

DATE: 6/06/90

TABLE 0

CORRECTED DPR DATA INCLUDING CONRAIL

RRID	YEAR	MAINTOH	TRK	GTM
5	1979	319.8290	287.6900	202.0710
5	1980	262.8130	283.9000	176.3980
5	1981	237.5490	277.5300	165.3030
5	1982	229.3260	260.8900	148.5240
5	1983	195.8760	248.6400	153.4940
5	1984	215.3320	238.7300	165.8650
5	1985	195.7700	218.4500	159.8710
5	1986	193.9380	213.8800	160.0920
5	1987	213.9960	203.0700	172.3870
8	1979	25.6781	19.4800	13.5216
8	1980	23.1679	19.3700	11.6217
8	1981	24.9494	20.6200	12.5500
8	1982	28.5976	19.7200	11.4259
8	1983	21.3733	19.3100	12.1074
8	1984	20.5796	17.7400	13.7723
8	1985	22.1383	17.5800	13.0745
8	1986	20.9035	17.5500	12.8964
8	1987	19.0340	13.5000	12.3400
10	1979	232.6490	205.0600	212.6230
10	1980	235.0330	204.7400	207.7330
10	1981	243.3000	207.0800	200.9960
10	1982	241.3340	209.3200	180.7600
10	1983	205.1980	209.5600	171.6380
10	1984	176.4650	207.2300	182.6960
10	1985	204.1800	220.5700	187.2780
10	1986	199.4300	219.2800	185.8610
10	1987	182.3980	215.3900	188.6680
18	1979	85.4305	107.7700	61.4207
18	1980	84.2733	104.1200	61.4102
18	1981	85.9025	99.7100	55.0495
18	1982	74.2568	94.9800	44.0104
18	1983	34.5516	90.3100	40.0644
18	1984	34.7196	85.9200	53.0432
18	1985	74.8808	64.3900	49.9743
18	1986	16.3345	52.9100	38.9779
18	1987	14.2500	45.0500	33.7479
20	1979	354.6140	334.4800	269.2240
20	1980	353.6050	337.6500	273.9450
20	1981	380.2740	336.2300	273.4770
20	1982	363.8900	332.7500	244.5750
20	1983	267.9460	315.2900	254.1820
20	1984	252.8210	304.7300	280.9760
20	1985	241.5380	300.5700	277.8040
20	1986	252.0390	288.6300	268.7520
20	1987	223.1300	274.3200	287.4520
21	1979	170.1170	157.9100	153.3560
21	1980	177.6340	157.5500	151.4490
21	1981	193.4250	160.1500	150.6990
21	1982	165.4200	159.6600	133.7720
21	1983	131.1020	157.2000	136.5270

21	1984	145.2860	155.5200	146.9110
21	1985	148.7230	154.7200	134.6000
21	1986	133.5150	152.4400	129.0770
21	1987	135.5300	153.1300	138.7210
22	1979	304.8090	343.4900	308.3050
22	1980	289.7680	343.6900	333.4710
22	1981	307.5810	344.5600	335.3930
22	1982	303.8200	341.8000	300.7910
22	1983	228.1710	332.2100	324.8940
22	1984	229.6650	326.0300	369.0790
22	1985	209.7220	317.0100	336.1110
22	1986	221.5800	303.1600	343.1650
22	1987	230.4670	280.2100	369.1310
23	1979	101.5740	106.1800	54.4846
23	1980	98.5136	94.0300	62.8084
23	1981	105.9930	98.8300	58.8635
23	1982	100.1580	95.5900	45.1445
23	1983	64.3813	95.1500	49.5445
23	1984	51.6172	90.5400	51.3144
23	1985	64.7966	89.1300	48.2796
23	1986	67.1651	78.5900	51.1192
23	1987	54.8950	77.5200	51.5223
27	1979	16.4102	23.1700	19.7285
27	1980	13.8984	23.1800	19.2334
27	1981	13.2830	22.7200	21.0233
27	1982	15.7615	22.7200	17.7250
27	1983	25.5215	28.9200	22.9053
27	1984	28.0458	28.8200	25.2014
27	1985	23.1078	27.4100	22.1195
27	1986	20.3137	27.4100	20.3048
27	1987	20.8930	27.4700	20.6002
30	1979	13.4762	19.1900	17.0197
30	1980	19.1516	19.2400	18.6274
30	1981	17.2147	19.2400	18.4991
30	1982	18.0006	19.2600	19.5224
30	1983	11.6930	19.0800	20.4160
30	1984	14.0318	19.0700	21.9831
30	1985	15.4324	19.1000	21.7402
30	1986	16.1513	19.1300	20.6104
30	1987	15.5580	19.1200	20.7753
31	1979	14.6508	24.3300	13.2152
31	1980	14.9746	24.5800	15.4654
31	1981	14.2357	24.5600	15.5036
31	1982	9.8764	24.0300	12.6080
31	1983	14.9985	35.9400	13.4324
31	1984	19.0024	35.8900	14.6233
31	1985	16.9325	36.3900	14.2842
31	1986	15.8840	39.9600	13.2933
31	1987	12.6380	37.3300	16.4429
34	1979	21.9574	17.4100	25.8106
34	1980	24.3582	30.5800	25.0822
34	1981	33.5160	29.4800	29.6690
34	1982	29.0335	31.2000	25.1677
34	1983	28.1849	33.6400	28.8791
34	1984	29.8153	33.6400	33.0411
34	1985	24.8736	34.3100	28.8595
34	1986	31.0195	34.3100	26.3199
34	1987	30.3080	33.9600	28.7089
35	1979	84.6316	162.9400	54.7328
35	1980	77.5678	99.7400	44.3767

35	1981	76.7652	99.7200	40.2286
35	1982	71.1377	92.2900	34.2983
35	1983	39.4875	90.2500	39.2059
35	1984	52.4409	91.0800	44.6990
35	1985	48.9583	94.2000	36.3397
35	1986	48.6578	91.2600	39.6265
35	1987	43.5570	69.7700	40.1416
36	1979	176.3050	134.9100	156.0280
36	1980	177.1850	133.1400	146.7390
36	1981	199.4900	133.0900	142.2000
36	1982	175.8150	131.0500	126.8320
36	1983	113.0260	129.7100	128.9250
36	1984	103.1530	130.2500	141.0640
36	1985	93.8563	128.0000	128.5790
36	1986	99.4639	123.6500	122.7440
36	1987	90.2040	121.1200	129.1160
37	1979	287.8980	278.4400	287.1750
37	1980	280.9720	278.0100	297.8040
37	1981	282.9370	274.0600	280.7900
37	1982	245.6030	273.2200	229.0460
37	1983	236.4150	272.6400	231.5270
37	1984	240.1600	270.7600	247.0440
37	1985	190.3090	268.6600	251.0060
37	1986	187.6000	271.4500	257.5640
37	1987	229.0430	266.1800	308.6050

MAINTOH ACCOUNT

MAINTOH	MILLIONS OF DOLLARS PER YEAR
TRK	HUNDREDS OF MILES OF RUNNING TRACK
GTM	BILLIONS OF GROSS TON-MILES

RAILROAD	MAINTOH	TRK	GTM
5	229.3810	248.0867	167.1117
8	22.9357	18.3189	12.5903
10	213.3319	210.9144	190.9170
18	50.5124	82.7956	49.5221
20	298.8730	313.8500	270.0430
21	155.6391	156.4756	141.6791
22	258.3981	325.7956	335.5933
23	78.7882	91.7209	52.5646
27	19.6978	25.7578	20.9824
30	15.6344	19.1589	19.9104
31	14.7972	31.4456	14.3187
34	28.1185	30.9478	27.9487
35	60.3560	99.0278	41.5166
36	136.4998	129.4356	135.8030
37	242.3263	272.6022	265.6179

121.6858 137.0894 116.4079

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## OLS REGRESSION RESULTS FOR POOLED MODEL

|                |          |
|----------------|----------|
| EFFOR VARIANCE | 665.1791 |
| RSQ            | 0.9396   |
| MODIFIED DW    | 0.6252   |
| MODIFIED PHO   | 0.6874   |

F-STATISTIC FOR POOLING YEARS:  $F(24, 108) = 2.55$

## OLS REGRESSION ON MODEL WITH RAILROAD EFFECTS AND TIME TREND

|                |          |
|----------------|----------|
| ERROR VARIANCE | 409.4516 |
| RSQ            | 0.9668   |
| MODIFIED DW    | 1.0081   |
| MODIFIED RHO   | 0.4960   |

F-STATISTIC FOR POOLING RAILROADS  
IN THE FIXED EFFECTS MODEL:  $F(42, 75) = 3.51$

OLS REGRESSION MODEL WITH RAILROAD EFFECTS AND TIME TREND

| Coefficient    | Estimate  | T-Ratio     |
|----------------|-----------|-------------|
| TRK            | 0.8340    | 5.8663      |
| GTM            | 0.2597    | 1.7467      |
| TIME           | -4.6032   | -5.7781     |
| F5             | -20.9339  | -0.4671     |
| F8             | 4.3872    | 0.5845      |
| F10            | -12.1629  | -0.7829     |
| F18            | -31.4037  | -1.9930     |
| F20            | -33.0241  | -0.5318     |
| F21            | -11.6637  | -0.3620     |
| F22            | -100.4868 | -1.4286     |
| F23            | -11.3688  | -0.6694     |
| F27            | -7.2396   | -0.8656     |
| F30            | -5.5159   | -0.6971     |
| F31            | -15.1463  | -1.7961     |
| F34            | -4.9518   | -0.5395     |
| F35            | -33.0192  | -1.9328     |
| F36            | -6.7246   | -0.2327     |
| F37            | 54.0195   | 0.9426      |
| ERROR VARIANCE |           | 409.4516    |
| RSQ            |           | 0.9668      |
| MODIFIED DW    |           | 1.0081      |
| MODIFIED RHO   |           | 0.4960      |
| BREUSCH-PAGAN  |           | 59.3739     |
| RESET          |           | 17.4297     |
|                |           | CHI-SQ(17 ) |
|                |           | F(3 114 )   |



## OLS REGRESSION ON MODEL WITH RAILROAD EFFECTS AND TIME EFFECTS

F-STATISTIC FOR TIME EFFECTS:  $F(8, 110) = 8.47$

OLS REGRESSION MODEL WITH RAILROAD EFFECTS AND TIME EFFECTS  
STEP ONE IN GLS ESTIMATION

| COEFFICIENT    | ESTIMATE  | T-RATIO  |
|----------------|-----------|----------|
| TRK            | 0.8752    | 6.6497   |
| GTM            | 0.2667    | 1.6825   |
| F5             | -18.1814  | -0.4039  |
| F8             | 17.6786   | 1.9287   |
| F10            | -8.0449   | -0.1827  |
| F18            | -21.0250  | -1.7208  |
| F20            | -33.6964  | -0.5395  |
| F21            | -4.9603   | -0.1480  |
| F22            | -102.1072 | -1.4321  |
| F23            | -1.3792   | -0.0752  |
| F27            | 5.6870    | 0.5605   |
| F30            | 7.6900    | 0.7948   |
| F31            | -2.4076   | -0.2379  |
| F34            | 7.7126    | 0.6999   |
| F35            | -23.2533  | -1.2744  |
| F36            | 1.1328    | 0.0371   |
| F37            | -52.9621  | -0.9092  |
| T79            | BASE YEAR |          |
| T80            | -1.0738   | -0.1574  |
| T81            | 5.6558    | 0.8260   |
| T82            | 2.3303    | 0.3122   |
| T83            | -27.2503  | -3.7436  |
| T84            | -27.8907  | -3.9734  |
| T85            | -29.0522  | -4.0880  |
| T86            | -26.0679  | -3.4960  |
| T87            | -23.2530  | -3.0595  |
| ERROR VARIANCE |           | 346.3395 |
| RSQ            |           | 0.9736   |
| MODIFIED DW    |           | 0.8979   |
| MODIFIED RHO   |           | 0.5510   |

FIXED-EFFECTS MODEL CORRECTED FOR AUTOCORRELATION:  
STEP TWO OF GLS ESTIMATION

| COEFFICIENT    | ESTIMATE  | ASY Z-RATIO |
|----------------|-----------|-------------|
| TRK            | 0.7335    | 8.2874      |
| GTM            | 0.5125    | 5.1149      |
| F5             | -19.1805  | -1.4716     |
| F8             | 0.9687    | 0.1362      |
| F10            | -22.0335  | -1.7297     |
| F18            | -18.2188  | -2.1620     |
| F20            | -38.9505  | -2.4580     |
| F21            | -17.2286  | -1.5673     |
| F22            | -77.1120  | -4.4159     |
| F23            | -9.0779   | -1.0418     |
| F27            | -5.3620   | -0.7331     |
| F30            | -4.7467   | -0.6585     |
| F31            | -8.7298   | -1.1851     |
| F34            | -4.9832   | -0.6670     |
| F35            | -16.1207  | -1.8448     |
| F36            | -16.9999  | -1.6254     |
| F37            | -49.0321  | -3.2218     |
| T79            | BASE YEAR |             |
| T80            | 7.7664    | 1.2079      |
| T81            | 16.1201   | 2.5067      |
| T82            | 12.0381   | 1.7414      |
| T83            | -18.8462  | -2.8840     |
| T84            | -5.4169   | -0.8382     |
| T85            | -4.2976   | -0.6419     |
| T86            | 0.4587    | -0.0682     |
| T87            | -2.5078   | -0.3691     |
| ERROR VARIANCE |           | 176.4577    |
| RSQ            |           | 0.9488      |
| MODIFIED DW    |           | 1.7261      |
| MODIFIED RHO   |           | 0.1370      |

WEIGHTED LEAST-SQUARES ESTIMATES OF FIXED-EFFECTS MODEL:  
STEP THREE OF GLS ESTIMATION

|     |        |        |
|-----|--------|--------|
| TRK | 0.6677 | 7.8207 |
| GTM | 0.5347 | 4.9058 |

|     |         |         |
|-----|---------|---------|
| F5  | -0.5692 | -0.6449 |
| F8  | 0.3643  | 0.6362  |
| F10 | -1.3419 | -1.1898 |
| F18 | -3.1624 | -3.3368 |
| F20 | -1.2123 | -1.3048 |
| F21 | -1.3801 | -1.2519 |
| F22 | -3.9148 | -3.2340 |
| F23 | -0.8065 | -0.9335 |
| F27 | -0.2473 | -0.4252 |
| F30 | -0.3257 | -0.5521 |
| F31 | -0.6872 | -1.1509 |
| F34 | -0.2970 | -0.4781 |
| F35 | -0.6913 | -1.0664 |
| F36 | -0.7478 | -0.9436 |
| F37 | -2.3314 | -2.1959 |

| T79 | BASE    | YEAR    |
|-----|---------|---------|
| T80 | 0.4922  | 0.9875  |
| T81 | 1.1455  | 2.2788  |
| T82 | 0.7502  | 1.3570  |
| T83 | -1.8667 | -3.6669 |
| T84 | -0.7003 | -1.4036 |
| T85 | -0.3655 | -0.6906 |
| T86 | -0.2313 | -0.4338 |
| T87 | -0.4539 | -0.8600 |

|                |         |             |
|----------------|---------|-------------|
| ERROR VARIANCE | 0.9981  |             |
| PSQ            | 0.9317  |             |
| MODIFIED DW    | 1.7463  |             |
| MODIFIED RHO   | 0.1269  |             |
| BREUSCH-PAGAN  | 65.7941 | CHI-SQ(24 ) |
| RESET          | 12.4141 | F(3 107 )   |

| COEFFICIENT | ESTIMATE | ASY Z-RATIO |
|-------------|----------|-------------|
|-------------|----------|-------------|

|    |         |         |
|----|---------|---------|
| 5  | -0.5692 | -0.6449 |
| 8  | 0.3643  | 0.6362  |
| 10 | -1.3419 | -1.1898 |
| 18 | -3.1624 | -3.3368 |
| 20 | -1.2123 | -1.3048 |
| 21 | -1.3801 | -1.2519 |
| 27 | -3.9148 | -3.7340 |
| 23 | -0.8065 | -0.9335 |
| 27 | -0.2473 | -0.4252 |
| 30 | -0.3257 | -0.5521 |
| 31 | -0.6872 | -1.1509 |
| 34 | -0.2970 | -0.4781 |
| 35 | -0.6913 | -1.0664 |
| 36 | -0.7478 | -0.9436 |
| 37 | -2.3314 | -2.1959 |

|      |         |         |
|------|---------|---------|
| 1979 | 0.4922  | 0.9875  |
| 1980 | 1.1455  | 2.2788  |
| 1981 | 0.7502  | 1.3570  |
| 1982 | -1.8667 | -3.6669 |
| 1983 | -0.7003 | -1.4036 |
| 1984 | -0.3655 | -0.6906 |
| 1985 | -0.2313 | -0.4338 |
| 1986 | -0.4539 | -0.8600 |

|                |        |
|----------------|--------|
| ERROR VARIANCE | 0.9981 |
| RSQ            | 0.9317 |
| MODIFIED DW    | 1.7463 |
| MODIFIED PBD   | 0.1269 |

DPR4.PRG

CONFIRMATION INCLUDED

MAINTOH ACCOUNT

| RAILROAD | RATIO | SE     |
|----------|-------|--------|
| 5        | 0.35  | 0.0686 |
| 8        | 0.36  | 0.0690 |
| 10       | 0.42  | 0.0734 |
| 18       | 0.32  | 0.0660 |
| 20       | 0.41  | 0.0728 |
| 21       | 0.42  | 0.0735 |
| 22       | 0.45  | 0.0747 |
| 23       | 0.31  | 0.0650 |
| 27       | 0.39  | 0.0720 |
| 30       | 0.45  | 0.0747 |
| 31       | 0.27  | 0.0590 |
| 34       | 0.42  | 0.0734 |
| 35       | 0.25  | 0.0567 |
| 36       | 0.46  | 0.0748 |
| 37       | 0.44  | 0.0742 |

MEAN OF RATIOS: 0.3818

RATIO AT OVERALL MEAN: 0.4048 SE: 0.0726

