

ASSOCIATION  
OF AMERICAN  
RAILROADS

Craig F. Rocky  
Vice President - Policy

June 5, 2000

The Honorable Vernon A. Williams  
Secretary  
Surface Transportation Board, Room 711  
1925 K Street, N.W.  
Washington, DC 20423-0001

Dear Mr. Williams:

This submission is the AAR forecast of the third quarter 2000 All-Inclusive Index and Rail Cost Adjustment Factor, filed in Ex Parte No. 290 (Sub-No. 5) (2000-3), *Quarterly Rail Cost Adjustment Factor*. The versions of RCAF-related indices covered in this filing are: the All-Inclusive Index (initiated in the second quarter 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 2000 results, and shows the percentage changes from the previous quarter.

	<u>2000Q2</u>	<u>2000Q3</u>	<u>% Change</u>
All-Inclusive Index	104.1	104.8	0.7
Preliminary RCAF	1.041	1.048	0.7
Forecast Error Adjustment	0.009	0.002	
RCAF (Unadjusted)	1.050	1.050	0.0
Productivity Adjustment Factor	1.7719	1.7871	
RCAF (Adjusted)	0.593	0.588	-0.8
PAF-5	1.8213	1.8468	
RCAF-5	0.577	0.569	-1.4

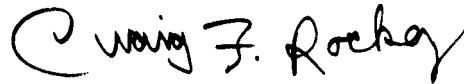
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In its October 3, 1996 decision in Ex Parte No. 290 (Sub-No. 7), *Productivity Adjustment - Implementation*, the STB noted its intent to publish, in addition to the RCAF (Unadjusted) and RCAF (Adjusted), an RCAF-5 (i.e., a calculation of the productivity 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 Jeff Warren in the STB office handling this proceeding. All workpapers are available for STB inspection. Questions should be directed to me or Clyde Crimmel (639-2309) of this office.

Sincerely,

A handwritten signature in black ink that reads "Craig F. Rockey". The signature is written in a cursive style with a large, looping initial "C".

Craig F. Rockey

Attachments

**Third Quarter 2000  
All-Inclusive Index**

**Ex Parte No. 290 (Sub-No. 5) (2000-3)**

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

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

**June 5, 2000**

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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 of 2000.

## 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. The 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 previous 1997 weights were used for the fourth quarter of 1998 through the third quarter of 1999. Beginning with the fourth quarter of 1999, the current 1998 weights are used. Reweighting from 1997 to 1998 causes the "depreciation", "interest" and "other" components to expand, while the weights of all the remaining components declined. The "labor" component declined to a weight close to its 1996 level. The current and previous weights are shown below. *No changes have been made to the weights for the third quarter of 2000, and the 1998 weights have now been used for four projections.*

RCAF Weights		
	Previous 1997	Current 1998
Labor	41.0 %	39.9 %
Fuel	8.6	7.0
Materials & Supplies	5.8	5.5
Equipment Rents	11.1	10.8
Depreciation	10.2	10.6
Interest	3.9	4.8
Other	19.4	21.4

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 insures 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 linked in order to eliminate the effect of the change in weighting.

## All-Inclusive Index Third Quarter 2000

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.

	1998 Weights	Forecast		Percent Change
		Previous 2000Q2	Current 2000Q3	
1. Labor	39.9%	242.8	245.7	1.2 %
2. Fuel	7.0%	102.6	98.7	-3.8
3. M&S	5.5%	146.5	147.6	0.8
4. Equipment Rents	10.8%	174.5	175.0	0.3
5. Depreciation	10.6%	149.8	150.2	0.3
6. Interest	4.8%	98.0	98.0	0.0
7. Other	21.4%	159.9	161.3	0.9
8. Weighted Average				
a. 1980 = 100		185.8	187.1	
b. 1980 = 100 (linked)		180.3	181.6 <sup>1</sup>	
c. 4Q97 = 100		104.1	104.8 <sup>2</sup>	0.7

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<sup>1</sup> To calculate the 1980 = 100 Linked Index:  

$$\text{Index}_{80} = (\text{Current Index} / \text{Previous Index}) * \text{the Previous Quarter Linked Index}$$

$$= 187.1 \text{ divided by } 185.8 \text{ times } 180.3$$

$$= 181.6$$

<sup>2</sup> To calculate the 4Q97 = 100 index:  

$$\text{Index}_{4Q97} = (\text{Current Linked Index} / 4Q97 \text{ Index}) * 100$$

$$= 181.6 \text{ divided by } 173.2 \text{ times } 100$$

$$= 104.8$$

4Q92 based index = 115.7  
 4Q87 based index = 137.4

## Forecast vs. Actual All-Inclusive Index First Quarter 2000

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

	1998 Weight	First Quarter 2000		Amt Difference
		Forecast	Actual	
1. Labor	39.9%	242.8	242.8	
2. Fuel	7.0%	90.1	93.9	
3. M&S	5.5%	146.5	146.5	
4. Equipment Rents <sup>1</sup>	10.8%	173.9	173.0	
5. Depreciation	10.6%	150.1	149.9	
6. Interest	4.8%	98.0	98.0	
7. Other	21.4%	160.1	158.9	
<b>8. Weighted Average</b>				
a. 1980 = 100		184.9	184.8	
b. 1980 = 100 (linked)		179.4	179.8 <sup>2</sup>	
c. 4Q97 = 100 <sup>3</sup>		103.6	103.8	0.2

**Forecast error** —————▶ **0.2 index points**

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1	1998 Weight	First Quarter 2000	
		Forecast	Actual
Car-Hire	58.8%	177.0	176.1
Lease Rentals	41.2%	160.1	158.9
Weighted Average		170.0	169.0
Weighted Average (linked)		173.9	173.0

<sup>2</sup> Linked actual index = (actual index / previous actual index) x previous linked actual index.  
 $179.8 = 184.8 / 180.5 \times 175.6$

<sup>3</sup> The 4Q97 based indexes are 1980 based indexes divided by the 4Q97 index (173.2/100).  
 4Q92 based indexes are the 1980 based indexes divided by the 4Q92 index (156.9/100).  
 2000Q1 actual index based on 4Q92: —————▶ 114.6



# Productivity

On January 27, 2000, the STB served a decision in Ex Parte 290 (Sub-No. 4) which added the year 1998 to the Productivity Adjustment Factor (PAF) and deleted the year 1993. This creates an average annual productivity for 1994 through 1998 of 3.5 percent – a decrease from the 1993 through 1997 average of 5.7 percent. The components of this average annual value are shown on the following table. Productivity changes are calculated by dividing the output index by the input index. The average annual rate is calculated by multiplying each of the 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.

<b>Comparison of Output, Input, &amp; Productivity</b>			
<b>1994 - 1998</b>			
Year	Output Index (1)	Input Index (2)	Productivity Changes (3)
1994	1.084	1.025	1.058
1995	1.058	1.045	1.012
1996	1.038	0.913	1.137
1997	1.007	1.019	0.988
1998	1.005	1.018	<u>0.987</u>
Average			1.035
Previous Average (1993-1997)			1.057

<b>Calculation of PAF and PAF-5</b>			
For 1994-1998 use fourth root of avg. productivity change			1.0086
For 1993-1997 use fourth root of previous avg. change			1.0140
Quarter	Year	PAF	PAF-5
Q4	1999	1.7325	1.7714
Q1	2000	<u>1.7568</u>	1.7962
Q2	2000	1.7719	1.8213
Q3	2000	1.7871	1.8468
Q4	2000	1.8025	<u>1.8727</u>
Q1	2001	1.8180	<u>1.8888</u>

1993-1997

←

1994-1998

←

## Rail Cost Adjustment Factor Third Quarter 2000

Four RCAF values are presented in this filing. Two of the indexes, the All-Inclusive Index and the Unadjusted RCAF, are not modified for productivity, while the Adjusted RCAF and the RCAF-5 incorporate a productivity calculation. The All-Inclusive Index and all four RCAF values, plus the percent change for each, are shown below.

	Previous 2000Q2	Current 2000Q3	Percent Change
All-Inclusive Index <sup>1</sup>	104.1	104.8	0.7
Preliminary RCAF <sup>2</sup>	1.041	1.048	0.7
Forecast Error Adjustment <sup>3</sup>	0.009	0.002	
RCAF (Unadjusted) <sup>4</sup>	1.050	1.050	0.0
Productivity Adjustment Factor <sup>5</sup>	1.7719	1.7871	
RCAF (Adjusted) <sup>6</sup>	0.593	0.588	-0.8
PAF-5 <sup>7</sup>	1.8213	1.8468	
RCAF-5 <sup>8</sup>	0.577	0.569	-1.4

<sup>1</sup> See All-Inclusive Index on page 3.

<sup>2</sup> All-Inclusive Index divided by the All-Inclusive Index in the base period (100.0).

<sup>3</sup> 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.

<sup>4</sup> Preliminary RCAF plus the forecast error adjustment.

<sup>5</sup> See Productivity on page 5.

<sup>6</sup> RCAF (Unadjusted) divided by the Productivity Adjustment Factor (PAF).

<sup>7</sup> See Productivity on page 5.

<sup>8</sup> RCAF (Unadjusted) divided by the PAF-5.

# Appendixes

## Labor

### Third Quarter 2000

The third quarter 2000 wage index is forecast to increase 1.5 percent, while the supplements index will increase 0.6 percent. These changes are caused largely by a national cost-of-living allowance. The overall impact of these changes in wages and supplements is an increase of 1.2 percent in the overall labor index.

#### Wage Index

**National COLA:** The 1996 national agreements with the major railroad unions provide for a cost-of-living allowance (COLA) to be rolled into the basic rates of pay. According to the National Railway Labor Conference, the COLA is 60 cents less a 4 cent health and welfare offset which results in an allowance of 56 cents. The COLA was rolled into the basic rates of pay on December 31, 1999 in the case of the BLE, UTU, UTU-Yardmasters, BMWWE, and BRS. The remaining unions will receive this COLA on July 1, 2000.

The national agreements also provide for a second COLA payable on July 1, 2000 in the case of the BLE, UTU, UTU-Yardmasters, BMWWE, and BRS (and payable on January 1, 2001 in the case of the clerks and shopcrafts). This second COLA, calculated on the basis of the change in the CPI-W for a specified measurement period, will be 15 cents.

Thus, for third quarter 2000, one group of unions is receiving a 56 cent COLA, and another group of unions is receiving a 15 cent COLA.

**Independent Contracts:** In addition to national wage increases, four railroads had independent wage increases for certain unions. Norfolk Southern's Brotherhood of Locomotive Engineers signed a new contract in March that, effective January 1, 2000, increased rates of pay to the rates provided in the BLE 1996 Core National Agreement. Three unions (BLE, BMWWE & IBFO) for Illinois Central have July 1 wage increases of 3 percent, and a fourth union, the UTU, has a 15 cent COLA. GTW's Brotherhood of Locomotive Engineers signed a new contract in late March that has 3 retroactive wage increases of 3 percent each. All of the Soo unions receive a July COLA of either 60 cents or 15 cents. In addition, Soo's BRS also receives a 3.5 percent wage increase.

**Lump Sums:** The lump sum adjustment increased 0.4 cents because of an Illinois Central UTU contract that calls for a 3.5 percent lump sum payment effective July 1.

**Back Pay:** The back pay hourly rate increased 3.8 cents per hour with the addition of the new BLE contracts for Norfolk Southern and Grand Trunk Western. The NS back pay is for the first half of 2000, while the GTW backpay is for retroactive increases of 3 percent each year for 1998, 1999 and the first half of 2000.

## **Labor**

### **Third Quarter 2000**

*Other:* This component contains the amortization of a profit sharing payment that the Burlington Northern and Santa Fe Railway made to its Brotherhood of Locomotive Engineers employees from the former Atchison, Topeka and Santa Fe Railway in the spring of 2000. The spring 1999 payment has been fully amortized. The new profit sharing payment is less than the previous year's, and when amortized over four quarters, the payment contributes 0.7 cents to the hourly wage rate. This figure was 1.2 cents in the previous quarter.

### **Supplements Index**

The Supplements index is forecast to increase by 0.6 percent. The sole cause of this change is higher railroad retirement and medicare contributions caused by higher wages.

### **Labor Index Calculation**

As shown in table A-1 on the next page, the 1.5 percent increase in the Wage Index and the 0.6 percent in the Supplements Index had a combined effect of a 1.2 percent increase in the Labor Index.

**Labor**  
**Third Quarter 2000**

**Table A-1 Labor Index**

	2000Q2	2000Q3	Change	
			Percent	Amount
<u>Base Wage</u> – Straight Time & Pay For Time Not Worked	\$25.981	\$26.329	1.3%	\$0.348
Adjustments:				
Lump Sum	0.006	0.010	66.7%	0.004
Back Pay	0.015	0.053	253.3%	0.038
Other	0.012	0.007	-41.7%	-0.005
<b>Total Wages</b>	<u>\$26.014</u>	<u>26.399</u>	1.5%	0.385
Health & Welfare Benefits	2.846	2.846	0.0%	0.000
RR Retirement & Medicare	5.687	5.741	0.9%	0.054
Supplemental Annuities	0.235	0.235	0.0%	0.000
Unemployment Insurance	0.054	0.054	0.0%	0.000
Other	0.008	0.008	0.0%	0.000
Adjustments	0.000	0.000		
<b>Total Supplements</b>	<u>\$8.830</u>	<u>\$8.884</u>	0.6%	0.054
Total Labor	\$34.844	\$35.283		
<b>Wage Index<sup>1</sup></b>	222.6	225.9	1.5%	
<b>Supplements Index<sup>2</sup></b>	326.3	328.3	0.6%	
Total labor Index, 1998 Weights <sup>3</sup>	248.4	251.4		
<b>Labor Index (linked)<sup>4</sup></b>	242.8	<b>245.7</b>	1.2%	

<sup>1</sup> 1980 wage rate \$11.685

<sup>2</sup> 1980 supplements rate \$2.706

<sup>3</sup> 1998 weights: wages, supplements 75.1% 24.9%

<sup>4</sup> 2000Q3 linked Index = 2000Q2<sub>linked</sub> x (2000Q3 / 2000Q2)

= 242.8 x 251.4 / 248.4

## Fuel Third Quarter 2000

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 discussions with their major suppliers, and (3) a consensus of petroleum industry experts and general business publications.

Railroad fuel prices are expected to be lower in the third quarter (July) than the second quarter average (April). The Department of Energy's Energy Information Administration agrees in its Short-Term Energy Outlook May 2000, saying that diesel fuel prices will decline.

Forecasted fuel index	98.7
Increase from previous quarter forecast	-3.8%
Increase from previous quarter actual	-3.3%





## Equipment Rents Third Quarter 2000

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 the Car Hire Rate Master File (CHARM). First, an average rate per car is developed. Second, those average rates are grouped into car type categories to create an overall summary of car hire rates. Car hire rates for the forecast quarter are estimated based on data for the most recent month available. The summary rates are then compared from quarter to quarter to determine the car hire index.

### Lease Rentals

The lease rental 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 forecast of the PPI-LF is discussed in Appendix G.

### Equipment Rent Index Calculation

The table below calculates the Equipment Rent Index.

	1998 Weight	2000Q2	2000Q3	Percent Change
Car Hire	58.8%	178.1	178.0	-0.1 %
Lease Rentals	41.2%	159.9	161.3	0.9
Weighted Average		170.6	171.1	0.3
Weighted Average (Linked)		174.5	175.0	0.3

The Car Hire forecast uses the latest CHARM File rates. 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.

The Lease Rental forecast uses the AAR PPI-LF forecast for that quarter.

## Depreciation

### Third Quarter 2000

The Producer Price Index for Railroad Equipment (PPI-RE) is used to index depreciation expense. The PPI-RE 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 be the most recent monthly data 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.

Forecasted depreciation index (1982=100)	135.8
Forecasted depreciation index (1980=100)	150.2
Increase from previous quarter forecast	0.3%
Increase from actual first month of previous quarter	0.0%
Increase from same quarter of prior year	0.0%

## Depreciation Third Quarter 2000

**PPI RAIL EQUIPMENT**

Forecast Model for PPI-RE  
Simple exponential smoothing: No trend, No seasonality

<u>Component</u>	<u>Smoothing Weight</u>	<u>Final Value</u>
Level	0.81875	135.76

**Within-Sample Statistics**

Sample size 72	Number of parameters 1
Mean 134.7	Standard deviation 2.422
R-square 0.7327	Adjusted R-square 0.7327
Durbin-Watson 1.877	Ljung-Box(18)=16.27 P=0.4264
Forecast error 1.252	BIC 1.281
MAPE 0.004505	RMSE 1.243
MAD 0.6098	Forecast Report

*Actual Values for the Most Recent 6 Periods:*

<u>Date</u>	<u>Actual</u>
1999-11	135.300
1999-12	135.500
2000-01	135.500
2000-02	135.300
2000-03	135.600
2000-04	135.800

*Forecasted Values*

<u>Date</u>	<u>2.5 Lower</u>	<u>Forecast</u>	<u>97.5 Upper</u>
2000-05	133.245	135.755	138.265
2000-06	132.511	135.755	138.999
2000-07	131.915	135.755	139.596
2000-08	131.399	135.755	140.111
2000-09	130.939	135.755	140.571
<b>QTR AVG</b>	<b>131.418</b>	<b>135.755</b>	<b>140.093</b>
2000-10	130.519	135.755	140.992
2000-11	130.130	135.755	141.380
2000-12	129.766	135.755	141.744

## Interest Third Quarter 2000

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.

### 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 Obligations - Non-Current
44	Debt in Default - Non-Current
45	Accounts Payable: Affiliated Companies - Non-Current
46	Unamortized Debt Premium - Non-Current

1998 Interest Rate	7.69%
1980 Interest Rate	7.85%
<b>2000Q3 Interest Index</b>	<b>98.0</b>
2000Q2 Interest Index	98.0
Percent Change	0.0%

## Other Expenses

### Third Quarter 2000

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. 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 be the most recent monthly data 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 is 0.9 percent higher than the previous quarter forecast. This increase was triggered by the monthly PPI-LF data from the last 14 months, which has been increasing after a period of little change for 1997 and 1998.

Forecasted Other Expense (1982=100)	143.9
Forecasted Other Expense (1980=100)	161.3
Increase from previous quarter forecast	0.9%
Increase from actual first month of previous quarter	1.1%
Increase from same quarter of prior year	3.1%

## Other Expenses Third Quarter 2000

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

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

<u>Component</u>	<u>Smoothing Weight</u>	<u>Final Value</u>
Level	0.82800	142.47
Trend	0.69653	0.34096
Seasonal	0.36127	

Seasonal Indexes

January - March	0.99991	0.99972	0.99958
April - June	0.99957	0.99985	1.00006
July - September	1.00038	1.00062	0.99965
October – December	1.00102	1.00004	0.99962

**Within-Sample Statistics**

Sample size 72	Number of parameters 3
Mean 138.6	Standard deviation 2.085
R-square 0.9879	Adjusted R-square 0.9875
Durbin-Watson 1.83	* Ljung-Box(18)=31.48 P=0.9747
Forecast error 0.2329	BIC 0.2493
MAPE 0.001248	RMSE 0.228
MAD 0.1726	Forecast Report

***Actual Values for the Most Recent 6 Periods:***

<u>Date</u>	<u>Actual</u>
1999-11	140.800
1999-12	141.000
2000-01	141.400
2000-02	141.700
2000-03	142.100
2000-04	142.400

***Forecasted Values***

<u>Date</u>	<u>2.5 Lower</u>	<u>Forecast</u>	<u>97.5 Upper</u>
2000-05	142.301	142.790	143.278
2000-06	142.318	143.160	144.003
2000-07	142.460	143.547	144.634
2000-08	142.638	143.923	145.209
2000-09	142.667	144.124	145.582
<b>QTR AVG</b>	<b>142.588</b>	<b>143.865</b>	<b>145.142</b>
2000-10	143.052	144.663	146.274
2000-11	143.112	144.863	146.615
2000-12	143.261	145.142	147.023