

Traction Electricity Consumption Rates List

This consumption rate list includes rates for the following:

1. Passenger Operators
2. Freight Operators

Passenger Traction Electricity Consumption Rates

Modelled Consumption Rates								
TOC	Service Code	Vehicle type	Loco / MU	Consumption Rate (for loco: kwhr/kgtm) (for MU: kwhr/train mile)	1 Unit	2 x Unit	3 x Unit	4 x Unit
National Express East Anglia	21939001	312	MU	12664	12.664	24.315	36.092	47.997
National Express East Anglia	21945001	312	MU	12664	12.664	24.315	36.092	47.997
National Express East Anglia	21910000	315	MU	14529	14.529	27.896	41.408	55.065
National Express East Anglia	21912000	315	MU	16492	16.492	31.665	47.002	62.505
National Express East Anglia	21920000	315	MU	13057	13.057	25.069	37.212	49.486
National Express East Anglia	21940001	315	MU	14725	14.725	28.272	41.966	55.808
National Express East Anglia	21943001	315	MU	16792	16.792	32.241	47.857	63.642
National Express East Anglia	21945001	315	MU	14701	14.701	28.226	41.898	55.717
National Express East Anglia	25940001	315	MU	14725	14.725	28.272	41.966	55.808
National Express East Anglia	25943001	315	MU	16792	16.792	32.241	47.857	63.642
National Express East Anglia	21913000	317	MU	13744	13.744	26.388	39.170	52.090
National Express East Anglia	21916400	317	MU	12737	12.737	24.455	36.300	48.273
National Express East Anglia	21916401	317	MU	12737	12.737	24.455	36.300	48.273
National Express East Anglia	25915000	317	MU	11584	11.584	22.241	33.014	43.903
National Express East Anglia	21939001	321	MU	12330	12.330	23.674	35.141	46.731
National Express East Anglia	21940001	321	MU	12483	12.483	23.967	35.577	47.311
National Express East Anglia	21943001	321	MU	14235	14.235	27.331	40.570	53.951
National Express East Anglia	21945001	321	MU	12462	12.462	23.927	35.517	47.231
National Express East Anglia	21945101	321	MU	12462	12.462	23.927	35.517	47.231
National Express East Anglia	25939001	321	MU	12330	12.330	23.674	35.141	46.731
National Express East Anglia	25943001	321	MU	14235	14.235	27.331	40.570	53.951
National Express East Anglia	21770002	322	MU	12296	12.296	23.608	35.044	46.602
National Express East Anglia	21781002	322	MU	12296	12.296	23.608	35.044	46.602
National Express East Anglia	21890002	322	MU	12462	12.462	23.927	35.517	47.231
National Express East Anglia	21890102	322	MU	12462	12.462	23.927	35.517	47.231
National Express East Anglia	21911000	322	MU	9424	9.424	18.094	26.858	35.717
National Express East Anglia	25911000	322	MU	9424	9.424	18.094	26.858	35.717
National Express East Anglia	21770002	086/2	Loco	52030	52.030	n/a	n/a	n/a
National Express East Anglia	21781002	086/2	Loco	52030	52.030	n/a	n/a	n/a
National Express East Anglia	21890002	086/2	Loco	52731	52.731	n/a	n/a	n/a
National Express East Anglia	21890102	086/2	Loco	52731	52.731	n/a	n/a	n/a
National Express East Anglia	21896002	086/2	Loco	52731	52.731	n/a	n/a	n/a
National Express East Anglia	21781002	086/4	Loco	52030	52.030	n/a	n/a	n/a
National Express East Anglia	21939001	360/0	MU	15648	15.648	30.044	44.597	59.306
National Express East Anglia	25939001	360/0	MU	15648	15.648	30.044	44.597	59.306
National Express East Anglia	25915000	365/5	MU	12860	12.860	24.691	36.651	48.739
Northern Rail	11818620	321	MU	10555	10.555	20.266	30.082	40.003
Northern Rail	11819020	321	MU	11957	11.957	22.957	34.077	45.317
Northern Rail	11820820	321	MU	13525	13.525	25.968	38.546	51.260
Northern Rail	11821020	321	MU	14281	14.281	27.420	40.701	54.125
Northern Rail	11824820	321	MU	15413	15.413	29.593	43.927	58.415
Northern Rail	11870820	321	MU	11355	11.355	21.802	32.362	43.035
Northern Rail	12974820	322	MU	12462	12.462	23.927	35.517	47.231
Northern Rail	12228110	323	MU	15220	15.220	29.222	43.377	57.684
Northern Rail	12230110	323	MU	19771	19.771	37.960	56.347	74.932
Northern Rail	12231820	323	MU	14299	14.299	27.454	40.752	54.193
Northern Rail	12232820	323	MU	15098	15.098	28.988	43.029	57.221
Northern Rail	12233820	323	MU	15098	15.098	28.988	43.029	57.221
Northern Rail	12974820	323	MU	15220	15.220	29.222	43.377	57.684
Northern Rail	22231000	323	MU	15220	15.220	29.222	43.377	57.684
Northern Rail	22232000	323	MU	15098	15.098	28.988	43.029	57.221
Northern Rail	22233000	323	MU	15098	15.098	28.988	43.029	57.221
Northern Rail	11818620	333/0	MU	19408	19.408	37.263	55.313	73.556
Northern Rail	11819020	333/0	MU	21980	21.980	42.202	62.643	83.304
Northern Rail	11820820	333/0	MU	26270	26.270	50.438	74.870	99.563
Northern Rail	11821020	333/0	MU	26093	26.093	50.099	74.365	98.892
Northern Rail	11824820	333/0	MU	22118	22.118	42.467	63.036	83.827
Northern Rail	11870820	333/0	MU	21617	21.617	41.505	61.608	81.928
Northern Rail	11818620	333/1	MU	19480	19.480	37.402	55.518	73.829
Northern Rail	11819020	333/1	MU	22640	22.640	43.469	64.524	85.806
Northern Rail	11820820	333/1	MU	26940	26.940	51.725	76.779	102.103
Northern Rail	11821020	333/1	MU	26780	26.780	51.418	76.323	101.496
Northern Rail	11824820	333/1	MU	23230	23.230	44.602	66.206	88.042
Northern Rail	11870820	333/1	MU	22830	22.830	43.834	65.066	86.526
First Capital Connect	21963000	313	MU	13155	13.155	25.258	37.492	49.857
First Capital Connect	21964000	313	MU	14038	14.038	26.953	40.008	53.204
First Capital Connect	21960000	317	MU	12737	12.737	24.455	36.300	48.273
First Capital Connect	21965000	317	MU	14333	14.333	27.519	40.849	54.322
First Capital Connect	21967000	317	MU	11293	11.293	21.683	32.185	42.800
First Capital Connect	24207000	319	MU	16068	16.068	30.851	45.794	60.898
First Capital Connect	24207001	319	MU	12801	12.801	24.578	36.483	48.516
First Capital Connect	24207003	319	MU	16068	16.068	30.851	45.794	60.898
First Capital Connect	24612000	319	MU	11790	11.790	22.637	33.602	44.684
First Capital Connect	24662000	319	MU	16068	16.068	30.851	45.794	60.898
First Capital Connect	24662001	319	MU	15113	15.113	29.017	43.072	57.278
First Capital Connect	21961000	365/5	MU	10111	10.111	19.413	28.816	38.321
First Capital Connect	21962000	365/5	MU	12860	12.860	24.691	36.651	48.739

First Capital Connect	25961000	365/5	MU	12247	12.247	23.514	34.904	46.416
First Capital Connect	25962000	365/5	MU	12247	12.247	23.514	34.904	46.416
First ScotRail	13560015	303	MU	14087	14.087	27.047	40.148	53.390
First ScotRail	13562015	303	MU	18014	18.014	34.587	51.340	68.273
First ScotRail	13563015	303	MU	11363	11.363	21.817	32.385	43.066
First ScotRail	13569815	303	MU	11191	11.191	21.487	31.894	42.414
First ScotRail	13571015	303	MU	14725	14.725	28.272	41.966	55.808
First ScotRail	13573015	303	MU	12100	12.100	23.232	34.485	45.859
First ScotRail	23971103	303	MU	13876	13.876	26.642	39.547	52.590
First ScotRail	23584003	305	MU	8806	8.806	16.908	25.097	33.375
First ScotRail	13560015	314	MU	12615	12.615	24.221	35.953	47.811
First ScotRail	13562015	314	MU	12320	12.320	23.654	35.112	46.693
First ScotRail	13563015	314	MU	7755	7.755	14.890	22.102	29.391
First ScotRail	13569815	314	MU	8048	8.048	15.452	22.937	30.502
First ScotRail	13571015	314	MU	9427	9.427	18.100	26.867	35.728
First ScotRail	13573015	314	MU	8816	8.816	16.927	25.126	33.413
First ScotRail	23564903	314	MU	10524	10.524	20.206	29.993	39.886
First ScotRail	23584003	314	MU	8160	8.160	15.667	23.256	30.926
First ScotRail	23971103	314	MU	9927	9.927	19.060	28.292	37.623
First ScotRail	23971403	314	MU	9927	9.927	19.060	28.292	37.623
First ScotRail	13560015	318	MU	15452	15.452	29.668	44.038	58.563
First ScotRail	13562015	318	MU	17069	17.069	32.772	48.647	64.692
First ScotRail	13563015	318	MU	14765	14.765	28.349	42.080	55.959
First ScotRail	13569815	318	MU	11151	11.151	21.410	31.780	42.262
First ScotRail	13571015	318	MU	13351	13.351	25.634	38.050	50.600
First ScotRail	13573015	318	MU	12222	12.222	23.466	34.833	46.321
First ScotRail	23564903	318	MU	13876	13.876	26.642	39.547	52.590
First ScotRail	23584003	318	MU	12860	12.860	24.691	36.651	48.739
First ScotRail	23971103	318	MU	13754	13.754	26.408	39.199	52.128
First ScotRail	23971403	318	MU	13754	13.754	26.408	39.199	52.128
First ScotRail	13560015	320	MU	13204	13.204	25.352	37.631	50.043
First ScotRail	23971103	320	MU	10627	10.627	20.404	30.287	40.276
First ScotRail	23971403	320	MU	10627	10.627	20.404	30.287	40.276
First ScotRail	13560015	334	MU	18417	18.417	35.361	52.488	69.800
First ScotRail	13562015	334	MU	18112	18.112	34.775	51.619	68.644
First ScotRail	13563015	334	MU	17464	17.464	33.531	49.772	66.189
First ScotRail	13569815	334	MU	12468	12.468	23.939	35.534	47.254
First ScotRail	13571015	334	MU	12497	12.497	23.994	35.616	47.364
First ScotRail	13573015	334	MU	12841	12.841	24.655	36.597	48.667
First ScotRail	23971403	334	MU	15300	15.300	29.376	43.605	57.987
First ScotRail	23551003	086/2	Loco	37304	37.304	n/a	n/a	n/a
First ScotRail	23552003	086/2	Loco	37304	37.304	n/a	n/a	n/a
First ScotRail	23553003	086/2	Loco	37304	37.304	n/a	n/a	n/a
First ScotRail	23551003	087/0	Loco	37304	37.304	n/a	n/a	n/a
First ScotRail	23552003	087/0	Loco	37304	37.304	n/a	n/a	n/a
First ScotRail	23553003	087/0	Loco	37304	37.304	n/a	n/a	n/a
First ScotRail	23551003	090/0	Loco	37304	37.304	n/a	n/a	n/a
First ScotRail	23552003	090/0	Loco	37304	37.304	n/a	n/a	n/a
First ScotRail	23553003	090/0	Loco	37304	37.304	n/a	n/a	n/a
First ScotRail	23584003	090/0	Loco	37304	37.304	n/a	n/a	n/a
First ScotRail	23564903	305/3	MU	16475	16.475	31.632	46.954	62.440
First ScotRail	23584003	305/3	MU	11289	11.289	21.675	32.174	42.785
First ScotRail	23971103	305/3	MU	15926	15.926	30.578	45.389	60.360
National Express East Coast	21702001	089/0	Loco	55220	55.220	n/a	n/a	n/a
National Express East Coast	21700001	090/0	Loco	51059	51.059	n/a	n/a	n/a
National Express East Coast	21702001	090/0	Loco	54637	54.637	n/a	n/a	n/a
National Express East Coast	21703001	090/0	Loco	54637	54.637	n/a	n/a	n/a
National Express East Coast	21704001	090/0	Loco	52848	52.848	n/a	n/a	n/a
National Express East Coast	21700001	091/0	Loco	51604	51.604	n/a	n/a	n/a
National Express East Coast	21701001	091/0	Loco	51604	51.604	n/a	n/a	n/a
National Express East Coast	21702001	091/0	Loco	55220	55.220	n/a	n/a	n/a
National Express East Coast	21703001	091/0	Loco	55220	55.220	n/a	n/a	n/a
National Express East Coast	21704001	091/0	Loco	53412	53.412	n/a	n/a	n/a
National Express East Coast	21700001	091/1	Loco	51604	51.604	n/a	n/a	n/a
National Express East Coast	21701001	091/1	Loco	51604	51.604	n/a	n/a	n/a
National Express East Coast	21702001	091/1	Loco	55220	55.220	n/a	n/a	n/a
National Express East Coast	21703001	091/1	Loco	55220	55.220	n/a	n/a	n/a
National Express East Coast	21704001	091/1	Loco	53412	53.412	n/a	n/a	n/a
Merseyrail	12301012	507	MU	12762	12.762	24.503	36.372	48.368
Merseyrail	12302012	507	MU	12762	12.762	24.503	36.372	48.368
Merseyrail	12303012	507	MU	12762	12.762	24.503	36.372	48.368
Merseyrail	12304212	507	MU	12762	12.762	24.503	36.372	48.368
Merseyrail	12305012	507	MU	14725	14.725	28.272	41.966	55.808
Merseyrail	12306212	507	MU	14725	14.725	28.272	41.966	55.808
Merseyrail	22304003	507	MU	12762	12.762	24.503	36.372	48.368
Merseyrail	22306003	507	MU	14725	14.725	28.272	41.966	55.808
Merseyrail	12301012	508	MU	12762	12.762	24.503	36.372	48.368
Merseyrail	12302012	508	MU	12762	12.762	24.503	36.372	48.368
Merseyrail	12303012	508	MU	12762	12.762	24.503	36.372	48.368
Merseyrail	12304212	508	MU	12762	12.762	24.503	36.372	48.368
Merseyrail	12305012	508	MU	14725	14.725	28.272	41.966	55.808
Merseyrail	12306212	508	MU	14725	14.725	28.272	41.966	55.808
Merseyrail	22304003	508	MU	12762	12.762	24.503	36.372	48.368
Merseyrail	22306003	508	MU	14725	14.725	28.272	41.966	55.808
Merseyrail	22902203	508	MU	12762	12.762	24.503	36.372	48.368
Merseyrail	22903203	508	MU	14725	14.725	28.272	41.966	55.808
Virgin Trains	22100001	086/1	Loco	55957	55.957	n/a	n/a	n/a
Virgin Trains	22100001	086/2	Loco	55957	55.957	n/a	n/a	n/a
Virgin Trains	22103001	086/2	Loco	55957	55.957	n/a	n/a	n/a
Virgin Trains	22104001	086/2	Loco	55957	55.957	n/a	n/a	n/a
Virgin Trains	22108001	086/2	Loco	55957	55.957	n/a	n/a	n/a
Virgin Trains	22109001	086/2	Loco	55957	55.957	n/a	n/a	n/a
Virgin Trains	22112001	086/2	Loco	55957	55.957	n/a	n/a	n/a
Virgin Trains	22100001	086/4	Loco	55957	55.957	n/a	n/a	n/a
Virgin Trains	22103001	086/4	Loco	55957	55.957	n/a	n/a	n/a

Virgin Trains	22108001	086/4	Loco	55957	55.957	n/a	n/a	n/a
Virgin Trains	22109001	086/4	Loco	55957	55.957	n/a	n/a	n/a
Virgin Trains	22100001	087/0	Loco	55957	55.957	n/a	n/a	n/a
Virgin Trains	22103001	087/0	Loco	55957	55.957	n/a	n/a	n/a
Virgin Trains	22104001	087/0	Loco	55957	55.957	n/a	n/a	n/a
Virgin Trains	22108001	087/0	Loco	55957	55.957	n/a	n/a	n/a
Virgin Trains	22109001	087/0	Loco	55957	55.957	n/a	n/a	n/a
Virgin Trains	22112001	087/0	Loco	55957	55.957	n/a	n/a	n/a
Virgin Trains	22100001	090/0	Loco	55957	55.957	n/a	n/a	n/a
Virgin Trains	22103001	090/0	Loco	55957	55.957	n/a	n/a	n/a
Virgin Trains	22104001	090/0	Loco	55957	55.957	n/a	n/a	n/a
Virgin Trains	22108001	090/0	Loco	55957	55.957	n/a	n/a	n/a
Virgin Trains	22109001	090/0	Loco	55957	55.957	n/a	n/a	n/a
Virgin Trains	22112001	090/0	Loco	55957	55.957	n/a	n/a	n/a
Virgin Trains	22100001	390/0	MU	31346	31.346	60.184	89.336	118.801
Virgin Trains	22103001	390/0	MU	30747	30.747	59.034	87.629	116.531
Virgin Trains	22108001	390/0	MU	27434	27.434	52.673	78.187	103.975
Virgin Trains	22109001	390/0	MU	28057	28.057	53.869	79.962	106.336
Virgin Trains	22112001	390/0	MU	28252	28.252	54.244	80.518	107.075
c2c	21936004	310	MU	12320	12.320	23.654	35.112	46.693
c2c	24936004	310	MU	15793	15.793	30.323	45.010	59.855
c2c	26936004	310	MU	12320	12.320	23.654	35.112	46.693
c2c	27936004	310	MU	13940	13.940	26.765	39.729	52.833
c2c	28936004	310	MU	13940	13.940	26.765	39.729	52.833
c2c	29936004	310	MU	12860	12.860	24.691	36.651	48.739
c2c	21936004	312	MU	12396	12.396	23.800	35.329	46.981
c2c	24936004	312	MU	13682	13.682	26.269	38.994	51.855
c2c	26936004	312	MU	12396	12.396	23.800	35.329	46.981
c2c	27936004	312	MU	12512	12.512	24.023	35.659	47.420
c2c	28936004	312	MU	12512	12.512	24.023	35.659	47.420
c2c	29936004	312	MU	11947	11.947	22.938	34.049	45.279
c2c	21936004	317	MU	13714	13.714	26.331	39.085	51.976
c2c	24936004	317	MU	14500	14.500	27.840	41.325	54.955
c2c	26936004	317	MU	13714	13.714	26.331	39.085	51.976
c2c	27936004	317	MU	12584	12.584	24.161	35.864	47.693
c2c	28936004	317	MU	12584	12.584	24.161	35.864	47.693
c2c	29936004	317	MU	12468	12.468	23.939	35.534	47.254
c2c	21936004	357	MU	16875	16.875	32.400	48.094	63.956
c2c	24936004	357	MU	16306	16.306	31.308	46.472	61.800
c2c	27936004	357	MU	14667	14.667	28.161	41.801	55.588
c2c	21936004	310/3	MU	9610	9.610	18.451	27.389	36.422
c2c	24936004	310/3	MU	12318	12.318	23.651	35.106	46.685
c2c	27936004	310/3	MU	10873	10.873	20.876	30.988	41.209
c2c	21936004	LT1	MU	20023	20.023	38.444	57.066	75.887
c2c	26936004	LT2	MU	26673	26.673	51.212	76.018	101.091
c2c	27936004	LT3	MU	15390	15.390	29.549	43.862	58.328
c2c	28936004	LT4	MU	23559	23.559	45.233	67.143	89.289
c2c	24936004	LT5	MU	19425	19.425	37.296	55.361	73.621
Southeastern	24601000	375	MU	13469	13.469	25.860	38.387	51.048
Southeastern	24601004	375	MU	14657	14.657	28.141	41.772	55.550
Southeastern	24602000	375	MU	11879	11.879	22.808	33.855	45.021
Southeastern	24602004	375	MU	13547	13.547	26.010	38.609	51.343
Southeastern	24604000	375	MU	12169	12.169	23.364	34.682	46.121
Southeastern	24604004	375	MU	12510	12.510	24.019	35.654	47.413
Southeastern	24605000	375	MU	11859	11.859	22.769	33.798	44.946
Southeastern	24605004	375	MU	12816	12.816	24.607	36.526	48.573
Southeastern	24606000	375	MU	12566	12.566	24.127	35.813	47.625
Southeastern	24606004	375	MU	12880	12.880	24.730	36.708	48.815
Southeastern	24607006	375	MU	18407	18.407	35.341	52.460	69.763
Southeastern	24608006	375	MU	19457	19.457	37.357	55.452	73.742
Southeastern	24609006	375	MU	15167	15.167	29.121	43.226	57.483
Southeastern	24650000	375	MU	19497	19.497	37.434	55.566	73.894
Southeastern	24650005	375	MU	19084	19.084	36.641	54.389	72.328
Southeastern	24652000	375	MU	20891	20.891	40.111	59.539	79.177
Southeastern	24652005	375	MU	20891	20.891	40.111	59.539	79.177
Southeastern	24655000	375	MU	17887	17.887	34.343	50.978	67.792
Southeastern	24655005	375	MU	17887	17.887	34.343	50.978	67.792
Southeastern	24656000	375	MU	19418	19.418	37.283	55.341	73.594
Southeastern	24656005	375	MU	19418	19.418	37.283	55.341	73.594
Southeastern	24658000	375	MU	13381	13.381	25.692	38.136	50.714
Southeastern	24658005	375	MU	13381	13.381	25.692	38.136	50.714
Southeastern	24462000	411	MU	9871	9.871	18.952	28.132	37.411
Southeastern	24601000	411	MU	8538	8.538	16.393	24.333	32.359
Southeastern	24601004	411	MU	8538	8.538	16.393	24.333	32.359
Southeastern	24602004	411	MU	8538	8.538	16.393	24.333	32.359
Southeastern	24604000	411	MU	8377	8.377	16.084	23.874	31.749
Southeastern	24604004	411	MU	8377	8.377	16.084	23.874	31.749
Southeastern	24605000	411	MU	9520	9.520	18.278	27.132	36.081
Southeastern	24605004	411	MU	9520	9.520	18.278	27.132	36.081
Southeastern	24606000	411	MU	8787	8.787	16.871	25.043	33.303
Southeastern	24606004	411	MU	8787	8.787	16.871	25.043	33.303
Southeastern	24607006	411	MU	11928	11.928	22.902	33.995	45.207
Southeastern	24608006	411	MU	12554	12.554	24.104	35.779	47.580
Southeastern	24609006	411	MU	9006	9.006	17.292	25.667	34.133
Southeastern	24462000	421	MU	12655	12.655	24.298	36.067	47.962
Southeastern	24601000	421	MU	10946	10.946	21.016	31.196	41.485
Southeastern	24601004	421	MU	10946	10.946	21.016	31.196	41.485
Southeastern	24602000	421	MU	10946	10.946	21.016	31.196	41.485
Southeastern	24602004	421	MU	10946	10.946	21.016	31.196	41.485
Southeastern	24604000	421	MU	10740	10.740	20.621	30.609	40.705
Southeastern	24604004	421	MU	10740	10.740	20.621	30.609	40.705
Southeastern	24605000	421	MU	12206	12.206	23.436	34.787	46.261
Southeastern	24605004	421	MU	12206	12.206	23.436	34.787	46.261
Southeastern	24606000	421	MU	11265	11.265	21.629	32.105	42.694
Southeastern	24606004	421	MU	11265	11.265	21.629	32.105	42.694

Southeastern	24609006	421	MU	11546	11.546	22.168	32.906	43.759
Southeastern	24652005	421	MU	12714	12.714	24.411	36.235	48.186
Southeastern	24655005	421	MU	12655	12.655	24.298	36.067	47.962
Southeastern	24656000	421	MU	12714	12.714	24.411	36.235	48.186
Southeastern	24656005	421	MU	12714	12.714	24.411	36.235	48.186
Southeastern	24620000	423	MU	12655	12.655	24.298	36.067	47.962
Southeastern	24601000	423	MU	10946	10.946	21.016	31.196	41.485
Southeastern	24601004	423	MU	10946	10.946	21.016	31.196	41.485
Southeastern	24602000	423	MU	10946	10.946	21.016	31.196	41.485
Southeastern	24602004	423	MU	10946	10.946	21.016	31.196	41.485
Southeastern	24604000	423	MU	10740	10.740	20.621	30.609	40.705
Southeastern	24604004	423	MU	10740	10.740	20.621	30.609	40.705
Southeastern	24605000	423	MU	12206	12.206	23.436	34.787	46.261
Southeastern	24605004	423	MU	12206	12.206	23.436	34.787	46.261
Southeastern	24606000	423	MU	11265	11.265	21.629	32.105	42.694
Southeastern	24606004	423	MU	11265	11.265	21.629	32.105	42.694
Southeastern	24607006	423	MU	15292	15.292	29.361	43.582	57.957
Southeastern	24608006	423	MU	16095	16.095	30.902	45.871	61.000
Southeastern	24609006	423	MU	11546	11.546	22.168	32.906	43.759
Southeastern	24652005	423	MU	12714	12.714	24.411	36.235	48.186
Southeastern	24653005	423	MU	15503	15.503	29.766	44.184	58.756
Southeastern	24655005	423	MU	12655	12.655	24.298	36.067	47.962
Southeastern	24462000	465	MU	17042	17.042	32.721	48.570	64.589
Southeastern	24604000	465	MU	14793	14.793	28.403	42.160	56.065
Southeastern	24604004	465	MU	14793	14.793	28.403	42.160	56.065
Southeastern	24605004	465	MU	14205	14.205	27.274	40.484	53.837
Southeastern	24606004	465	MU	14042	14.042	26.961	40.020	53.219
Southeastern	24650000	465	MU	15246	15.246	29.272	43.451	57.782
Southeastern	24650005	465	MU	15246	15.246	29.272	43.451	57.782
Southeastern	24652000	465	MU	15216	15.216	29.215	43.366	57.669
Southeastern	24652005	465	MU	15216	15.216	29.215	43.366	57.669
Southeastern	24653000	465	MU	20665	20.665	39.677	58.895	78.320
Southeastern	24653005	465	MU	20665	20.665	39.677	58.895	78.320
Southeastern	24655000	465	MU	17042	17.042	32.721	48.570	64.589
Southeastern	24655005	465	MU	17042	17.042	32.721	48.570	64.589
Southeastern	24656000	465	MU	15216	15.216	29.215	43.366	57.669
Southeastern	24656005	465	MU	15216	15.216	29.215	43.366	57.669
Southeastern	24657000	465	MU	15246	15.246	29.272	43.451	57.782
Southeastern	24657005	465	MU	15246	15.246	29.272	43.451	57.782
Southeastern	24658000	465	MU	15246	15.246	29.272	43.451	57.782
Southeastern	24658005	465	MU	15246	15.246	29.272	43.451	57.782
Southeastern	24659000	465	MU	15246	15.246	29.272	43.451	57.782
Southeastern	24659005	465	MU	15246	15.246	29.272	43.451	57.782
Southeastern	24650005	466	MU	7928	7.928	15.222	22.595	30.047
Southeastern	24653005	466	MU	10746	10.746	20.632	30.626	40.727
Southeastern	24655005	466	MU	8862	8.862	17.015	25.257	33.587
Southeastern	24656005	466	MU	7912	7.912	15.191	22.549	29.986
Southeastern	24657005	466	MU	7928	7.928	15.222	22.595	30.047
Southeastern	24658005	466	MU	7928	7.928	15.222	22.595	30.047
Southeastern	24659005	466	MU	7928	7.928	15.222	22.595	30.047
Southeastern	24601000	508	MU	8786	8.786	16.869	25.040	33.299
Southeastern	24601004	508	MU	8786	8.786	16.869	25.040	33.299
Southeastern	24602004	508	MU	8786	8.786	16.869	25.040	33.299
Southeastern	24604004	508	MU	9179	9.179	17.624	26.160	34.788
Southeastern	24607006	508	MU	16070	16.070	30.854	45.800	60.905
Southeastern	24608006	508	MU	13999	13.999	26.878	39.897	53.056
Southeastern	24609006	508	MU	10828	10.828	20.790	30.860	41.038
Southeastern	24655005	508	MU	11868	11.868	22.787	33.824	44.980
Southeastern	24604000	365/5	MU	12026	12.026	23.090	34.274	45.579
Southeastern	24604004	365/5	MU	12026	12.026	23.090	34.274	45.579
Southeastern	24606000	365/5	MU	10091	10.091	19.375	28.759	38.245
Southeastern	24606004	365/5	MU	10091	10.091	19.375	28.759	38.245
Southeastern	24601000	375/3	MU	9954	9.954	19.112	28.369	37.726
Southeastern	24601004	375/3	MU	10809	10.809	20.753	30.806	40.966
Southeastern	24602000	375/3	MU	8835	8.835	16.963	25.180	33.485
Southeastern	24602004	375/3	MU	9994	9.994	19.188	28.483	37.877
Southeastern	24604000	375/3	MU	9051	9.051	17.378	25.795	34.303
Southeastern	24604004	375/3	MU	9277	9.277	17.812	26.439	35.160
Southeastern	24605000	375/3	MU	8816	8.816	16.927	25.126	33.413
Southeastern	24605004	375/3	MU	9567	9.567	18.369	27.266	36.259
Southeastern	24606000	375/3	MU	9326	9.326	17.906	26.579	35.346
Southeastern	24606004	375/3	MU	9562	9.562	18.359	27.252	36.240
Southeastern	24607006	375/3	MU	13341	13.341	25.615	38.022	50.562
Southeastern	24608006	375/3	MU	14254	14.254	27.368	40.624	54.023
Southeastern	24609006	375/3	MU	11172	11.172	21.450	31.840	42.342
Southeastern	24650000	375/3	MU	14254	14.254	27.368	40.624	54.023
Southeastern	24650005	375/3	MU	13950	13.950	26.784	39.758	52.871
Southeastern	24652000	375/3	MU	15226	15.226	29.234	43.394	57.707
Southeastern	24652005	375/3	MU	15226	15.226	29.234	43.394	57.707
Southeastern	24655000	375/3	MU	12919	12.919	24.804	36.819	48.963
Southeastern	24655005	375/3	MU	12919	12.919	24.804	36.819	48.963
Southeastern	24656000	375/3	MU	14186	14.186	27.237	40.430	53.765
Southeastern	24656005	375/3	MU	14186	14.186	27.237	40.430	53.765
Southeastern	24658000	375/3	MU	10004	10.004	19.208	28.511	37.915
Southeastern	24658005	375/3	MU	10004	10.004	19.208	28.511	37.915
Southeastern	24601000	375/6	MU	13911	13.911	26.709	39.646	52.723
Southeastern	24601004	375/6	MU	15148	15.148	29.084	43.172	57.411
Southeastern	24602000	375/6	MU	12281	12.281	23.580	35.001	46.545
Southeastern	24602004	375/6	MU	14009	14.009	26.897	39.926	53.094
Southeastern	24604000	375/6	MU	12556	12.556	24.108	35.785	47.587
Southeastern	24604004	375/6	MU	12913	12.913	24.793	36.802	48.940
Southeastern	24605000	375/6	MU	12212	12.212	23.447	34.804	46.283
Southeastern	24605004	375/6	MU	13209	13.209	25.361	37.646	50.062
Southeastern	24606000	375/6	MU	13017	13.017	24.993	37.098	49.334
Southeastern	24606004	375/6	MU	13351	13.351	25.634	38.050	50.600

Southeastern	24607006	375/6	MU	18966	18.966	36.415	54.053	71.881
Southeastern	24608006	375/6	MU	20184	20.184	38.753	57.524	76.497
Southeastern	24609006	375/6	MU	15413	15.413	29.593	43.927	58.415
Southeastern	24650000	375/6	MU	20184	20.184	38.753	57.524	76.497
Southeastern	24650005	375/6	MU	19752	19.752	37.924	56.293	74.860
Southeastern	24652000	375/6	MU	21597	21.597	41.466	61.551	81.853
Southeastern	24652005	375/6	MU	21597	21.597	41.466	61.551	81.853
Southeastern	24655000	375/6	MU	18407	18.407	35.341	52.460	69.763
Southeastern	24655005	375/6	MU	18407	18.407	35.341	52.460	69.763
Southeastern	24656000	375/6	MU	20086	20.086	38.565	57.245	76.126
Southeastern	24656005	375/6	MU	20086	20.086	38.565	57.245	76.126
Southeastern	24658000	375/6	MU	13871	13.871	26.632	39.532	52.571
Southeastern	24658005	375/6	MU	13871	13.871	26.632	39.532	52.571
Southeastern	24650000	376/0	MU	25455	25.455	48.874	72.547	96.474
Southeastern	24650005	376/0	MU	24916	24.916	47.839	71.011	94.432
Southeastern	24652000	376/0	MU	27409	27.409	52.625	78.116	103.880
Southeastern	24652005	376/0	MU	27409	27.409	52.625	78.116	103.880
Southeastern	24653000	376/0	MU	24955	24.955	47.914	71.122	94.579
Southeastern	24653005	376/0	MU	24955	24.955	47.914	71.122	94.579
Southeastern	24655000	376/0	MU	22913	22.913	43.993	65.302	86.840
Southeastern	24655005	376/0	MU	22913	22.913	43.993	65.302	86.840
Southeastern	24656000	376/0	MU	24837	24.837	47.687	70.785	94.132
Southeastern	24656005	376/0	MU	24837	24.837	47.687	70.785	94.132
Southeastern	24657000	376/0	MU	23904	23.904	45.896	68.126	90.596
Southeastern	24657005	376/0	MU	23168	23.168	44.483	66.029	87.807
Southeastern	24658000	376/0	MU	17248	17.248	33.116	49.157	65.370
Southeastern	24658005	376/0	MU	17248	17.248	33.116	49.157	65.370
Southeastern	24659000	376/0	MU	24366	24.366	46.783	69.443	92.347
Southeastern	24659005	376/0	MU	24366	24.366	46.783	69.443	92.347
Southeastern	24462000	411/5	MU	12655	12.655	24.298	36.067	47.962
Southeastern	24601000	411/5	MU	10946	10.946	21.016	31.196	41.485
Southeastern	24601004	411/5	MU	10946	10.946	21.016	31.196	41.485
Southeastern	24602004	411/5	MU	10946	10.946	21.016	31.196	41.485
Southeastern	24604000	411/5	MU	10740	10.740	20.621	30.609	40.705
Southeastern	24604004	411/5	MU	10740	10.740	20.621	30.609	40.705
Southeastern	24605000	411/5	MU	12206	12.206	23.436	34.787	46.261
Southeastern	24605004	411/5	MU	12206	12.206	23.436	34.787	46.261
Southeastern	24606000	411/5	MU	11265	11.265	21.629	32.105	42.694
Southeastern	24606004	411/5	MU	11265	11.265	21.629	32.105	42.694
Southeastern	24607006	411/5	MU	15292	15.292	29.361	43.582	57.957
Southeastern	24608006	411/5	MU	16095	16.095	30.902	45.871	61.000
Southeastern	24609006	411/5	MU	11546	11.546	22.168	32.906	43.759
Southeastern	24650005	411/5	MU	12569	12.569	24.132	35.822	47.637
Southeastern	24652005	411/5	MU	12714	12.714	24.411	36.235	48.186
Southeastern	24655005	411/5	MU	12655	12.655	24.298	36.067	47.962
Southeastern	24656000	411/5	MU	12714	12.714	24.411	36.235	48.186
Southeastern	24656005	411/5	MU	12714	12.714	24.411	36.235	48.186
Southern	24660004	319	MU	16068	16.068	30.851	45.794	60.898
Southern	24661000	319	MU	18849	18.849	36.190	53.720	71.438
Southern	24661005	319	MU	18849	18.849	36.190	53.720	71.438
Southern	24663000	319	MU	12216	12.216	23.455	34.816	46.299
Southern	24663004	319	MU	12216	12.216	23.455	34.816	46.299
Southern	24664004	319	MU	12216	12.216	23.455	34.816	46.299
Southern	24667000	319	MU	20941	20.941	40.207	59.682	79.366
Southern	24667004	319	MU	20941	20.941	40.207	59.682	79.366
Southern	24674005	319	MU	16068	16.068	30.851	45.794	60.898
Southern	24683005	319	MU	19339	19.339	37.131	55.116	73.295
Southern	24684005	319	MU	16727	16.727	32.116	47.672	63.395
Southern	24685000	319	MU	16296	16.296	31.288	46.444	61.762
Southern	24685005	319	MU	16296	16.296	31.288	46.444	61.762
Southern	24687000	319	MU	14793	14.793	28.403	42.160	56.065
Southern	24687005	319	MU	14793	14.793	28.403	42.160	56.065
Southern	24610000	377	MU	17749	17.749	34.078	50.585	67.269
Southern	24610004	377	MU	17749	17.749	34.078	50.585	67.269
Southern	24614006	377	MU	18217	18.217	34.977	51.918	69.042
Southern	24615006	377	MU	21872	21.872	41.994	62.335	82.895
Southern	24618000	377	MU	13621	13.621	26.152	38.820	51.624
Southern	24618004	377	MU	13602	13.602	26.116	38.766	51.552
Southern	24661000	377	MU	20631	20.631	39.612	58.798	78.191
Southern	24661005	377	MU	20631	20.631	39.612	58.798	78.191
Southern	24663000	377	MU	11413	11.413	21.913	32.527	43.255
Southern	24663004	377	MU	11413	11.413	21.913	32.527	43.255
Southern	24664000	377	MU	15707	15.707	30.157	44.765	59.530
Southern	24664004	377	MU	15707	15.707	30.157	44.765	59.530
Southern	24665000	377	MU	14811	14.811	28.437	42.211	56.134
Southern	24665004	377	MU	14811	14.811	28.437	42.211	56.134
Southern	24666000	377	MU	13384	13.384	25.697	38.144	50.725
Southern	24666004	377	MU	13384	13.384	25.697	38.144	50.725
Southern	24667000	377	MU	17960	17.960	34.483	51.186	68.068
Southern	24667004	377	MU	18917	18.917	36.321	53.913	71.695
Southern	24668000	377	MU	25210	25.210	48.403	71.849	95.546
Southern	24668005	377	MU	25210	25.210	48.403	71.849	95.546
Southern	24669000	377	MU	24194	24.194	46.452	68.953	91.695
Southern	24669005	377	MU	24194	24.194	46.452	68.953	91.695
Southern	24683000	377	MU	23512	23.512	45.143	67.009	89.110
Southern	24683005	377	MU	23512	23.512	45.143	67.009	89.110
Southern	24684000	377	MU	23809	23.809	45.713	67.856	90.236
Southern	24684005	377	MU	23809	23.809	45.713	67.856	90.236
Southern	24685000	377	MU	25029	25.029	48.056	71.333	94.860
Southern	24685005	377	MU	25029	25.029	48.056	71.333	94.860
Southern	24686000	377	MU	23381	23.381	44.892	66.636	88.614
Southern	24686005	377	MU	23381	23.381	44.892	66.636	88.614
Southern	24687000	377	MU	22498	22.498	43.196	64.119	85.267
Southern	24687005	377	MU	22498	22.498	43.196	64.119	85.267
Southern	24688000	377	MU	18224	18.224	34.990	51.938	69.069

Southern	24688005	377	MU	18224	18.224	34.990	51.938	69.069
Southern	24610004	421	MU	14480	14.480	27.802	41.268	54.879
Southern	24614006	421	MU	15118	15.118	29.027	43.086	57.297
Southern	24615006	421	MU	13351	13.351	25.634	38.050	50.600
Southern	24618000	421	MU	10799	10.799	20.734	30.777	40.928
Southern	24618004	421	MU	10799	10.799	20.734	30.777	40.928
Southern	24660004	421	MU	12655	12.655	24.298	36.067	47.962
Southern	24663000	421	MU	9621	9.621	18.472	27.420	36.464
Southern	24663004	421	MU	9621	9.621	18.472	27.420	36.464
Southern	24664000	421	MU	9621	9.621	18.472	27.420	36.464
Southern	24664004	421	MU	9621	9.621	18.472	27.420	36.464
Southern	24665000	421	MU	11361	11.361	21.813	32.379	43.058
Southern	24665004	421	MU	11361	11.361	21.813	32.379	43.058
Southern	24666000	421	MU	11453	11.453	21.990	32.641	43.407
Southern	24666004	421	MU	11453	11.453	21.990	32.641	43.407
Southern	24667000	421	MU	16492	16.492	31.665	47.002	62.505
Southern	24667004	421	MU	16492	16.492	31.665	47.002	62.505
Southern	24614006	422	MU	15118	15.118	29.027	43.086	57.297
Southern	24615006	422	MU	13351	13.351	25.634	38.050	50.600
Southern	24667004	422	MU	16492	16.492	31.665	47.002	62.505
Southern	24610000	423	MU	14480	14.480	27.802	41.268	54.879
Southern	24610004	423	MU	14480	14.480	27.802	41.268	54.879
Southern	24614006	423	MU	15118	15.118	29.027	43.086	57.297
Southern	24615006	423	MU	13351	13.351	25.634	38.050	50.600
Southern	24618004	423	MU	10799	10.799	20.734	30.777	40.928
Southern	24636004	423	MU	12655	12.655	24.298	36.067	47.962
Southern	24660004	423	MU	12655	12.655	24.298	36.067	47.962
Southern	24661005	423	MU	13442	13.442	25.809	38.310	50.945
Southern	24663004	423	MU	9621	9.621	18.472	27.420	36.464
Southern	24664004	423	MU	9621	9.621	18.472	27.420	36.464
Southern	24665000	423	MU	11361	11.361	21.813	32.379	43.058
Southern	24665004	423	MU	11361	11.361	21.813	32.379	43.058
Southern	24666000	423	MU	11453	11.453	21.990	32.641	43.407
Southern	24666004	423	MU	11453	11.453	21.990	32.641	43.407
Southern	24667000	423	MU	16492	16.492	31.665	47.002	62.505
Southern	24667004	423	MU	16492	16.492	31.665	47.002	62.505
Southern	24684005	423	MU	13173	13.173	25.292	37.543	49.926
Southern	24685000	423	MU	13954	13.954	26.792	39.769	52.886
Southern	24685005	423	MU	13954	13.954	26.792	39.769	52.886
Southern	24687005	423	MU	11650	11.650	22.368	33.203	44.154
Southern	24688000	423	MU	10916	10.916	20.959	31.111	41.372
Southern	24688005	423	MU	10916	10.916	20.959	31.111	41.372
Southern	24660004	455	MU	16689	16.689	32.043	47.564	63.251
Southern	24661000	455	MU	15877	15.877	30.484	45.249	60.174
Southern	24661005	455	MU	15877	15.877	30.484	45.249	60.174
Southern	24663004	455	MU	12687	12.687	24.359	36.158	48.084
Southern	24664004	455	MU	12687	12.687	24.359	36.158	48.084
Southern	24667004	455	MU	21749	21.749	41.758	61.985	82.429
Southern	24668000	455	MU	21144	21.144	40.596	60.260	80.136
Southern	24668005	455	MU	21144	21.144	40.596	60.260	80.136
Southern	24669005	455	MU	19896	19.896	38.200	56.704	75.406
Southern	24683000	455	MU	24346	24.346	46.744	69.386	92.271
Southern	24683005	455	MU	24346	24.346	46.744	69.386	92.271
Southern	24684000	455	MU	17372	17.372	33.354	49.510	65.840
Southern	24684005	455	MU	17372	17.372	33.354	49.510	65.840
Southern	24685000	455	MU	19879	19.879	38.168	56.655	75.341
Southern	24685005	455	MU	19879	19.879	38.168	56.655	75.341
Southern	24686000	455	MU	21892	21.892	42.033	62.392	82.971
Southern	24686005	455	MU	21892	21.892	42.033	62.392	82.971
Southern	24687000	455	MU	15364	15.364	29.499	43.787	58.230
Southern	24687005	455	MU	15364	15.364	29.499	43.787	58.230
Southern	24688000	455	MU	12173	12.173	23.372	34.693	46.136
Southern	24688005	455	MU	12173	12.173	23.372	34.693	46.136
Southern	24661000	456	MU	8256	8.256	15.852	23.530	31.290
Southern	24661005	456	MU	8256	8.256	15.852	23.530	31.290
Southern	24668000	456	MU	10995	10.995	21.110	31.336	41.671
Southern	24668005	456	MU	10995	10.995	21.110	31.336	41.671
Southern	24669005	456	MU	10346	10.346	19.864	29.486	39.211
Southern	24683005	456	MU	12660	12.660	24.307	36.081	47.981
Southern	24684000	456	MU	9034	9.034	17.345	25.747	34.239
Southern	24684005	456	MU	9034	9.034	17.345	25.747	34.239
Southern	24685005	456	MU	10337	10.337	19.847	29.460	39.177
Southern	24686005	456	MU	11384	11.384	21.857	32.444	43.145
Southern	24687005	456	MU	7989	7.989	15.339	22.769	30.278
Southern	24688005	456	MU	6330	6.330	12.154	18.041	23.991
Southern	24614006	375/3	MU	13838	13.838	26.569	39.438	52.446
Southern	24615006	375/3	MU	18024	18.024	34.606	51.368	68.311
Southern	24663000	375/3	MU	9169	9.169	17.604	26.132	34.751
Southern	24663004	375/3	MU	9169	9.169	17.604	26.132	34.751
Southern	24664000	375/3	MU	11433	11.433	21.951	32.584	43.331
Southern	24664004	375/3	MU	11433	11.433	21.951	32.584	43.331
Southern	24664000	377/1	MU	13877	13.877	26.644	39.549	52.594
Southern	24664004	377/1	MU	13877	13.877	26.644	39.549	52.594
Southern	24610000	377/2	MU	18466	18.466	35.455	52.628	69.986
Southern	24610004	377/2	MU	18466	18.466	35.455	52.628	69.986
Southern	24674005	377/2	MU	14166	14.166	27.199	40.373	53.689
Southern	24614006	377/3	MU	13246	13.246	25.432	37.751	50.202
Southern	24615006	377/3	MU	15730	15.730	30.202	44.831	59.617
Southern	24663000	377/3	MU	8914	8.914	17.115	25.405	33.784
Southern	24663004	377/3	MU	8914	8.914	17.115	25.405	33.784
Southern	24664000	377/3	MU	11520	11.520	22.118	32.832	43.661
Southern	24664004	377/3	MU	11520	11.520	22.118	32.832	43.661
Southern	24614006	421/3	MU	11792	11.792	22.641	33.607	44.692
Southern	24615006	421/3	MU	10414	10.414	19.995	29.680	39.469
Southern	24618004	421/3	MU	8423	8.423	16.172	24.006	31.923

Southern	24664004	421/3	MU	7504	7.504	14.408	21.386	28.440
Southern	24665004	421/3	MU	8862	8.862	17.015	25.257	33.587
Southern	24666004	421/3	MU	8933	8.933	17.151	25.459	33.856
Southern	24667004	421/3	MU	12864	12.864	24.699	36.662	48.755
Stagecoach South Western Trains	24620204	411	MU	9627	9.627	18.484	27.437	36.486
Stagecoach South Western Trains	24621204	411	MU	7274	7.274	13.966	20.731	27.568
Stagecoach South Western Trains	24621304	411	MU	12259	12.259	23.537	34.938	46.462
Stagecoach South Western Trains	24628206	411	MU	9871	9.871	18.952	28.132	37.411
Stagecoach South Western Trains	24629104	411	MU	7045	7.045	13.526	20.078	26.701
Stagecoach South Western Trains	24629204	411	MU	9544	9.544	18.324	27.200	36.172
Stagecoach South Western Trains	24629304	411	MU	12175	12.175	23.376	34.699	46.143
Stagecoach South Western Trains	24631104	411	MU	9740	9.740	18.701	27.759	36.915
Stagecoach South Western Trains	24631204	411	MU	12489	12.489	23.979	35.594	47.333
Stagecoach South Western Trains	24671205	411	MU	9335	9.335	17.923	26.605	35.380
Stagecoach South Western Trains	24672104	411	MU	10215	10.215	19.613	29.113	38.715
Stagecoach South Western Trains	24672404	411	MU	10215	10.215	19.613	29.113	38.715
Stagecoach South Western Trains	24673605	411	MU	9044	9.044	17.364	25.775	34.277
Stagecoach South Western Trains	24620104	412	MU	12342	12.342	23.697	35.175	46.776
Stagecoach South Western Trains	24620204	412	MU	12342	12.342	23.697	35.175	46.776
Stagecoach South Western Trains	24621104	412	MU	8295	8.295	15.926	23.641	31.438
Stagecoach South Western Trains	24621204	412	MU	9326	9.326	17.906	26.579	35.346
Stagecoach South Western Trains	24628106	412	MU	12655	12.655	24.298	36.067	47.962
Stagecoach South Western Trains	24628206	412	MU	12655	12.655	24.298	36.067	47.962
Stagecoach South Western Trains	24629104	412	MU	9032	9.032	17.341	25.741	34.231
Stagecoach South Western Trains	24629204	412	MU	12236	12.236	23.493	34.873	46.374
Stagecoach South Western Trains	24629304	412	MU	15609	15.609	29.969	44.486	59.158
Stagecoach South Western Trains	24631104	412	MU	12487	12.487	23.975	35.588	47.326
Stagecoach South Western Trains	24631204	412	MU	16011	16.011	30.741	45.631	60.682
Stagecoach South Western Trains	24672104	412	MU	13096	13.096	25.144	37.324	49.634
Stagecoach South Western Trains	24676004	412	MU	12655	12.655	24.298	36.067	47.962
Stagecoach South Western Trains	24620104	421	MU	12342	12.342	23.697	35.175	46.776
Stagecoach South Western Trains	24620204	421	MU	12342	12.342	23.697	35.175	46.776
Stagecoach South Western Trains	24621104	421	MU	8295	8.295	15.926	23.641	31.438
Stagecoach South Western Trains	24621204	421	MU	9326	9.326	17.906	26.579	35.346
Stagecoach South Western Trains	24621304	421	MU	15717	15.717	30.177	44.793	59.567
Stagecoach South Western Trains	24628106	421	MU	12655	12.655	24.298	36.067	47.962
Stagecoach South Western Trains	24628206	421	MU	12655	12.655	24.298	36.067	47.962
Stagecoach South Western Trains	24629104	421	MU	9032	9.032	17.341	25.741	34.231
Stagecoach South Western Trains	24629204	421	MU	12236	12.236	23.493	34.873	46.374
Stagecoach South Western Trains	24629304	421	MU	15609	15.609	29.969	44.486	59.158
Stagecoach South Western Trains	24631104	421	MU	12487	12.487	23.975	35.588	47.326
Stagecoach South Western Trains	24631204	421	MU	16011	16.011	30.741	45.631	60.682
Stagecoach South Western Trains	24632104	421	MU	14038	14.038	26.953	40.008	53.204
Stagecoach South Western Trains	24632204	421	MU	14038	14.038	26.953	40.008	53.204
Stagecoach South Western Trains	24671205	421	MU	11968	11.968	22.979	34.109	45.359
Stagecoach South Western Trains	24671305	421	MU	11968	11.968	22.979	34.109	45.359
Stagecoach South Western Trains	24672104	421	MU	13096	13.096	25.144	37.324	49.634
Stagecoach South Western Trains	24672204	421	MU	13096	13.096	25.144	37.324	49.634
Stagecoach South Western Trains	24672404	421	MU	13096	13.096	25.144	37.324	49.634
Stagecoach South Western Trains	24673605	421	MU	11594	11.594	22.260	33.043	43.941
Stagecoach South Western Trains	24676004	421	MU	12655	12.655	24.298	36.067	47.962
Stagecoach South Western Trains	24620204	422	MU	12342	12.342	23.697	35.175	46.776
Stagecoach South Western Trains	24621204	422	MU	9326	9.326	17.906	26.579	35.346
Stagecoach South Western Trains	24628206	422	MU	12655	12.655	24.298	36.067	47.962
Stagecoach South Western Trains	24629104	422	MU	9032	9.032	17.341	25.741	34.231
Stagecoach South Western Trains	24629204	422	MU	12236	12.236	23.493	34.873	46.374
Stagecoach South Western Trains	24629304	422	MU	15609	15.609	29.969	44.486	59.158
Stagecoach South Western Trains	24631104	422	MU	12487	12.487	23.975	35.588	47.326
Stagecoach South Western Trains	24631204	422	MU	16011	16.011	30.741	45.631	60.682
Stagecoach South Western Trains	24620104	423	MU	12342	12.342	23.697	35.175	46.776
Stagecoach South Western Trains	24620204	423	MU	12342	12.342	23.697	35.175	46.776
Stagecoach South Western Trains	24621104	423	MU	8295	8.295	15.926	23.641	31.438
Stagecoach South Western Trains	24621204	423	MU	9326	9.326	17.906	26.579	35.346
Stagecoach South Western Trains	24621304	423	MU	15717	15.717	30.177	44.793	59.567
Stagecoach South Western Trains	24628206	423	MU	12655	12.655	24.298	36.067	47.962
Stagecoach South Western Trains	24629104	423	MU	9032	9.032	17.341	25.741	34.231
Stagecoach South Western Trains	24629204	423	MU	12236	12.236	23.493	34.873	46.374
Stagecoach South Western Trains	24629304	423	MU	15609	15.609	29.969	44.486	59.158
Stagecoach South Western Trains	24631104	423	MU	12487	12.487	23.975	35.588	47.326
Stagecoach South Western Trains	24631204	423	MU	16011	16.011	30.741	45.631	60.682
Stagecoach South Western Trains	24632104	423	MU	14038	14.038	26.953	40.008	53.204
Stagecoach South Western Trains	24632204	423	MU	14038	14.038	26.953	40.008	53.204
Stagecoach South Western Trains	24671205	423	MU	11968	11.968	22.979	34.109	45.359
Stagecoach South Western Trains	24671305	423	MU	11968	11.968	22.979	34.109	45.359
Stagecoach South Western Trains	24672104	423	MU	13096	13.096	25.144	37.324	49.634
Stagecoach South Western Trains	24672204	423	MU	13096	13.096	25.144	37.324	49.634
Stagecoach South Western Trains	24672404	423	MU	13096	13.096	25.144	37.324	49.634
Stagecoach South Western Trains	24673605	423	MU	11594	11.594	22.260	33.043	43.941
Stagecoach South Western Trains	24620104	442	MU	14529	14.529	27.896	41.408	55.065
Stagecoach South Western Trains	24620204	442	MU	14529	14.529	27.896	41.408	55.065
Stagecoach South Western Trains	24621104	442	MU	12958	12.958	24.879	36.930	49.111
Stagecoach South Western Trains	24621204	442	MU	14136	14.136	27.141	40.288	53.575
Stagecoach South Western Trains	24621304	442	MU	17965	17.965	34.493	51.200	68.087
Stagecoach South Western Trains	24629104	442	MU	10632	10.632	20.413	30.301	40.295
Stagecoach South Western Trains	24676004	442	MU	14897	14.897	28.602	42.456	56.460
Stagecoach South Western Trains	24671105	455	MU	15783	15.783	30.303	44.982	59.818
Stagecoach South Western Trains	24671205	455	MU	15783	15.783	30.303	44.982	59.818
Stagecoach South Western Trains	24671305	455	MU	15783	15.783	30.303	44.982	59.818
Stagecoach South Western Trains	24671405	455	MU	15783	15.783	30.303	44.982	59.818
Stagecoach South Western Trains	24671505	455	MU	15783	15.783	30.303	44.982	59.818
Stagecoach South Western Trains	24671605	455	MU	15783	15.783	30.303	44.982	59.818
Stagecoach South Western Trains	24672104	455	MU	11878	11.878	22.806	33.852	45.018
Stagecoach South Western Trains	24673105	455	MU	15290	15.290	29.357	43.577	57.949
Stagecoach South Western Trains	24673205	455	MU	15290	15.290	29.357	43.577	57.949
Stagecoach South Western Trains	24673305	455	MU	15290	15.290	29.357	43.577	57.949

Stagecoach South Western Trains	24673405	455	MU	15290	15.290	29.357	43.577	57.949
Stagecoach South Western Trains	24673505	455	MU	15290	15.290	29.357	43.577	57.949
Stagecoach South Western Trains	24673605	455	MU	15290	15.290	29.357	43.577	57.949
Stagecoach South Western Trains	24673705	455	MU	15290	15.290	29.357	43.577	57.949
Stagecoach South Western Trains	24673905	455	MU	12173	12.173	23.372	34.693	46.136
Stagecoach South Western Trains	24676004	455	MU	16689	16.689	32.043	47.564	63.251
Stagecoach South Western Trains	24629204	458	MU	13115	13.115	25.181	37.378	49.706
Stagecoach South Western Trains	24632204	458	MU	12860	12.860	24.691	36.651	48.739
Stagecoach South Western Trains	24672004	458	MU	14254	14.254	27.368	40.624	54.023
Stagecoach South Western Trains	24673605	458	MU	12428	12.428	23.862	35.420	47.102
Stagecoach South Western Trains	24676004	458	MU	13565	13.565	26.045	38.660	51.411
Stagecoach South Western Trains	24620104	411/5	MU	12342	12.342	23.697	35.175	46.776
Stagecoach South Western Trains	24620204	411/5	MU	12342	12.342	23.697	35.175	46.776
Stagecoach South Western Trains	24621104	411/5	MU	8295	8.295	15.926	23.641	31.438
Stagecoach South Western Trains	24621204	411/5	MU	9326	9.326	17.906	26.579	35.346
Stagecoach South Western Trains	24621304	411/5	MU	15717	15.717	30.177	44.793	59.567
Stagecoach South Western Trains	24628106	411/5	MU	12655	12.655	24.298	36.067	47.962
Stagecoach South Western Trains	24628206	411/5	MU	12655	12.655	24.298	36.067	47.962
Stagecoach South Western Trains	24629104	411/5	MU	9032	9.032	17.341	25.741	34.231
Stagecoach South Western Trains	24629204	411/5	MU	12236	12.236	23.493	34.873	46.374
Stagecoach South Western Trains	24629304	411/5	MU	15609	15.609	29.969	44.486	59.158
Stagecoach South Western Trains	24631104	411/5	MU	12487	12.487	23.975	35.588	47.326
Stagecoach South Western Trains	24631204	411/5	MU	16011	16.011	30.741	45.631	60.682
Stagecoach South Western Trains	24632104	411/5	MU	14038	14.038	26.953	40.008	53.204
Stagecoach South Western Trains	24632204	411/5	MU	14038	14.038	26.953	40.008	53.204
Stagecoach South Western Trains	24671205	411/5	MU	11968	11.968	22.979	34.109	45.359
Stagecoach South Western Trains	24671305	411/5	MU	11968	11.968	22.979	34.109	45.359
Stagecoach South Western Trains	24672104	411/5	MU	13096	13.096	25.144	37.324	49.634
Stagecoach South Western Trains	24672204	411/5	MU	13096	13.096	25.144	37.324	49.634
Stagecoach South Western Trains	24672404	411/5	MU	13096	13.096	25.144	37.324	49.634
Stagecoach South Western Trains	24673605	411/5	MU	11594	11.594	22.260	33.043	43.941
Stagecoach South Western Trains	24676004	411/5	MU	12655	12.655	24.298	36.067	47.962
Stagecoach South Western Trains	24620104	444/0	MU	16915	16.915	32.477	48.208	64.108
Stagecoach South Western Trains	24620204	444/0	MU	17576	17.576	33.746	50.092	66.613
Stagecoach South Western Trains	24621104	444/0	MU	16551	16.551	31.778	47.170	62.728
Stagecoach South Western Trains	24621204	444/0	MU	19467	19.467	37.377	55.481	73.780
Stagecoach South Western Trains	24629204	444/0	MU	16895	16.895	32.438	48.151	64.032
Stagecoach South Western Trains	24620104	450/0	MU	12438	12.438	23.881	35.448	47.140
Stagecoach South Western Trains	24620204	450/0	MU	13675	13.675	26.256	38.974	51.828
Stagecoach South Western Trains	24621104	450/0	MU	12203	12.203	23.430	34.779	46.249
Stagecoach South Western Trains	24621204	450/0	MU	14068	14.068	27.011	40.094	53.318
Stagecoach South Western Trains	24621304	450/0	MU	16286	16.286	31.269	46.415	61.724
Stagecoach South Western Trains	24628206	450/0	MU	12684	12.684	24.353	36.149	48.072
Stagecoach South Western Trains	24629104	450/0	MU	14392	14.392	27.633	41.017	54.546
Stagecoach South Western Trains	24629204	450/0	MU	14244	14.244	27.348	40.595	53.985
Stagecoach South Western Trains	24629304	450/0	MU	19398	19.398	37.244	55.284	73.518
Stagecoach South Western Trains	24631104	450/0	MU	19320	19.320	37.094	55.062	73.223
Stagecoach South Western Trains	24631204	450/0	MU	14588	14.588	28.009	41.576	55.289
Stagecoach South Western Trains	24632104	450/0	MU	13351	13.351	25.634	38.050	50.600
Stagecoach South Western Trains	24632204	450/0	MU	13999	13.999	26.878	39.897	53.056
Stagecoach South Western Trains	24671105	450/0	MU	17828	17.828	34.230	50.810	67.568
Stagecoach South Western Trains	24671205	450/0	MU	19879	19.879	38.168	56.655	75.341
Stagecoach South Western Trains	24671305	450/0	MU	20655	20.655	39.658	58.867	78.282
Stagecoach South Western Trains	24671405	450/0	MU	20724	20.724	39.790	59.063	78.544
Stagecoach South Western Trains	24671505	450/0	MU	20724	20.724	39.790	59.063	78.544
Stagecoach South Western Trains	24671605	450/0	MU	21872	21.872	41.994	62.335	82.895
Stagecoach South Western Trains	24672104	450/0	MU	16571	16.571	31.816	47.227	62.804
Stagecoach South Western Trains	24672204	450/0	MU	16689	16.689	32.043	47.564	63.251
Stagecoach South Western Trains	24672404	450/0	MU	18073	18.073	34.700	51.508	68.497
Stagecoach South Western Trains	24673105	450/0	MU	20086	20.086	38.565	57.245	76.126
Stagecoach South Western Trains	24673205	450/0	MU	20027	20.027	38.452	57.077	75.902
Stagecoach South Western Trains	24673305	450/0	MU	17160	17.160	32.947	48.906	65.036
Stagecoach South Western Trains	24673405	450/0	MU	20714	20.714	39.771	59.035	78.506
Stagecoach South Western Trains	24673505	450/0	MU	18112	18.112	34.775	51.619	68.644
Stagecoach South Western Trains	24673605	450/0	MU	17268	17.268	33.155	49.214	65.446
Stagecoach South Western Trains	24673705	450/0	MU	18672	18.672	35.850	53.215	70.767
Stagecoach South Western Trains	24673905	450/0	MU	18299	18.299	35.134	52.152	69.353

Generic Defaults (applies when a train Service Code does not have a modelled consumption rate)

Service Group	Vehicle type	Loco / MU	Consumption Rate (for loco: kwhr/kgtm) (for MU: kwhr/train mile)	1 Unit	2 x Unit	3 x Unit	4 x Unit
Default	303	MU	13876	13.876	26.642	39.547	52.590
Default	305	MU	12422	12.422	23.850	35.403	47.079
Default	308	MU	12173	12.173	23.372	34.693	46.136
Default	309	MU	14617	14.617	28.065	41.658	55.398
Default	310	MU	14617	14.617	28.065	41.658	55.398
Default	312	MU	12664	12.664	24.315	36.092	47.997
Default	313	MU	14185	14.185	27.235	40.427	53.761
Default	314	MU	9927	9.927	19.060	28.292	37.623
Default	315	MU	14701	14.701	28.226	41.898	55.717
Default	317	MU	12737	12.737	24.455	36.300	48.273
Default	318	MU	13754	13.754	26.408	39.199	52.128
Default	319	MU	16068	16.068	30.851	45.794	60.898
Default	320	MU	10627	10.627	20.404	30.287	40.276
Default	321	MU	12462	12.462	23.927	35.517	47.231
Default	322	MU	12462	12.462	23.927	35.517	47.231
Default	323	MU	15220	15.220	29.222	43.377	57.684
Default	334	MU	15300	15.300	29.376	43.605	57.987
Default	350	MU	19218	19.218	36.899	54.771	72.836
Default	357	MU	15949	15.949	30.622	45.455	60.447
Default	375	MU	15788	15.788	30.313	44.996	59.837
Default	377	MU	19187	19.187	36.839	54.683	72.719
Default	395	MU	21586	21.586	41.445	61.520	81.811
Default	411	MU	9871	9.871	18.952	28.132	37.411
Default	412	MU	12655	12.655	24.298	36.067	47.962
Default	421	MU	12655	12.655	24.298	36.067	47.962
Default	422	MU	12655	12.655	24.298	36.067	47.962
Default	423	MU	12655	12.655	24.298	36.067	47.962
Default	442	MU	14897	14.897	28.602	42.456	56.460
Default	455	MU	16689	16.689	32.043	47.584	63.251
Default	456	MU	8678	8.678	16.662	24.732	32.890
Default	458	MU	13565	13.565	26.045	38.660	51.411
Default	460	MU	25779	25.779	49.496	73.470	97.702
Default	465	MU	17042	17.042	32.721	48.570	64.589
Default	466	MU	8862	8.862	17.015	25.257	33.587
Default	507	MU	11868	11.868	22.787	33.824	44.980
Default	508	MU	11868	11.868	22.787	33.824	44.980
Default	073/0	Loco	45649	45.649	n/a	n/a	n/a
Default	086/1	Loco	52731	52.731	n/a	n/a	n/a
Default	086/2	Loco	52731	52.731	n/a	n/a	n/a
Default	086/4	Loco	52731	52.731	n/a	n/a	n/a
Default	087/0	Loco	52848	52.848	n/a	n/a	n/a
Default	089/0	Loco	53412	53.412	n/a	n/a	n/a
Default	090/0	Loco	52848	52.848	n/a	n/a	n/a
Default	090/2	Loco	52848	52.848	n/a	n/a	n/a
Default	091/0	Loco	53412	53.412	n/a	n/a	n/a
Default	091/1	Loco	53412	53.412	n/a	n/a	n/a
Default	333/0	MU	22914	22.914	43.995	65.305	86.844
Default	333/1	MU	23650	23.650	45.408	67.403	89.634
Default	360/0	MU	15491	15.491	29.743	44.149	58.711
Default	365/5	MU	12247	12.247	23.514	34.904	46.416
Default	373/0	Loco	52894	52.894	n/a	n/a	n/a
Default	373/2	Loco	52894	52.894	n/a	n/a	n/a
Default	375/3	MU	11601	11.601	22.274	33.063	43.968
Default	375/6	MU	16306	16.306	31.308	46.472	61.800
Default	375/7	MU	12247	12.247	23.514	34.904	46.416
Default	375/8	MU	12247	12.247	23.514	34.904	46.416
Default	375/9	MU	12247	12.247	23.514	34.904	46.416
Default	376/0	MU	23806	23.806	45.708	67.847	90.225
Default	377/1	MU	13877	13.877	26.644	39.549	52.594
Default	377/2	MU	16316	16.316	31.327	46.501	61.838
Default	377/3	MU	12353	12.353	23.718	35.206	46.818
Default	377/4	MU	13877	13.877	26.644	39.549	52.594
Default	390/0	MU	29167	29.167	56.001	83.126	110.543
Default	411/5	MU	12655	12.655	24.298	36.067	47.962
Default	421/3	MU	9871	9.871	18.952	28.132	37.411
Default	444/0	MU	17481	17.481	33.564	49.821	66.253
Default	450/0	MU	17133	17.133	32.895	48.829	64.934

Freight Traction Electricity Consumption Rates
kwhr/kgtm

Service Group / Default Group	kwhr/kgtm
1213	25.51
2323	25.53
3002	25.51
4050	25.03
4068	24.95
4075	38.76
4273	38.82
4600	36.24
4603	36.24
5101	38.26
5102	36.89
5202	38.36
5212	25.54
6050	24.92
6060	36.99
6090	38.21
6101	38.82
6102	38.81
6103	38.82
6104	38.82
7162	25.15
<i>Generic default: heavy haul</i>	<i>25.27</i>
<i>Generic default: inter-modal</i>	<i>38.00</i>
<i>Generic default (Multiple Units): parcels / mail</i>	<i>46.38</i>
<i>Generic default (Locomotive & coaches): parcels / mail</i>	<i>53.61</i>

Note: Generic Defaults would apply if a new electric Service Group is introduced