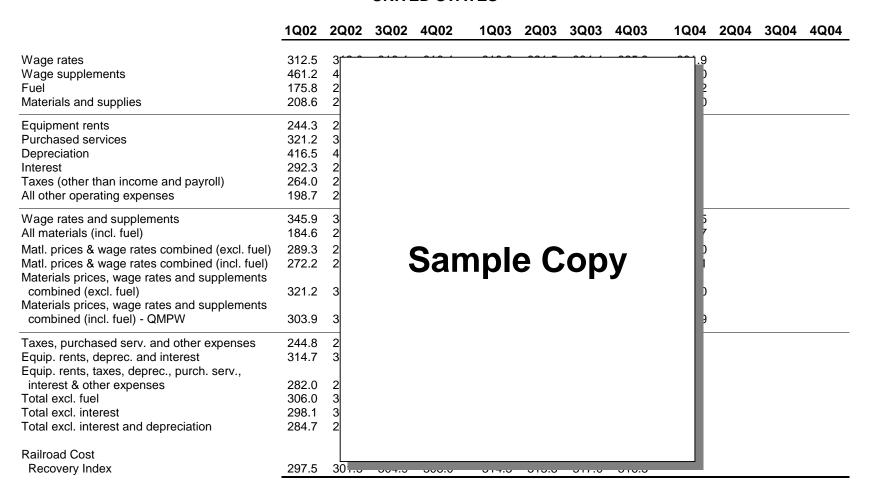


Table C
QUARTERLY INDEXES OF CHARGEOUT PRICES AND WAGE RATES (1977=100)

EAST

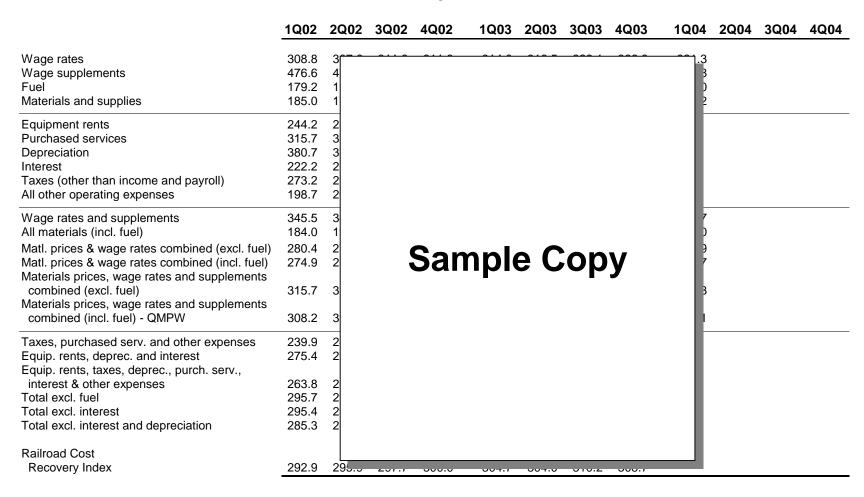
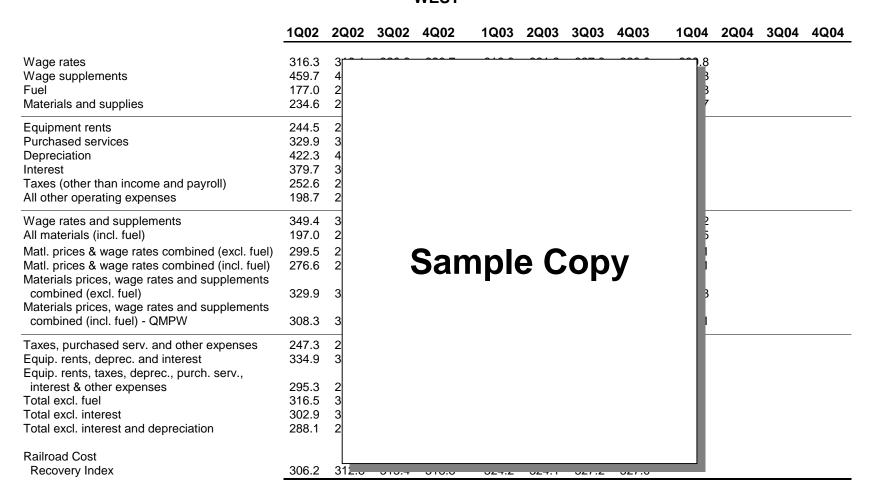


Table C
QUARTERLY INDEXES OF CHARGEOUT PRICES AND WAGE RATES (1977=100)
WEST



SECOND QUARTER 2004 ALL-INCLUSIVE INDEX

The second quarter 2004 All-Inclusive Index forecast of 102.6 is 0.8 percent higher than the first quarter 2004 figure of 101.8. The Labor, Fuel, and Depreciation portions of the Index all increased from the prior quarter, while Materials & Supplies and Equipment Rents decreased.

Labor – A 1.6 percent increase in the Wage Index combined with a 0.1 percent increase in the Supplements Index caused the second quarter 2004 Labor Index to increase 1.0 percent. New contracts with the Brotherhood of Locomotive Engineers (BLE) had the most significant impact.

National BLE Contract: On December 16, 2003, the Brotherhood of Locomotive Engineers (BLE) signed a new agreement with the National Carriers' Conference Committee. The agreement affects a group of railroads that includes five Class I railroads for health & welfare, and four of the five railroads for wages and lump sums. Highlights of the decision are as follows: a Longevity Bonus of \$1,200 that applies to about two thirds of BLE employees for four Class I railroads; a Lump Sum payment of \$774 that applies to three Class I railroads; 48 cents of the cost-of-living allowance (COLA) is rolled into basic rates of pay effective June 30, 2002; (remaining) COLAs terminate effective June 30, 2002; a 4.0 percent (retroactive) general wage increase effective July 1, 2002; and a 2.5 percent (retroactive) general wage increase effective July 1, 2003. The contract also has future increases, a service scale adjustment, and pay system simplification. In addition, BLE employees will participate in health & welfare cost sharing by making a pre-tax contribution toward health & welfare premiums. The monthly per employee health & welfare contribution will be \$33.39, \$81.18, and \$79.74 – effective July 1, 2001, 2002, and 2003, respectively. The cost sharing rate will change again effective July 1, 2004. Retroactive employee health & welfare cost sharing will be offset against retroactive wage payments. One railroad is using the contract's Optional Alternative Compensation Program, and has some differences in wage increases and bonuses.

Independent BLE Contracts: Norfolk Southern and CN's Grand Trunk Western independently signed agreements with the BLE. The Norfolk Southern agreement continued their annual Thoroughbred Performance Bonus, includes future wage increases, pays a signing bonus, and has a provision that aligns with the national agreement's health & welfare cost sharing.

Wage Increases: Only the national BLE contract had an effect on the second quarter wage rate.

Lump Sums: The lump sum adjustment increased significantly because of the BLE agreements. The national BLE agreement has a Longevity Bonus and a signing bonus. The Norfolk Southern BLE agreement has a \$2,000 signing bonus and continues the performance bonus.

Back Pay: The back pay adjustment increased 10.5 cents because of the new national BLE agreement. The new back pay amounts were net figures with retroactive pay increases offset by COLA wages received after the June 30, 2002 that were discontinued in the new agreement. In addition, back pay was offset for the retroactive health & welfare cost sharing.

Other: This component contains the amortization of a profit sharing payment that the BNSF made to its Brotherhood of Locomotive Engineers employees from the former Atchison, Topeka and Santa Fe Railway in early 2003 for performance in 2002. This figure was unchanged.

Supplements: The Supplements Index is forecast to increase by 0.1 percent from the first quarter filing. Railroad Retirement costs increased as a result of the higher wage rates from the new BLE contract. Most of this increase was offset by lower health & welfare costs caused by the employee cost sharing in the new BLE contracts.

Fuel – Second quarter (April 2004) fuel prices are expected to increase 9.0 percent from the first quarter (January) forecast – a 1.1 percent *de*crease from the January actual level. Crude oil prices jumped beyond \$35 per barrel in early March, and oil exporters hinted that they may take steps to moderate prices.

Materials & Supplies – The Materials and Supplies Index for the second quarter is 3.3 percent lower than the previous period. Regional purchases of ballast were the primary cause of the decline.

Equipment Rents – The second quarter 2004 Equipment Rents Index is forecast to decrease 2.0 percent from the first quarter 2004 forecast. The decrease in the Car Hire portion was caused by lower rates for privately-owned tank cars and autoracks.

Depreciation – The Depreciation Index, which is measured by the changes in the Producer Price Index for Rail Equipment, increased 1.1 percent from the prior quarter forecast.

Interest – The interest rate underlying the interest component of the index is updated every fourth quarter and held constant until the next rebenchmarking. Thus, the Interest Index is unchanged.

Other – Regulations require that the Producer Price Index for Industrial Commodities less Fuel and Related Products (PPI-LF) be used to index other expenses (purchased services, casualties and insurance, loss and damage, taxes other than income and payroll, and general and administrative expenses). The second quarter 2004 forecast of 163.9 is unchanged from the first quarter 2004 forecast.

Table D SECOND QUARTER 2004 ALL-INCLUSIVE INDEX

The components and values of the All-Inclusive Index in the second quarter 2004 are shown below. The projected first quarter index of 102.6 is 0.8 percent above the first quarter 2004 forecast.

	2002 Weights	2004Q1 Forecast	2004Q2 Forecast	Percent Change
Labor	38.0 %	276.8	279.5	1.0 %
Fuel	9.0	110.8	120.8	9.0
Materials & Supplies	4.6	160.3	155.0	-3.3
Equipment Rents	10.3	176.7	173.1	-2.0
Depreciation	10.9	150.7	152.3	1.1
Interest	3.7	98.0	98.0	0.0
Other	23.5	163.9	163.9	0.0
Weighted Average				
a. 1980 = 100		199.3	200.8	
b. 1980 = 100 (linke	ed)	195.6	197.1 ¹	
c. 4Q02 = 100		101.8	102.6 2	0.8

¹ 2004Q2 linked index of 197.1 = relative change (2004Q2 index of 200.8/ 2004Q1 index of 199.3) times 2004Q1 linked index of 195.6. Linking is necessitated by periodic changes in external weighting.

² 4Q02 based index = 2004Q2 index (197.1) / 4Q02 linking factor (192.1) times 100 = 102.6. 4Q97 based index is 113.8 and the 4Q92 based index is 125.6.

Table E

FORECAST VS. ACTUAL FOURTH QUARTER 2003 ALL-INCLUSIVE INDEX

As shown below, the actual index of 102.7 in the fourth quarter 2003 is 0.7 index points above the forecast value of 102.0. Thus, the forecast error adjustment in the second quarter 2004 is an increase of 0.7 index points.

		2002	Fourth Qua	rter 2003
		Weights	Forecast	Actual
	Labor	38.0 %	278.3	278.3
	Fuel	9.0	113.3	111.2
	Materials & Supplies	4.6	154.8	154.8
	Equipment Rents ¹	10.3	175.7	176.8
	Depreciation	10.9	152.4	152.0
	Interest	3.7	98.0	98.0
	Other	23.5	162.6	163.8
	Weighted Average			
	a. 1980 = 100		199.6	199.8
	b. 1980 = 100 (linked)		195.9	197.2 ²
	c. $4Q02 = 100^3$		102.0	102.7
Note 1:				
	Equipment Rents Calculation:	2002	Fourth Qua	
	Car Hire	Weights* 50.6 %	Forecast 177.8	Actual 178.0
	Lease Rentals	49.4	162.6	163.8
Nata O	Weighted Average Weighted Average (linked) * Prior quarter weighted averages were recalculated	using 2002 weights.	170.3 175.7	171.0 176.8
Note 2:				

Note 3:

Beginning with the December 5, 2002 filing, the RCAF is on a 2002Q4=100 basis.

was recalculated using 2002 weights.

2003Q4 linked actual index of 197.2 = relative change (2003Q4 actual index of 199.8 / 2003Q3 actual index of 197.2) times 2003Q3 linked actual index of 194.6. The 2003Q3 actual index

Table F
ALL-INCLUSIVE INDEX ON VARIOUS BASES

			Ва	ıse *			
	1980	10/01/80	10/1/82	4Q87	4Q92	4Q97	4Q02
1996Q1	168.0	163.6	139.0	127.1	107.1		
1996Q2	167.4	163.0	138.5	126.6	106.7		
1996Q3	169.0	164.6	139.8	127.8	107.7		
1996Q4	170.4	165.9	140.9	128.9	108.6		
1997Q1	174.7	170.1	144.5	132.1	111.3		
1997Q2	173.7	169.1	143.7	131.4	110.7		
1997Q3	174.6	170.0	144.4	132.1	111.3		
1997Q4	173.2	168.6	143.3	131.0	110.4	100.0	
1998Q1	172.7	168.2	142.8	130.6	110.1	99.7	
1998Q2	171.5	167.0	141.9	129.7	109.3	99.0	
1998Q3	173.4	168.8	143.4	131.2	110.5	100.1	
1998Q4	173.3	168.7	143.3	131.1	110.5	100.1	
1999Q1	173.0	168.5	143.1	130.9	110.3	99.9	
1999Q2	172.1	167.6	142.3	130.2	109.7	99.4	
1999Q3	174.2	169.6	144.1	131.8	111.0	100.6	
1999Q4	174.1	169.5	144.0	131.7	111.0	100.5	
2000Q1	179.4	174.7	148.4	135.7	114.3	103.6	
2000Q2	180.3	175.6	149.1	136.4	114.9	104.1	
2000Q3	181.6	176.8	150.2	137.4	115.7	104.8	
2000Q4	183.5	178.7	151.8	138.8	117.0	105.9	
2001Q1	186.9	182.0	154.6	141.4	119.1	107.9	
2001Q2	185.6	180.7	153.5	140.4	118.3	107.2	
2001Q3	186.9	182.0	154.6	141.4	119.1	107.9	
2001Q4	186.1	181.2	153.9	140.8	118.6	107.4	
2002Q1	186.4	181.5	154.2	141.0	118.8	107.6	
2002Q2	184.2	179.4	152.4	139.3	117.4	106.4	
2002Q3	185.6	180.7	153.5	140.4	118.3	107.2	
2002Q4	189.9	184.9	157.1	143.6	121.0	109.6	98.9
2003Q1	190.6	185.6	157.7	144.2	121.5	110.0	99.2
2003Q2	194.3	189.2	160.7	147.0	123.8	112.2	101.1
2003Q3	193.3	188.2	159.9	146.2	123.2	111.6	100.6
2003Q4	195.9	190.7	162.0	148.2	124.9	113.1	102.0
2004Q1	195.6	190.5	161.8	148.0	124.7	112.9	101.8
2004Q2	197.1	191.9	163.0	149.1	125.6	113.8	102.6
2004Q3							
2004Q4							

^{*} The 1980 linked All-Inclusive Index for each quarter is divided by the following linking factors to determine the values shown on Table F: 10/1/80 = 102.7; 10/1/82 = 120.9; 4Q87 = 132.2; 4Q92 = 156.9; 4Q97 = 173.2; and 4Q02 = 192.1.

RAIL COST ADJUSTMENT FACTOR

In a decision served March 19, 2004, the Surface Transportation Board (STB) approved a second quarter 2004 Adjusted RCAF of 0.518, which is 0.2 percent above the first quarter 2004 Adjusted RCAF. The second quarter 2004 Unadjusted RCAF of 1.033 is 0.8 percent higher than the previous quarter. The difference between the Adjusted and Unadjusted RCAF is a productivity adjustment mandated by the STB. This adjustment has been applied since the second quarter 1989, in accordance with its March 22, 1989 decision in Ex Parte No. 290 (Sub-No. 4), Railroad Cost Recovery Procedures - Productivity Adjustment.

The STB in its October 3, 1996 Ex Parte No. 290 (Sub-No. 7) decision created an additional productivity-adjusted RCAF (RCAF-5) which reflects RCAF values that would have been produced if the agency had always used a 5-year rolling average from the second quarter 1989 inception of a productivity-adjusted RCAF. The results of these calculations are shown in Tables G, I, J, and K.

As shown in Table D, the forecasted AII for the second quarter 2004 is 102.6; this is the linked index of 197.1 (1980 = 100) divided by the fourth quarter 2002¹ base index of 192.1 times 100. The Adjusted RCAF, shown below, is derived in three steps: (1) the AII is divided by the base period AII of 100 to obtain the "Preliminary RCAF" of 1.026; (2) the forecast error of 0.007 is added to the preliminary RCAF to produce the Unadjusted RCAF² of 1.033; and (3) the Unadjusted RCAF is divided by the productivity adjustment factor³ (PAF) of 1.9943 to yield the Adjusted RCAF of 0.518. The PAF-5, unpublished until the first quarter 1997, is the productivity adjustment factor that would have been produced had the STB used a 5-year rolling average methodology from the inception of the productivity adjustment process in the second quarter 1989. The RCAF-5 index of 0.493 in the second quarter 2004 is derived by dividing the RCAF (Unadjusted) index of 1.033 by the PAF-5 value of 2.0950.

	<u>2004Q1</u>	2004Q2	% Change
All-Inclusive Index	101.8	102.6	0.8 %
Preliminary RCAF	1.018	1.026	0.8
Forecast Error Adjustment	<u>0.007</u>	0.007	
RCAF (Unadjusted)	1.025	1.033	0.8
Productivity Adjustment Factor	1.9834	1.9943	
RCAF (Adjusted)	0.517	0.518	0.2
PAF-5	2.0852	2.0950	
RCAF-5	0.492	0.493	0.2

¹ The RCAF was changed from a 1997Q4 basis to a 2002Q4 basis, as required by law every five years, beginning with the 2003Q1 forecast. An attachment in that filing contains converted historical data.

² The "forecast error" is the 0.7 index point difference between the forecast and actual fourth quarter 2003 AII, and is shown in Table E. (Because of data availability, there is always a two-quarter lag.)

³ Starting in the second quarter 2004, the 1998-2002 based PAF of 2.2 percent was applied. Each quarter's PAF is calculated by multiplying the previous quarter's PAF by the fourth root of the current multi-year average. Thus, the second quarter 2004 PAF of 1.9943 equals 1.9834 (previous quarter's PAF) times 1.0055 – the fourth root of the 1998-2002 average annual productivity growth ratio of 1.022.

Table G
RAIL COST ADJUSTMENT FACTOR (4Q/87=100)

Quarter	Prelim- ¹ inary RCAF	Forecast ² Error Adjustment	RCAF ³ (Unad- justed)	Productivity Adjustment Factor		PAF-5 ⁴	RCAF-5 ⁴
4Q/87	0.994	0.006	1.000	-	1.000	-	-
1Q/88 2Q/88 3Q/88 4Q/88	1.022 1.036 1.034 1.033	0.005 0.007 0.001 0.007	1.027 1.043 1.035 1.040	- - - -	1.027 1.043 1.035 1.040	- - -	- - - -
1Q/89 2Q/89 3Q/89 4Q/89	1.048 1.055 1.061 1.071	-0.002 -0.003 0.006 0.009	1.046 1.052 1.067 1.080	1.0042 1.0084 1.0193	1.046 1.048 1.058 1.060	1.0040 1.0080 1.0120	1.048 1.059 1.067
1Q/90 2Q/90 3Q/90 4Q/90	1.092 1.093 1.092 1.126	-0.004 0.005 0.006 0.000	1.088 1.098 1.098 1.126	1.0303 1.0414 1.0526 1.0640	1.056 1.054 1.043 1.058	1.0264 1.0410 1.0558 1.0707	1.060 1.055 1.040 1.052
1Q/91 2Q/91 3Q/91 4Q/91	1.144 1.128 1.157 1.176	0.001 0.015 -0.009 -0.002	1.145 1.143 1.148 1.174	1.0755 1.0871 1.0988 1.1107	1.065 1.051 1.045 1.057	1.0834 1.0962 1.1091 1.1222	1.057 1.043 1.035 1.046
1Q/92 2Q/92 3Q/92 4Q/92	1.169 1.157 1.161 1.181	-0.001 0.005 -0.003 0.006	1.168 1.162 1.158 1.187	1.1227 1.1348 1.1471 1.1595	1.040 1.024 1.010 1.024	1.1351 1.1481 1.1613 1.1747	1.029 1.012 0.997 1.010

(Beginning with 1Q93, the ICC used 4Q92 as the RCAF base period. See Table I.)

¹ "Preliminary RCAF" is the All-Inclusive Index (Table D), divided by 100.

² The "Forecast Error Adjustment" is the difference between the forecast and actual index levels from two quarters prior (Table E), divided by 100.

³ Prior to 1989Q2, the terms "RCAF (Unadjusted)" and "RCAF (Adjusted)" were not used. The factor derived by adjusting the Preliminary RCAF for forecast error was simply called the "RCAF". Beginning 1989Q, the RCAF (Unadjusted) is the Preliminary RCAF adjusted for forecast error, and the RCAF (Adjusted) is the RCAF (Unadjusted) adjusted by the Productivity Adjustment Factor.

⁴ The Surface Transportation Board in its Ex Parte No. 290 (Sub-No. 7) decision served October 3, 1996 created an additional RCAF series (RCAF-5) which reflects productivity-adjusted values as if the agency had used a 5-year rolling average productivity adjustment factor since the second quarter 1989 inception of a productivity-adjusted RCAF. The productivity adjustment factor used in this calculation is called the PAF-5.

Table H

RAIL COST ADJUSTMENT FACTOR (10/1/82=100)

Quarter	Preliminary RCAF	Forecast Error Adjustment	RCAF	Maximum RCAF Rate Level
10/1/82			1.000	1.000
1Q/83 2Q/83 3Q/83 4Q/83			1.010 0.979 0.999 1.012	1.010 1.010 1.010 1.012
1Q/84 2Q/84 3Q/84 4Q/84			1.053 ¹ 1.053 1.058 1.053	1.053 1.053 1.057 ¹ 1.057
1Q/85 2Q/85 3Q/85 4Q/85			1.048 1.042 1.040 1.012	1.057 1.057 1.057 1.057
1Q/86 2Q/86 3Q/86 4Q/86			1.069 1.023 1.040 1.044	1.069 1.069 1.069 1.069 ²
1Q/87 2Q/87 3Q/87 4Q/87	1.071 1.069 1.079 1.087	-0.009 -0.001 0.008 0.006	1.062 1.068 1.087 1.093	1.057 1.057 1.057 1.057
1Q/88 2Q/88	1.117 1.133	0.005 0.007	1.122 1.140	1.101 1.140

(Beginning in 3Q88, the ICC used the 4Q87 base for the RCAF. See Table G.)

¹ The ICC in 2Q84 determined that 1Q84 should have been 105.2, but no retroactive rate actions were ordered. The maximum RCAF rate level was held down by 0.1% in 3Q84 to adjust for the overstatement.

² The 4Q86 maximum RCAF rate level was 1.069 to November 16, and 1.057 thereafter.

Table I

RAIL COST ADJUSTMENT FACTOR (4Q/92=100)

	Prelim-1	Forecast ²	RCAF ³	Productivity			
O	inary	Error	(Unad-	Adjustment		DAE 5	RCAF-5 ⁵
Quarter	RCAF	Adjustment	justed)	Factor	(Adjusted)	PAF-5 ⁵	RCAF-5
4Q/92	0.995	0.005	1.000	1.1595	0.862	1.1747	0.851
1Q/93	1.008	0.004	1.012	1.1720	0.863	1.1926	0.849
2Q/93	1.003	0.002	1.005	1.1847	0.848	1.2107	0.830
3Q/93	1.011	0.002	1.013	1.1975	0.846	1.2291	0.824
4Q/93	1.024	0.001	1.025	1.2104	0.847	1.2478	0.822
1Q/94	1.033	-0.004	1.029	1.2253	0.840	1.2621	0.815
2Q/94 3Q/94	1.022 1.046	0.002 0.000	1.024 1.046	1.2404	0.826 0.833	1.2766 1.2913	0.802 0.810
3Q/94 4Q/94	1.046	0.000	1.046	1.2557 1.2711	0.833	1.2913	0.800
4Q/94	1.043	0.002	1.045	1.2711	0.022	1.3002	0.800
1Q/95	1.055	0.003	1.058	1.2867	0.822	1.3222	0.800
2Q/95	1.065	0.005	1.070	1.3052	0.820	1.3385	0.799
3Q/95	1.076	0.004	1.080	1.3240	0.816	1.3550	0.797
4Q/95	1.076	0.003	1.079	1.3431	0.803	1.3716	0.787
1Q/96	1.071	-0.005	1.066	1.3624	0.782	1.3914	0.766
2Q/96	1.067	-0.004	1.063	1.3820	0.769	1.4114	0.753
3Q/96	1.077	-0.003	1.074	1.4019	0.766	1.4317	0.750
4Q/96	1.086	0.006	1.092	1.4221	0.768	1.4524	0.752
1Q/97	1.113	0.003	1.116	1.4426	0.774	1.4733	0.757
2Q/97	1.107	0.008	1.115	1.4603	0.764	1.4945	0.746
3Q/97	1.113	-0.001	1.112	1.4783	0.752	1.5160	0.734
4Q/97	1.104	0.000	1.104	1.4965	0.738	1.5378	0.718

(Beginning with 1Q98, the STB used 4Q97 as the RCAF base period. See Table J.)

¹ "Preliminary RCAF" is the All-Inclusive Index (Table D), divided by 100.

² The "Forecast Error Adjustment" is the difference between the forecast and actual index levels from two quarters prior (Table E), divided by 100.

³ The Unadjusted RCAF is the sum of the Preliminary RCAF plus the Forecast Error Adjustment.

⁴ The Adjusted RCAF is the Unadjusted RCAF adjusted by the Productivity Adjustment Factor.

⁵ The Surface Transportation Board in its Ex Parte No. 290 (Sub-No. 7) decision served October 3, 1996 created an additional RCAF series (RCAF-5) which reflects productivity-adjusted values as if the agency had used a 5-year rolling average productivity adjustment factor since the second quarter 1989 inception of a productivity-adjusted RCAF. The productivity adjustment factor used in this calculation is called the PAF-5.

Table J
RAIL COST ADJUSTMENT FACTOR (4Q/97=100)

Quarter	Prelim- ¹ inary RCAF	Forecast ² Error Adjustment	RCAF ³ (Unad- justed)	Productivity Adjustment Factor		PAF-5 ⁵	RCAF-5⁵
4Q 1997	1.000	0.000	1.000	1.4965	0.668	1.5378	0.650
1Q 1998	0.997	-0.001	0.996	1.5149	0.657	1.5567	0.640
2Q 1998	0.990	0.006	0.996	1.5503	0.642	1.5758	0.632
3Q 1998	1.001	-0.003	0.998	1.5866	0.629	1.5952	0.626
4Q 1998	1.001	0.002	1.003	1.6237	0.618	1.6148	0.621
1Q 1999	0.999	-0.003	0.996	1.6617	0.599	1.6526	0.603
2Q 1999	0.994	-0.001	0.993	1.6850	0.589	1.6913	0.587
3Q 1999	1.006	-0.004	1.002	1.7086	0.586	1.7309	0.579
4Q 1999	1.005	0.006	1.011	1.7325	0.584	1.7714	0.571
1Q 2000	1.036	0.007	1.043	1.7568	0.594	1.7962	0.581
2Q 2000	1.041	0.009	1.050	1.7719	0.593	1.8213	0.577
3Q 2000	1.048	0.002	1.050	1.7871	0.588	1.8468	0.569
4Q 2000	1.059	0.003	1.062	1.8025	0.589	1.8727	0.567
1Q 2001	1.079	0.006	1.085	1.8180	0.597	1.8888	0.574
2Q 2001	1.072	0.004	1.076	1.8305	0.588	1.9050	0.565
3Q 2001	1.079	0.000	1.079	1.8431	0.585	1.9214	0.562
4Q 2001	1.074	0.004	1.078	1.8558	0.581	1.9379	0.556
1Q 2002	1.076	0.000	1.076	1.8686	0.576	1.9513	0.551
2Q 2002	1.064	-0.002	1.062	1.8878	0.563	1.9648	0.541
3Q 2002	1.072	-0.010	1.062	1.9072	0.557	1.9784	0.537
4Q 2002	1.096	0.012	1.108	1.9268	0.575	1.9921	0.556
(Reginnin	na with O1	03 the STR i	ised 4002	as the RCA	F hase period	d See Tah	le K)

(Beginning with Q103, the STB used 4Q02 as the RCAF base period. See Table K.)

¹ "Preliminary RCAF" is the All-Inclusive Index (Table D), divided by 100.

² The "Forecast Error Adjustment" is the difference between the forecast and actual index levels from two quarters prior (Table E), divided by 100.

³ The Unadjusted RCAF is the sum of the Preliminary RCAF plus the Forecast Error Adjustment.

⁴ The Adjusted RCAF is the Unadjusted RCAF adjusted by the Productivity Adjustment Factor.

⁵ The Surface Transportation Board in its Ex Parte No. 290 (Sub-No. 7) decision served October 3, 1996 created an additional RCAF series (RCAF-5) which reflects productivity-adjusted values as if the agency had used a 5-year rolling average productivity adjustment factor since the second quarter 1989 inception of a productivity-adjusted RCAF. The productivity adjustment factor used in this calculation is called the PAF-5.

Table K
RAIL COST ADJUSTMENT FACTOR (4Q/2002=100)

Quarter	Prelim- ¹ inary RCAF	Forecast ² Error Adjustment	RCAF ³ (Unad- justed)	Productivity Adjustment Factor		PAF-5 ⁵	RCAF-5 ⁵
4Q 2002	0.989	0.011	1.000	1.9268	0.519	1.9921	0.502
1Q 2003 2Q 2003 3Q 2003 4Q 2003	0.992 1.011 1.006 1.020	0.004 0.009 0.014 -0.003	0.996 1.020 1.020 1.017	1.9466 1.9557 1.9649 1.9741	0.512 0.522 0.519 0.515	2.0126 2.0333 2.0542 2.0754	0.495 0.502 0.497 0.490
1Q 2004 2Q 2004 3Q 2004 4Q 2004	1.018 1.026	0.007 0.007	1.025 1.033	1.9834 1.9943	0.517 0.518	2.0852 2.0950	0.492 0.493
1Q 2005 2Q 2005 3Q 2005 4Q 2005							
1Q 2006 2Q 2006 3Q 2006 4Q 2006							
1Q 2007 2Q 2007 3Q 2007 4Q 2007							

¹ "Preliminary RCAF" is the All-Inclusive Index (Table D), divided by 100.

² The "Forecast Error Adjustment" is the difference between the forecast and actual index levels from two quarters prior (Table E), divided by 100.

³ The Unadjusted RCAF is the sum of the Preliminary RCAF plus the Forecast Error Adjustment.

⁴ The Adjusted RCAF is the Unadjusted RCAF adjusted by the Productivity Adjustment Factor.

⁵ The Surface Transportation Board in its Ex Parte No. 290 (Sub-No. 7) decision served October 3, 1996 created an additional RCAF series (RCAF-5) which reflects productivity-adjusted values as if the agency had used a 5-year rolling average productivity adjustment factor since the second quarter 1989 inception of a productivity-adjusted RCAF. The productivity adjustment factor used in this calculation is called the PAF-5.

Table L RAIL COST ADJUSTMENT FACTOR (4Q/2007=100)

Quarter	Prelim- ¹ inary RCAF	Forecast ² Error Adjustment	RCAF ³ (Unad- justed)	Productivity Adjustment Factor		PAF-5 ⁵	RCAF-5 ⁵
4Q 2007		Tables	l through	7 040 4000	n od for futu		
1Q 2008 2Q 2008 3Q 2008 4Q 2008				n Z are resei ment Factor		re	
1Q 2009 2Q 2009 3Q 2009 4Q 2009							
1Q 2010 2Q 2010 3Q 2010 4Q 2010							
1Q 2011 2Q 2011 3Q 2011 4Q 2011							
1Q 2012 2Q 2012 3Q 2012 4Q 2012							

¹ "Preliminary RCAF" is the All-Inclusive Index (Table D), divided by 100.

² The "Forecast Error Adjustment" is the difference between the forecast and actual index levels from two quarters prior (Table E), divided by 100.

³ The Unadjusted RCAF is the sum of the Preliminary RCAF plus the Forecast Error Adjustment.

⁴ The Adjusted RCAF is the Unadjusted RCAF adjusted by the Productivity Adjustment Factor.

⁵ The Surface Transportation Board in its Ex Parte No. 290 (Sub-No. 7) decision served October 3, 1996 created an additional RCAF series (RCAF-5) which reflects productivity-adjusted values as if the agency had used a 5-year rolling average productivity adjustment factor since the second quarter 1989 inception of a productivity-adjusted RCAF. The productivity adjustment factor used in this calculation is called the PAF-5.

Table M RAIL COST ADJUSTMENT FACTOR (4Q/2012=100)

Quarter	Prelim- ¹ inary RCAF	Forecast ² Error Adjustment	RCAF ³ (Unad- justed)	Productivi Adjustmer Factor		PAF-5 ⁵	RCAF-5 ⁵
4Q 2001	2					_	
1Q 2013 2Q 2013 3Q 2013 4Q 2013			_	n Z are resoment Facto	erved for futu ors.	re	
1Q 2014 2Q 2014 3Q 2014 4Q 2014							
1Q 2015 2Q 2015 3Q 2015 4Q 2015							
1Q 2016 2Q 2016 3Q 2016 4Q 2016							
1Q 2017 2Q 2017 3Q 2017 4Q 2017							

¹ "Preliminary RCAF" is the All-Inclusive Index (Table D), divided by 100.

² The "Forecast Error Adjustment" is the difference between the forecast and actual index levels from two quarters prior (Table E), divided by 100.

³ The Unadjusted RCAF is the sum of the Preliminary RCAF plus the Forecast Error Adjustment.

⁴ The Adjusted RCAF is the Unadjusted RCAF adjusted by the Productivity Adjustment Factor.

⁵ The Surface Transportation Board in its Ex Parte No. 290 (Sub-No. 7) decision served October 3, 1996 created an additional RCAF series (RCAF-5) which reflects productivity-adjusted values as if the agency had used a 5-year rolling average productivity adjustment factor since the second quarter 1989 inception of a productivity-adjusted RCAF. The productivity adjustment factor used in this calculation is called the PAF-5.

Table AA SECOND QUARTER 2004 ALL-INCLUSIVE INDEX LESS FUEL

The components and values of the All-Inclusive Index Less Fuel in the second quarter 2004 are shown below. The second quarter index of 103.0 is 0.3 percent higher than the first quarter 2004 forecast.

	2002 Weights	2004Q1 Forecast	2004Q2 Forecast	Percent Change
Labor	41.8 %	276.8	279.5	1.0 %
Materials & Supplies	5.0	160.3	155.0	-3.3
Equipment Rents	11.3	176.7	173.1	-2.0
Depreciation	12.0	150.7	152.3	1.1
Interest	4.1	98.0	98.0	0.0
Other	25.8	163.9	163.9	0.0
Weighted Average				
a. 1980 = 100		208.1	208.7	
b. 1980 = 100 (linke	d)	206.9	207.5 1	
c. 4Q02 = 100		102.7	103.0 2	0.3

²⁰⁰⁴Q2 linked index of 207.5 = relative change (2004Q2 index of 208.7/ 2004Q1 index of 208.1) times 2004Q1 linked index of 206.9. Linking is necessitated by periodic changes in external weighting.

 $^{^{2}}$ 4Q02 based index = 2004Q2 index (207.5) / 4Q02 linking factor (201.4) times 100 = 103.0.

Table AB

FORECAST VS. ACTUAL FOURTH QUARTER 2003 ALL-INCLUSIVE INDEX LESS FUEL

As shown below, the actual index of 102.9 in the fourth quarter 2003 is 0.1 index points above the forecast value of 102.8. Thus, the forecast error adjustment in the second quarter 2004 is an increase of 0.1 index points.

	2002	Fourth Qua	arter 2003
	Weights	Forecast	Actual
Labor	41.8 %	278.3	278.3
Materials & Supplies	5.0	154.8	154.8
Equipment Rents	11.3	175.7	176.8
Depreciation	12.0	152.4	152.0
Interest	4.1	98.0	98.0
Other	25.8	162.6	163.8
Weighted Average			
a. 1980 = 100		208.2	208.6
b. 1980 = 100 (linked)		207.0	207.2 1
c. $4Q02 = 100^2$		102.8	102.9
Forecast Error	0.1		

Note 1: 2003Q4 linked actual index of 207.2 = relative change (2003Q4 actual index of 208.6 / 2003Q3 actual index of 206.0) times 2003Q3 linked actual index of 204.6. The 2003Q3 actual index has been recalculated using 2002 weights.

Note 2: Linked index divided by 2002Q4 linking factor of (201.4) times 100.

Table AC
ALL-INCLUSIVE INDEX LESS FUEL ON VARIOUS BASES

			Base *	
	1980	2002Q4		
1994Q1 1994Q2 1994Q3 1994Q4	171.3 170.1 174.0 173.3	85.1 84.5 86.4 86.0		
1995Q1 1995Q2 1995Q3 1995Q4	175.4 1 77.2 1	87.1 ** 0		
1996Q1 1996Q2 1996Q3 1996Q4	1 1 1 1			
1997Q1 1997Q2 1997Q3 1997Q4	1) 1) 1) 1)			
1998Q1 1998Q2 1998Q3 1998Q4	1) 1) 1) 1)			
1999Q1 1999Q2 1999Q3 1999Q4	1; 1; 1; 1;		Sample Copy	
2000Q1 2000Q2 2000Q3 2000Q4	1! 1! 1!		Janipie Copy	
2001Q1 2001Q2 2001Q3 2001Q4	1! 1! 1!			
2002Q1 2002Q2 2002Q3 2002Q4	1! 1! 1! 2!			
2003Q1 2003Q2 2003Q3 2003Q4	2(2(2) 2(
2004Q1 2004Q2 2004Q3 2004Q4	2(2(

^{*} The 1980 linked All-Inclusive Index for each quarter is divided by the following linking factors to determine the values shown on Table AC: 4Q/02 = 2.014

Table AD

ALL-INCLUSIVE INDEX LESS FUEL WITH FORECAST ERROR ADJUSTMENT

4Q/2002 = 100.0

	AII-LF	Forecast Error Adjustment	AII-LF With Forecast Error Adjustment	
1994Q1 1994Q2 1994Q3 1994Q4	85.1 84.5 86.4 86.0	-0.3 -0.2 0.2 0.0	84.8 84.3 86.6 86.0	
1995Q1 1995Q2 1995Q3 1995Q4	8 8 8			
1996Q1 1996Q2 1996Q3 1996Q4	8 8 8			
1997Q1 1997Q2 1997Q3 1997Q4	9, 9, 9, 9, 9, 9, 9, 9, 9, 9, 9, 9, 9, 9			
1998Q1 1998Q2 1998Q3 1998Q4	9			
1999Q1 1999Q2 1999Q3 1999Q4	9,9	Samp	le Copy	
2000Q1 2000Q2 2000Q3 2000Q4	9			
2001Q1 2001Q2 2001Q3 2001Q4	9			
2002Q1 2002Q2 2002Q3 2002Q4	10			
2003Q1 2003Q2 2003Q3 2003Q4	10 10 10 10			
2004Q1 2004Q2 2004Q3 2004Q4	10 2.7 103.0	-0.1 0.1	102.6 103.1	

INDEX TERMINOLOGY

- ALL-INCLUSIVE INDEX An index which measures changes in prices for various categories of railroad expenses associated with carrying freight. A forecast of this index is used by the Surface Transportation Board (STB) to determine the Railroad Cost Adjustment Factor. It replaced the Interim Mid-Quarter Index in 1985.
- ALL-INCLUSIVE INDEX LESS FUEL (AII-LF) The All-Inclusive Index calculated without the Fuel component. All other components match the All-Inclusive Index used to determine the Rail Cost Adjustment Factor.
- BASE PERIOD The year to which all price levels are compared. Indexes are generally rebased to 100 periodically. An index can be rebased by dividing each index number by the index value for the period which will be established as the new base.
- BENCHMARKING Updating the hourly rates that underlie the quarterly estimates of the various components of the wage index and the supplements index. Benchmark data on hours and compensation are from the annual Wage Statistics, and data on fringe benefits and payroll taxes are from the R-1 Annual Report. The Class I railroads file the R-1 Annual Report and an abbreviated version of the wage statistics with the STB.
- CHARGEOUT PRICES The value of an item at the time it is charged to an operating expense account. The chargeout price is generally the original purchase price, sometimes a "system average price." The AAR publishes both an annual and a quarterly series of chargeout price indexes.
- COMPOSITION CATEGORIES Subcomponents of the materials and supplies index. Each of the market basket items can be assigned to one of three categories: forest products, metal products, and miscellaneous products. Separate spot price indexes are published for these categories. The overall materials and supplies spot price and chargeout price indexes are based on this grouping.
- EX PARTE NO. 290 The STB proceeding which meets the requirements of the Staggers Rail Act to calculate a Rail Cost Adjustment Factor using an index of railroad costs.
- FORECAST ERROR The difference between the forecasted and the actual All-Inclusive Indexes for a given quarter. The forecast error from the second prior quarter is added to (if the forecast was understated) or subtracted from (if the forecast was overstated) the Preliminary RCAF to derive the RCAF (the RCAF (Unadjusted) beginning in 2Q,89).
- FUNCTION CATEGORIES Subcomponents of the materials and supplies index. Each of the market basket items can be assigned to one of four categories: maintenance of way items, freight car items, locomotive items, and all other items. Separate spot price indexes are published for these categories on a quarterly basis.
- INTERIM MID-QUARTER INDEX An index which measures changes in prices for various categories of railroad expenses associated with carrying freight. The ICC used this index for determining the RCAF until 1985, when it completed its analysis of the AII.
- LINKING The statistical process used to adjust indexes for changes other than price changes, the inclusion of which would otherwise distort the index value. Examples are the introduction of new weights, the substitution of a different product in the market basket or the inclusion of a new index component. Since the purpose of a price index is to reflect changes due only to actual changes in price levels, it is often necessary to "link out" the impact of other changes.
- PPI-All Commodities U.S. Department of Labor's Producer Price Index for All Commodities (series ID wpu00000000).
- PPI-LF U.S. Department of Labor's Producer Price Index for Industrial Commodities, Less Fuel and Related Products and Power (series ID wpu03t15m05).
- PPI-RE U.S. Department of Labor's Producer Price Index for Railroad Equipment (series ID wpu144).
- PRELIMINARY RCAF The STB's term for the forecasted All-Inclusive Index, divided by 100. It is the basis for both the RCAF (Unadjusted) and the RCAF (Adjusted), and is prior to forecast error adjustment.

INDEX TERMINOLOGY (Cont.)

- PRODUCTIVITY ADJUSTMENT The adjustment made to the RCAF each quarter which is designed to convert a price index to a cost index. A productivity adjustment was incorporated in the RCAF for the first time in 2Q,89.
- PRODUCTIVITY ADJUSTMENT FACTOR (PAF) The STB-determined factor which is divided into the RCAF (Unadjusted) to derive the RCAF (Adjusted). Each quarter's PAF is calculated by multiplying the previous quarter's PAF by the fourth root of the current multi-year average. The years included and the productivity change underlying the PAF used for various RCAF calculations are: 2Q and 3Q 89=1982-86 (1.7%); 4Q89-2Q90=1982-87 (4.4%); 3Q90-4Q91=1982-88 (4.4%); 1Q92-4Q93=1982-89 (4.4%); 1Q94-1Q95=1988-92 (5.0%); 2Q95-2Q96=1989-93 (5.9%); 3Q96-1Q97=1990-94 (5.9%); 2Q97-1Q98=1991-95 (5.0%); 2Q98-1Q99=1992-96 (9.7%); 2Q99-1Q00=1993-97 (5.7%); 2Q00-1Q01=1994-98 (3.5%); 2Q01-1Q02=1995-99 (2.8%); 2Q02-1Q03=1996-2000 (4.2%); 2Q03-1Q04=1997-2001 (1.9%); 2Q04-present=1998-2002 (2.2%).
- PRODUCTIVITY ADJUSTMENT FACTOR-5 (PAF-5) Same concept as PAF above to determine RCAF-5. The five-year rolling average included and the productivity change underlying the PAF-5 used for various RCAF-5 calculations are: 2Q-4Q 89=1982-86 (1.6%); 1990=1983-87 (5.8%); 1991=1984-88 (4.8%); 1992=1985-89 (4.7%); 1993=1986-90 (6.2%); 1994=1987-91 (4.7%); 1995=1988-92 (5.0%); 1996=1989-93 (5.9%); 1997=1990-94 (5.9%); 1998=1991-95 (5.0%); 1999=1992-96 (9.7%); 2000=1993-97 (5.7%); 2001=1994-98 (3.5%); 2002=1995-1999 (2.8%); 2003=1996-2000 (4.2%); 2004=1997-2001 (1.9%).
- QMPW Indexes of Railroad Material Prices and Wage Rates. An index series which contains individual indexes for several of the most important components of railroad operating expenses (labor, fuel, and materials and supplies). These indexes have been published continuously since 1933, and are now included in the RCR series.
- RCAF The Rail Cost Adjustment Factor. A factor based on the changes in the forecasted All-Inclusive Index, by which railroads may, as permitted by contracts, virtually automatically adjust their rates for inflationary/deflationary cost changes. The procedures for determining the RCAF are set forth in Ex Parte No. 290 (Sub-No. 2) proceeding.
- RCAF (Adjusted) The RCAF adjusted for productivity. Beginning in 2Q89, regulations required that the RCAF (Unadjusted) be divided by the Productivity Adjustment Factor to derive the RCAF (Adjusted), which is the basis for the maximum RCAF rate level.
- RCAF (Unadjusted) The RCAF prior to adjustment for productivity, but after forecast error adjustment.
- RCAF-5 The Surface Transportation Board in its Ex Parte No. 290 (Sub-No. 7) decision served October 3, 1996 created an additional RCAF series (RCAF-5) which reflects productivity-adjusted values as if the agency had used a 5-year rolling average productivity adjustment factor since the second quarter 1989 inception of a productivity-adjusted RCAF.
- RCR The Railroad Cost Recovery Indexes. An index series containing individual indexes for each component of railroad operating expenses, together with various composite indexes. The series continues all of the series established in the QMPW series and adds inflationary measures for the various categories of Other Operating Expenses. This series is published on both an annual and quarterly basis.
- SPOT PRICES The value of an item at the time it is purchased rather than at the time it is consumed or expensed to operating accounts. Spot price indexes are published for diesel fuel and materials and supplies.
- WEIGHTS The importance of an item with respect to the other items in the category. The AAR indexes use two basic types of weights: internal and external weights. The internal weights are the values used to combine the various subcomponents of an index to arrive at the index (e.g., the three composition groupings within materials and supplies). The external weights are the values used to combine the individual indexes to calculate the composite indexes and the "bottom-line" indexes. The weights are generally based on annual expense data and are updated periodically the AII/RCAF, AII-LF, and the internal weights of the RCR annually, and the RCR external weights every five years, or sooner, if the distribution of costs among components changes substantially.

COMMON ABBREVIATIONS

Freight Railroads

BNSF The Burlington Northern and Santa Fe Railway

CC Chicago, Central & Pacific (part of CN's Grand Trunk Corporation, also noted as CC&P)

CN Canadian National Railway (Canada, a.k.a. CN)

CNGT AAR's designation for Grand Trunk Corporation (most of CN's U.S. operations)

CP Canadian Pacific Railway (Canada) Also noted as CPR.

CSX CSX Transportation

DWP Duluth, Winnipeg & Pacific Railway Company (part of CN's Grand Trunk Corporation)
FXE Ferrocarril Mexicano (Ferromex), a subsidiary of Grupo Ferroviario Mexicano (Mexico)

GTW Grand Trunk Western Railroad (part of CN's Grand Trunk Corporation)
IC Illinois Central Railroad (part of CN's Grand Trunk Corporation)

KCS Kansas City Southern Railway

NS Norfolk Southern Combined Railroad Subsidiaries (a.k.a. Norfolk Southern Railway or NS Rail)

SOO Soo Line Railroad (Western U.S. part of Canadian Pacific Railway)

SSAM Sault Saint Marie Bridge Company (part of CN's Grand Trunk Corporation)
TFM TFM, a subsidiary of Grupo Transportación Ferroviaria Mexicana (Mexico)

UP Union Pacific Railroad

WC Wisconsin Central and subsidiaries (part of CN's Grand Trunk Corporation)

Note: Index calculations in this publication are based on data provided by the U.S. Class I railroads.

Railroad Organizations and Regulators

AAR Association of American Railroads

ICC Interstate Commerce Commission (replaced by the Surface Transportation Board on January 1, 1996)

NRLC National Railway Labor Conference

RRB Railroad Retirement Board STB Surface Transportation Board

Major Railroad Unions

ATDA or ATDD American Train Dispatchers Department of the Brotherhood of Locomotive Engineers

BLE Brotherhood of Locomotive Engineers (predecessor to BLET)

BLET Brotherhood of Locomotive Engineers and Trainmen, a division of the International Brotherhood of

Teamsters Rail Conference (labeled in AAR data bases as BLE)

BMWE Brotherhood of Maintenance of Way Employees

BRC (see TCU-Carmen)

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

IBFO International Brotherhood of Firemen and Oilers (predecessor to NCFO)

NCFO National Conference of Firemen and Oilers (sometimes labeled in AAR data bases as IBFO)

SMW or SMWIA Sheet Metal Workers' International Association
TCU Transportation Communication International Union
Brotherhood of Railway Carmen Division of the TCU

UTU United Transportation Union

UTU-Yard United Transportation Union Yardmaster Department (also called the UTU-YMD)

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