

RRID	YEAR	RRMAINT	TRK	GTM
5	1979	325.3730	287.6900	202.0710
5	1980	309.7230	283.9000	176.3980
5	1981	267.9210	277.5300	165.3030
5	1982	237.3010	260.8900	148.5240
5	1983	178.0960	248.6400	153.4940
5	1984	162.9410	238.7300	165.8650
5	1985	138.5100	218.4500	159.8710
5	1986	129.9200	213.8800	160.0920
5	1987	132.7820	203.0700	172.3870
8	1979	14.0948	19.4800	13.5246
8	1980	11.5675	19.3700	11.6217
8	1981	11.1352	20.6200	12.5500
8	1982	11.5449	19.7200	11.4259
8	1983	12.2028	19.3100	12.1074
8	1984	11.9666	17.7400	13.7723
8	1985	11.9204	17.5800	13.0745
8	1986	11.0981	17.5500	12.8964
8	1987	10.1480	13.5000	12.3400
10	1979	184.6850	205.0600	212.6230
10	1980	190.2250	204.7400	207.7330
10	1981	170.7440	207.0800	200.9960
10	1982	161.5140	209.3200	180.7600
10	1983	128.8910	209.5600	171.6380
10	1984	135.5650	207.2300	182.6960
10	1985	98.7447	220.5700	187.2780
10	1986	124.0150	219.2800	185.8610
10	1987	136.5950	215.3900	188.6680
18	1979	39.7350	107.7700	61.4207
18	1980	34.4003	104.1200	61.4102
18	1981	34.2496	99.7100	55.0495
18	1982	40.0221	94.9800	44.0104
18	1983	30.8811	90.3100	48.0644
18	1984	21.3754	85.9200	53.0432
18	1985	28.6137	64.3900	49.9743
18	1986	15.3819	52.9100	38.9779
18	1987	12.8590	45.0500	33.7479
20	1979	263.7380	334.4800	269.2240
20	1980	311.8930	337.6500	273.9450
20	1981	337.2180	336.2300	273.4770
20	1982	329.4370	332.7500	244.5750
20	1983	239.7550	315.2900	254.1820
20	1984	201.5060	304.7300	280.9760
20	1985	194.6690	300.5700	277.8040
20	1986	176.3230	288.6300	268.7520
20	1987	171.8480	274.3200	287.4520
21	1979	120.1170	157.9100	153.3560
21	1980	136.3580	157.5500	151.4430
21	1981	142.3460	160.1500	150.6990
21	1982	94.0863	159.6600	133.7720
21	1983	94.8491	157.2000	136.5270
21	1984	119.0130	155.5200	146.9110

21	1985	108.2450	154.7200	134.6000
21	1986	104.7000	152.4400	129.0770
21	1987	91.3440	153.1300	138.7210
22	1979	257.0290	343.4900	308.3050
22	1980	255.9720	343.6900	333.4710
22	1981	284.8060	344.5600	335.3930
22	1982	251.4120	341.8000	300.7910
22	1983	231.9660	332.2100	324.8940
22	1984	199.8510	326.0300	369.0790
22	1985	193.4000	317.0100	336.1110
22	1986	195.6460	303.1600	343.1650
22	1987	201.2390	280.2100	369.1310
23	1979	60.3107	106.1800	54.4846
23	1980	65.7116	94.0300	62.8084
23	1981	60.3645	98.8300	58.8635
23	1982	40.8381	95.5900	45.1445
23	1983	39.6083	95.1500	49.5445
23	1984	30.5438	90.5400	51.3144
23	1985	35.3159	89.1300	48.2796
23	1986	36.6144	78.5900	51.1192
23	1987	32.0720	77.5200	51.5223
27	1979	19.9644	23.1700	19.7285
27	1980	20.0463	23.1800	19.2334
27	1981	21.0435	22.7200	21.0233
27	1982	15.6521	22.7200	17.7250
27	1983	16.5217	28.9200	22.9053
27	1984	17.3924	28.8200	25.2014
27	1985	17.6116	27.4100	22.1195
27	1986	11.9197	27.4100	20.3048
27	1987	11.3380	27.4700	20.6002
30	1979	12.2596	19.1900	17.0197
30	1980	16.4662	19.2400	18.6274
30	1981	15.9740	19.2400	18.4991
30	1982	15.9985	19.2600	19.5224
30	1983	8.9009	19.0800	20.4160
30	1984	12.7937	19.0700	21.9831
30	1985	11.7583	19.1000	21.7402
30	1986	13.1636	19.1300	20.6104
30	1987	13.2890	19.1200	20.7753
31	1979	12.5086	24.3300	13.2152
31	1980	14.4675	24.5800	15.4654
31	1981	16.3147	24.5600	15.5036
31	1982	21.3717	24.0300	12.6080
31	1983	19.5628	35.9400	13.4324
31	1984	17.2741	35.8900	14.6233
31	1985	16.3594	36.3900	14.2842
31	1986	13.4035	39.9600	13.2933
31	1987	10.6590	37.3300	16.4429
34	1979	14.5090	17.4100	25.8106
34	1980	18.6141	30.5800	25.0822
34	1981	17.6603	29.4800	29.6690
34	1982	14.5117	31.2000	25.1677
34	1983	8.5379	33.6400	28.8791
34	1984	6.2926	33.6400	33.0411
34	1985	12.0741	34.3100	28.8595
34	1986	9.3939	34.3100	26.3199
34	1987	7.8900	33.9600	28.7089
35	1979	52.2817	162.9400	54.7328
35	1980	49.1482	99.7400	44.3767
35	1981	49.3705	99.7200	40.2286

35	1982	36.0846	92.2900	34.2983
35	1983	37.4503	90.2500	39.2059
35	1984	43.5943	91.0800	44.6990
35	1985	36.6291	94.2000	36.3397
35	1986	30.3256	91.2600	39.6265
35	1987	23.8990	69.7700	40.1416
36	1979	95.4778	134.9100	156.0280
36	1980	89.1161	133.1400	146.7390
36	1981	75.6871	133.0900	147.2000
36	1982	66.5473	131.0500	126.8320
36	1983	77.7494	129.7100	128.9250
36	1984	46.5188	130.2500	141.0640
36	1985	55.6901	128.0000	128.5790
36	1986	55.3878	123.6500	122.7440
36	1987	57.6570	121.1200	129.1160
37	1979	236.4390	278.4400	287.1750
37	1980	262.2040	278.0100	297.8040
37	1981	248.4130	274.0600	280.7900
37	1982	197.1760	273.2200	229.0460
37	1983	174.0750	272.6400	231.5270
37	1984	173.9920	270.7600	247.0440
37	1985	163.7100	268.6600	251.0060
37	1986	149.9460	271.4500	257.5640
37	1987	91.1030	266.1800	308.6050

RRMAINT ACCOUNT

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

RAILROAD	RRMAINT	TRK	GTM
5	209.1186	248.0067	167.1117
8	11.7420	18.3189	12.5903
10	147.8865	210.9144	190.9170
18	28.6131	82.7956	49.5221
20	247.3763	313.8500	270.0430
21	112.3398	156.4756	141.6791
22	230.1468	325.7956	335.5933
23	44.5977	91.7289	52.5646
27	16.2766	25.7578	20.9824
30	13.4004	19.1589	19.9104
31	15.7690	31.4456	14.3187
34	11.6093	30.9478	27.9487
35	39.8648	99.0278	41.5166
36	68.8724	129.4356	135.8030
37	188.5620	272.6022	265.6179

92.4117 137.0894 116.4079

[illegible]

OLS REGRESSION RESULTS FOR POOLED MODEL

ERROR VARIANCE	706.8970
RSQ	0.9174
MODIFIED DW	0.6056
MODIFIED RHO	0.6972

F-STATISTIC FOR POOLING YEARS: $F(24, 108) = 2.65$

OLS REGRESSION ON MODEL WITH RAILROAD EFFECTS AND TIME TREND

ERROR VARIANCE	535.2960
RSQ	0.9441
MODIFIED DW	0.7939
MODIFIED RHO	0.6031

F-STATISTIC FOR POOLING RAILROADS
IN THE FIXED EFFECTS MODEL: $F(42, 75) = 8.29$

OLS REGRESSION MODEL WITH RAILROAD EFFECTS AND TIME TREND

COEFFICIENT	ESTIMATE	T-RATIO
TRK	1.0221	6.2872
GTM	0.1151	0.6769
TIME	-4.2493	-4.6650
F5	-63.6701	-1.2426
F8	-8.4297	-0.9822
F10	-89.6497	-1.8235
F18	-61.7072	3.4250
F20	-104.4712	-1.4715
F21	-63.8907	-1.7341
F22	-141.4532	-1.7588
F23	-55.2031	-2.8428
F27	-12.4638	-1.3033
F30	-8.4722	-0.9364
F31	-18.0178	-1.8687
F34	-23.2373	-2.2143
F35	-66.1245	-3.3852
F36	-79.0456	-2.3927
F37	-120.6189	-1.8408
ERROR VARIANCE		535.2960
RSD		0.9441
MODIFIED DW		0.7939
MODIFIED RHO		0.6031
BREUSCH-PAGAN		128.2175
RESET		38.1200

OLS REGRESSION ON MODEL WITH RAILROAD EFFECTS AND NO TIME TREND

F-STATISTIC FOR TIME TREND: $F(1, 117) = 21.76$ F-STATISTIC FOR TIME TREND: $F(1, 117) = 21.76$

OLS REGRESSION ON MODEL WITH RAILROAD EFFECTS AND TIME EFFECTS

F-STATISTIC FOR TIME EFFECTS: $F(8, 110) = 4.03$

F-STATISTIC FOR TIME EFFECTS: $F(8, 110) = 4.03$

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

COEFFICIENT	ESTIMATE	T-RATIO
TRK	1.0585	6.5492
GTM	0.0643	0.3306
F5	-54.9119	-0.9933
F8	0.8698	0.0773
F10	-78.3277	-1.4489
F18	-52.8859	-2.5006
F20	-92.8894	-1.2110
F21	-53.0811	-1.2895
F22	-126.9812	-1.4503
F23	-46.5532	-2.0660
F27	-3.0098	-0.2416
F30	1.1681	0.0983
F31	-9.1094	-0.7329
F34	-13.6192	-1.0065
F35	-58.3014	-2.6019
F36	-67.5478	-1.8020
F37	-107.7569	-1.5064
T79	BASE YEAR	
T80	9.9999	1.1936
T81	8.1384	0.9678
T82	-2.4495	-0.2672
T83	-16.1819	-1.8103
T84	-20.4542	-2.3729
T85	-22.3883	-2.5135
T86	-21.0248	-2.2901
T87	-19.6003	-2.1001
ERROR VARIANCE		522.2795
RSQ		0.9487
MODIFIED DW		0.7537
MODIFIED RHO		0.6231

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

COEFFICIENT	ESTIMATE	ASY Z-RATIO
TRK	0.8218	7.6707
GTM	0.1639	1.3667
F5	--18.0995	--1.2830
F8	--6.2222	--0.7392
F10	--29.9512	--2.1660
F18	--22.6367	--2.3427
F20	--30.3687	--1.8056
F21	--22.0820	--1.8188
F22	--43.3090	--2.3572
F23	--20.8433	--2.0907
F27	--8.1855	--0.9498
F30	--6.4549	--0.7585
F31	--10.1098	--1.1644
F34	--12.6402	--1.4406
F35	--22.8763	--2.2950
F36	--29.9794	--2.5843
F37	--45.2366	--2.7878
T79	BASE YEAR	
T80	20.2945	2.6274
T81	13.0709	1.6974
T82	4.4031	0.5340
T83	-4.1733	-0.5357
T84	-1.0261	-0.1326
T85	0.5798	0.0726
T86	2.4908	0.3110
T87	1.1727	0.1447
ERROR VARIANCE		250.8387
RSQ		0.8803
MODIFIED DW		1.7641
MODIFIED RHO		0.1179

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

COEFFICIENT	ESTIMATE	ASY Z-RATIO
TRK	0.4716	5.1106
GTM	0.3862	3.5163
F5	0.4888	0.6751
F8	0.1677	0.3323
F10	-0.4361	-0.5241
F18	-0.5185	-0.9027
F20	0.0047	0.0057
F21	-0.2936	-0.3743
F22	-1.2710	-1.0546
F23	-0.9718	-1.2230
F27	-0.1320	-0.2280
F30	0.0087	0.0156
F31	-0.1773	-0.3054
F34	-0.5847	-1.0229
F35	-0.2344	-0.4176
F36	-1.2990	-1.6150
F37	-0.7713	-0.9565
T79	BASE	YEAR
T80	0.6093	1.3755
T81	0.2419	0.5466
T82	-0.1221	-0.2507
T83	-0.7778	-1.7650
T84	-0.7693	-1.7651
T85	-0.4228	-0.9096
T86	-0.3962	-0.8531
T87	-0.6682	-1.4538
ERROR VARIANCE		0.6470
RSQ		0.8596
MODIFIED DW		1.9524
MODIFIED FHO		0.0238
BREUSCH-PAGAN		37.1556
RESET		11.4994
		CHI-SQ(24)
		F(3 107)

REMAINT ACCOUNT

GENERALIZED LEAST-SQUARES ESTIMATES OF FIXED-EFFECTS MODEL

COEFFICIENT	ESTIMATE	ASY Z-RATIO
TRK	0.4716	5.1106
GTM	0.3862	3.5163
5	0.4888	0.6751
8	0.1677	0.3323
10	-0.4361	-0.5241
18	-0.5185	-0.9027
20	0.0047	0.0057
21	-0.2936	-0.3743
22	-1.2710	-1.0546
23	-0.9718	-1.2230
27	-0.1320	-0.2280
30	0.0087	0.0156
31	-0.1773	-0.3054
34	-0.5847	-1.0229
35	-0.2344	-0.4176
36	-1.2990	-1.6150
37	-0.7713	-0.9565
1978 IS THE BASE YEAR		
1979	0.6093	1.3755
1980	0.2419	0.5466
1981	-0.1221	-0.2507
1982	-0.7778	-1.7650
1983	-0.7693	-1.7651
1984	-0.4228	-0.9096
1985	-0.3962	-0.8531
1986	-0.6682	-1.4538
ERROR VARIANCE		0.6470
PSD		0.8596
MODIFIED DW		1.9524
MODIFIED RHO		0.0238

DATE: 6/06/90

DPR4.FEG

TABLE 11	
Year	Value
1970	100
1971	105
1972	110
1973	115
1974	120
1975	125
1976	130
1977	135
1978	140
1979	145
1980	150
1981	155
1982	160
1983	165
1984	170
1985	175
1986	180
1987	185
1988	190
1989	195
1990	200
1991	205
1992	210
1993	215
1994	220
1995	225
1996	230
1997	235
1998	240
1999	245
2000	250
2001	255
2002	260
2003	265
2004	270
2005	275
2006	280
2007	285
2008	290
2009	295
2010	300
2011	305
2012	310
2013	315
2014	320
2015	325
2016	330
2017	335
2018	340
2019	345
2020	350

CONFIDENTIAL

CONFRAIL INCLUDED

RRMAINT ACCOUNT

RAILROAD	RATIO	SE
5	0.36	0.0971
8	0.36	0.0977
10	0.43	0.1036
18	0.33	0.0936
20	0.41	0.1028
21	0.43	0.1036
22	0.46	0.1052
23	0.32	0.0922
27	0.40	0.1018
30	0.46	0.1053
31	0.27	0.0839
34	0.43	0.1036
35	0.26	0.0807
36	0.46	0.1054
37	0.44	0.1046

MEAN OF RATIOS: 0.3870

RATIO AT OVERALL MEAN: 0.4102 SE: 0.1026