

Appendix G.
Detailed Simulation Results from Evaluation of
Base Enforcement Algorithm

Train Type	Train Load	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P < x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (> 500 ft if v < 30mph, > 1200 ft if v > 30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Aluminum Hopper	Empty	100	Distributed (Head and Rear)	10	0.0%	Flat	<0.1%	0	0	< 0.1%	0%	584	595
Unit Aluminum Hopper	Empty	100	Distributed (Head and Rear)	30	0.0%	Flat	<0.1%	0	0	> 50%	0%	2561	2655
Unit Aluminum Hopper	Empty	100	Distributed (Head and Rear)	60	0.0%	Flat	<0.1%	0	0	> 50%	0%	7065	7102
Unit Aluminum Hopper	Empty	100	Distributed (Head and Rear)	10	0.5%	Decline	<0.1%	0	0	> 10%, < 25%	0%	749	786
Unit Aluminum Hopper	Empty	100	Distributed (Head and Rear)	30	0.5%	Decline	<0.1%	0	0	> 50%	0%	2931	2973
Unit Aluminum Hopper	Empty	100	Distributed (Head and Rear)	60	0.5%	Decline	<0.1%	0	0	> 50%	0%	7753	7877
Unit Aluminum Hopper	Empty	100	Distributed (Head and Rear)	10	0.5%	Incline	<0.1%	0	0	< 0.1%	0%	485	496
Unit Aluminum Hopper	Empty	100	Distributed (Head and Rear)	30	0.5%	Incline	<0.1%	0	0	> 10%, < 25%	0%	2242	2275
Unit Aluminum Hopper	Empty	100	Distributed (Head and Rear)	60	0.5%	Incline	<0.1%	0	0	> 50%	0%	5711	5723
Unit Aluminum Hopper	Empty	100	Distributed (Head and Rear)	52	1.0%	Crest	<0.1%	0	0	> 50%	0%	4627	4662
Unit Aluminum Hopper	Empty	100	Distributed (Head and Rear)	55	1.0%	Trough	<0.1%	0	0	> 50%	0%	7536	7651
Unit Aluminum Hopper	Empty	100	Distributed	10	1.1%	Decline	<0.1%	0	0	> 50%	0%	1006	1058

Train Type	Train Load	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P < x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (> 500 ft if v < 30mph, > 1200 ft if v > 30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Aluminum Hopper Unit	Empty	100	(Head and Rear) Distributed	30	1.1%	Decline	<0.1%	0	0	> 50%	0%	3467	3532
Aluminum Hopper Unit	Empty	100	(Head and Rear) Distributed	55	1.1%	Decline	<0.1%	0	0	> 50%	0%	7725	7837
Aluminum Hopper Unit	Empty	100	(Head and Rear) Distributed	25	1.5%	Incline	<0.1%	0	0	> 50%	0%	1295	1317
Aluminum Hopper Unit	Empty	100	(Head and Rear) Distributed	25	1.7%	Decline	<0.1%	0	0	> 50%	0%	3421	3579
Aluminum Hopper Unit	Empty	100	(Head and Rear) Distributed	20	2.2%	Decline	<0.1%	0	0	> 50%	0%	3313	3387
Aluminum Hopper Unit	Empty	100	Head end only	10	0.0%	Flat	<0.1%	0	0	< 0.1%	0%	584	594
Aluminum Hopper Unit	Empty	100	Head end only	30	0.0%	Flat	<0.1%	0	0	< 0.1%	0%	2552	2623
Aluminum Hopper Unit	Empty	100	Head end only	60	0.0%	Flat	<0.1%	0	0	> 50%	0%	7064	7173
Aluminum Hopper Unit	Empty	100	Head end only	10	0.5%	Decline	<0.1%	0	0	< 0.1%	0%	749	788
Aluminum Hopper Unit	Empty	100	Head end only	30	0.5%	Decline	<0.1%	0	0	> 50%	0%	2899	2959
Aluminum Hopper Unit	Empty	100	Head end only	60	0.5%	Decline	<0.1%	0	0	> 50%	0%	7757	7869

Train Type	Train Load	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P < x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (> 500 ft if v < 30mph, > 1200 ft if v > 30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Hopper Unit Aluminum	Empty	100	Head end only	10	0.5%	Incline	<0.1%	0	0	< 0.1%	0%	485	493
Hopper Unit Aluminum	Empty	100	Head end only	30	0.5%	Incline	<0.1%	0	0	< 0.1%	0%	2240	2275
Hopper Unit Aluminum	Empty	100	Head end only	60	0.5%	Incline	<0.1%	0	0	> 50%	0%	5712	5723
Hopper Unit Aluminum	Empty	100	Head end only	52	1.0%	Crest	<0.1%	0	0	> 50%	0%	4637	4727
Hopper Unit Aluminum	Empty	100	Head end only	55	1.0%	Trough	<0.1%	0	0	> 50%	0%	7535	7658
Hopper Unit Aluminum	Empty	100	Head end only	10	1.1%	Decline	<0.1%	0	0	> 50%	0%	1008	1070
Hopper Unit Aluminum	Empty	100	Head end only	30	1.1%	Decline	<0.1%	0	0	> 50%	0%	3471	3592
Hopper Unit Aluminum	Empty	100	Head end only	55	1.1%	Decline	<0.1%	0	0	> 50%	0%	7732	7849
Hopper Unit Aluminum	Empty	100	Head end only	25	1.5%	Incline	<0.1%	0	0	> 50%	0%	1298	1317
Hopper Unit Aluminum	Empty	100	Head end only	25	1.7%	Decline	<0.1%	0	0	> 50%	0%	3410	3511
Hopper Unit Aluminum	Empty	100	Head end only	20	2.2%	Decline	<0.1%	0	0	> 50%	0%	3299	3386

Train Type	Train Load	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P < x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (> 500 ft if v < 30mph, > 1200 ft if v > 30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Aluminum Hopper	Loaded	100	Distributed (Head and Rear)	10	0.0%	Flat	<0.1%	0	0	> 10%, < 25%	0%	855	885
Unit Aluminum Hopper	Loaded	100	Distributed (Head and Rear)	30	0.0%	Flat	<0.1%	0	0	> 50%	0%	3830	3959
Unit Aluminum Hopper	Loaded	100	Distributed (Head and Rear)	50	0.0%	Flat	<0.1%	0	0	> 50%	0%	8543	8713
Unit Aluminum Hopper	Loaded	100	Distributed (Head and Rear)	10	0.5%	Decline	<0.1%	0	0	> 50%	0%	1278	1335
Unit Aluminum Hopper	Loaded	100	Distributed (Head and Rear)	30	0.5%	Decline	<0.1%	0	0	> 50%	0%	5083	5165
Unit Aluminum Hopper	Loaded	100	Distributed (Head and Rear)	50	0.5%	Decline	<0.1%	0	0	> 50%	0%	11016	11246
Unit Aluminum Hopper	Loaded	100	Distributed (Head and Rear)	10	0.5%	Incline	<0.1%	0	0	< 0.1%	0%	578	615
Unit Aluminum Hopper	Loaded	100	Distributed (Head and Rear)	26	0.5%	Incline	<0.1%	0	0	> 50%	0%	2425	2496
Unit Aluminum Hopper	Loaded	100	Distributed (Head and Rear)	14	1.0%	Crest	<0.1%	0	0	> 50%	0%	1086	1153
Unit Aluminum Hopper	Loaded	100	Distributed (Head and Rear)	23	1.0%	Trough	<0.1%	0	0	> 50%	0%	4362	4484
Unit Aluminum Hopper	Loaded	100	Distributed (Head and Rear)	10	1.1%	Decline	<0.1%	0	0	> 50%	0%	2359	2388
Unit Aluminum Hopper	Loaded	100	Distributed	30	1.1%	Decline	<0.1%	0	0	> 50%	0%	4281	4511

Train Type	Train Load	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P < x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (> 500 ft if v < 30mph, > 1200 ft if v > 30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Aluminum Hopper Unit	Loaded	100	(Head and Rear) Distributed	45	1.1%	Decline	<0.1%	0	0	> 50%	0%	9252	9790
Aluminum Hopper Unit	Loaded	100	(Head and Rear) Distributed	10	1.5%	Incline	<0.1%	0	0	< 0.1%	0%	397	414
Aluminum Hopper Unit	Loaded	100	(Head and Rear) Distributed	15	1.7%	Decline	<0.1%	0	0	> 50%	0%	2326	2643
Aluminum Hopper Unit	Loaded	100	(Head and Rear) Distributed	15	2.2%	Decline	<0.1%	0	0	> 50%	0%	4278	5801
Aluminum Hopper Unit	Loaded	100	Head end only	10	0.0%	Flat	<0.1%	0	0	< 0.1%	0%	855	886
Aluminum Hopper Unit	Loaded	100	Head end only	30	0.0%	Flat	<0.1%	0	0	> 50%	0%	3820	3894
Aluminum Hopper Unit	Loaded	100	Head end only	50	0.0%	Flat	<0.1%	0	0	> 50%	0%	8555	8710
Aluminum Hopper Unit	Loaded	100	Head end only	10	0.5%	Decline	<0.1%	0	0	> 50%	0%	1272	1322
Aluminum Hopper Unit	Loaded	100	Head end only	30	0.5%	Decline	<0.1%	0	0	> 50%	0%	5100	5182
Aluminum Hopper Unit	Loaded	100	Head end only	50	0.5%	Decline	<0.1%	0	0	> 50%	0%	11015	11280
Aluminum Hopper Unit	Loaded	100	Head end only	10	0.5%	Incline	<0.1%	0	0	< 0.1%	0%	594	633

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Hopper Unit Aluminum	Loaded	100	Head end only	26	0.5%	Incline	<0.1%	0	0	> 50%	0%	2415	2468
Hopper Unit Aluminum	Loaded	100	Head end only	14	1.0%	Crest	<0.1%	0	0	> 10%, < 25%	0%	1120	1186
Hopper Unit Aluminum	Loaded	100	Head end only	23	1.0%	Trough	<0.1%	0	0	> 50%	0%	4373	4490
Hopper Unit Aluminum	Loaded	100	Head end only	10	1.1%	Decline	<0.1%	0	0	> 50%	0%	2364	2392
Hopper Unit Aluminum	Loaded	100	Head end only	30	1.1%	Decline	<0.1%	0	0	> 50%	0%	4288	4535
Hopper Unit Aluminum	Loaded	100	Head end only	45	1.1%	Decline	<0.1%	0	0	> 50%	0%	9343	9899
Hopper Unit Aluminum	Loaded	100	Head end only	10	1.5%	Incline	<0.1%	0	0	< 0.1%	0%	394	411
Hopper Unit Aluminum	Loaded	100	Head end only	15	1.7%	Decline	<0.1%	0	0	> 50%	0%	2338	2619
Hopper Unit Aluminum	Loaded	100	Head end only	15	2.2%	Decline	<0.1%	0	0	> 50%	0%	4432	6304
Hopper Unit Aluminum	Empty	135	Distributed (Head and Rear)	10	0.0%	Flat	<0.1%	0	0	< 0.1%	0%	632	663
Hopper Unit Aluminum	Empty	135	Distributed (Head and Rear)	30	0.0%	Flat	<0.1%	0	0	> 50%	0%	2814	2928

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Unit Aluminum Hopper	Empty	135	Distributed (Head and Rear)	60	0.0%	Flat	<0.1%	0	0	> 50%	0%	7758	7929
Unit Aluminum Hopper	Empty	135	Distributed (Head and Rear)	10	0.5%	Decline	<0.1%	0	0	> 50%	0%	835	882
Unit Aluminum Hopper	Empty	135	Distributed (Head and Rear)	30	0.5%	Decline	<0.1%	0	0	> 50%	0%	3280	3350
Unit Aluminum Hopper	Empty	135	Distributed (Head and Rear)	60	0.5%	Decline	<0.1%	0	0	> 50%	0%	8646	8759
Unit Aluminum Hopper	Empty	135	Distributed (Head and Rear)	10	0.5%	Incline	<0.1%	0	0	< 0.1%	0%	505	595
Unit Aluminum Hopper	Empty	135	Distributed (Head and Rear)	30	0.5%	Incline	<0.1%	0	0	> 50%	0%	2422	2548
Unit Aluminum Hopper	Empty	135	Distributed (Head and Rear)	60	0.5%	Incline	<0.1%	0	0	> 50%	0%	6922	7202
Unit Aluminum Hopper	Empty	135	Distributed (Head and Rear)	55	1.0%	Crest	<0.1%	0	0	> 50%	0%	7934	8124
Unit Aluminum Hopper	Empty	135	Distributed (Head and Rear)	55	1.0%	Trough	<0.1%	0	0	> 50%	0%	5650	5798
Unit Aluminum Hopper	Empty	135	Distributed (Head and Rear)	10	1.1%	Decline	<0.1%	0	0	> 50%	0%	1214	1281
Unit Aluminum Hopper	Empty	135	Distributed (Head and Rear)	30	1.1%	Decline	<0.1%	0	0	> 50%	0%	4039	4151
Unit Aluminum Hopper	Empty	135	Distributed	55	1.1%	Decline	<0.1%	0	0	> 50%	0%	8771	8881

Train Type	Train Load	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P < x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (> 500 ft if v < 30mph, > 1200 ft if v > 30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Aluminum Hopper Unit	Empty	135	(Head and Rear) Distributed	25	1.5%	Incline	<0.1%	0	0	> 50%	0%	1395	1515
Aluminum Hopper Unit	Empty	135	(Head and Rear) Distributed	25	1.7%	Decline	<0.1%	0	0	> 50%	0%	4137	4226
Aluminum Hopper Unit	Empty	135	(Head and Rear) Distributed	20	2.2%	Decline	<0.1%	0	0	> 50%	0%	4177	4326
Aluminum Hopper Unit	Empty	135	(Head, Mid, Rear) Distributed	10	0.0%	Flat	<0.1%	0	0	< 0.1%	0%	637	690
Aluminum Hopper Unit	Empty	135	(Head, Mid, Rear) Distributed	30	0.0%	Flat	<0.1%	0	0	> 50%	0%	2799	2905
Aluminum Hopper Unit	Empty	135	(Head, Mid, Rear) Distributed	60	0.0%	Flat	<0.1%	0	0	> 50%	0%	7735	7908
Aluminum Hopper Unit	Empty	135	(Head, Mid, Rear) Distributed	10	0.5%	Decline	<0.1%	0	0	> 50%	0%	835	873
Aluminum Hopper Unit	Empty	135	(Head, Mid, Rear) Distributed	30	0.5%	Decline	<0.1%	0	0	> 50%	0%	3284	3356
Aluminum Hopper Unit	Empty	135	(Head, Mid, Rear) Distributed	60	0.5%	Decline	<0.1%	0	0	> 50%	0%	8649	8760
Aluminum Hopper Unit	Empty	135	(Head, Mid, Rear) Distributed	10	0.5%	Incline	<0.1%	0	0	< 0.1%	0%	503	572
Aluminum Hopper Unit	Empty	135	(Head, Mid, Rear) Distributed	30	0.5%	Incline	<0.1%	0	0	> 50%	0%	2424	2581

Train Type	Train Load	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P < x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (> 500 ft if v < 30mph, > 1200 ft if v > 30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Hopper Unit	Empty	135	Rear) Distributed (Head, Mid, Rear)	60	0.5%	Incline	<0.1%	0	0	> 50%	0%	6926	7161
Aluminum Hopper Unit	Empty	135	Distributed (Head, Mid, Rear)	55	1.0%	Crest	<0.1%	0	0	> 50%	0%	8021	8115
Aluminum Hopper Unit	Empty	135	Distributed (Head, Mid, Rear)	55	1.0%	Trough	<0.1%	0	0	> 50%	0%	5686	5825
Aluminum Hopper Unit	Empty	135	Distributed (Head, Mid, Rear)	10	1.1%	Decline	<0.1%	0	0	> 50%	0%	1203	1274
Aluminum Hopper Unit	Empty	135	Distributed (Head, Mid, Rear)	30	1.1%	Decline	<0.1%	0	0	> 50%	0%	4031	4131
Aluminum Hopper Unit	Empty	135	Distributed (Head, Mid, Rear)	55	1.1%	Decline	<0.1%	0	0	> 50%	0%	8754	8868
Aluminum Hopper Unit	Empty	135	Distributed (Head, Mid, Rear)	25	1.5%	Incline	<0.1%	0	0	> 50%	0%	1402	1526
Aluminum Hopper Unit	Empty	135	Distributed (Head, Mid, Rear)	25	1.7%	Decline	<0.1%	0	0	> 50%	0%	4130	4278
Aluminum Hopper Unit	Empty	135	Distributed (Head, Mid, Rear)	20	2.2%	Decline	<0.1%	0	0	> 50%	0%	4171	4304
Aluminum Hopper Unit	Loaded	135	Distributed (Head and Rear)	10	0.0%	Flat	<0.1%	0	0	> 50%	0%	917	975
Aluminum Hopper Unit	Loaded	135	Distributed (Head and Rear)	30	0.0%	Flat	<0.1%	0	0	> 50%	0%	4240	4333

Train Type	Train Load	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P < x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (> 500 ft if v < 30mph, > 1200 ft if v > 30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Aluminum Hopper	Loaded	135	Distributed (Head and Rear)	50	0.0%	Flat	<0.1%	0	0	> 50%	0%	9262	9395
Unit Aluminum Hopper	Loaded	135	Distributed (Head and Rear)	10	0.5%	Decline	<0.1%	0	0	> 50%	0%	1510	1567
Unit Aluminum Hopper	Loaded	135	Distributed (Head and Rear)	30	0.5%	Decline	<0.1%	0	0	> 50%	0%	5763	5892
Unit Aluminum Hopper	Loaded	135	Distributed (Head and Rear)	50	0.5%	Decline	<0.1%	0	0	> 50%	0%	12176	12438
Unit Aluminum Hopper	Loaded	135	Distributed (Head and Rear)	10	0.5%	Incline	<0.1%	0	0	< 0.1%	0%	639	706
Unit Aluminum Hopper	Loaded	135	Distributed (Head and Rear)	30	0.5%	Incline	<0.1%	0	0	> 50%	0%	3261	3339
Unit Aluminum Hopper	Loaded	135	Distributed (Head and Rear)	15	1.0%	Crest	<0.1%	0	0	> 50%	0%	1320	1442
Unit Aluminum Hopper	Loaded	135	Distributed (Head and Rear)	27	1.0%	Trough	<0.1%	0	0	> 50%	0%	6410	6625
Unit Aluminum Hopper	Loaded	135	Distributed (Head and Rear)	10	1.1%	Decline	<0.1%	0	0	> 50%	0%	2978	3110
Unit Aluminum Hopper	Loaded	135	Distributed (Head and Rear)	30	1.1%	Decline	<0.1%	0	0	> 50%	0%	4631	4870
Unit Aluminum Hopper	Loaded	135	Distributed (Head and Rear)	45	1.1%	Decline	<0.1%	0	0	> 50%	0%	9899	12776
Unit Aluminum Hopper	Loaded	135	Distributed	11	1.5%	Incline	<0.1%	0	0	< 0.1%	0%	430	469

Train Type	Train Load	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P < x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (> 500 ft if v < 30mph, > 1200 ft if v > 30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Aluminum Hopper Unit	Loaded	135	(Head and Rear) Distributed	25	1.7%	Decline	<0.1%	0	0	> 50%	0%	6601	7327
Aluminum Hopper Unit	Loaded	135	(Head and Rear) Distributed	15	2.2%	Decline	<0.1%	0	0	> 50%	0%	5268	6629
Aluminum Hopper Unit	Loaded	135	(Head and Rear) Distributed	10	0.0%	Flat	<0.1%	0	0	> 50%	0%	919	962
Aluminum Hopper Unit	Loaded	135	(Head, Mid, Rear) Distributed	30	0.0%	Flat	<0.1%	0	0	> 50%	0%	4240	4325
Aluminum Hopper Unit	Loaded	135	(Head, Mid, Rear) Distributed	50	0.0%	Flat	<0.1%	0	0	> 50%	0%	9246	9429
Aluminum Hopper Unit	Loaded	135	(Head, Mid, Rear) Distributed	10	0.5%	Decline	<0.1%	0	0	> 50%	0%	1503	1566
Aluminum Hopper Unit	Loaded	135	(Head, Mid, Rear) Distributed	30	0.5%	Decline	<0.1%	0	0	> 50%	0%	5772	5877
Aluminum Hopper Unit	Loaded	135	(Head, Mid, Rear) Distributed	50	0.5%	Decline	<0.1%	0	0	> 50%	0%	12186	12387
Aluminum Hopper Unit	Loaded	135	(Head, Mid, Rear) Distributed	10	0.5%	Incline	<0.1%	0	0	< 0.1%	0%	635	713
Aluminum Hopper Unit	Loaded	135	(Head, Mid, Rear) Distributed	30	0.5%	Incline	<0.1%	0	0	> 50%	0%	3272	3338
Aluminum Hopper Unit	Loaded	135	(Head, Mid, Rear) Distributed	15	1.0%	Crest	<0.1%	0	0	> 50%	0%	1322	1436

Train Type	Train Load	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P < x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (> 500 ft if v < 30mph, > 1200 ft if v > 30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Hopper			Rear)										
Unit Aluminum Hopper	Loaded	135	Distributed (Head, Mid, Rear)	27	1.0%	Trough	<0.1%	0	0	> 50%	0%	6406	6571
Unit Aluminum Hopper	Loaded	135	Distributed (Head, Mid, Rear)	10	1.1%	Decline	<0.1%	0	0	> 50%	0%	2972	3083
Unit Aluminum Hopper	Loaded	135	Distributed (Head, Mid, Rear)	30	1.1%	Decline	<0.1%	0	0	> 50%	0%	4640	4890
Unit Aluminum Hopper	Loaded	135	Distributed (Head, Mid, Rear)	45	1.1%	Decline	<0.1%	0	0	> 50%	0%	9881	10348
Unit Aluminum Hopper	Loaded	135	Distributed (Head, Mid, Rear)	11	1.5%	Incline	<0.1%	0	0	< 0.1%	0%	432	466
Unit Aluminum Hopper	Loaded	135	Distributed (Head, Mid, Rear)	25	1.7%	Decline	<0.1%	0	0	> 50%	0%	6660	7247
Unit Aluminum Hopper	Loaded	135	Distributed (Head, Mid, Rear)	15	2.2%	Decline	<0.1%	0	0	> 50%	0%	5088	6567
Unit Aluminum Hopper	Empty	200	Distributed (Head and Rear)	10	0.0%	Flat	<0.1%	0	0	< 0.1%	0%	679	715
Unit Aluminum Hopper	Empty	200	Distributed (Head and Rear)	30	0.0%	Flat	<0.1%	0	0	> 50%	0%	3086	3202
Unit Aluminum Hopper	Empty	200	Distributed (Head and Rear)	60	0.0%	Flat	<0.1%	0	0	> 50%	0%	8477	8632
Unit Aluminum Hopper	Empty	200	Distributed (Head and Rear)	10	0.5%	Decline	<0.1%	0	0	> 50%	0%	939	988

Train Type	Train Load	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P < x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (> 500 ft if v < 30mph, > 1200 ft if v > 30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Aluminum Hopper	Empty	200	Distributed (Head and Rear)	30	0.5%	Decline	<0.1%	0	0	> 50%	0%	3708	3773
Unit Aluminum Hopper	Empty	200	Distributed (Head and Rear)	60	0.5%	Decline	<0.1%	0	0	> 50%	0%	9600	9724
Unit Aluminum Hopper	Empty	200	Distributed (Head and Rear)	10	0.5%	Incline	<0.1%	0	0	< 0.1%	0%	518	591
Unit Aluminum Hopper	Empty	200	Distributed (Head and Rear)	30	0.5%	Incline	<0.1%	0	0	> 50%	0%	2586	2821
Unit Aluminum Hopper	Empty	200	Distributed (Head and Rear)	60	0.5%	Incline	<0.1%	0	0	> 50%	0%	7422	7673
Unit Aluminum Hopper	Empty	200	Distributed (Head and Rear)	45	1.0%	Crest	<0.1%	0	0	> 50%	0%	6335	6413
Unit Aluminum Hopper	Empty	200	Distributed (Head and Rear)	45	1.0%	Trough	<0.1%	0	0	> 50%	0%	4714	4880
Unit Aluminum Hopper	Empty	200	Distributed (Head and Rear)	10	1.1%	Decline	<0.1%	0	0	> 50%	0%	1475	1554
Unit Aluminum Hopper	Empty	200	Distributed (Head and Rear)	30	1.1%	Decline	<0.1%	0	0	> 50%	0%	4742	4865
Unit Aluminum Hopper	Empty	200	Distributed (Head and Rear)	45	1.1%	Decline	<0.1%	0	0	> 50%	0%	7763	7877
Unit Aluminum Hopper	Empty	200	Distributed (Head and Rear)	25	1.5%	Incline	<0.1%	0	0	> 50%	0%	1410	1542
Unit Aluminum Hopper	Empty	200	Distributed	25	1.7%	Decline	<0.1%	0	0	> 50%	0%	5090	5288

Train Type	Train Load	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P < x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (> 500 ft if v < 30mph, > 1200 ft if v > 30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Aluminum Hopper Unit	Empty	200	(Head and Rear) Distributed	20	2.2%	Decline	<0.1%	0	0	> 50%	0%	5440	5595
Aluminum Hopper Unit	Empty	200	(Head and Rear) Distributed	10	0.0%	Flat	<0.1%	0	0	< 0.1%	0%	681	722
Aluminum Hopper Unit	Empty	200	(Head, Mid, Rear) Distributed	30	0.0%	Flat	<0.1%	0	0	> 50%	0%	3063	3194
Aluminum Hopper Unit	Empty	200	(Head, Mid, Rear) Distributed	60	0.0%	Flat	<0.1%	0	0	> 50%	0%	8529	8642
Aluminum Hopper Unit	Empty	200	(Head, Mid, Rear) Distributed	10	0.5%	Decline	<0.1%	0	0	> 50%	0%	945	1001
Aluminum Hopper Unit	Empty	200	(Head, Mid, Rear) Distributed	30	0.5%	Decline	<0.1%	0	0	> 50%	0%	3703	3768
Aluminum Hopper Unit	Empty	200	(Head, Mid, Rear) Distributed	60	0.5%	Decline	<0.1%	0	0	> 50%	0%	9597	9720
Aluminum Hopper Unit	Empty	200	(Head, Mid, Rear) Distributed	10	0.5%	Incline	<0.1%	0	0	< 0.1%	0%	518	598
Aluminum Hopper Unit	Empty	200	(Head, Mid, Rear) Distributed	30	0.5%	Incline	<0.1%	0	0	> 50%	0%	2589	2753
Aluminum Hopper Unit	Empty	200	(Head, Mid, Rear) Distributed	60	0.5%	Incline	<0.1%	0	0	> 50%	0%	7558	7695
Aluminum Hopper Unit	Empty	200	(Head, Mid, Rear) Distributed	45	1.0%	Crest	<0.1%	0	0	> 50%	0%	6370	6510

Train Type	Train Load	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P < x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (> 500 ft if v < 30mph, > 1200 ft if v > 30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Hopper Unit	Empty	200	Rear) Distributed (Head, Mid, Rear)	45	1.0%	Trough	<0.1%	0	0	> 50%	0%	4714	4869
Aluminum Hopper Unit	Empty	200	Distributed (Head, Mid, Rear)	10	1.1%	Decline	<0.1%	0	0	> 50%	0%	1474	1549
Aluminum Hopper Unit	Empty	200	Distributed (Head, Mid, Rear)	30	1.1%	Decline	<0.1%	0	0	> 50%	0%	4728	4833
Aluminum Hopper Unit	Empty	200	Distributed (Head, Mid, Rear)	45	1.1%	Decline	<0.1%	0	0	> 50%	0%	7761	7908
Aluminum Hopper Unit	Empty	200	Distributed (Head, Mid, Rear)	25	1.5%	Incline	<0.1%	0	0	> 50%	0%	1409	1556
Aluminum Hopper Unit	Empty	200	Distributed (Head, Mid, Rear)	25	1.7%	Decline	<0.1%	0	0	> 50%	0%	5094	5240
Aluminum Hopper Unit	Empty	200	Distributed (Head, Mid, Rear)	20	2.2%	Decline	<0.1%	0	0	> 50%	0%	5441	5683
Aluminum Hopper Unit	Loaded	200	Distributed (Head and Rear)	10	0.0%	Flat	<0.1%	0	0	> 50%	0%	1013	1061
Aluminum Hopper Unit	Loaded	200	Distributed (Head and Rear)	30	0.0%	Flat	<0.1%	0	0	> 50%	0%	4775	4857
Aluminum Hopper Unit	Loaded	200	Distributed (Head and Rear)	50	0.0%	Flat	<0.1%	0	0	> 50%	0%	10413	10514
Aluminum Hopper Unit	Loaded	200	Distributed (Head and Rear)	10	0.5%	Decline	<0.1%	0	0	> 50%	0%	1844	1917

Train Type	Train Load	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P < x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (> 500 ft if v < 30mph, > 1200 ft if v > 30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Aluminum Hopper	Loaded	200	Distributed (Head and Rear)	30	0.5%	Decline	<0.1%	0	0	> 50%	0%	6840	6939
Unit Aluminum Hopper	Loaded	200	Distributed (Head and Rear)	50	0.5%	Decline	<0.1%	0	0	> 50%	0%	13801	14035
Unit Aluminum Hopper	Loaded	200	Distributed (Head and Rear)	10	0.5%	Incline	<0.1%	0	0	< 0.1%	0%	638	734
Unit Aluminum Hopper	Loaded	200	Distributed (Head and Rear)	26	0.5%	Incline	<0.1%	0	0	> 50%	0%	2811	2874
Unit Aluminum Hopper	Loaded	200	Distributed (Head and Rear)	14	1.0%	Crest	<0.1%	0	0	> 50%	0%	1388	1501
Unit Aluminum Hopper	Loaded	200	Distributed (Head and Rear)	25	1.0%	Trough	<0.1%	0	0	> 50%	0%	6244	6463
Unit Aluminum Hopper	Loaded	200	Distributed (Head and Rear)	10	1.1%	Decline	<0.1%	0	0	> 50%	0%	4130	4256
Unit Aluminum Hopper	Loaded	200	Distributed (Head and Rear)	30	1.1%	Decline	<0.1%	0	0	> 50%	0%	5089	5415
Unit Aluminum Hopper	Loaded	200	Distributed (Head and Rear)	45	1.1%	Decline	<0.1%	0	0	> 50%	0%	10568	11079
Unit Aluminum Hopper	Loaded	200	Distributed (Head and Rear)	10	1.5%	Incline	<0.1%	0	0	< 0.1%	0%	393	422
Unit Aluminum Hopper	Loaded	200	Distributed (Head and Rear)	20	1.7%	Decline	<0.1%	0	0	> 50%	0%	5194	6550
Unit Aluminum Hopper	Loaded	200	Distributed	15	2.2%	Decline	<0.1%	0	0	> 50%	0%	6151	8437

Train Type	Train Load	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P < x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (> 500 ft if v < 30mph, > 1200 ft if v > 30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Aluminum Hopper Unit	Loaded	200	(Head and Rear) Distributed	10	0.0%	Flat	<0.1%	0	0	> 50%	0%	1017	1056
Aluminum Hopper Unit	Loaded	200	(Head, Mid, Rear) Distributed	30	0.0%	Flat	<0.1%	0	0	> 50%	0%	4769	4868
Aluminum Hopper Unit	Loaded	200	(Head, Mid, Rear) Distributed	50	0.0%	Flat	<0.1%	0	0	> 50%	0%	10402	10509
Aluminum Hopper Unit	Loaded	200	(Head, Mid, Rear) Distributed	10	0.5%	Decline	<0.1%	0	0	> 50%	0%	1840	1909
Aluminum Hopper Unit	Loaded	200	(Head, Mid, Rear) Distributed	30	0.5%	Decline	<0.1%	0	0	> 50%	0%	6844	6954
Aluminum Hopper Unit	Loaded	200	(Head, Mid, Rear) Distributed	50	0.5%	Decline	<0.1%	0	0	> 50%	0%	13811	14153
Aluminum Hopper Unit	Loaded	200	(Head, Mid, Rear) Distributed	10	0.5%	Incline	<0.1%	0	0	< 0.1%	0%	650	730
Aluminum Hopper Unit	Loaded	200	(Head, Mid, Rear) Distributed	26	0.5%	Incline	<0.1%	0	0	> 50%	0%	2803	2875
Aluminum Hopper Unit	Loaded	200	(Head, Mid, Rear) Distributed	14	1.0%	Crest	<0.1%	0	0	> 50%	0%	1396	1533
Aluminum Hopper Unit	Loaded	200	(Head, Mid, Rear) Distributed	25	1.0%	Trough	<0.1%	0	0	> 50%	0%	6292	6538
Aluminum Hopper Unit	Loaded	200	(Head, Mid, Rear) Distributed	10	1.1%	Decline	<0.1%	0	0	> 50%	0%	4142	4287

Train Type	Train Load	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P < x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (> 500 ft if v < 30mph, > 1200 ft if v > 30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Hopper			Rear)										
Unit Aluminum Hopper	Loaded	200	Distributed (Head, Mid, Rear)	30	1.1%	Decline	<0.1%	0	0	> 50%	0%	5094	5348
Unit Aluminum Hopper	Loaded	200	Distributed (Head, Mid, Rear)	45	1.1%	Decline	<0.1%	0	0	> 50%	0%	10528	11023
Unit Aluminum Hopper	Loaded	200	Distributed (Head, Mid, Rear)	10	1.5%	Incline	<0.1%	0	0	< 0.1%	0%	382	414
Unit Aluminum Hopper	Loaded	200	Distributed (Head, Mid, Rear)	20	1.7%	Decline	<0.1%	0	0	> 50%	0%	5177	5816
Unit Aluminum Hopper	Loaded	200	Distributed (Head, Mid, Rear)	15	2.2%	Decline	<0.1%	0	0	> 50%	0%	6147	7969
Unit Aluminum Hopper	Empty	260	Distributed (Head, Mid, Rear)	10	0.0%	Flat	<0.1%	0	0	> 50%	0%	998	1047
Unit Aluminum Hopper	Empty	260	Distributed (Head, Mid, Rear)	30	0.0%	Flat	<0.1%	0	0	> 50%	0%	4616	4773
Unit Aluminum Hopper	Empty	260	Distributed (Head, Mid, Rear)	60	0.0%	Flat	<0.1%	0	0	> 50%	0%	12989	13111
Unit Aluminum Hopper	Empty	260	Distributed (Head, Mid, Rear)	10	0.5%	Decline	<0.1%	0	0	> 50%	0%	1751	1828
Unit Aluminum Hopper	Empty	260	Distributed (Head, Mid, Rear)	30	0.5%	Decline	<0.1%	0	0	> 50%	0%	6382	6500
Unit Aluminum Hopper	Empty	260	Distributed (Head, Mid, Rear)	60	0.5%	Decline	<0.1%	0	0	> 50%	0%	15762	15769

Train Type	Train Load	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P < x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (> 500 ft if v < 30mph, > 1200 ft if v > 30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Aluminum Hopper	Empty	260	Distributed (Head, Mid, Rear)	10	0.5%	Incline	<0.1%	0	0	< 0.1%	0%	637	781
Unit Aluminum Hopper	Empty	260	Distributed (Head, Mid, Rear)	30	0.5%	Incline	<0.1%	0	0	> 50%	0%	3495	3736
Unit Aluminum Hopper	Empty	260	Distributed (Head, Mid, Rear)	60	0.5%	Incline	<0.1%	0	0	> 50%	0%	10766	10926
Unit Aluminum Hopper	Empty	260	Distributed (Head, Mid, Rear)	45	1.0%	Crest	<0.1%	0	0	> 50%	0%	8974	9174
Unit Aluminum Hopper	Empty	260	Distributed (Head, Mid, Rear)	45	1.0%	Trough	<0.1%	0	0	> 50%	0%	7430	7610
Unit Aluminum Hopper	Empty	260	Distributed (Head, Mid, Rear)	10	1.1%	Decline	<0.1%	0	0	> 50%	0%	3660	3749
Unit Aluminum Hopper	Empty	260	Distributed (Head, Mid, Rear)	30	1.1%	Decline	<0.1%	0	0	> 50%	0%	9945	10165
Unit Aluminum Hopper	Empty	260	Distributed (Head, Mid, Rear)	45	1.1%	Decline	<0.1%	0	0	> 50%	0%	6959	7646
Unit Aluminum Hopper	Empty	260	Distributed (Head, Mid, Rear)	25	1.5%	Incline	<0.1%	0	0	> 50%	0%	1663	1821
Unit Aluminum Hopper	Empty	260	Distributed (Head, Mid, Rear)	25	1.7%	Decline	<0.1%	0	0	> 50%	0%	11764	11772
Unit Aluminum Hopper	Empty	260	Distributed (Head, Mid, Rear)	20	2.2%	Decline	<0.1%	0	0	> 50%	0%	9671	9681
Unit Aluminum Hopper	Loaded	260	Distributed	10	0.0%	Flat	<0.1%	0	0	> 50%	0%	1665	1720

Train Type	Train Load	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P < x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (> 500 ft if v < 30mph, > 1200 ft if v > 30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Aluminum Hopper Unit	Loaded	260	(Head, Mid, Rear) Distributed	30	0.0%	Flat	<0.1%	0	0	> 50%	0%	8402	8576
Aluminum Hopper Unit	Loaded	260	(Head, Mid, Rear) Distributed	50	0.0%	Flat	<0.1%	0	0	> 50%	0%	14777	14785
Aluminum Hopper Unit	Loaded	260	(Head, Mid, Rear) Distributed	10	0.5%	Decline	<0.1%	0	0	> 50%	0%	3836	3847
Aluminum Hopper Unit	Loaded	260	(Head, Mid, Rear) Distributed	30	0.5%	Decline	<0.1%	0	0	> 50%	0%	9906	9918
Aluminum Hopper Unit	Loaded	260	(Head, Mid, Rear) Distributed	10	0.5%	Incline	<0.1%	0	0	< 10%	0%	766	886
Aluminum Hopper Unit	Loaded	260	(Head, Mid, Rear) Distributed	30	0.5%	Incline	<0.1%	0	0	> 50%	0%	4669	4803
Aluminum Hopper Unit	Loaded	260	(Head, Mid, Rear) Distributed	16	1.0%	Crest	<0.1%	0	0	> 50%	0%	2350	2514
Aluminum Hopper Unit	Loaded	260	(Head, Mid, Rear) Distributed	27	1.0%	Trough	<0.1%	0	0	> 50%	0%	8310	8318
Aluminum Hopper Unit	Loaded	260	(Head, Mid, Rear) Distributed	10	1.1%	Decline	<0.1%	0	0	> 50%	0%	15318	15530
Aluminum Hopper Unit	Loaded	260	(Head, Mid, Rear) Distributed	30	1.1%	Decline	<0.1%	0	0	> 50%	0%	26553	26892
Aluminum Hopper Unit	Loaded	260	(Head, Mid, Rear) Distributed	45	1.1%	Decline	<0.1%	0	0	> 50%	0%	32954	32962

Train Type	Train Load	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P < x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (> 500 ft if v < 30mph, > 1200 ft if v > 30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Hopper			Rear)										
Unit Aluminum Hopper	Loaded	260	Distributed (Head, Mid, Rear)	11	1.5%	Incline	<0.1%	0	0	< 0.1%	0%	459	496
Unit Aluminum Hopper	Loaded	260	Distributed (Head, Mid, Rear)	20	1.7%	Decline	<0.1%	0	0	> 50%	0%	23780	24132
Unit Aluminum Hopper	Loaded	260	Distributed (Head, Mid, Rear)	15	2.2%	Decline	<0.1%	0	0	> 50%	0%	22253	22688
Unit Covered Hopper	Empty	100	Distributed (Head and Rear)	10	0.0%	Flat	<0.1%	0	0	< 0.1%	0%	585	596
Unit Covered Hopper	Empty	100	Distributed (Head and Rear)	30	0.0%	Flat	<0.1%	0	0	> 50%	0%	2860	2892
Unit Covered Hopper	Empty	100	Distributed (Head and Rear)	60	0.0%	Flat	<0.1%	0	0	> 50%	0%	7898	7964
Unit Covered Hopper	Empty	100	Distributed (Head and Rear)	10	0.5%	Decline	<0.1%	0	0	> 50%	0%	883	915
Unit Covered Hopper	Empty	100	Distributed (Head and Rear)	30	0.5%	Decline	<0.1%	0	0	> 50%	0%	3415	3485
Unit Covered Hopper	Empty	100	Distributed (Head and Rear)	60	0.5%	Decline	<0.1%	0	0	> 50%	0%	9056	9119
Unit Covered Hopper	Empty	100	Distributed (Head and Rear)	10	0.5%	Incline	<0.1%	0	0	< 0.1%	0%	485	492
Unit Covered Hopper	Empty	100	Distributed (Head and Rear)	30	0.5%	Incline	<0.1%	0	0	> 10%, < 25%	0%	2355	2363

Train Type	Train Load	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P < x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (> 500 ft if v < 30mph, > 1200 ft if v > 30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Covered Hopper	Empty	100	Distributed (Head and Rear)	60	0.5%	Incline	<0.1%	0	0	> 50%	0%	5711	5721
Unit Covered Hopper	Empty	100	Distributed (Head and Rear)	45	1.0%	Crest	<0.1%	0	0	> 50%	0%	4035	4103
Unit Covered Hopper	Empty	100	Distributed (Head and Rear)	55	1.0%	Trough	<0.1%	0	0	> 50%	0%	8980	9114
Unit Covered Hopper	Empty	100	Distributed (Head and Rear)	10	1.1%	Decline	<0.1%	0	0	> 50%	0%	1262	1343
Unit Covered Hopper	Empty	100	Distributed (Head and Rear)	30	1.1%	Decline	<0.1%	0	0	> 50%	0%	4228	4370
Unit Covered Hopper	Empty	100	Distributed (Head and Rear)	55	1.1%	Decline	<0.1%	0	0	> 50%	0%	9357	9452
Unit Covered Hopper	Empty	100	Distributed (Head and Rear)	25	1.5%	Incline	<0.1%	0	0	> 50%	0%	1309	1345
Unit Covered Hopper	Empty	100	Distributed (Head and Rear)	25	1.7%	Decline	<0.1%	0	0	> 50%	0%	4401	4536
Unit Covered Hopper	Empty	100	Distributed (Head and Rear)	20	2.2%	Decline	<0.1%	0	0	> 50%	0%	3970	3981
Unit Covered Hopper	Empty	100	Head end only	10	0.0%	Flat	<0.1%	0	0	< 0.1%	0%	586	595
Unit Covered Hopper	Empty	100	Head end only	30	0.0%	Flat	<0.1%	0	0	> 25%, < 50%	0%	2857	2924
Unit Covered Hopper	Empty	100	Head end only	60	0.0%	Flat	<0.1%	0	0	> 50%	0%	7914	7968
Unit Covered Hopper	Empty	100	Head end only	10	0.5%	Decline	<0.1%	0	0	< 0.1%	0%	876	916

Train Type	Train Load	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P < x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (> 500 ft if v < 30mph, > 1200 ft if v > 30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Hopper													
Unit Covered Hopper	Empty	100	Head end only	30	0.5%	Decline	<0.1%	0	0	> 50%	0%	3402	3482
Unit Covered Hopper	Empty	100	Head end only	60	0.5%	Decline	<0.1%	0	0	> 50%	0%	9048	9101
Unit Covered Hopper	Empty	100	Head end only	10	0.5%	Incline	<0.1%	0	0	< 0.1%	0%	485	494
Unit Covered Hopper	Empty	100	Head end only	30	0.5%	Incline	<0.1%	0	0	< 0.1%	0%	2356	2369
Unit Covered Hopper	Empty	100	Head end only	60	0.5%	Incline	<0.1%	0	0	> 50%	0%	5713	5721
Unit Covered Hopper	Empty	100	Head end only	45	1.0%	Crest	<0.1%	0	0	> 50%	0%	4040	4102
Unit Covered Hopper	Empty	100	Head end only	55	1.0%	Trough	<0.1%	0	0	> 50%	0%	9016	9104
Unit Covered Hopper	Empty	100	Head end only	10	1.1%	Decline	<0.1%	0	0	> 50%	0%	1268	1352
Unit Covered Hopper	Empty	100	Head end only	30	1.1%	Decline	<0.1%	0	0	> 50%	0%	4230	4315
Unit Covered Hopper	Empty	100	Head end only	55	1.1%	Decline	<0.1%	0	0	> 50%	0%	9374	9471
Unit Covered Hopper	Empty	100	Head end only	25	1.5%	Incline	<0.1%	0	0	> 50%	0%	1315	1348
Unit Covered Hopper	Empty	100	Head end only	25	1.7%	Decline	<0.1%	0	0	> 50%	0%	4397	4518
Unit Covered Hopper	Empty	100	Head end only	20	2.2%	Decline	<0.1%	0	0	> 50%	0%	3971	3980
Unit Covered Hopper	Loaded	100	Distributed (Head and Rear)	10	0.0%	Flat	<0.1%	0	0	< 0.1%	0%	877	899
Unit Covered Hopper	Loaded	100	Distributed (Head and Rear)	30	0.0%	Flat	<0.1%	0	0	> 50%	0%	3942	4055
Unit Covered Hopper	Loaded	100	Distributed	50	0.0%	Flat	<0.1%	0	0	> 50%	0%	8748	8937

Train Type	Train Load	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P < x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (> 500 ft if v < 30mph, > 1200 ft if v > 30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Hopper			(Head and Rear)										
Unit Covered Hopper	Loaded	100	Distributed (Head and Rear)	10	0.5%	Decline	<0.1%	0	0	> 50%	0%	1335	1398
Unit Covered Hopper	Loaded	100	Distributed (Head and Rear)	30	0.5%	Decline	<0.1%	0	0	> 50%	0%	5299	5410
Unit Covered Hopper	Loaded	100	Distributed (Head and Rear)	50	0.5%	Decline	<0.1%	0	0	> 50%	0%	11363	11537
Unit Covered Hopper	Loaded	100	Distributed (Head and Rear)	10	0.5%	Incline	<0.1%	0	0	< 0.1%	0%	585	630
Unit Covered Hopper	Loaded	100	Distributed (Head and Rear)	26	0.5%	Incline	<0.1%	0	0	> 50%	0%	2469	2538
Unit Covered Hopper	Loaded	100	Distributed (Head and Rear)	14	1.0%	Crest	<0.1%	0	0	> 50%	0%	1109	1176
Unit Covered Hopper	Loaded	100	Distributed (Head and Rear)	23	1.0%	Trough	<0.1%	0	0	> 50%	0%	4576	4699
Unit Covered Hopper	Loaded	100	Distributed (Head and Rear)	10	1.1%	Decline	<0.1%	0	0	> 50%	0%	2385	2394
Unit Covered Hopper	Loaded	100	Distributed (Head and Rear)	30	1.1%	Decline	<0.1%	0	0	> 50%	0%	4393	4623
Unit Covered Hopper	Loaded	100	Distributed (Head and Rear)	45	1.1%	Decline	<0.1%	0	0	> 50%	0%	9468	9953
Unit Covered Hopper	Loaded	100	Distributed (Head and	10	1.5%	Incline	<0.1%	0	0	< 0.1%	0%	396	414

Train Type	Train Load	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P < x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (> 500 ft if v < 30mph, > 1200 ft if v > 30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Covered Hopper	Loaded	100	Rear) Distributed (Head and Rear)	15	1.7%	Decline	<0.1%	0	0	> 50%	0%	3018	4615
Unit Covered Hopper	Loaded	100	Distributed (Head and Rear)	15	2.2%	Decline	<0.1%	0	0	> 50%	0%	5375	8278
Unit Covered Hopper	Loaded	100	Head end only	10	0.0%	Flat	<0.1%	0	0	< 0.1%	0%	875	900
Unit Covered Hopper	Loaded	100	Head end only	30	0.0%	Flat	<0.1%	0	0	> 10%, < 25%	0%	3942	4023
Unit Covered Hopper	Loaded	100	Head end only	50	0.0%	Flat	<0.1%	0	0	> 50%	0%	8759	8923
Unit Covered Hopper	Loaded	100	Head end only	10	0.5%	Decline	<0.1%	0	0	> 50%	0%	1329	1408
Unit Covered Hopper	Loaded	100	Head end only	30	0.5%	Decline	<0.1%	0	0	> 50%	0%	5293	5384
Unit Covered Hopper	Loaded	100	Head end only	50	0.5%	Decline	<0.1%	0	0	> 50%	0%	11417	11657
Unit Covered Hopper	Loaded	100	Head end only	10	0.5%	Incline	<0.1%	0	0	< 0.1%	0%	595	639
Unit Covered Hopper	Loaded	100	Head end only	26	0.5%	Incline	<0.1%	0	0	> 50%	0%	2462	2510
Unit Covered Hopper	Loaded	100	Head end only	14	1.0%	Crest	<0.1%	0	0	< 0.1%	0%	1199	1280
Unit Covered Hopper	Loaded	100	Head end only	23	1.0%	Trough	<0.1%	0	0	> 50%	0%	4578	4692
Unit Covered Hopper	Loaded	100	Head end only	10	1.1%	Decline	<0.1%	0	0	> 50%	0%	2385	2394
Unit Covered Hopper	Loaded	100	Head end only	30	1.1%	Decline	<0.1%	0	0	> 50%	0%	4417	4647
Unit Covered Hopper	Loaded	100	Head end only	45	1.1%	Decline	<0.1%	0	0	> 50%	0%	9536	10152
Unit Covered Hopper	Loaded	100	Head end only	10	1.5%	Incline	<0.1%	0	0	< 0.1%	0%	391	412

Train Type	Train Load	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P < x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (> 500 ft if v < 30mph, > 1200 ft if v > 30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Hopper													
Unit Covered Hopper	Loaded	100	Head end only	15	1.7%	Decline	<0.1%	0	0	> 50%	0%	3250	4880
Unit Covered Hopper	Loaded	100	Head end only	15	2.2%	Decline	<0.1%	0	0	> 50%	0%	5930	9131
Unit Covered Hopper	Empty	135	Distributed (Head and Rear)	10	0.0%	Flat	<0.1%	0	0	< 0.1%	0%	708	746
Unit Covered Hopper	Empty	135	Distributed (Head and Rear)	30	0.0%	Flat	<0.1%	0	0	> 50%	0%	3198	3287
Unit Covered Hopper	Empty	135	Distributed (Head and Rear)	60	0.0%	Flat	<0.1%	0	0	> 50%	0%	8944	9067
Unit Covered Hopper	Empty	135	Distributed (Head and Rear)	10	0.5%	Decline	<0.1%	0	0	> 50%	0%	990	1038
Unit Covered Hopper	Empty	135	Distributed (Head and Rear)	30	0.5%	Decline	<0.1%	0	0	> 50%	0%	3858	3959
Unit Covered Hopper	Empty	135	Distributed (Head and Rear)	60	0.5%	Decline	<0.1%	0	0	> 50%	0%	10055	10162
Unit Covered Hopper	Empty	135	Distributed (Head and Rear)	10	0.5%	Incline	<0.1%	0	0	< 0.1%	0%	541	614
Unit Covered Hopper	Empty	135	Distributed (Head and Rear)	30	0.5%	Incline	<0.1%	0	0	> 50%	0%	2693	2836
Unit Covered Hopper	Empty	135	Distributed (Head and Rear)	60	0.5%	Incline	<0.1%	0	0	> 50%	0%	7900	8013
Unit Covered Hopper	Empty	135	Distributed (Head and	47	1.0%	Crest	<0.1%	0	0	> 50%	0%	7242	7414

Train Type	Train Load	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P < x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (> 500 ft if v < 30mph, > 1200 ft if v > 30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Covered Hopper	Empty	135	Rear) Distributed (Head and Rear)	55	1.0%	Trough	<0.1%	0	0	> 50%	0%	6395	6571
Unit Covered Hopper	Empty	135	Distributed (Head and Rear)	10	1.1%	Decline	<0.1%	0	0	> 50%	0%	1566	1636
Unit Covered Hopper	Empty	135	Distributed (Head and Rear)	30	1.1%	Decline	<0.1%	0	0	> 50%	0%	4993	5101
Unit Covered Hopper	Empty	135	Distributed (Head and Rear)	55	1.1%	Decline	<0.1%	0	0	> 50%	0%	10632	10745
Unit Covered Hopper	Empty	135	Distributed (Head and Rear)	25	1.5%	Incline	<0.1%	0	0	> 50%	0%	1429	1560
Unit Covered Hopper	Empty	135	Distributed (Head and Rear)	25	1.7%	Decline	<0.1%	0	0	> 50%	0%	5453	5556
Unit Covered Hopper	Empty	135	Distributed (Head and Rear)	20	2.2%	Decline	<0.1%	0	0	> 50%	0%	5871	6135
Unit Covered Hopper	Empty	135	Distributed (Head, Mid, Rear)	10	0.0%	Flat	<0.1%	0	0	< 0.1%	0%	707	734
Unit Covered Hopper	Empty	135	Distributed (Head, Mid, Rear)	30	0.0%	Flat	<0.1%	0	0	> 50%	0%	3207	3288
Unit Covered Hopper	Empty	135	Distributed (Head, Mid, Rear)	60	0.0%	Flat	<0.1%	0	0	> 50%	0%	8942	9067
Unit Covered Hopper	Empty	135	Distributed (Head, Mid, Rear)	10	0.5%	Decline	<0.1%	0	0	> 50%	0%	990	1039

Train Type	Train Load	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P < x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (> 500 ft if v < 30mph, > 1200 ft if v > 30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Covered Hopper	Empty	135	Distributed (Head, Mid, Rear)	30	0.5%	Decline	<0.1%	0	0	> 50%	0%	3850	3926
Unit Covered Hopper	Empty	135	Distributed (Head, Mid, Rear)	60	0.5%	Decline	<0.1%	0	0	> 50%	0%	10057	10159
Unit Covered Hopper	Empty	135	Distributed (Head, Mid, Rear)	10	0.5%	Incline	<0.1%	0	0	< 0.1%	0%	543	633
Unit Covered Hopper	Empty	135	Distributed (Head, Mid, Rear)	30	0.5%	Incline	<0.1%	0	0	> 50%	0%	2683	2837
Unit Covered Hopper	Empty	135	Distributed (Head, Mid, Rear)	60	0.5%	Incline	<0.1%	0	0	> 50%	0%	7910	8015
Unit Covered Hopper	Empty	135	Distributed (Head, Mid, Rear)	47	1.0%	Crest	<0.1%	0	0	> 50%	0%	7270	7375
Unit Covered Hopper	Empty	135	Distributed (Head, Mid, Rear)	55	1.0%	Trough	<0.1%	0	0	> 50%	0%	6366	6512
Unit Covered Hopper	Empty	135	Distributed (Head, Mid, Rear)	10	1.1%	Decline	<0.1%	0	0	> 50%	0%	1555	1631
Unit Covered Hopper	Empty	135	Distributed (Head, Mid, Rear)	30	1.1%	Decline	<0.1%	0	0	> 50%	0%	4993	5116
Unit Covered Hopper	Empty	135	Distributed (Head, Mid, Rear)	55	1.1%	Decline	<0.1%	0	0	> 50%	0%	10630	10746
Unit Covered Hopper	Empty	135	Distributed (Head, Mid, Rear)	25	1.5%	Incline	<0.1%	0	0	> 50%	0%	1429	1569
Unit Covered Hopper	Empty	135	Distributed	25	1.7%	Decline	<0.1%	0	0	> 50%	0%	5453	5598

Train Type	Train Load	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P < x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (> 500 ft if v < 30mph, > 1200 ft if v > 30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Hopper			(Head, Mid, Rear)										
Unit Covered Hopper	Empty	135	Distributed (Head, Mid, Rear)	20	2.2%	Decline	<0.1%	0	0	> 50%	0%	5907	6150
Unit Covered Hopper	Loaded	135	Distributed (Head and Rear)	10	0.0%	Flat	<0.1%	0	0	< 10%	0%	940	984
Unit Covered Hopper	Loaded	135	Distributed (Head and Rear)	30	0.0%	Flat	<0.1%	0	0	> 50%	0%	4377	4470
Unit Covered Hopper	Loaded	135	Distributed (Head and Rear)	50	0.0%	Flat	<0.1%	0	0	> 50%	0%	9501	9662
Unit Covered Hopper	Loaded	135	Distributed (Head and Rear)	10	0.5%	Decline	<0.1%	0	0	> 50%	0%	1585	1659
Unit Covered Hopper	Loaded	135	Distributed (Head and Rear)	30	0.5%	Decline	<0.1%	0	0	> 50%	0%	6031	6151
Unit Covered Hopper	Loaded	135	Distributed (Head and Rear)	50	0.5%	Decline	<0.1%	0	0	> 50%	0%	12598	12802
Unit Covered Hopper	Loaded	135	Distributed (Head and Rear)	10	0.5%	Incline	<0.1%	0	0	< 0.1%	0%	636	722
Unit Covered Hopper	Loaded	135	Distributed (Head and Rear)	30	0.5%	Incline	<0.1%	0	0	> 50%	0%	3333	3405
Unit Covered Hopper	Loaded	135	Distributed (Head and Rear)	15	1.0%	Crest	<0.1%	0	0	> 50%	0%	1360	1465
Unit Covered Hopper	Loaded	135	Distributed (Head and	27	1.0%	Trough	<0.1%	0	0	> 50%	0%	6688	6865

Train Type	Train Load	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P < x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (> 500 ft if v < 30mph, > 1200 ft if v > 30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Covered Hopper	Loaded	135	Rear) Distributed (Head and Rear)	10	1.1%	Decline	<0.1%	0	0	> 50%	0%	3247	3352
Unit Covered Hopper	Loaded	135	Distributed (Head and Rear)	30	1.1%	Decline	<0.1%	0	0	> 50%	0%	4767	5044
Unit Covered Hopper	Loaded	135	Distributed (Head and Rear)	45	1.1%	Decline	<0.1%	0	0	> 50%	0%	10050	10551
Unit Covered Hopper	Loaded	135	Distributed (Head and Rear)	11	1.5%	Incline	<0.1%	0	0	< 0.1%	0%	434	464
Unit Covered Hopper	Loaded	135	Distributed (Head and Rear)	25	1.7%	Decline	<0.1%	0	0	> 50%	0%	7351	10464
Unit Covered Hopper	Loaded	135	Distributed (Head and Rear)	15	2.2%	Decline	<0.1%	0	0	> 50%	0%	5461	7895
Unit Covered Hopper	Loaded	135	Distributed (Head, Mid, Rear)	10	0.0%	Flat	<0.1%	0	0	> 50%	0%	945	984
Unit Covered Hopper	Loaded	135	Distributed (Head, Mid, Rear)	30	0.0%	Flat	<0.1%	0	0	> 50%	0%	4387	4519
Unit Covered Hopper	Loaded	135	Distributed (Head, Mid, Rear)	50	0.0%	Flat	<0.1%	0	0	> 50%	0%	9493	9607
Unit Covered Hopper	Loaded	135	Distributed (Head, Mid, Rear)	10	0.5%	Decline	<0.1%	0	0	> 50%	0%	1576	1657
Unit Covered Hopper	Loaded	135	Distributed (Head, Mid, Rear)	30	0.5%	Decline	<0.1%	0	0	> 50%	0%	6024	6152

Train Type	Train Load	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P < x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (> 500 ft if v < 30mph, > 1200 ft if v > 30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Covered Hopper	Loaded	135	Distributed (Head, Mid, Rear)	50	0.5%	Decline	<0.1%	0	0	> 50%	0%	12593	12773
Unit Covered Hopper	Loaded	135	Distributed (Head, Mid, Rear)	10	0.5%	Incline	<0.1%	0	0	< 0.1%	0%	639	709
Unit Covered Hopper	Loaded	135	Distributed (Head, Mid, Rear)	30	0.5%	Incline	<0.1%	0	0	> 50%	0%	3332	3402
Unit Covered Hopper	Loaded	135	Distributed (Head, Mid, Rear)	15	1.0%	Crest	<0.1%	0	0	> 50%	0%	1401	1489
Unit Covered Hopper	Loaded	135	Distributed (Head, Mid, Rear)	27	1.0%	Trough	<0.1%	0	0	> 50%	0%	6664	6801
Unit Covered Hopper	Loaded	135	Distributed (Head, Mid, Rear)	10	1.1%	Decline	<0.1%	0	0	> 50%	0%	3240	3358
Unit Covered Hopper	Loaded	135	Distributed (Head, Mid, Rear)	30	1.1%	Decline	<0.1%	0	0	> 50%	0%	4753	5016
Unit Covered Hopper	Loaded	135	Distributed (Head, Mid, Rear)	45	1.1%	Decline	<0.1%	0	0	> 50%	0%	10082	10527
Unit Covered Hopper	Loaded	135	Distributed (Head, Mid, Rear)	11	1.5%	Incline	<0.1%	0	0	< 0.1%	0%	436	468
Unit Covered Hopper	Loaded	135	Distributed (Head, Mid, Rear)	25	1.7%	Decline	<0.1%	0	0	> 50%	0%	7559	10279
Unit Covered Hopper	Loaded	135	Distributed (Head, Mid, Rear)	15	2.2%	Decline	<0.1%	0	0	> 50%	0%	5446	8197
Unit	Empty	100	Distributed	10	0.0%	Flat	<0.1%	0	0	> 10%, < 25%	0%	829	884

Train Type	Train Load	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P < x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (> 500 ft if v < 30mph, > 1200 ft if v > 30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Multilevel			(Head and Rear)										
Unit Multilevel	Empty	100	Distributed (Head and Rear)	30	0.0%	Flat	<0.1%	0	0	> 50%	0%	3771	3809
Unit Multilevel	Empty	100	Distributed (Head and Rear)	60	0.0%	Flat	<0.1%	0	0	> 50%	0%	9612	9622
Unit Multilevel	Empty	100	Distributed (Head and Rear)	10	0.5%	Decline	<0.1%	0	0	> 50%	0%	1291	1396
Unit Multilevel	Empty	100	Distributed (Head and Rear)	30	0.5%	Decline	<0.1%	0	0	> 50%	0%	4945	5029
Unit Multilevel	Empty	100	Distributed (Head and Rear)	60	0.5%	Decline	<0.1%	0	0	> 50%	0%	12612	12622
Unit Multilevel	Empty	100	Distributed (Head and Rear)	10	0.5%	Incline	<0.1%	0	0	< 0.1%	0%	589	622
Unit Multilevel	Empty	100	Distributed (Head and Rear)	30	0.5%	Incline	<0.1%	0	0	> 50%	0%	2962	3008
Unit Multilevel	Empty	100	Distributed (Head and Rear)	50	0.5%	Incline	<0.1%	0	0	> 50%	0%	6726	6733
Unit Multilevel	Empty	100	Distributed (Head and Rear)	34	1.0%	Crest	<0.1%	0	0	> 50%	0%	3633	3682
Unit Multilevel	Empty	100	Distributed (Head and Rear)	55	1.0%	Trough	<0.1%	0	0	> 50%	0%	11919	11930
Unit Multilevel	Empty	100	Distributed (Head and	10	1.1%	Decline	<0.1%	0	0	> 50%	0%	2357	2417

Train Type	Train Load	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P < x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (> 500 ft if v < 30mph, > 1200 ft if v > 30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Multilevel	Empty	100	Rear) Distributed (Head and Rear)	30	1.1%	Decline	<0.1%	0	0	> 50%	0%	6156	6164
Unit Multilevel	Empty	100	Distributed (Head and Rear)	55	1.1%	Decline	<0.1%	0	0	> 50%	0%	13719	13727
Unit Multilevel	Empty	100	Distributed (Head and Rear)	25	1.5%	Incline	<0.1%	0	0	> 50%	0%	1312	1365
Unit Multilevel	Empty	100	Distributed (Head and Rear)	25	1.7%	Decline	<0.1%	0	0	> 50%	0%	7463	7474
Unit Multilevel	Empty	100	Distributed (Head and Rear)	20	2.2%	Decline	<0.1%	0	0	> 50%	0%	3971	3979
Unit Multilevel	Empty	100	Head end only	10	0.0%	Flat	<0.1%	0	0	< 0.1%	0%	828	904
Unit Multilevel	Empty	100	Head end only	30	0.0%	Flat	<0.1%	0	0	> 50%	0%	3779	3848
Unit Multilevel	Empty	100	Head end only	60	0.0%	Flat	<0.1%	0	0	> 50%	0%	9612	9621
Unit Multilevel	Empty	100	Head end only	10	0.5%	Decline	<0.1%	0	0	> 50%	0%	1311	1362
Unit Multilevel	Empty	100	Head end only	30	0.5%	Decline	<0.1%	0	0	> 50%	0%	4845	5005
Unit Multilevel	Empty	100	Head end only	60	0.5%	Decline	<0.1%	0	0	> 50%	0%	12612	12622
Unit Multilevel	Empty	100	Head end only	10	0.5%	Incline	<0.1%	0	0	< 0.1%	0%	590	653
Unit Multilevel	Empty	100	Head end only	30	0.5%	Incline	<0.1%	0	0	< 10%	0%	2973	3013
Unit Multilevel	Empty	100	Head end only	50	0.5%	Incline	<0.1%	0	0	> 50%	0%	6727	6739

Train Type	Train Load	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P < x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (> 500 ft if v < 30mph, > 1200 ft if v > 30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Multilevel	Empty	100	Head end only	34	1.0%	Crest	<0.1%	0	0	> 50%	0%	3650	3713
Unit Multilevel	Empty	100	Head end only	55	1.0%	Trough	<0.1%	0	0	> 50%	0%	11919	11928
Unit Multilevel	Empty	100	Head end only	10	1.1%	Decline	<0.1%	0	0	> 50%	0%	2378	2414
Unit Multilevel	Empty	100	Head end only	30	1.1%	Decline	<0.1%	0	0	> 50%	0%	6156	6164
Unit Multilevel	Empty	100	Head end only	55	1.1%	Decline	<0.1%	0	0	> 50%	0%	13719	13728
Unit Multilevel	Empty	100	Head end only	25	1.5%	Incline	<0.1%	0	0	> 50%	0%	1370	1428
Unit Multilevel	Empty	100	Head end only	25	1.7%	Decline	<0.1%	0	0	> 50%	0%	7463	7471
Unit Multilevel	Empty	100	Head end only	20	2.2%	Decline	<0.1%	0	0	> 50%	0%	3971	3979
Unit Multilevel	Loaded	100	Distributed (Head and Rear)	10	0.0%	Flat	<0.1%	0	0	> 50%	0%	969	1010
Unit Multilevel	Loaded	100	Distributed (Head and Rear)	30	0.0%	Flat	<0.1%	0	0	> 50%	0%	4526	4599
Unit Multilevel	Loaded	100	Distributed (Head and Rear)	50	0.0%	Flat	<0.1%	0	0	> 50%	0%	9747	9824
Unit Multilevel	Loaded	100	Distributed (Head and Rear)	10	0.5%	Decline	<0.1%	0	0	> 50%	0%	1719	1821
Unit Multilevel	Loaded	100	Distributed (Head and Rear)	30	0.5%	Decline	<0.1%	0	0	> 50%	0%	6372	6630
Unit Multilevel	Loaded	100	Distributed (Head and Rear)	50	0.5%	Decline	<0.1%	0	0	> 50%	0%	13040	13224

Train Type	Train Load	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P < x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (> 500 ft if v < 30mph, > 1200 ft if v > 30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Multilevel	Loaded	100	Distributed (Head and Rear)	10	0.5%	Incline	<0.1%	0	0	< 0.1%	0%	602	639
Unit Multilevel	Loaded	100	Distributed (Head and Rear)	34	0.5%	Incline	<0.1%	0	0	> 50%	0%	4108	4161
Unit Multilevel	Loaded	100	Distributed (Head and Rear)	19	1.0%	Crest	<0.1%	0	0	> 50%	0%	2042	2078
Unit Multilevel	Loaded	100	Distributed (Head and Rear)	33	1.0%	Trough	<0.1%	0	0	> 50%	0%	9617	9963
Unit Multilevel	Loaded	100	Distributed (Head and Rear)	10	1.1%	Decline	<0.1%	0	0	> 50%	0%	3386	3396
Unit Multilevel	Loaded	100	Distributed (Head and Rear)	30	1.1%	Decline	<0.1%	0	0	> 50%	0%	5003	5851
Unit Multilevel	Loaded	100	Distributed (Head and Rear)	45	1.1%	Decline	<0.1%	0	0	> 50%	0%	10416	11324
Unit Multilevel	Loaded	100	Distributed (Head and Rear)	13	1.5%	Incline	<0.1%	0	0	< 0.1%	0%	548	584
Unit Multilevel	Loaded	100	Distributed (Head and Rear)	25	1.7%	Decline	<0.1%	0	0	> 50%	0%	7541	8439
Unit Multilevel	Loaded	100	Distributed (Head and Rear)	15	2.2%	Decline	<0.1%	0	0	> 50%	0%	11649	12380
Unit Multilevel	Loaded	100	Head end only	10	0.0%	Flat	<0.1%	0	0	< 10%	0%	967	1014
Unit Multilevel	Loaded	100	Head end only	30	0.0%	Flat	<0.1%	0	0	> 50%	0%	4523	4592

Train Type	Train Load	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P < x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (> 500 ft if v < 30mph, > 1200 ft if v > 30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Multilevel	Loaded	100	Head end only	50	0.0%	Flat	<0.1%	0	0	> 50%	0%	9777	9835
Unit Multilevel	Loaded	100	Head end only	10	0.5%	Decline	<0.1%	0	0	> 50%	0%	1770	1866
Unit Multilevel	Loaded	100	Head end only	30	0.5%	Decline	<0.1%	0	0	> 50%	0%	6451	6635
Unit Multilevel	Loaded	100	Head end only	50	0.5%	Decline	<0.1%	0	0	> 50%	0%	13430	13734
Unit Multilevel	Loaded	100	Head end only	10	0.5%	Incline	<0.1%	0	0	< 0.1%	0%	630	757
Unit Multilevel	Loaded	100	Head end only	34	0.5%	Incline	<0.1%	0	0	> 50%	0%	4147	4207
Unit Multilevel	Loaded	100	Head end only	19	1.0%	Crest	<0.1%	0	0	> 25%, < 50%	0%	2001	2051
Unit Multilevel	Loaded	100	Head end only	33	1.0%	Trough	<0.1%	0	0	> 50%	0%	9770	10169
Unit Multilevel	Loaded	100	Head end only	10	1.1%	Decline	<0.1%	0	0	> 50%	0%	3386	3395
Unit Multilevel	Loaded	100	Head end only	30	1.1%	Decline	<0.1%	0	0	> 50%	0%	4962	5425
Unit Multilevel	Loaded	100	Head end only	45	1.1%	Decline	<0.1%	0	0	> 50%	0%	10491	11466
Unit Multilevel	Loaded	100	Head end only	13	1.5%	Incline	<0.1%	0	0	< 0.1%	0%	562	598
Unit Multilevel	Loaded	100	Head end only	25	1.7%	Decline	<0.1%	0	0	> 50%	0%	7879	9126
Unit Multilevel	Loaded	100	Head end only	15	2.2%	Decline	<0.1%	0	0	> 50%	0%	12091	13065
Unit Multilevel	Empty	135	Distributed (Head and Rear)	10	0.0%	Flat	<0.1%	0	0	> 50%	0%	903	1004
Unit Multilevel	Empty	135	Distributed (Head and Rear)	30	0.0%	Flat	<0.1%	0	0	> 50%	0%	4168	4245

Train Type	Train Load	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P < x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (> 500 ft if v < 30mph, > 1200 ft if v > 30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Multilevel	Empty	135	Distributed (Head and Rear)	60	0.0%	Flat	<0.1%	0	0	> 50%	0%	11671	11841
Unit Multilevel	Empty	135	Distributed (Head and Rear)	10	0.5%	Decline	<0.1%	0	0	> 50%	0%	1518	1643
Unit Multilevel	Empty	135	Distributed (Head and Rear)	30	0.5%	Decline	<0.1%	0	0	> 50%	0%	5564	5805
Unit Multilevel	Empty	135	Distributed (Head and Rear)	60	0.5%	Decline	<0.1%	0	0	> 50%	0%	14145	14303
Unit Multilevel	Empty	135	Distributed (Head and Rear)	10	0.5%	Incline	<0.1%	0	0	< 0.1%	0%	603	731
Unit Multilevel	Empty	135	Distributed (Head and Rear)	30	0.5%	Incline	<0.1%	0	0	> 50%	0%	3160	3317
Unit Multilevel	Empty	135	Distributed (Head and Rear)	53	0.5%	Incline	<0.1%	0	0	> 50%	0%	8001	8105
Unit Multilevel	Empty	135	Distributed (Head and Rear)	36	1.0%	Crest	<0.1%	0	0	> 50%	0%	4308	4454
Unit Multilevel	Empty	135	Distributed (Head and Rear)	55	1.0%	Trough	<0.1%	0	0	> 50%	0%	8307	9354
Unit Multilevel	Empty	135	Distributed (Head and Rear)	10	1.1%	Decline	<0.1%	0	0	> 50%	0%	3019	3157
Unit Multilevel	Empty	135	Distributed (Head and Rear)	30	1.1%	Decline	<0.1%	0	0	> 50%	0%	8347	8816
Unit	Empty	135	Distributed	55	1.1%	Decline	<0.1%	0	0	> 50%	0%	16738	17028

Train Type	Train Load	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P < x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (> 500 ft if v < 30mph, > 1200 ft if v > 30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Multilevel			(Head and Rear)										
Unit Multilevel	Empty	135	Distributed (Head and Rear)	25	1.5%	Incline	<0.1%	0	0	> 50%	0%	1512	1667
Unit Multilevel	Empty	135	Distributed (Head and Rear)	25	1.7%	Decline	<0.1%	0	0	> 50%	0%	11205	11511
Unit Multilevel	Empty	135	Distributed (Head and Rear)	20	2.2%	Decline	<0.1%	0	0	> 50%	0%	10470	10479
Unit Multilevel	Empty	135	Distributed (Head, Mid, Rear)	10	0.0%	Flat	<0.1%	0	0	> 50%	0%	894	976
Unit Multilevel	Empty	135	Distributed (Head, Mid, Rear)	30	0.0%	Flat	<0.1%	0	0	> 50%	0%	4188	4272
Unit Multilevel	Empty	135	Distributed (Head, Mid, Rear)	60	0.0%	Flat	<0.1%	0	0	> 50%	0%	11652	11771
Unit Multilevel	Empty	135	Distributed (Head, Mid, Rear)	10	0.5%	Decline	<0.1%	0	0	> 50%	0%	1511	1593
Unit Multilevel	Empty	135	Distributed (Head, Mid, Rear)	30	0.5%	Decline	<0.1%	0	0	> 50%	0%	5612	5682
Unit Multilevel	Empty	135	Distributed (Head, Mid, Rear)	60	0.5%	Decline	<0.1%	0	0	> 50%	0%	14148	14305
Unit Multilevel	Empty	135	Distributed (Head, Mid, Rear)	10	0.5%	Incline	<0.1%	0	0	< 0.1%	0%	598	672
Unit Multilevel	Empty	135	Distributed (Head, Mid, Rear)	30	0.5%	Incline	<0.1%	0	0	> 50%	0%	3170	3290

Train Type	Train Load	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P < x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (> 500 ft if v < 30mph, > 1200 ft if v > 30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Multilevel	Empty	135	Rear) Distributed (Head, Mid, Rear)	53	0.5%	Incline	<0.1%	0	0	> 50%	0%	7957	8113
Unit Multilevel	Empty	135	Distributed (Head, Mid, Rear)	36	1.0%	Crest	<0.1%	0	0	> 50%	0%	4193	4345
Unit Multilevel	Empty	135	Distributed (Head, Mid, Rear)	55	1.0%	Trough	<0.1%	0	0	> 50%	0%	8448	9051
Unit Multilevel	Empty	135	Distributed (Head, Mid, Rear)	10	1.1%	Decline	<0.1%	0	0	> 50%	0%	3004	3228
Unit Multilevel	Empty	135	Distributed (Head, Mid, Rear)	30	1.1%	Decline	<0.1%	0	0	> 50%	0%	8327	8803
Unit Multilevel	Empty	135	Distributed (Head, Mid, Rear)	55	1.1%	Decline	<0.1%	0	0	> 50%	0%	16667	16938
Unit Multilevel	Empty	135	Distributed (Head, Mid, Rear)	25	1.5%	Incline	<0.1%	0	0	> 50%	0%	1556	1629
Unit Multilevel	Empty	135	Distributed (Head, Mid, Rear)	25	1.7%	Decline	<0.1%	0	0	> 50%	0%	11092	11620
Unit Multilevel	Empty	135	Distributed (Head, Mid, Rear)	20	2.2%	Decline	<0.1%	0	0	> 50%	0%	9770	9778
Unit Multilevel	Loaded	135	Distributed (Head and Rear)	10	0.0%	Flat	<0.1%	0	0	> 50%	0%	1056	1116
Unit Multilevel	Loaded	135	Distributed (Head and Rear)	30	0.0%	Flat	<0.1%	0	0	> 50%	0%	4991	5055

Train Type	Train Load	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P < x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (> 500 ft if v < 30mph, > 1200 ft if v > 30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Multilevel	Loaded	135	Distributed (Head and Rear)	50	0.0%	Flat	<0.1%	0	0	> 50%	0%	10671	10807
Unit Multilevel	Loaded	135	Distributed (Head and Rear)	10	0.5%	Decline	<0.1%	0	0	> 50%	0%	2022	2187
Unit Multilevel	Loaded	135	Distributed (Head and Rear)	30	0.5%	Decline	<0.1%	0	0	> 50%	0%	7307	7533
Unit Multilevel	Loaded	135	Distributed (Head and Rear)	50	0.5%	Decline	<0.1%	0	0	> 50%	0%	14565	14761
Unit Multilevel	Loaded	135	Distributed (Head and Rear)	10	0.5%	Incline	<0.1%	0	0	< 0.1%	0%	666	794
Unit Multilevel	Loaded	135	Distributed (Head and Rear)	37	0.5%	Incline	<0.1%	0	0	> 50%	0%	5082	5178
Unit Multilevel	Loaded	135	Distributed (Head and Rear)	21	1.0%	Crest	<0.1%	0	0	> 50%	0%	2357	2688
Unit Multilevel	Loaded	135	Distributed (Head and Rear)	37	1.0%	Trough	<0.1%	0	0	> 50%	0%	6787	7511
Unit Multilevel	Loaded	135	Distributed (Head and Rear)	10	1.1%	Decline	<0.1%	0	0	> 50%	0%	4918	5092
Unit Multilevel	Loaded	135	Distributed (Head and Rear)	30	1.1%	Decline	<0.1%	0	0	> 50%	0%	5457	5964
Unit Multilevel	Loaded	135	Distributed (Head and Rear)	45	1.1%	Decline	<0.1%	0	0	> 50%	0%	11061	11723
Unit	Loaded	135	Distributed	14	1.5%	Incline	<0.1%	0	0	< 0.1%	0%	608	668

Train Type	Train Load	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P < x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (> 500 ft if v < 30mph, > 1200 ft if v > 30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Multilevel			(Head and Rear)										
Unit Multilevel	Loaded	135	Distributed (Head and Rear)	25	1.7%	Decline	<0.1%	0	0	> 50%	0%	9033	11479
Unit Multilevel	Loaded	135	Distributed (Head and Rear)	15	2.2%	Decline	<0.1%	0	0	> 50%	0%	12219	13472
Unit Multilevel	Loaded	135	Distributed (Head, Mid, Rear)	10	0.0%	Flat	<0.1%	0	0	> 50%	0%	1053	1104
Unit Multilevel	Loaded	135	Distributed (Head, Mid, Rear)	30	0.0%	Flat	<0.1%	0	0	> 50%	0%	4996	5063
Unit Multilevel	Loaded	135	Distributed (Head, Mid, Rear)	50	0.0%	Flat	<0.1%	0	0	> 50%	0%	10687	10813
Unit Multilevel	Loaded	135	Distributed (Head, Mid, Rear)	10	0.5%	Decline	<0.1%	0	0	> 50%	0%	2028	2152
Unit Multilevel	Loaded	135	Distributed (Head, Mid, Rear)	30	0.5%	Decline	<0.1%	0	0	> 50%	0%	7273	7448
Unit Multilevel	Loaded	135	Distributed (Head, Mid, Rear)	50	0.5%	Decline	<0.1%	0	0	> 50%	0%	14564	14724
Unit Multilevel	Loaded	135	Distributed (Head, Mid, Rear)	10	0.5%	Incline	<0.1%	0	0	< 0.1%	0%	656	727
Unit Multilevel	Loaded	135	Distributed (Head, Mid, Rear)	37	0.5%	Incline	<0.1%	0	0	> 50%	0%	5077	5180
Unit Multilevel	Loaded	135	Distributed (Head, Mid, Rear)	21	1.0%	Crest	<0.1%	0	0	> 50%	0%	2412	2593

Train Type	Train Load	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P < x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (> 500 ft if v < 30mph, > 1200 ft if v > 30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Multilevel	Loaded	135	Rear) Distributed (Head, Mid, Rear)	37	1.0%	Trough	<0.1%	0	0	> 50%	0%	6794	7274
Unit Multilevel	Loaded	135	Distributed (Head, Mid, Rear)	10	1.1%	Decline	<0.1%	0	0	> 50%	0%	4829	4891
Unit Multilevel	Loaded	135	Distributed (Head, Mid, Rear)	30	1.1%	Decline	<0.1%	0	0	> 50%	0%	5435	5873
Unit Multilevel	Loaded	135	Distributed (Head, Mid, Rear)	45	1.1%	Decline	<0.1%	0	0	> 50%	0%	11076	11697
Unit Multilevel	Loaded	135	Distributed (Head, Mid, Rear)	14	1.5%	Incline	<0.1%	0	0	< 0.1%	0%	613	665
Unit Multilevel	Loaded	135	Distributed (Head, Mid, Rear)	25	1.7%	Decline	<0.1%	0	0	> 50%	0%	8670	10065
Unit Multilevel	Loaded	135	Distributed (Head, Mid, Rear)	15	2.2%	Decline	<0.1%	0	0	> 50%	0%	11896	12634
Unit Refrigerated Boxcar	Empty	100	Distributed (Head and Rear)	10	0.0%	Flat	<0.1%	0	0	> 10%, < 25%	0%	810	860
Unit Refrigerated Boxcar	Empty	100	Distributed (Head and Rear)	30	0.0%	Flat	<0.1%	0	0	> 50%	0%	3626	3695
Unit Refrigerated Boxcar	Empty	100	Distributed (Head and Rear)	60	0.0%	Flat	<0.1%	0	0	> 50%	0%	9612	9620
Unit Refrigerated Boxcar	Empty	100	Distributed (Head and Rear)	10	0.5%	Decline	<0.1%	0	0	> 50%	0%	1233	1282

Train Type	Train Load	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P < x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (> 500 ft if v < 30mph, > 1200 ft if v > 30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Refrigerated Boxcar	Empty	100	Distributed (Head and Rear)	30	0.5%	Decline	<0.1%	0	0	> 50%	0%	4681	4779
Unit Refrigerated Boxcar	Empty	100	Distributed (Head and Rear)	60	0.5%	Decline	<0.1%	0	0	> 50%	0%	12222	12348
Unit Refrigerated Boxcar	Empty	100	Distributed (Head and Rear)	10	0.5%	Incline	<0.1%	0	0	< 0.1%	0%	573	614
Unit Refrigerated Boxcar	Empty	100	Distributed (Head and Rear)	30	0.5%	Incline	<0.1%	0	0	> 50%	0%	2922	2982
Unit Refrigerated Boxcar	Empty	100	Distributed (Head and Rear)	50	0.5%	Incline	<0.1%	0	0	> 50%	0%	6427	6434
Unit Refrigerated Boxcar	Empty	100	Distributed (Head and Rear)	34	1.0%	Crest	<0.1%	0	0	> 50%	0%	3457	3498
Unit Refrigerated Boxcar	Empty	100	Distributed (Head and Rear)	55	1.0%	Trough	<0.1%	0	0	> 50%	0%	11920	11929
Unit Refrigerated Boxcar	Empty	100	Distributed (Head and Rear)	10	1.1%	Decline	<0.1%	0	0	> 50%	0%	1985	1991
Unit Refrigerated Boxcar	Empty	100	Distributed (Head and Rear)	30	1.1%	Decline	<0.1%	0	0	> 50%	0%	5956	5969
Unit Refrigerated Boxcar	Empty	100	Distributed (Head and Rear)	55	1.1%	Decline	<0.1%	0	0	> 50%	0%	13719	13729
Unit Refrigerated Boxcar	Empty	100	Distributed (Head and Rear)	25	1.5%	Incline	<0.1%	0	0	> 50%	0%	1313	1380
Unit Refrigerated Boxcar	Empty	100	Distributed	25	1.7%	Decline	<0.1%	0	0	> 50%	0%	7463	7474

Train Type	Train Load	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P < x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (> 500 ft if v < 30mph, > 1200 ft if v > 30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Refrigerated Boxcar Unit	Empty	100	(Head and Rear) Distributed	20	2.2%	Decline	<0.1%	0	0	> 50%	0%	4670	4683
Refrigerated Boxcar Unit	Empty	100	(Head and Rear) Head end only	10	0.0%	Flat	<0.1%	0	0	< 0.1%	0%	804	854
Refrigerated Boxcar Unit	Empty	100	Head end only	30	0.0%	Flat	<0.1%	0	0	> 50%	0%	3633	3692
Refrigerated Boxcar Unit	Empty	100	Head end only	60	0.0%	Flat	<0.1%	0	0	> 50%	0%	9612	9622
Refrigerated Boxcar Unit	Empty	100	Head end only	10	0.5%	Decline	<0.1%	0	0	> 50%	0%	1196	1249
Refrigerated Boxcar Unit	Empty	100	Head end only	30	0.5%	Decline	<0.1%	0	0	> 50%	0%	4550	4765
Refrigerated Boxcar Unit	Empty	100	Head end only	60	0.5%	Decline	<0.1%	0	0	> 50%	0%	12235	12435
Refrigerated Boxcar Unit	Empty	100	Head end only	10	0.5%	Incline	<0.1%	0	0	< 0.1%	0%	574	640
Refrigerated Boxcar Unit	Empty	100	Head end only	30	0.5%	Incline	<0.1%	0	0	> 25%, < 50%	0%	2939	2981
Refrigerated Boxcar Unit	Empty	100	Head end only	50	0.5%	Incline	<0.1%	0	0	> 50%	0%	6426	6436
Refrigerated Boxcar Unit	Empty	100	Head end only	34	1.0%	Crest	<0.1%	0	0	> 50%	0%	3453	3500

Train Type	Train Load	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P < x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (> 500 ft if v < 30mph, > 1200 ft if v > 30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Boxcar													
Unit Refrigerated Boxcar	Empty	100	Head end only	55	1.0%	Trough	<0.1%	0	0	> 50%	0%	11919	11928
Unit Refrigerated Boxcar	Empty	100	Head end only	10	1.1%	Decline	<0.1%	0	0	> 50%	0%	1985	1995
Unit Refrigerated Boxcar	Empty	100	Head end only	30	1.1%	Decline	<0.1%	0	0	> 50%	0%	5956	5965
Unit Refrigerated Boxcar	Empty	100	Head end only	55	1.1%	Decline	<0.1%	0	0	> 50%	0%	13719	13728
Unit Refrigerated Boxcar	Empty	100	Head end only	25	1.5%	Incline	<0.1%	0	0	> 50%	0%	1370	1419
Unit Refrigerated Boxcar	Empty	100	Head end only	25	1.7%	Decline	<0.1%	0	0	> 50%	0%	7463	7473
Unit Refrigerated Boxcar	Empty	100	Head end only	20	2.2%	Decline	<0.1%	0	0	> 50%	0%	4671	4679
Unit Refrigerated Boxcar	Loaded	100	Distributed (Head and Rear)	10	0.0%	Flat	<0.1%	0	0	> 25%, < 50%	0%	958	992
Unit Refrigerated Boxcar	Loaded	100	Distributed (Head and Rear)	30	0.0%	Flat	<0.1%	0	0	> 50%	0%	4369	4426
Unit Refrigerated Boxcar	Loaded	100	Distributed (Head and Rear)	50	0.0%	Flat	<0.1%	0	0	> 50%	0%	9483	9550
Unit Refrigerated Boxcar	Loaded	100	Distributed (Head and Rear)	10	0.5%	Decline	<0.1%	0	0	> 50%	0%	1619	1738

Train Type	Train Load	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P < x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (> 500 ft if v < 30mph, > 1200 ft if v > 30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Refrigerated Boxcar	Loaded	100	Distributed (Head and Rear)	30	0.5%	Decline	<0.1%	0	0	> 50%	0%	6069	6231
Unit Refrigerated Boxcar	Loaded	100	Distributed (Head and Rear)	50	0.5%	Decline	<0.1%	0	0	> 50%	0%	12674	12878
Unit Refrigerated Boxcar	Loaded	100	Distributed (Head and Rear)	10	0.5%	Incline	<0.1%	0	0	< 0.1%	0%	636	677
Unit Refrigerated Boxcar	Loaded	100	Distributed (Head and Rear)	30	0.5%	Incline	<0.1%	0	0	> 50%	0%	3290	3369
Unit Refrigerated Boxcar	Loaded	100	Distributed (Head and Rear)	16	1.0%	Crest	<0.1%	0	0	> 50%	0%	1533	1633
Unit Refrigerated Boxcar	Loaded	100	Distributed (Head and Rear)	26	1.0%	Trough	<0.1%	0	0	> 50%	0%	6295	6484
Unit Refrigerated Boxcar	Loaded	100	Distributed (Head and Rear)	10	1.1%	Decline	<0.1%	0	0	> 50%	0%	3085	3093
Unit Refrigerated Boxcar	Loaded	100	Distributed (Head and Rear)	30	1.1%	Decline	<0.1%	0	0	> 50%	0%	4757	5012
Unit Refrigerated Boxcar	Loaded	100	Distributed (Head and Rear)	45	1.1%	Decline	<0.1%	0	0	> 50%	0%	10030	10728
Unit Refrigerated Boxcar	Loaded	100	Distributed (Head and Rear)	11	1.5%	Incline	<0.1%	0	0	< 0.1%	0%	444	466
Unit Refrigerated Boxcar	Loaded	100	Distributed (Head and Rear)	15	1.7%	Decline	<0.1%	0	0	> 50%	0%	2878	3171
Unit Refrigerated Boxcar	Loaded	100	Distributed	15	2.2%	Decline	<0.1%	0	0	> 50%	0%	5460	8328

Train Type	Train Load	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P < x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (> 500 ft if v < 30mph, > 1200 ft if v > 30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Refrigerated Boxcar Unit	Loaded	100	(Head and Rear) Head end only	10	0.0%	Flat	<0.1%	0	0	< 0.1%	0%	952	990
Refrigerated Boxcar Unit	Loaded	100	Head end only	30	0.0%	Flat	<0.1%	0	0	> 50%	0%	4374	4457
Refrigerated Boxcar Unit	Loaded	100	Head end only	50	0.0%	Flat	<0.1%	0	0	> 50%	0%	9521	9604
Refrigerated Boxcar Unit	Loaded	100	Head end only	10	0.5%	Decline	<0.1%	0	0	> 50%	0%	1649	1745
Refrigerated Boxcar Unit	Loaded	100	Head end only	30	0.5%	Decline	<0.1%	0	0	> 50%	0%	6211	6379
Refrigerated Boxcar Unit	Loaded	100	Head end only	50	0.5%	Decline	<0.1%	0	0	> 50%	0%	13228	13578
Refrigerated Boxcar Unit	Loaded	100	Head end only	10	0.5%	Incline	<0.1%	0	0	< 0.1%	0%	614	646
Refrigerated Boxcar Unit	Loaded	100	Head end only	30	0.5%	Incline	<0.1%	0	0	< 0.1%	0%	3304	3327
Refrigerated Boxcar Unit	Loaded	100	Head end only	16	1.0%	Crest	<0.1%	0	0	< 10%	0%	1584	1672
Refrigerated Boxcar Unit	Loaded	100	Head end only	26	1.0%	Trough	<0.1%	0	0	> 50%	0%	6317	6544
Refrigerated Boxcar Unit	Loaded	100	Head end only	10	1.1%	Decline	<0.1%	0	0	> 50%	0%	3085	3094

Train Type	Train Load	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P < x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (> 500 ft if v < 30mph, > 1200 ft if v > 30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Boxcar													
Unit Refrigerated Boxcar	Loaded	100	Head end only	30	1.1%	Decline	<0.1%	0	0	> 50%	0%	4762	5218
Unit Refrigerated Boxcar	Loaded	100	Head end only	45	1.1%	Decline	<0.1%	0	0	> 50%	0%	10098	10809
Unit Refrigerated Boxcar	Loaded	100	Head end only	11	1.5%	Incline	<0.1%	0	0	< 0.1%	0%	447	468
Unit Refrigerated Boxcar	Loaded	100	Head end only	15	1.7%	Decline	<0.1%	0	0	> 50%	0%	2968	3545
Unit Refrigerated Boxcar	Loaded	100	Head end only	15	2.2%	Decline	<0.1%	0	0	> 50%	0%	6844	11131
Unit Refrigerated Boxcar	Empty	135	Distributed (Head and Rear)	10	0.0%	Flat	<0.1%	0	0	> 50%	0%	873	958
Unit Refrigerated Boxcar	Empty	135	Distributed (Head and Rear)	30	0.0%	Flat	<0.1%	0	0	> 50%	0%	4015	4083
Unit Refrigerated Boxcar	Empty	135	Distributed (Head and Rear)	60	0.0%	Flat	<0.1%	0	0	> 50%	0%	11261	11416
Unit Refrigerated Boxcar	Empty	135	Distributed (Head and Rear)	10	0.5%	Decline	<0.1%	0	0	> 50%	0%	1437	1542
Unit Refrigerated Boxcar	Empty	135	Distributed (Head and Rear)	30	0.5%	Decline	<0.1%	0	0	> 50%	0%	5296	5517
Unit Refrigerated Boxcar	Empty	135	Distributed (Head and Rear)	60	0.5%	Decline	<0.1%	0	0	> 50%	0%	13567	13754

Train Type	Train Load	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P < x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (> 500 ft if v < 30mph, > 1200 ft if v > 30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Refrigerated Boxcar	Empty	135	Distributed (Head and Rear)	10	0.5%	Incline	<0.1%	0	0	< 0.1%	0%	607	696
Unit Refrigerated Boxcar	Empty	135	Distributed (Head and Rear)	30	0.5%	Incline	<0.1%	0	0	> 50%	0%	3083	3221
Unit Refrigerated Boxcar	Empty	135	Distributed (Head and Rear)	52	0.5%	Incline	<0.1%	0	0	> 50%	0%	7562	7678
Unit Refrigerated Boxcar	Empty	135	Distributed (Head and Rear)	35	1.0%	Crest	<0.1%	0	0	> 50%	0%	4026	4307
Unit Refrigerated Boxcar	Empty	135	Distributed (Head and Rear)	55	1.0%	Trough	<0.1%	0	0	> 50%	0%	7658	9756
Unit Refrigerated Boxcar	Empty	135	Distributed (Head and Rear)	10	1.1%	Decline	<0.1%	0	0	> 50%	0%	2781	2914
Unit Refrigerated Boxcar	Empty	135	Distributed (Head and Rear)	30	1.1%	Decline	<0.1%	0	0	> 50%	0%	7793	8135
Unit Refrigerated Boxcar	Empty	135	Distributed (Head and Rear)	55	1.1%	Decline	<0.1%	0	0	> 50%	0%	15864	16068
Unit Refrigerated Boxcar	Empty	135	Distributed (Head and Rear)	25	1.5%	Incline	<0.1%	0	0	> 50%	0%	1500	1636
Unit Refrigerated Boxcar	Empty	135	Distributed (Head and Rear)	25	1.7%	Decline	<0.1%	0	0	> 50%	0%	10257	10546
Unit Refrigerated Boxcar	Empty	135	Distributed (Head and Rear)	20	2.2%	Decline	<0.1%	0	0	> 50%	0%	9770	9779
Unit	Empty	135	Distributed	10	0.0%	Flat	<0.1%	0	0	> 50%	0%	873	945

Train Type	Train Load	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P < x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (> 500 ft if v < 30mph, > 1200 ft if v > 30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Refrigerated Boxcar Unit	Empty	135	(Head, Mid, Rear) Distributed	30	0.0%	Flat	<0.1%	0	0	> 50%	0%	4038	4150
Refrigerated Boxcar Unit	Empty	135	(Head, Mid, Rear) Distributed	60	0.0%	Flat	<0.1%	0	0	> 50%	0%	11276	11418
Refrigerated Boxcar Unit	Empty	135	(Head, Mid, Rear) Distributed	10	0.5%	Decline	<0.1%	0	0	> 50%	0%	1419	1505
Refrigerated Boxcar Unit	Empty	135	(Head, Mid, Rear) Distributed	30	0.5%	Decline	<0.1%	0	0	> 50%	0%	5337	5454
Refrigerated Boxcar Unit	Empty	135	(Head, Mid, Rear) Distributed	60	0.5%	Decline	<0.1%	0	0	> 50%	0%	13548	13704
Refrigerated Boxcar Unit	Empty	135	(Head, Mid, Rear) Distributed	10	0.5%	Incline	<0.1%	0	0	< 0.1%	0%	595	684
Refrigerated Boxcar Unit	Empty	135	(Head, Mid, Rear) Distributed	30	0.5%	Incline	<0.1%	0	0	> 50%	0%	3093	3207
Refrigerated Boxcar Unit	Empty	135	(Head, Mid, Rear) Distributed	52	0.5%	Incline	<0.1%	0	0	> 50%	0%	7535	7672
Refrigerated Boxcar Unit	Empty	135	(Head, Mid, Rear) Distributed	35	1.0%	Crest	<0.1%	0	0	> 50%	0%	3960	4229
Refrigerated Boxcar Unit	Empty	135	(Head, Mid, Rear) Distributed	55	1.0%	Trough	<0.1%	0	0	> 50%	0%	7780	8497
Refrigerated Boxcar Unit	Empty	135	(Head, Mid, Rear) Distributed	10	1.1%	Decline	<0.1%	0	0	> 50%	0%	2730	2986

Train Type	Train Load	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P < x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (> 500 ft if v < 30mph, > 1200 ft if v > 30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Boxcar			Rear)										
Unit Refrigerated Boxcar	Empty	135	Distributed (Head, Mid, Rear)	30	1.1%	Decline	<0.1%	0	0	> 50%	0%	7737	8034
Unit Refrigerated Boxcar	Empty	135	Distributed (Head, Mid, Rear)	55	1.1%	Decline	<0.1%	0	0	> 50%	0%	15850	16065
Unit Refrigerated Boxcar	Empty	135	Distributed (Head, Mid, Rear)	25	1.5%	Incline	<0.1%	0	0	> 50%	0%	1541	1616
Unit Refrigerated Boxcar	Empty	135	Distributed (Head, Mid, Rear)	25	1.7%	Decline	<0.1%	0	0	> 50%	0%	10067	10539
Unit Refrigerated Boxcar	Empty	135	Distributed (Head, Mid, Rear)	20	2.2%	Decline	<0.1%	0	0	> 50%	0%	9770	9779
Unit Refrigerated Boxcar	Loaded	135	Distributed (Head and Rear)	10	0.0%	Flat	<0.1%	0	0	> 50%	0%	1026	1092
Unit Refrigerated Boxcar	Loaded	135	Distributed (Head and Rear)	30	0.0%	Flat	<0.1%	0	0	> 50%	0%	4850	4915
Unit Refrigerated Boxcar	Loaded	135	Distributed (Head and Rear)	50	0.0%	Flat	<0.1%	0	0	> 50%	0%	10393	10593
Unit Refrigerated Boxcar	Loaded	135	Distributed (Head and Rear)	10	0.5%	Decline	<0.1%	0	0	> 50%	0%	1915	2227
Unit Refrigerated Boxcar	Loaded	135	Distributed (Head and Rear)	30	0.5%	Decline	<0.1%	0	0	> 50%	0%	6971	7168
Unit Refrigerated Boxcar	Loaded	135	Distributed (Head and Rear)	50	0.5%	Decline	<0.1%	0	0	> 50%	0%	14125	14344

Train Type	Train Load	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P < x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (> 500 ft if v < 30mph, > 1200 ft if v > 30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Refrigerated Boxcar	Loaded	135	Distributed (Head and Rear)	10	0.5%	Incline	<0.1%	0	0	< 0.1%	0%	663	786
Unit Refrigerated Boxcar	Loaded	135	Distributed (Head and Rear)	31	0.5%	Incline	<0.1%	0	0	> 50%	0%	3735	3819
Unit Refrigerated Boxcar	Loaded	135	Distributed (Head and Rear)	17	1.0%	Crest	<0.1%	0	0	> 50%	0%	1829	2047
Unit Refrigerated Boxcar	Loaded	135	Distributed (Head and Rear)	30	1.0%	Trough	<0.1%	0	0	> 50%	0%	5948	6270
Unit Refrigerated Boxcar	Loaded	135	Distributed (Head and Rear)	10	1.1%	Decline	<0.1%	0	0	> 50%	0%	4387	4667
Unit Refrigerated Boxcar	Loaded	135	Distributed (Head and Rear)	30	1.1%	Decline	<0.1%	0	0	> 50%	0%	5229	5632
Unit Refrigerated Boxcar	Loaded	135	Distributed (Head and Rear)	45	1.1%	Decline	<0.1%	0	0	> 50%	0%	10739	11426
Unit Refrigerated Boxcar	Loaded	135	Distributed (Head and Rear)	12	1.5%	Incline	<0.1%	0	0	< 0.1%	0%	483	538
Unit Refrigerated Boxcar	Loaded	135	Distributed (Head and Rear)	25	1.7%	Decline	<0.1%	0	0	> 50%	0%	8167	9489
Unit Refrigerated Boxcar	Loaded	135	Distributed (Head and Rear)	15	2.2%	Decline	<0.1%	0	0	> 50%	0%	8060	10283
Unit Refrigerated Boxcar	Loaded	135	Distributed (Head, Mid, Rear)	10	0.0%	Flat	<0.1%	0	0	> 50%	0%	1033	1090
Unit Refrigerated Boxcar	Loaded	135	Distributed	30	0.0%	Flat	<0.1%	0	0	> 50%	0%	4852	4914

Train Type	Train Load	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P < x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (> 500 ft if v < 30mph, > 1200 ft if v > 30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Refrigerated Boxcar Unit	Loaded	135	(Head, Mid, Rear) Distributed	50	0.0%	Flat	<0.1%	0	0	> 50%	0%	10387	10582
Refrigerated Boxcar Unit	Loaded	135	(Head, Mid, Rear) Distributed	10	0.5%	Decline	<0.1%	0	0	> 50%	0%	1894	2019
Refrigerated Boxcar Unit	Loaded	135	(Head, Mid, Rear) Distributed	30	0.5%	Decline	<0.1%	0	0	> 50%	0%	6944	7108
Refrigerated Boxcar Unit	Loaded	135	(Head, Mid, Rear) Distributed	50	0.5%	Decline	<0.1%	0	0	> 50%	0%	14151	14308
Refrigerated Boxcar Unit	Loaded	135	(Head, Mid, Rear) Distributed	10	0.5%	Incline	<0.1%	0	0	< 0.1%	0%	643	740
Refrigerated Boxcar Unit	Loaded	135	(Head, Mid, Rear) Distributed	31	0.5%	Incline	<0.1%	0	0	> 50%	0%	3751	3824
Refrigerated Boxcar Unit	Loaded	135	(Head, Mid, Rear) Distributed	17	1.0%	Crest	<0.1%	0	0	> 50%	0%	1727	1904
Refrigerated Boxcar Unit	Loaded	135	(Head, Mid, Rear) Distributed	30	1.0%	Trough	<0.1%	0	0	> 50%	0%	5883	6188
Refrigerated Boxcar Unit	Loaded	135	(Head, Mid, Rear) Distributed	10	1.1%	Decline	<0.1%	0	0	> 50%	0%	4368	4467
Refrigerated Boxcar Unit	Loaded	135	(Head, Mid, Rear) Distributed	30	1.1%	Decline	<0.1%	0	0	> 50%	0%	5183	5578
Refrigerated Boxcar Unit	Loaded	135	(Head, Mid, Rear) Distributed	45	1.1%	Decline	<0.1%	0	0	> 50%	0%	10731	11233

Train Type	Train Load	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P < x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (> 500 ft if v < 30mph, > 1200 ft if v > 30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Boxcar			Rear)										
Unit Refrigerated Boxcar	Loaded	135	Distributed (Head, Mid, Rear)	12	1.5%	Incline	<0.1%	0	0	< 0.1%	0%	500	529
Unit Refrigerated Boxcar	Loaded	135	Distributed (Head, Mid, Rear)	25	1.7%	Decline	<0.1%	0	0	> 50%	0%	7938	9066
Unit Refrigerated Boxcar	Loaded	135	Distributed (Head, Mid, Rear)	15	2.2%	Decline	<0.1%	0	0	> 50%	0%	6791	9782
Unit Steel Hopper	Empty	100	Distributed (Head and Rear)	10	0.0%	Flat	<0.1%	0	0	< 0.1%	0%	585	593
Unit Steel Hopper	Empty	100	Distributed (Head and Rear)	30	0.0%	Flat	<0.1%	0	0	> 50%	0%	2679	2751
Unit Steel Hopper	Empty	100	Distributed (Head and Rear)	60	0.0%	Flat	<0.1%	0	0	> 50%	0%	7442	7523
Unit Steel Hopper	Empty	100	Distributed (Head and Rear)	10	0.5%	Decline	<0.1%	0	0	> 50%	0%	794	838
Unit Steel Hopper	Empty	100	Distributed (Head and Rear)	30	0.5%	Decline	<0.1%	0	0	> 50%	0%	3129	3193
Unit Steel Hopper	Empty	100	Distributed (Head and Rear)	60	0.5%	Decline	<0.1%	0	0	> 50%	0%	8382	8503
Unit Steel Hopper	Empty	100	Distributed (Head and Rear)	10	0.5%	Incline	<0.1%	0	0	< 0.1%	0%	485	495
Unit Steel Hopper	Empty	100	Distributed (Head and Rear)	30	0.5%	Incline	<0.1%	0	0	> 25%, < 50%	0%	2338	2364

Train Type	Train Load	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P < x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (> 500 ft if v < 30mph, > 1200 ft if v > 30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Steel Hopper	Empty	100	Distributed (Head and Rear)	60	0.5%	Incline	<0.1%	0	0	> 50%	0%	5712	5720
Unit Steel Hopper	Empty	100	Distributed (Head and Rear)	46	1.0%	Crest	<0.1%	0	0	> 50%	0%	3926	4002
Unit Steel Hopper	Empty	100	Distributed (Head and Rear)	55	1.0%	Trough	<0.1%	0	0	> 50%	0%	8262	8379
Unit Steel Hopper	Empty	100	Distributed (Head and Rear)	10	1.1%	Decline	<0.1%	0	0	> 50%	0%	1111	1187
Unit Steel Hopper	Empty	100	Distributed (Head and Rear)	30	1.1%	Decline	<0.1%	0	0	> 50%	0%	3815	3898
Unit Steel Hopper	Empty	100	Distributed (Head and Rear)	55	1.1%	Decline	<0.1%	0	0	> 50%	0%	8483	8624
Unit Steel Hopper	Empty	100	Distributed (Head and Rear)	25	1.5%	Incline	<0.1%	0	0	> 50%	0%	1272	1307
Unit Steel Hopper	Empty	100	Distributed (Head and Rear)	25	1.7%	Decline	<0.1%	0	0	> 50%	0%	3813	3953
Unit Steel Hopper	Empty	100	Distributed (Head and Rear)	20	2.2%	Decline	<0.1%	0	0	> 50%	0%	3760	3828
Unit Steel Hopper	Empty	100	Head end only	10	0.0%	Flat	<0.1%	0	0	< 0.1%	0%	586	593
Unit Steel Hopper	Empty	100	Head end only	30	0.0%	Flat	<0.1%	0	0	< 0.1%	0%	2680	2751
Unit Steel Hopper	Empty	100	Head end only	60	0.0%	Flat	<0.1%	0	0	> 50%	0%	7443	7522
Unit Steel	Empty	100	Head end only	10	0.5%	Decline	<0.1%	0	0	< 0.1%	0%	812	841

Train Type	Train Load	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P < x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (> 500 ft if v < 30mph, > 1200 ft if v > 30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Hopper													
Unit Steel Hopper	Empty	100	Head end only	30	0.5%	Decline	<0.1%	0	0	> 50%	0%	3093	3184
Unit Steel Hopper	Empty	100	Head end only	60	0.5%	Decline	<0.1%	0	0	> 50%	0%	8380	8473
Unit Steel Hopper	Empty	100	Head end only	10	0.5%	Incline	<0.1%	0	0	< 0.1%	0%	485	492
Unit Steel Hopper	Empty	100	Head end only	30	0.5%	Incline	<0.1%	0	0	< 0.1%	0%	2340	2364
Unit Steel Hopper	Empty	100	Head end only	60	0.5%	Incline	<0.1%	0	0	> 50%	0%	5712	5720
Unit Steel Hopper	Empty	100	Head end only	46	1.0%	Crest	<0.1%	0	0	> 50%	0%	3928	4000
Unit Steel Hopper	Empty	100	Head end only	55	1.0%	Trough	<0.1%	0	0	> 50%	0%	8240	8374
Unit Steel Hopper	Empty	100	Head end only	10	1.1%	Decline	<0.1%	0	0	> 50%	0%	1110	1169
Unit Steel Hopper	Empty	100	Head end only	30	1.1%	Decline	<0.1%	0	0	> 50%	0%	3779	3894
Unit Steel Hopper	Empty	100	Head end only	55	1.1%	Decline	<0.1%	0	0	> 50%	0%	8471	8581
Unit Steel Hopper	Empty	100	Head end only	25	1.5%	Incline	<0.1%	0	0	> 10%, < 25%	0%	1269	1308
Unit Steel Hopper	Empty	100	Head end only	25	1.7%	Decline	<0.1%	0	0	> 50%	0%	3801	3916
Unit Steel Hopper	Empty	100	Head end only	20	2.2%	Decline	<0.1%	0	0	> 50%	0%	3756	3827
Unit Steel Hopper	Loaded	100	Distributed (Head and Rear)	10	0.0%	Flat	<0.1%	0	0	< 0.1%	0%	832	852
Unit Steel Hopper	Loaded	100	Distributed (Head and Rear)	30	0.0%	Flat	<0.1%	0	0	> 50%	0%	3715	3835
Unit Steel Hopper	Loaded	100	Distributed	50	0.0%	Flat	<0.1%	0	0	> 50%	0%	8383	8502

Train Type	Train Load	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P < x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (> 500 ft if v < 30mph, > 1200 ft if v > 30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Hopper			(Head and Rear)										
Unit Steel Hopper	Loaded	100	Distributed (Head and Rear)	10	0.5%	Decline	<0.1%	0	0	> 50%	0%	1226	1270
Unit Steel Hopper	Loaded	100	Distributed (Head and Rear)	30	0.5%	Decline	<0.1%	0	0	> 50%	0%	4897	4989
Unit Steel Hopper	Loaded	100	Distributed (Head and Rear)	50	0.5%	Decline	<0.1%	0	0	> 50%	0%	10716	10953
Unit Steel Hopper	Loaded	100	Distributed (Head and Rear)	10	0.5%	Incline	<0.1%	0	0	< 0.1%	0%	574	604
Unit Steel Hopper	Loaded	100	Distributed (Head and Rear)	27	0.5%	Incline	<0.1%	0	0	> 50%	0%	2503	2571
Unit Steel Hopper	Loaded	100	Distributed (Head and Rear)	15	1.0%	Crest	<0.1%	0	0	> 50%	0%	1153	1216
Unit Steel Hopper	Loaded	100	Distributed (Head and Rear)	24	1.0%	Trough	<0.1%	0	0	> 50%	0%	4521	4653
Unit Steel Hopper	Loaded	100	Distributed (Head and Rear)	10	1.1%	Decline	<0.1%	0	0	> 50%	0%	2237	2298
Unit Steel Hopper	Loaded	100	Distributed (Head and Rear)	30	1.1%	Decline	<0.1%	0	0	> 50%	0%	4235	4390
Unit Steel Hopper	Loaded	100	Distributed (Head and Rear)	45	1.1%	Decline	<0.1%	0	0	> 50%	0%	9210	9709
Unit Steel Hopper	Loaded	100	Distributed (Head and	10	1.5%	Incline	<0.1%	0	0	< 0.1%	0%	399	413

Train Type	Train Load	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P < x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (> 500 ft if v < 30mph, > 1200 ft if v > 30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Steel Hopper	Loaded	100	Rear) Distributed (Head and Rear)	15	1.7%	Decline	<0.1%	0	0	> 50%	0%	2446	3977
Unit Steel Hopper	Loaded	100	Distributed (Head and Rear)	15	2.2%	Decline	<0.1%	0	0	> 50%	0%	4378	7173
Unit Steel Hopper	Loaded	100	Head end only	10	0.0%	Flat	<0.1%	0	0	< 0.1%	0%	831	850
Unit Steel Hopper	Loaded	100	Head end only	30	0.0%	Flat	<0.1%	0	0	< 10%	0%	3715	3832
Unit Steel Hopper	Loaded	100	Head end only	50	0.0%	Flat	<0.1%	0	0	> 50%	0%	8381	8507
Unit Steel Hopper	Loaded	100	Head end only	10	0.5%	Decline	<0.1%	0	0	> 50%	0%	1222	1265
Unit Steel Hopper	Loaded	100	Head end only	30	0.5%	Decline	<0.1%	0	0	> 50%	0%	4913	5018
Unit Steel Hopper	Loaded	100	Head end only	50	0.5%	Decline	<0.1%	0	0	> 50%	0%	10737	10962
Unit Steel Hopper	Loaded	100	Head end only	10	0.5%	Incline	<0.1%	0	0	< 0.1%	0%	594	629
Unit Steel Hopper	Loaded	100	Head end only	27	0.5%	Incline	<0.1%	0	0	> 50%	0%	2503	2567
Unit Steel Hopper	Loaded	100	Head end only	15	1.0%	Crest	<0.1%	0	0	< 0.1%	0%	1204	1270
Unit Steel Hopper	Loaded	100	Head end only	24	1.0%	Trough	<0.1%	0	0	> 50%	0%	4532	4678
Unit Steel Hopper	Loaded	100	Head end only	10	1.1%	Decline	<0.1%	0	0	> 50%	0%	2233	2280
Unit Steel Hopper	Loaded	100	Head end only	30	1.1%	Decline	<0.1%	0	0	> 50%	0%	4250	4499
Unit Steel Hopper	Loaded	100	Head end only	45	1.1%	Decline	<0.1%	0	0	> 50%	0%	9224	9668
Unit Steel Hopper	Loaded	100	Head end only	10	1.5%	Incline	<0.1%	0	0	< 0.1%	0%	392	411

Train Type	Train Load	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P < x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (> 500 ft if v < 30mph, > 1200 ft if v > 30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Hopper													
Unit Steel Hopper	Loaded	100	Head end only	15	1.7%	Decline	<0.1%	0	0	> 50%	0%	2432	3861
Unit Steel Hopper	Loaded	100	Head end only	15	2.2%	Decline	<0.1%	0	0	> 50%	0%	4383	7500
Unit Steel Hopper	Empty	135	Distributed (Head and Rear)	10	0.0%	Flat	<0.1%	0	0	< 0.1%	0%	668	721
Unit Steel Hopper	Empty	135	Distributed (Head and Rear)	30	0.0%	Flat	<0.1%	0	0	> 50%	0%	2966	3050
Unit Steel Hopper	Empty	135	Distributed (Head and Rear)	60	0.0%	Flat	<0.1%	0	0	> 50%	0%	8323	8451
Unit Steel Hopper	Empty	135	Distributed (Head and Rear)	10	0.5%	Decline	<0.1%	0	0	> 50%	0%	895	938
Unit Steel Hopper	Empty	135	Distributed (Head and Rear)	30	0.5%	Decline	<0.1%	0	0	> 50%	0%	3522	3599
Unit Steel Hopper	Empty	135	Distributed (Head and Rear)	60	0.5%	Decline	<0.1%	0	0	> 50%	0%	9272	9373
Unit Steel Hopper	Empty	135	Distributed (Head and Rear)	10	0.5%	Incline	<0.1%	0	0	< 0.1%	0%	525	597
Unit Steel Hopper	Empty	135	Distributed (Head and Rear)	30	0.5%	Incline	<0.1%	0	0	> 50%	0%	2559	2697
Unit Steel Hopper	Empty	135	Distributed (Head and Rear)	60	0.5%	Incline	<0.1%	0	0	> 50%	0%	7422	7568
Unit Steel Hopper	Empty	135	Distributed (Head and	50	1.0%	Crest	<0.1%	0	0	> 50%	0%	7516	7566

Train Type	Train Load	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P < x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (> 500 ft if v < 30mph, > 1200 ft if v > 30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Steel Hopper	Empty	135	Rear) Distributed (Head and Rear)	55	1.0%	Trough	<0.1%	0	0	> 50%	0%	5971	6094
Unit Steel Hopper	Empty	135	Distributed (Head and Rear)	10	1.1%	Decline	<0.1%	0	0	> 50%	0%	1342	1417
Unit Steel Hopper	Empty	135	Distributed (Head and Rear)	30	1.1%	Decline	<0.1%	0	0	> 50%	0%	4426	4554
Unit Steel Hopper	Empty	135	Distributed (Head and Rear)	55	1.1%	Decline	<0.1%	0	0	> 50%	0%	9612	9748
Unit Steel Hopper	Empty	135	Distributed (Head and Rear)	25	1.5%	Incline	<0.1%	0	0	> 50%	0%	1404	1520
Unit Steel Hopper	Empty	135	Distributed (Head and Rear)	25	1.7%	Decline	<0.1%	0	0	> 50%	0%	4653	4796
Unit Steel Hopper	Empty	135	Distributed (Head and Rear)	20	2.2%	Decline	<0.1%	0	0	> 50%	0%	4822	5060
Unit Steel Hopper	Empty	135	Distributed (Head, Mid, Rear)	10	0.0%	Flat	<0.1%	0	0	< 0.1%	0%	667	697
Unit Steel Hopper	Empty	135	Distributed (Head, Mid, Rear)	30	0.0%	Flat	<0.1%	0	0	> 50%	0%	2986	3056
Unit Steel Hopper	Empty	135	Distributed (Head, Mid, Rear)	60	0.0%	Flat	<0.1%	0	0	> 50%	0%	8311	8474
Unit Steel Hopper	Empty	135	Distributed (Head, Mid, Rear)	10	0.5%	Decline	<0.1%	0	0	> 50%	0%	900	952

Train Type	Train Load	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P < x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (> 500 ft if v < 30mph, > 1200 ft if v > 30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Steel Hopper	Empty	135	Distributed (Head, Mid, Rear)	30	0.5%	Decline	<0.1%	0	0	> 50%	0%	3519	3607
Unit Steel Hopper	Empty	135	Distributed (Head, Mid, Rear)	60	0.5%	Decline	<0.1%	0	0	> 50%	0%	9270	9377
Unit Steel Hopper	Empty	135	Distributed (Head, Mid, Rear)	10	0.5%	Incline	<0.1%	0	0	< 0.1%	0%	528	613
Unit Steel Hopper	Empty	135	Distributed (Head, Mid, Rear)	30	0.5%	Incline	<0.1%	0	0	> 50%	0%	2548	2688
Unit Steel Hopper	Empty	135	Distributed (Head, Mid, Rear)	60	0.5%	Incline	<0.1%	0	0	> 50%	0%	7470	7582
Unit Steel Hopper	Empty	135	Distributed (Head, Mid, Rear)	50	1.0%	Crest	<0.1%	0	0	> 50%	0%	7481	7552
Unit Steel Hopper	Empty	135	Distributed (Head, Mid, Rear)	55	1.0%	Trough	<0.1%	0	0	> 50%	0%	5949	6080
Unit Steel Hopper	Empty	135	Distributed (Head, Mid, Rear)	10	1.1%	Decline	<0.1%	0	0	> 50%	0%	1337	1406
Unit Steel Hopper	Empty	135	Distributed (Head, Mid, Rear)	30	1.1%	Decline	<0.1%	0	0	> 50%	0%	4413	4553
Unit Steel Hopper	Empty	135	Distributed (Head, Mid, Rear)	55	1.1%	Decline	<0.1%	0	0	> 50%	0%	9602	9741
Unit Steel Hopper	Empty	135	Distributed (Head, Mid, Rear)	25	1.5%	Incline	<0.1%	0	0	> 50%	0%	1374	1516
Unit Steel	Empty	135	Distributed	25	1.7%	Decline	<0.1%	0	0	> 50%	0%	4661	4783

Train Type	Train Load	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P < x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (> 500 ft if v < 30mph, > 1200 ft if v > 30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Hopper			(Head, Mid, Rear)										
Unit Steel Hopper	Empty	135	Distributed (Head, Mid, Rear)	20	2.2%	Decline	<0.1%	0	0	> 50%	0%	4856	5077
Unit Steel Hopper	Loaded	135	Distributed (Head and Rear)	10	0.0%	Flat	<0.1%	0	0	< 0.1%	0%	895	951
Unit Steel Hopper	Loaded	135	Distributed (Head and Rear)	30	0.0%	Flat	<0.1%	0	0	> 50%	0%	4113	4213
Unit Steel Hopper	Loaded	135	Distributed (Head and Rear)	50	0.0%	Flat	<0.1%	0	0	> 50%	0%	9075	9226
Unit Steel Hopper	Loaded	135	Distributed (Head and Rear)	10	0.5%	Decline	<0.1%	0	0	> 50%	0%	1434	1490
Unit Steel Hopper	Loaded	135	Distributed (Head and Rear)	30	0.5%	Decline	<0.1%	0	0	> 50%	0%	5554	5663
Unit Steel Hopper	Loaded	135	Distributed (Head and Rear)	50	0.5%	Decline	<0.1%	0	0	> 50%	0%	11818	12030
Unit Steel Hopper	Loaded	135	Distributed (Head and Rear)	10	0.5%	Incline	<0.1%	0	0	< 0.1%	0%	632	714
Unit Steel Hopper	Loaded	135	Distributed (Head and Rear)	30	0.5%	Incline	<0.1%	0	0	> 50%	0%	3208	3281
Unit Steel Hopper	Loaded	135	Distributed (Head and Rear)	16	1.0%	Crest	<0.1%	0	0	> 50%	0%	1393	1501
Unit Steel Hopper	Loaded	135	Distributed (Head and	27	1.0%	Trough	<0.1%	0	0	> 50%	0%	6154	6348

Train Type	Train Load	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P < x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (> 500 ft if v < 30mph, > 1200 ft if v > 30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Steel Hopper	Loaded	135	Rear) Distributed (Head and Rear)	10	1.1%	Decline	<0.1%	0	0	> 50%	0%	2767	2865
Unit Steel Hopper	Loaded	135	Distributed (Head and Rear)	30	1.1%	Decline	<0.1%	0	0	> 50%	0%	4531	4766
Unit Steel Hopper	Loaded	135	Distributed (Head and Rear)	45	1.1%	Decline	<0.1%	0	0	> 50%	0%	9702	10126
Unit Steel Hopper	Loaded	135	Distributed (Head and Rear)	11	1.5%	Incline	<0.1%	0	0	< 0.1%	0%	417	470
Unit Steel Hopper	Loaded	135	Distributed (Head and Rear)	25	1.7%	Decline	<0.1%	0	0	> 50%	0%	6428	7578
Unit Steel Hopper	Loaded	135	Distributed (Head and Rear)	15	2.2%	Decline	<0.1%	0	0	> 50%	0%	4833	6856
Unit Steel Hopper	Loaded	135	Distributed (Head, Mid, Rear)	10	0.0%	Flat	<0.1%	0	0	> 50%	0%	897	925
Unit Steel Hopper	Loaded	135	Distributed (Head, Mid, Rear)	30	0.0%	Flat	<0.1%	0	0	> 50%	0%	4112	4205
Unit Steel Hopper	Loaded	135	Distributed (Head, Mid, Rear)	50	0.0%	Flat	<0.1%	0	0	> 50%	0%	9073	9228
Unit Steel Hopper	Loaded	135	Distributed (Head, Mid, Rear)	10	0.5%	Decline	<0.1%	0	0	> 50%	0%	1433	1491
Unit Steel Hopper	Loaded	135	Distributed (Head, Mid, Rear)	30	0.5%	Decline	<0.1%	0	0	> 50%	0%	5559	5683

Train Type	Train Load	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P < x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (> 500 ft if v < 30mph, > 1200 ft if v > 30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Steel Hopper	Loaded	135	Distributed (Head, Mid, Rear)	50	0.5%	Decline	<0.1%	0	0	> 50%	0%	11820	12040
Unit Steel Hopper	Loaded	135	Distributed (Head, Mid, Rear)	10	0.5%	Incline	<0.1%	0	0	< 0.1%	0%	624	715
Unit Steel Hopper	Loaded	135	Distributed (Head, Mid, Rear)	30	0.5%	Incline	<0.1%	0	0	> 50%	0%	3213	3274
Unit Steel Hopper	Loaded	135	Distributed (Head, Mid, Rear)	16	1.0%	Crest	<0.1%	0	0	> 50%	0%	1427	1521
Unit Steel Hopper	Loaded	135	Distributed (Head, Mid, Rear)	27	1.0%	Trough	<0.1%	0	0	> 50%	0%	6169	6326
Unit Steel Hopper	Loaded	135	Distributed (Head, Mid, Rear)	10	1.1%	Decline	<0.1%	0	0	> 50%	0%	2755	2873
Unit Steel Hopper	Loaded	135	Distributed (Head, Mid, Rear)	30	1.1%	Decline	<0.1%	0	0	> 50%	0%	4544	4745
Unit Steel Hopper	Loaded	135	Distributed (Head, Mid, Rear)	45	1.1%	Decline	<0.1%	0	0	> 50%	0%	9694	10181
Unit Steel Hopper	Loaded	135	Distributed (Head, Mid, Rear)	11	1.5%	Incline	<0.1%	0	0	< 0.1%	0%	429	469
Unit Steel Hopper	Loaded	135	Distributed (Head, Mid, Rear)	25	1.7%	Decline	<0.1%	0	0	> 50%	0%	6581	8886
Unit Steel Hopper	Loaded	135	Distributed (Head, Mid, Rear)	15	2.2%	Decline	<0.1%	0	0	> 50%	0%	4833	6204
Unit Steel	Empty	200	Distributed	10	0.0%	Flat	<0.1%	0	0	< 0.1%	0%	724	765

Train Type	Train Load	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P < x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (> 500 ft if v < 30mph, > 1200 ft if v > 30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Hopper			(Head and Rear)										
Unit Steel Hopper	Empty	200	Distributed (Head and Rear)	30	0.0%	Flat	<0.1%	0	0	> 50%	0%	3271	3367
Unit Steel Hopper	Empty	200	Distributed (Head and Rear)	60	0.0%	Flat	<0.1%	0	0	> 50%	0%	9087	9232
Unit Steel Hopper	Empty	200	Distributed (Head and Rear)	10	0.5%	Decline	<0.1%	0	0	> 50%	0%	1040	1087
Unit Steel Hopper	Empty	200	Distributed (Head and Rear)	30	0.5%	Decline	<0.1%	0	0	> 50%	0%	4018	4114
Unit Steel Hopper	Empty	200	Distributed (Head and Rear)	60	0.5%	Decline	<0.1%	0	0	> 50%	0%	10394	10488
Unit Steel Hopper	Empty	200	Distributed (Head and Rear)	10	0.5%	Incline	<0.1%	0	0	< 0.1%	0%	538	594
Unit Steel Hopper	Empty	200	Distributed (Head and Rear)	30	0.5%	Incline	<0.1%	0	0	> 50%	0%	2721	2864
Unit Steel Hopper	Empty	200	Distributed (Head and Rear)	60	0.5%	Incline	<0.1%	0	0	> 50%	0%	8027	8155
Unit Steel Hopper	Empty	200	Distributed (Head and Rear)	45	1.0%	Crest	<0.1%	0	0	> 50%	0%	6920	7044
Unit Steel Hopper	Empty	200	Distributed (Head and Rear)	45	1.0%	Trough	<0.1%	0	0	> 50%	0%	4874	4997
Unit Steel Hopper	Empty	200	Distributed (Head and	10	1.1%	Decline	<0.1%	0	0	> 50%	0%	1671	1772

Train Type	Train Load	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P < x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (> 500 ft if v < 30mph, > 1200 ft if v > 30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Steel Hopper	Empty	200	Rear) Distributed (Head and Rear)	30	1.1%	Decline	<0.1%	0	0	> 50%	0%	5257	5421
Unit Steel Hopper	Empty	200	Distributed (Head and Rear)	45	1.1%	Decline	<0.1%	0	0	> 50%	0%	8606	8729
Unit Steel Hopper	Empty	200	Distributed (Head and Rear)	25	1.5%	Incline	<0.1%	0	0	> 50%	0%	1439	1560
Unit Steel Hopper	Empty	200	Distributed (Head and Rear)	25	1.7%	Decline	<0.1%	0	0	> 50%	0%	5851	6021
Unit Steel Hopper	Empty	200	Distributed (Head and Rear)	20	2.2%	Decline	<0.1%	0	0	> 50%	0%	6421	6680
Unit Steel Hopper	Empty	200	Distributed (Head, Mid, Rear)	10	0.0%	Flat	<0.1%	0	0	< 0.1%	0%	721	771
Unit Steel Hopper	Empty	200	Distributed (Head, Mid, Rear)	30	0.0%	Flat	<0.1%	0	0	> 50%	0%	3258	3385
Unit Steel Hopper	Empty	200	Distributed (Head, Mid, Rear)	60	0.0%	Flat	<0.1%	0	0	> 50%	0%	9009	9175
Unit Steel Hopper	Empty	200	Distributed (Head, Mid, Rear)	10	0.5%	Decline	<0.1%	0	0	> 50%	0%	1037	1100
Unit Steel Hopper	Empty	200	Distributed (Head, Mid, Rear)	30	0.5%	Decline	<0.1%	0	0	> 50%	0%	4012	4137
Unit Steel Hopper	Empty	200	Distributed (Head, Mid, Rear)	60	0.5%	Decline	<0.1%	0	0	> 50%	0%	10403	10496

Train Type	Train Load	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P < x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (> 500 ft if v < 30mph, > 1200 ft if v > 30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Steel Hopper	Empty	200	Distributed (Head, Mid, Rear)	10	0.5%	Incline	<0.1%	0	0	< 0.1%	0%	546	599
Unit Steel Hopper	Empty	200	Distributed (Head, Mid, Rear)	30	0.5%	Incline	<0.1%	0	0	> 50%	0%	2727	2859
Unit Steel Hopper	Empty	200	Distributed (Head, Mid, Rear)	60	0.5%	Incline	<0.1%	0	0	> 50%	0%	7996	8160
Unit Steel Hopper	Empty	200	Distributed (Head, Mid, Rear)	45	1.0%	Crest	<0.1%	0	0	> 50%	0%	6831	7007
Unit Steel Hopper	Empty	200	Distributed (Head, Mid, Rear)	45	1.0%	Trough	<0.1%	0	0	> 50%	0%	4912	5017
Unit Steel Hopper	Empty	200	Distributed (Head, Mid, Rear)	10	1.1%	Decline	<0.1%	0	0	> 50%	0%	1679	1769
Unit Steel Hopper	Empty	200	Distributed (Head, Mid, Rear)	30	1.1%	Decline	<0.1%	0	0	> 50%	0%	5258	5401
Unit Steel Hopper	Empty	200	Distributed (Head, Mid, Rear)	45	1.1%	Decline	<0.1%	0	0	> 50%	0%	8601	8749
Unit Steel Hopper	Empty	200	Distributed (Head, Mid, Rear)	25	1.5%	Incline	<0.1%	0	0	> 50%	0%	1447	1557
Unit Steel Hopper	Empty	200	Distributed (Head, Mid, Rear)	25	1.7%	Decline	<0.1%	0	0	> 50%	0%	5879	6061
Unit Steel Hopper	Empty	200	Distributed (Head, Mid, Rear)	20	2.2%	Decline	<0.1%	0	0	> 50%	0%	6440	6606
Unit Steel	Loaded	200	Distributed	10	0.0%	Flat	<0.1%	0	0	< 10%	0%	990	1028

Train Type	Train Load	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P < x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (> 500 ft if v < 30mph, > 1200 ft if v > 30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Hopper			(Head and Rear)										
Unit Steel Hopper	Loaded	200	Distributed (Head and Rear)	30	0.0%	Flat	<0.1%	0	0	> 50%	0%	4636	4744
Unit Steel Hopper	Loaded	200	Distributed (Head and Rear)	50	0.0%	Flat	<0.1%	0	0	> 50%	0%	9969	10156
Unit Steel Hopper	Loaded	200	Distributed (Head and Rear)	10	0.5%	Decline	<0.1%	0	0	> 50%	0%	1750	1811
Unit Steel Hopper	Loaded	200	Distributed (Head and Rear)	30	0.5%	Decline	<0.1%	0	0	> 50%	0%	6546	6705
Unit Steel Hopper	Loaded	200	Distributed (Head and Rear)	50	0.5%	Decline	<0.1%	0	0	> 50%	0%	13489	13667
Unit Steel Hopper	Loaded	200	Distributed (Head and Rear)	10	0.5%	Incline	<0.1%	0	0	< 0.1%	0%	652	716
Unit Steel Hopper	Loaded	200	Distributed (Head and Rear)	27	0.5%	Incline	<0.1%	0	0	> 50%	0%	2939	3003
Unit Steel Hopper	Loaded	200	Distributed (Head and Rear)	15	1.0%	Crest	<0.1%	0	0	> 50%	0%	1485	1589
Unit Steel Hopper	Loaded	200	Distributed (Head and Rear)	27	1.0%	Trough	<0.1%	0	0	> 50%	0%	7042	7216
Unit Steel Hopper	Loaded	200	Distributed (Head and Rear)	10	1.1%	Decline	<0.1%	0	0	> 50%	0%	3810	3948
Unit Steel Hopper	Loaded	200	Distributed (Head and	30	1.1%	Decline	<0.1%	0	0	> 50%	0%	4960	5239

Train Type	Train Load	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P < x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (> 500 ft if v < 30mph, > 1200 ft if v > 30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Steel Hopper	Loaded	200	Rear) Distributed (Head and Rear)	45	1.1%	Decline	<0.1%	0	0	> 50%	0%	10382	10803
Unit Steel Hopper	Loaded	200	Distributed (Head and Rear)	10	1.5%	Incline	<0.1%	0	0	< 0.1%	0%	390	421
Unit Steel Hopper	Loaded	200	Distributed (Head and Rear)	20	1.7%	Decline	<0.1%	0	0	> 50%	0%	5245	6362
Unit Steel Hopper	Loaded	200	Distributed (Head and Rear)	15	2.2%	Decline	<0.1%	0	0	> 50%	0%	5793	8192
Unit Steel Hopper	Loaded	200	Distributed (Head, Mid, Rear)	10	0.0%	Flat	<0.1%	0	0	> 50%	0%	991	1026
Unit Steel Hopper	Loaded	200	Distributed (Head, Mid, Rear)	30	0.0%	Flat	<0.1%	0	0	> 50%	0%	4632	4721
Unit Steel Hopper	Loaded	200	Distributed (Head, Mid, Rear)	50	0.0%	Flat	<0.1%	0	0	> 50%	0%	9986	10187
Unit Steel Hopper	Loaded	200	Distributed (Head, Mid, Rear)	10	0.5%	Decline	<0.1%	0	0	> 50%	0%	1753	1824
Unit Steel Hopper	Loaded	200	Distributed (Head, Mid, Rear)	30	0.5%	Decline	<0.1%	0	0	> 50%	0%	6547	6647
Unit Steel Hopper	Loaded	200	Distributed (Head, Mid, Rear)	50	0.5%	Decline	<0.1%	0	0	> 50%	0%	13431	13629
Unit Steel Hopper	Loaded	200	Distributed (Head, Mid, Rear)	10	0.5%	Incline	<0.1%	0	0	< 0.1%	0%	645	736

Train Type	Train Load	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P < x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (> 500 ft if v < 30mph, > 1200 ft if v > 30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Steel Hopper	Loaded	200	Distributed (Head, Mid, Rear)	27	0.5%	Incline	<0.1%	0	0	> 50%	0%	2926	2996
Unit Steel Hopper	Loaded	200	Distributed (Head, Mid, Rear)	15	1.0%	Crest	<0.1%	0	0	> 50%	0%	1499	1600
Unit Steel Hopper	Loaded	200	Distributed (Head, Mid, Rear)	27	1.0%	Trough	<0.1%	0	0	> 50%	0%	7014	7181
Unit Steel Hopper	Loaded	200	Distributed (Head, Mid, Rear)	10	1.1%	Decline	<0.1%	0	0	> 50%	0%	3802	3911
Unit Steel Hopper	Loaded	200	Distributed (Head, Mid, Rear)	30	1.1%	Decline	<0.1%	0	0	> 50%	0%	4957	5205
Unit Steel Hopper	Loaded	200	Distributed (Head, Mid, Rear)	45	1.1%	Decline	<0.1%	0	0	> 50%	0%	10374	10829
Unit Steel Hopper	Loaded	200	Distributed (Head, Mid, Rear)	10	1.5%	Incline	<0.1%	0	0	< 0.1%	0%	381	417
Unit Steel Hopper	Loaded	200	Distributed (Head, Mid, Rear)	20	1.7%	Decline	<0.1%	0	0	> 50%	0%	5121	6656
Unit Steel Hopper	Loaded	200	Distributed (Head, Mid, Rear)	15	2.2%	Decline	<0.1%	0	0	> 50%	0%	5792	8749
Unit Steel Hopper	Empty	260	Distributed (Head, Mid, Rear)	10	0.0%	Flat	<0.1%	0	0	> 50%	0%	1048	1103
Unit Steel Hopper	Empty	260	Distributed (Head, Mid, Rear)	30	0.0%	Flat	<0.1%	0	0	> 50%	0%	4868	5003
Unit Steel	Empty	260	Distributed	60	0.0%	Flat	<0.1%	0	0	> 50%	0%	13662	13768

Train Type	Train Load	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P < x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (> 500 ft if v < 30mph, > 1200 ft if v > 30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Hopper			(Head, Mid, Rear)										
Unit Steel Hopper	Empty	260	Distributed (Head, Mid, Rear)	10	0.5%	Decline	<0.1%	0	0	> 50%	0%	1932	2012
Unit Steel Hopper	Empty	260	Distributed (Head, Mid, Rear)	30	0.5%	Decline	<0.1%	0	0	> 50%	0%	6994	7130
Unit Steel Hopper	Empty	260	Distributed (Head, Mid, Rear)	60	0.5%	Decline	<0.1%	0	0	> 50%	0%	16811	16823
Unit Steel Hopper	Empty	260	Distributed (Head, Mid, Rear)	10	0.5%	Incline	<0.1%	0	0	< 0.1%	0%	664	790
Unit Steel Hopper	Empty	260	Distributed (Head, Mid, Rear)	30	0.5%	Incline	<0.1%	0	0	> 50%	0%	3569	3784
Unit Steel Hopper	Empty	260	Distributed (Head, Mid, Rear)	60	0.5%	Incline	<0.1%	0	0	> 50%	0%	11058	11141
Unit Steel Hopper	Empty	260	Distributed (Head, Mid, Rear)	45	1.0%	Crest	<0.1%	0	0	> 50%	0%	9672	9788
Unit Steel Hopper	Empty	260	Distributed (Head, Mid, Rear)	45	1.0%	Trough	<0.1%	0	0	> 50%	0%	7676	8034
Unit Steel Hopper	Empty	260	Distributed (Head, Mid, Rear)	10	1.1%	Decline	<0.1%	0	0	> 50%	0%	4299	4418
Unit Steel Hopper	Empty	260	Distributed (Head, Mid, Rear)	30	1.1%	Decline	<0.1%	0	0	> 50%	0%	11711	11941
Unit Steel Hopper	Empty	260	Distributed (Head, Mid, Rear)	45	1.1%	Decline	<0.1%	0	0	> 50%	0%	9215	9921

Train Type	Train Load	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P < x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (> 500 ft if v < 30mph, > 1200 ft if v > 30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Steel Hopper	Empty	260	Rear) Distributed (Head, Mid, Rear)	25	1.5%	Incline	<0.1%	0	0	> 50%	0%	1615	1777
Unit Steel Hopper	Empty	260	Distributed (Head, Mid, Rear)	25	1.7%	Decline	<0.1%	0	0	> 50%	0%	10764	10771
Unit Steel Hopper	Empty	260	Distributed (Head, Mid, Rear)	20	2.2%	Decline	<0.1%	0	0	> 50%	0%	9671	9681
Unit Steel Hopper	Loaded	260	Distributed (Head, Mid, Rear)	10	0.0%	Flat	<0.1%	0	0	> 50%	0%	1618	1679
Unit Steel Hopper	Loaded	260	Distributed (Head, Mid, Rear)	30	0.0%	Flat	<0.1%	0	0	> 50%	0%	8217	8381
Unit Steel Hopper	Loaded	260	Distributed (Head, Mid, Rear)	50	0.0%	Flat	<0.1%	0	0	> 50%	0%	16527	16534
Unit Steel Hopper	Loaded	260	Distributed (Head, Mid, Rear)	10	0.5%	Decline	<0.1%	0	0	> 50%	0%	3785	3797
Unit Steel Hopper	Loaded	260	Distributed (Head, Mid, Rear)	30	0.5%	Decline	<0.1%	0	0	> 50%	0%	10456	10467
Unit Steel Hopper	Loaded	260	Distributed (Head, Mid, Rear)	10	0.5%	Incline	<0.1%	0	0	< 0.1%	0%	756	895
Unit Steel Hopper	Loaded	260	Distributed (Head, Mid, Rear)	31	0.5%	Incline	<0.1%	0	0	> 50%	0%	4896	5017
Unit Steel Hopper	Loaded	260	Distributed (Head, Mid, Rear)	17	1.0%	Crest	<0.1%	0	0	> 50%	0%	2549	2678

Train Type	Train Load	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P < x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (> 500 ft if v < 30mph, > 1200 ft if v > 30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Steel Hopper	Loaded	260	Distributed (Head, Mid, Rear)	28	1.0%	Trough	<0.1%	0	0	> 50%	0%	8960	8969
Unit Steel Hopper	Loaded	260	Distributed (Head, Mid, Rear)	10	1.1%	Decline	<0.1%	0	0	> 50%	0%	14831	15059
Unit Steel Hopper	Loaded	260	Distributed (Head, Mid, Rear)	30	1.1%	Decline	<0.1%	0	0	> 50%	0%	26445	26804
Unit Steel Hopper	Loaded	260	Distributed (Head, Mid, Rear)	45	1.1%	Decline	<0.1%	0	0	> 50%	0%	31854	31864
Unit Steel Hopper	Loaded	260	Distributed (Head, Mid, Rear)	12	1.5%	Incline	<0.1%	0	0	< 0.1%	0%	518	550
Unit Steel Hopper	Loaded	260	Distributed (Head, Mid, Rear)	20	1.7%	Decline	<0.1%	0	0	> 50%	0%	23418	23716
Unit Steel Hopper	Loaded	260	Distributed (Head, Mid, Rear)	15	2.2%	Decline	<0.1%	0	0	> 50%	0%	21828	22909
Unit Tank	Empty	100	Distributed (Head and Rear)	10	0.0%	Flat	<0.1%	0	0	< 0.1%	0%	611	637
Unit Tank	Empty	100	Distributed (Head and Rear)	30	0.0%	Flat	<0.1%	0	0	> 50%	0%	2634	2704
Unit Tank	Empty	100	Distributed (Head and Rear)	60	0.0%	Flat	<0.1%	0	0	> 50%	0%	7420	7514
Unit Tank	Empty	100	Distributed (Head and Rear)	10	0.5%	Decline	<0.1%	0	0	> 50%	0%	769	806
Unit Tank	Empty	100	Distributed	30	0.5%	Decline	<0.1%	0	0	> 50%	0%	3050	3110

Train Type	Train Load	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P < x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (> 500 ft if v < 30mph, > 1200 ft if v > 30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Tank	Empty	100	(Head and Rear) Distributed	60	0.5%	Decline	<0.1%	0	0	> 50%	0%	8234	8336
Unit Tank	Empty	100	(Head and Rear) Distributed	10	0.5%	Incline	<0.1%	0	0	< 0.1%	0%	508	565
Unit Tank	Empty	100	(Head and Rear) Distributed	30	0.5%	Incline	<0.1%	0	0	> 50%	0%	2345	2421
Unit Tank	Empty	100	(Head and Rear) Distributed	60	0.5%	Incline	<0.1%	0	0	> 50%	0%	5712	5722
Unit Tank	Empty	100	(Head and Rear) Distributed	47	1.0%	Crest	<0.1%	0	0	> 50%	0%	4007	4087
Unit Tank	Empty	100	(Head and Rear) Distributed	55	1.0%	Trough	<0.1%	0	0	> 50%	0%	8128	8229
Unit Tank	Empty	100	(Head and Rear) Distributed	10	1.1%	Decline	<0.1%	0	0	> 50%	0%	1067	1126
Unit Tank	Empty	100	(Head and Rear) Distributed	30	1.1%	Decline	<0.1%	0	0	> 50%	0%	3710	3819
Unit Tank	Empty	100	(Head and Rear) Distributed	55	1.1%	Decline	<0.1%	0	0	> 50%	0%	8347	8491
Unit Tank	Empty	100	(Head and Rear) Distributed	25	1.5%	Incline	<0.1%	0	0	> 50%	0%	1266	1304
Unit Tank	Empty	100	(Head and Rear) Distributed	25	1.7%	Decline	<0.1%	0	0	> 50%	0%	3673	3816

Train Type	Train Load	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P < x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (> 500 ft if v < 30mph, > 1200 ft if v > 30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Tank	Empty	100	Rear) Distributed (Head and Rear)	20	2.2%	Decline	<0.1%	0	0	> 50%	0%	3626	3733
Unit Tank	Empty	100	Head end only	10	0.0%	Flat	<0.1%	0	0	< 0.1%	0%	613	633
Unit Tank	Empty	100	Head end only	30	0.0%	Flat	<0.1%	0	0	> 25%, < 50%	0%	2634	2707
Unit Tank	Empty	100	Head end only	60	0.0%	Flat	<0.1%	0	0	> 50%	0%	7427	7514
Unit Tank	Empty	100	Head end only	10	0.5%	Decline	<0.1%	0	0	< 10%	0%	803	833
Unit Tank	Empty	100	Head end only	30	0.5%	Decline	<0.1%	0	0	> 50%	0%	3035	3107
Unit Tank	Empty	100	Head end only	60	0.5%	Decline	<0.1%	0	0	> 50%	0%	8249	8328
Unit Tank	Empty	100	Head end only	10	0.5%	Incline	<0.1%	0	0	< 0.1%	0%	502	539
Unit Tank	Empty	100	Head end only	30	0.5%	Incline	<0.1%	0	0	< 0.1%	0%	2326	2419
Unit Tank	Empty	100	Head end only	60	0.5%	Incline	<0.1%	0	0	> 50%	0%	5711	5718
Unit Tank	Empty	100	Head end only	47	1.0%	Crest	<0.1%	0	0	> 50%	0%	4007	4088
Unit Tank	Empty	100	Head end only	55	1.0%	Trough	<0.1%	0	0	> 50%	0%	8146	8225
Unit Tank	Empty	100	Head end only	10	1.1%	Decline	<0.1%	0	0	> 50%	0%	1069	1141
Unit Tank	Empty	100	Head end only	30	1.1%	Decline	<0.1%	0	0	> 50%	0%	3672	3753
Unit Tank	Empty	100	Head end only	55	1.1%	Decline	<0.1%	0	0	> 50%	0%	8358	8491
Unit Tank	Empty	100	Head end only	25	1.5%	Incline	<0.1%	0	0	> 50%	0%	1268	1305
Unit Tank	Empty	100	Head end only	25	1.7%	Decline	<0.1%	0	0	> 50%	0%	3675	3814
Unit Tank	Empty	100	Head end only	20	2.2%	Decline	<0.1%	0	0	> 50%	0%	3607	3682
Unit Tank	Loaded	100	Distributed (Head and Rear)	10	0.0%	Flat	<0.1%	0	0	< 0.1%	0%	820	839
Unit Tank	Loaded	100	Distributed (Head and Rear)	30	0.0%	Flat	<0.1%	0	0	> 50%	0%	3670	3784
Unit Tank	Loaded	100	Distributed (Head and Rear)	50	0.0%	Flat	<0.1%	0	0	> 50%	0%	8350	8499

Train Type	Train Load	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P < x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (> 500 ft if v < 30mph, > 1200 ft if v > 30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Tank	Loaded	100	Distributed (Head and Rear)	10	0.5%	Decline	<0.1%	0	0	> 50%	0%	1195	1250
Unit Tank	Loaded	100	Distributed (Head and Rear)	30	0.5%	Decline	<0.1%	0	0	> 50%	0%	4838	4960
Unit Tank	Loaded	100	Distributed (Head and Rear)	50	0.5%	Decline	<0.1%	0	0	> 50%	0%	10753	10987
Unit Tank	Loaded	100	Distributed (Head and Rear)	10	0.5%	Incline	<0.1%	0	0	< 0.1%	0%	572	601
Unit Tank	Loaded	100	Distributed (Head and Rear)	30	0.5%	Incline	<0.1%	0	0	> 50%	0%	2882	2931
Unit Tank	Loaded	100	Distributed (Head and Rear)	15	1.0%	Crest	<0.1%	0	0	> 50%	0%	1204	1226
Unit Tank	Loaded	100	Distributed (Head and Rear)	25	1.0%	Trough	<0.1%	0	0	> 50%	0%	4892	5033
Unit Tank	Loaded	100	Distributed (Head and Rear)	10	1.1%	Decline	<0.1%	0	0	> 50%	0%	2164	2269
Unit Tank	Loaded	100	Distributed (Head and Rear)	30	1.1%	Decline	<0.1%	0	0	> 50%	0%	4442	4693
Unit Tank	Loaded	100	Distributed (Head and Rear)	45	1.1%	Decline	<0.1%	0	0	> 50%	0%	9823	14427
Unit Tank	Loaded	100	Distributed (Head and Rear)	10	1.5%	Incline	<0.1%	0	0	< 0.1%	0%	401	415
Unit Tank	Loaded	100	Distributed	20	1.7%	Decline	<0.1%	0	0	> 50%	0%	4315	5237

Train Type	Train Load	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P < x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (> 500 ft if v < 30mph, > 1200 ft if v > 30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Tank	Loaded	100	(Head and Rear) Distributed (Head and Rear)	15	2.2%	Decline	<0.1%	0	0	> 50%	0%	6972	10134
Unit Tank	Loaded	100	Head end only	10	0.0%	Flat	<0.1%	0	0	< 0.1%	0%	818	841
Unit Tank	Loaded	100	Head end only	30	0.0%	Flat	<0.1%	0	0	> 50%	0%	3669	3749
Unit Tank	Loaded	100	Head end only	50	0.0%	Flat	<0.1%	0	0	> 50%	0%	8354	8500
Unit Tank	Loaded	100	Head end only	10	0.5%	Decline	<0.1%	0	0	> 50%	0%	1192	1236
Unit Tank	Loaded	100	Head end only	30	0.5%	Decline	<0.1%	0	0	> 50%	0%	4847	4969
Unit Tank	Loaded	100	Head end only	50	0.5%	Decline	<0.1%	0	0	> 50%	0%	10775	11039
Unit Tank	Loaded	100	Head end only	10	0.5%	Incline	<0.1%	0	0	< 0.1%	0%	593	627
Unit Tank	Loaded	100	Head end only	30	0.5%	Incline	<0.1%	0	0	< 0.1%	0%	2891	2934
Unit Tank	Loaded	100	Head end only	15	1.0%	Crest	<0.1%	0	0	> 10%, < 25%	0%	1200	1252
Unit Tank	Loaded	100	Head end only	25	1.0%	Trough	<0.1%	0	0	> 50%	0%	4894	5069
Unit Tank	Loaded	100	Head end only	10	1.1%	Decline	<0.1%	0	0	> 50%	0%	2174	2272
Unit Tank	Loaded	100	Head end only	30	1.1%	Decline	<0.1%	0	0	> 50%	0%	4450	4700
Unit Tank	Loaded	100	Head end only	45	1.1%	Decline	<0.1%	0	0	> 50%	0%	9784	10320
Unit Tank	Loaded	100	Head end only	10	1.5%	Incline	<0.1%	0	0	< 0.1%	0%	394	413
Unit Tank	Loaded	100	Head end only	20	1.7%	Decline	<0.1%	0	0	> 50%	0%	4474	5678
Unit Tank	Loaded	100	Head end only	15	2.2%	Decline	<0.1%	0	0	> 50%	0%	7616	10606
Unit Tank	Empty	135	Distributed (Head and Rear)	10	0.0%	Flat	<0.1%	0	0	< 0.1%	0%	661	711
Unit Tank	Empty	135	Distributed (Head and Rear)	30	0.0%	Flat	<0.1%	0	0	> 50%	0%	2914	2997
Unit Tank	Empty	135	Distributed (Head and Rear)	60	0.0%	Flat	<0.1%	0	0	> 50%	0%	8168	8321

Train Type	Train Load	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P < x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (> 500 ft if v < 30mph, > 1200 ft if v > 30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Tank	Empty	135	Distributed (Head and Rear)	10	0.5%	Decline	<0.1%	0	0	> 50%	0%	881	932
Unit Tank	Empty	135	Distributed (Head and Rear)	30	0.5%	Decline	<0.1%	0	0	> 50%	0%	3446	3516
Unit Tank	Empty	135	Distributed (Head and Rear)	60	0.5%	Decline	<0.1%	0	0	> 50%	0%	9160	9226
Unit Tank	Empty	135	Distributed (Head and Rear)	10	0.5%	Incline	<0.1%	0	0	< 0.1%	0%	523	591
Unit Tank	Empty	135	Distributed (Head and Rear)	30	0.5%	Incline	<0.1%	0	0	> 50%	0%	2528	2674
Unit Tank	Empty	135	Distributed (Head and Rear)	60	0.5%	Incline	<0.1%	0	0	> 50%	0%	7254	7481
Unit Tank	Empty	135	Distributed (Head and Rear)	48	1.0%	Crest	<0.1%	0	0	> 50%	0%	6935	7044
Unit Tank	Empty	135	Distributed (Head and Rear)	55	1.0%	Trough	<0.1%	0	0	> 50%	0%	5865	5985
Unit Tank	Empty	135	Distributed (Head and Rear)	10	1.1%	Decline	<0.1%	0	0	> 50%	0%	1293	1381
Unit Tank	Empty	135	Distributed (Head and Rear)	30	1.1%	Decline	<0.1%	0	0	> 50%	0%	4305	4436
Unit Tank	Empty	135	Distributed (Head and Rear)	55	1.1%	Decline	<0.1%	0	0	> 50%	0%	9443	9560
Unit Tank	Empty	135	Distributed	25	1.5%	Incline	<0.1%	0	0	> 50%	0%	1381	1511

Train Type	Train Load	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P < x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (> 500 ft if v < 30mph, > 1200 ft if v > 30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Tank	Empty	135	(Head and Rear) Distributed	25	1.7%	Decline	<0.1%	0	0	> 50%	0%	4492	4624
Unit Tank	Empty	135	(Head and Rear) Distributed	20	2.2%	Decline	<0.1%	0	0	> 50%	0%	4609	4752
Unit Tank	Empty	135	(Head and Rear) Distributed	10	0.0%	Flat	<0.1%	0	0	< 0.1%	0%	661	701
Unit Tank	Empty	135	(Head, Mid, Rear) Distributed	30	0.0%	Flat	<0.1%	0	0	> 50%	0%	2930	3022
Unit Tank	Empty	135	(Head, Mid, Rear) Distributed	60	0.0%	Flat	<0.1%	0	0	> 50%	0%	8186	8408
Unit Tank	Empty	135	(Head, Mid, Rear) Distributed	10	0.5%	Decline	<0.1%	0	0	> 50%	0%	875	942
Unit Tank	Empty	135	(Head, Mid, Rear) Distributed	30	0.5%	Decline	<0.1%	0	0	> 50%	0%	3442	3530
Unit Tank	Empty	135	(Head, Mid, Rear) Distributed	60	0.5%	Decline	<0.1%	0	0	> 50%	0%	9140	9254
Unit Tank	Empty	135	(Head, Mid, Rear) Distributed	10	0.5%	Incline	<0.1%	0	0	< 0.1%	0%	522	610
Unit Tank	Empty	135	(Head, Mid, Rear) Distributed	30	0.5%	Incline	<0.1%	0	0	> 50%	0%	2505	2693
Unit Tank	Empty	135	(Head, Mid, Rear) Distributed	60	0.5%	Incline	<0.1%	0	0	> 50%	0%	7247	7470

Train Type	Train Load	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P < x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (> 500 ft if v < 30mph, > 1200 ft if v > 30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Tank	Empty	135	Rear) Distributed (Head, Mid, Rear)	48	1.0%	Crest	<0.1%	0	0	> 50%	0%	6958	7072
Unit Tank	Empty	135	Distributed (Head, Mid, Rear)	55	1.0%	Trough	<0.1%	0	0	> 50%	0%	5822	5962
Unit Tank	Empty	135	Distributed (Head, Mid, Rear)	10	1.1%	Decline	<0.1%	0	0	> 50%	0%	1289	1354
Unit Tank	Empty	135	Distributed (Head, Mid, Rear)	30	1.1%	Decline	<0.1%	0	0	> 50%	0%	4291	4433
Unit Tank	Empty	135	Distributed (Head, Mid, Rear)	55	1.1%	Decline	<0.1%	0	0	> 50%	0%	9439	9544
Unit Tank	Empty	135	Distributed (Head, Mid, Rear)	25	1.5%	Incline	<0.1%	0	0	> 50%	0%	1381	1505
Unit Tank	Empty	135	Distributed (Head, Mid, Rear)	25	1.7%	Decline	<0.1%	0	0	> 50%	0%	4486	4621
Unit Tank	Empty	135	Distributed (Head, Mid, Rear)	20	2.2%	Decline	<0.1%	0	0	> 50%	0%	4632	4875
Unit Tank	Loaded	135	Distributed (Head and Rear)	10	0.0%	Flat	<0.1%	0	0	< 10%	0%	878	925
Unit Tank	Loaded	135	Distributed (Head and Rear)	30	0.0%	Flat	<0.1%	0	0	> 50%	0%	4030	4104
Unit Tank	Loaded	135	Distributed (Head and Rear)	50	0.0%	Flat	<0.1%	0	0	> 50%	0%	8998	9165

Train Type	Train Load	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P < x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (> 500 ft if v < 30mph, > 1200 ft if v > 30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Tank	Loaded	135	Distributed (Head and Rear)	10	0.5%	Decline	<0.1%	0	0	> 50%	0%	1393	1449
Unit Tank	Loaded	135	Distributed (Head and Rear)	30	0.5%	Decline	<0.1%	0	0	> 50%	0%	5473	5565
Unit Tank	Loaded	135	Distributed (Head and Rear)	50	0.5%	Decline	<0.1%	0	0	> 50%	0%	11811	12050
Unit Tank	Loaded	135	Distributed (Head and Rear)	10	0.5%	Incline	<0.1%	0	0	< 0.1%	0%	628	698
Unit Tank	Loaded	135	Distributed (Head and Rear)	31	0.5%	Incline	<0.1%	0	0	> 50%	0%	3333	3407
Unit Tank	Loaded	135	Distributed (Head and Rear)	17	1.0%	Crest	<0.1%	0	0	> 50%	0%	1483	1555
Unit Tank	Loaded	135	Distributed (Head and Rear)	30	1.0%	Trough	<0.1%	0	0	> 50%	0%	7419	7678
Unit Tank	Loaded	135	Distributed (Head and Rear)	10	1.1%	Decline	<0.1%	0	0	> 50%	0%	2662	2779
Unit Tank	Loaded	135	Distributed (Head and Rear)	30	1.1%	Decline	<0.1%	0	0	> 50%	0%	4760	5069
Unit Tank	Loaded	135	Distributed (Head and Rear)	45	1.1%	Decline	<0.1%	0	0	> 50%	0%	10275	10930
Unit Tank	Loaded	135	Distributed (Head and Rear)	12	1.5%	Incline	<0.1%	0	0	< 0.1%	0%	482	521
Unit Tank	Loaded	135	Distributed	25	1.7%	Decline	<0.1%	0	0	> 50%	0%	7423	8469

Train Type	Train Load	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P < x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (> 500 ft if v < 30mph, > 1200 ft if v > 30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Tank	Loaded	135	(Head and Rear) Distributed	15	2.2%	Decline	<0.1%	0	0	> 50%	0%	8538	9971
Unit Tank	Loaded	135	(Head and Rear) Distributed	10	0.0%	Flat	<0.1%	0	0	> 50%	0%	880	922
Unit Tank	Loaded	135	(Head, Mid, Rear) Distributed	30	0.0%	Flat	<0.1%	0	0	> 50%	0%	4039	4147
Unit Tank	Loaded	135	(Head, Mid, Rear) Distributed	50	0.0%	Flat	<0.1%	0	0	> 50%	0%	8982	9159
Unit Tank	Loaded	135	(Head, Mid, Rear) Distributed	10	0.5%	Decline	<0.1%	0	0	> 50%	0%	1382	1445
Unit Tank	Loaded	135	(Head, Mid, Rear) Distributed	30	0.5%	Decline	<0.1%	0	0	> 50%	0%	5460	5590
Unit Tank	Loaded	135	(Head, Mid, Rear) Distributed	50	0.5%	Decline	<0.1%	0	0	> 50%	0%	11810	12098
Unit Tank	Loaded	135	(Head, Mid, Rear) Distributed	10	0.5%	Incline	<0.1%	0	0	< 0.1%	0%	616	679
Unit Tank	Loaded	135	(Head, Mid, Rear) Distributed	31	0.5%	Incline	<0.1%	0	0	> 50%	0%	3343	3421
Unit Tank	Loaded	135	(Head, Mid, Rear) Distributed	17	1.0%	Crest	<0.1%	0	0	> 50%	0%	1457	1555
Unit Tank	Loaded	135	(Head, Mid, Rear) Distributed	30	1.0%	Trough	<0.1%	0	0	> 50%	0%	7414	7628

Train Type	Train Load	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P < x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (> 500 ft if v < 30mph, > 1200 ft if v > 30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Tank	Loaded	135	Rear) Distributed (Head, Mid, Rear)	10	1.1%	Decline	<0.1%	0	0	> 50%	0%	2667	2770
Unit Tank	Loaded	135	Distributed (Head, Mid, Rear)	30	1.1%	Decline	<0.1%	0	0	> 50%	0%	4764	5037
Unit Tank	Loaded	135	Distributed (Head, Mid, Rear)	45	1.1%	Decline	<0.1%	0	0	> 50%	0%	10327	10915
Unit Tank	Loaded	135	Distributed (Head, Mid, Rear)	12	1.5%	Incline	<0.1%	0	0	< 0.1%	0%	487	523
Unit Tank	Loaded	135	Distributed (Head, Mid, Rear)	25	1.7%	Decline	<0.1%	0	0	> 50%	0%	7329	8393
Unit Tank	Loaded	135	Distributed (Head, Mid, Rear)	15	2.2%	Decline	<0.1%	0	0	> 50%	0%	8418	9928

Appendix H.
Detailed Simulation Results from Evaluation of Phase 1
Developmental Enforcement Algorithm

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Steel Hoppers	Empty	100	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	430.12	489.00
Unit Steel Hoppers	Empty	100	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	301.01	332.00
Unit Steel Hoppers	Empty	100	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	524.82	661.00
Unit Steel Hoppers	Empty	100	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	360.13	394.00
Unit Steel Hoppers	Empty	100	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1577.54	2027.00
Unit Steel Hoppers	Empty	100	Distributed (Head and Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	768.40	825.00
Unit Steel Hoppers	Empty	100	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1760.07	2139.00
Unit Steel Hoppers	Empty	100	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	1644.38	1861.00
Unit Steel Hoppers	Empty	100	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1318.06	1455.00
Unit Steel Hoppers	Empty	100	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	1866.02	2220.00
Unit Steel Hoppers	Empty	100	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	1473.87	1614.00
Unit Steel Hoppers	Empty	100	Distributed (Head and Rear)	46	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	2.00%	2343.06	2557.00
Unit Steel Hoppers	Empty	100	Distributed (Head and Rear)	55	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	4394.61	4929.00
Unit Steel Hoppers	Empty	100	Distributed (Head and Rear)	55	1.00%	Trough	<0.1%	0.00	0.00	< 10%	0.00%	4104.67	4591.00
Unit Steel Hoppers	Empty	100	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	4429.21	4930.00
Unit Steel Hoppers	Empty	100	Distributed (Head and Rear)	60	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	3532.25	3802.00
Unit Steel Hoppers	Empty	100	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	4107.84	4530.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Steel Hoppers	Empty	100	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	585.30	717.00
Unit Steel Hoppers	Empty	100	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	391.10	433.00
Unit Steel Hoppers	Empty	100	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	782.05	908.00
Unit Steel Hoppers	Empty	100	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	465.96	528.00
Unit Steel Hoppers	Empty	100	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2548.20	3232.00
Unit Steel Hoppers	Empty	100	Head end only	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	902.57	984.00
Unit Steel Hoppers	Empty	100	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2669.24	3373.00
Unit Steel Hoppers	Empty	100	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2229.95	2554.00
Unit Steel Hoppers	Empty	100	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1646.64	1791.00
Unit Steel Hoppers	Empty	100	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	2720.50	3214.00
Unit Steel Hoppers	Empty	100	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	1923.34	2164.00
Unit Steel Hoppers	Empty	100	Head end only	46	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	8.00%	2900.64	3105.00
Unit Steel Hoppers	Empty	100	Head end only	55	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5773.27	6440.00
Unit Steel Hoppers	Empty	100	Head end only	55	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	5458.34	6206.00
Unit Steel Hoppers	Empty	100	Head end only	60	0.50%	Decline	<0.1%	0.00	0.00	< 10%	2.00%	5708.58	6259.00
Unit Steel Hoppers	Empty	100	Head end only	60	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	4456.54	5102.00
Unit Steel Hoppers	Empty	100	Head end only	60	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	1.00%	5125.62	5679.00
Unit Steel Hoppers	Loaded	100	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	622.76	762.00
Unit Steel Hoppers	Loaded	100	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	405.53	453.00
Unit Steel Hoppers	Loaded	100	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	947.68	1279.00
Unit Steel Hoppers	Loaded	100	Distributed (Head and Rear)	10	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	255.95	276.00
Unit Steel Hoppers	Loaded	100	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	491.06	571.00
Unit Steel Hoppers	Loaded	100	Distributed (Head and Rear)	15	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5985.68	7704.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Steel Hoppers	Loaded	100	Distributed (Head and Rear)	15	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	735.52	838.00
Unit Steel Hoppers	Loaded	100	Distributed (Head and Rear)	15	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6804.27	8373.00
Unit Steel Hoppers	Loaded	100	Distributed (Head and Rear)	24	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	1976.32	2433.00
Unit Steel Hoppers	Loaded	100	Distributed (Head and Rear)	27	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1629.51	1761.00
Unit Steel Hoppers	Loaded	100	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	2882.44	3516.00
Unit Steel Hoppers	Loaded	100	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4164.61	5527.00
Unit Steel Hoppers	Loaded	100	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2331.82	2687.00
Unit Steel Hoppers	Loaded	100	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	9301.07	11531.00
Unit Steel Hoppers	Loaded	100	Distributed (Head and Rear)	50	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6667.75	7688.00
Unit Steel Hoppers	Loaded	100	Distributed (Head and Rear)	50	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	5439.36	6036.00
Unit Steel Hoppers	Loaded	100	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	902.50	1073.00
Unit Steel Hoppers	Loaded	100	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	467.55	517.00
Unit Steel Hoppers	Loaded	100	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1583.65	2119.00
Unit Steel Hoppers	Loaded	100	Head end only	10	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	274.48	311.00
Unit Steel Hoppers	Loaded	100	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	624.83	709.00
Unit Steel Hoppers	Loaded	100	Head end only	15	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7754.38	9239.00
Unit Steel Hoppers	Loaded	100	Head end only	15	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	933.01	1039.00
Unit Steel Hoppers	Loaded	100	Head end only	15	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	11448.51	13341.00
Unit Steel Hoppers	Loaded	100	Head end only	24	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	3113.75	4101.00
Unit Steel Hoppers	Loaded	100	Head end only	27	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1975.80	2190.00
Unit Steel Hoppers	Loaded	100	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	3811.17	4467.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Steel Hoppers	Loaded	100	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6134.63	7252.00
Unit Steel Hoppers	Loaded	100	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2953.71	3402.00
Unit Steel Hoppers	Loaded	100	Head end only	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	11718.90	13773.00
Unit Steel Hoppers	Loaded	100	Head end only	50	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	8362.55	9795.00
Unit Steel Hoppers	Loaded	100	Head end only	50	0.00%	Flat	<0.1%	0.00	0.00	< 10%	0.00%	6595.39	7484.00
Unit Covered Hoppers	Empty	100	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	433.93	522.00
Unit Covered Hoppers	Empty	100	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	304.12	341.00
Unit Covered Hoppers	Empty	100	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	536.85	676.00
Unit Covered Hoppers	Empty	100	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	368.63	419.00
Unit Covered Hoppers	Empty	100	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1618.42	1911.00
Unit Covered Hoppers	Empty	100	Distributed (Head and Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	1.00%	782.47	881.00
Unit Covered Hoppers	Empty	100	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1823.27	2192.00
Unit Covered Hoppers	Empty	100	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	1673.38	1986.00
Unit Covered Hoppers	Empty	100	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	1.00%	1343.05	1459.00
Unit Covered Hoppers	Empty	100	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	1936.79	2205.00
Unit Covered Hoppers	Empty	100	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	1529.21	1660.00
Unit Covered Hoppers	Empty	100	Distributed (Head and Rear)	45	1.00%	Crest	> 1.0%	5.50	7.00	< 0.1%	5.00%	2344.93	2647.00
Unit Covered Hoppers	Empty	100	Distributed (Head and Rear)	55	1.10%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	4501.31	5163.00
Unit Covered Hoppers	Empty	100	Distributed (Head and Rear)	55	1.00%	Trough	<0.1%	0.00	0.00	< 10%	0.00%	4173.24	4666.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Covered Hoppers	Empty	100	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	4495.93	4924.00
Unit Covered Hoppers	Empty	100	Distributed (Head and Rear)	60	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	1.00%	3610.06	3992.00
Unit Covered Hoppers	Empty	100	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	4147.68	4864.00
Unit Covered Hoppers	Empty	100	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	595.39	706.00
Unit Covered Hoppers	Empty	100	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	404.95	451.00
Unit Covered Hoppers	Empty	100	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	841.07	1039.00
Unit Covered Hoppers	Empty	100	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	479.25	557.00
Unit Covered Hoppers	Empty	100	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2772.31	3679.00
Unit Covered Hoppers	Empty	100	Head end only	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	915.61	961.00
Unit Covered Hoppers	Empty	100	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2839.33	3336.00
Unit Covered Hoppers	Empty	100	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2328.86	2652.00
Unit Covered Hoppers	Empty	100	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1698.54	1833.00
Unit Covered Hoppers	Empty	100	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	2824.30	3279.00
Unit Covered Hoppers	Empty	100	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	1993.79	2316.00
Unit Covered Hoppers	Empty	100	Head end only	45	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	11.00%	2957.55	3220.00
Unit Covered Hoppers	Empty	100	Head end only	55	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6045.90	6943.00
Unit Covered Hoppers	Empty	100	Head end only	55	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	5714.10	6683.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Covered Hoppers	Empty	100	Head end only	60	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	5918.79	6945.00
Unit Covered Hoppers	Empty	100	Head end only	60	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	4600.67	5193.00
Unit Covered Hoppers	Empty	100	Head end only	60	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	1.00%	5363.39	5790.00
Unit Covered Hoppers	Loaded	100	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	616.18	747.00
Unit Covered Hoppers	Loaded	100	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	396.51	442.00
Unit Covered Hoppers	Loaded	100	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	952.07	1358.00
Unit Covered Hoppers	Loaded	100	Distributed (Head and Rear)	10	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	258.45	275.00
Unit Covered Hoppers	Loaded	100	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	485.78	532.00
Unit Covered Hoppers	Loaded	100	Distributed (Head and Rear)	14	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	682.05	805.00
Unit Covered Hoppers	Loaded	100	Distributed (Head and Rear)	15	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6051.21	7338.00
Unit Covered Hoppers	Loaded	100	Distributed (Head and Rear)	15	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6958.68	8590.00
Unit Covered Hoppers	Loaded	100	Distributed (Head and Rear)	23	1.00%	Trough	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	1755.16	2101.00
Unit Covered Hoppers	Loaded	100	Distributed (Head and Rear)	26	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1529.20	1719.00
Unit Covered Hoppers	Loaded	100	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	2863.02	3350.00
Unit Covered Hoppers	Loaded	100	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4231.38	5188.00
Unit Covered Hoppers	Loaded	100	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2303.57	2695.00
Unit Covered Hoppers	Loaded	100	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	9425.21	11364.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Covered Hoppers	Loaded	100	Distributed (Head and Rear)	50	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6462.28	8256.00
Unit Covered Hoppers	Loaded	100	Distributed (Head and Rear)	50	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	5388.16	6026.00
Unit Covered Hoppers	Loaded	100	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	938.15	1210.00
Unit Covered Hoppers	Loaded	100	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	464.17	506.00
Unit Covered Hoppers	Loaded	100	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1708.42	2323.00
Unit Covered Hoppers	Loaded	100	Head end only	10	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	277.52	292.00
Unit Covered Hoppers	Loaded	100	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	627.71	712.00
Unit Covered Hoppers	Loaded	100	Head end only	14	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	897.91	1052.00
Unit Covered Hoppers	Loaded	100	Head end only	15	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7961.36	9075.00
Unit Covered Hoppers	Loaded	100	Head end only	15	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	11732.16	13388.00
Unit Covered Hoppers	Loaded	100	Head end only	23	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	2840.86	3734.00
Unit Covered Hoppers	Loaded	100	Head end only	26	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1878.17	2063.00
Unit Covered Hoppers	Loaded	100	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	3869.44	4557.00
Unit Covered Hoppers	Loaded	100	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6274.57	7925.00
Unit Covered Hoppers	Loaded	100	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	3042.35	3416.00
Unit Covered Hoppers	Loaded	100	Head end only	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	11979.29	13879.00
Unit Covered Hoppers	Loaded	100	Head end only	50	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	8312.94	9557.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Covered Hoppers	Loaded	100	Head end only	50	0.00%	Flat	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	6769.41	7557.00
Unit Aluminum Hoppers	Empty	100	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	389.13	428.00
Unit Aluminum Hoppers	Empty	100	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	300.16	344.00
Unit Aluminum Hoppers	Empty	100	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	470.71	570.00
Unit Aluminum Hoppers	Empty	100	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	335.76	375.00
Unit Aluminum Hoppers	Empty	100	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1378.15	1706.00
Unit Aluminum Hoppers	Empty	100	Distributed (Head and Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	771.09	839.00
Unit Aluminum Hoppers	Empty	100	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1538.49	1804.00
Unit Aluminum Hoppers	Empty	100	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	1478.47	1692.00
Unit Aluminum Hoppers	Empty	100	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1202.57	1319.00
Unit Aluminum Hoppers	Empty	100	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	1690.35	1944.00
Unit Aluminum Hoppers	Empty	100	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	1351.32	1487.00
Unit Aluminum Hoppers	Empty	100	Distributed (Head and Rear)	52	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	6.00%	2597.28	2839.00
Unit Aluminum Hoppers	Empty	100	Distributed (Head and Rear)	55	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	3899.33	4353.00
Unit Aluminum Hoppers	Empty	100	Distributed (Head and Rear)	55	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	0.00%	3642.36	4022.00
Unit Aluminum Hoppers	Empty	100	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	3.00%	4034.91	4411.00
Unit Aluminum Hoppers	Empty	100	Distributed (Head and Rear)	60	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	3.00%	3358.79	3612.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Aluminum Hoppers	Empty	100	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	5.00%	3683.65	4104.00
Unit Aluminum Hoppers	Empty	100	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	527.81	612.00
Unit Aluminum Hoppers	Empty	100	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	347.01	406.00
Unit Aluminum Hoppers	Empty	100	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	696.51	826.00
Unit Aluminum Hoppers	Empty	100	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	428.70	470.00
Unit Aluminum Hoppers	Empty	100	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2188.23	2863.00
Unit Aluminum Hoppers	Empty	100	Head end only	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	898.12	957.00
Unit Aluminum Hoppers	Empty	100	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2325.56	2865.00
Unit Aluminum Hoppers	Empty	100	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	1991.83	2319.00
Unit Aluminum Hoppers	Empty	100	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1523.31	1704.00
Unit Aluminum Hoppers	Empty	100	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	2376.18	2697.00
Unit Aluminum Hoppers	Empty	100	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	1738.99	1910.00
Unit Aluminum Hoppers	Empty	100	Head end only	52	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	8.00%	3210.29	3490.00
Unit Aluminum Hoppers	Empty	100	Head end only	55	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	5164.74	5889.00
Unit Aluminum Hoppers	Empty	100	Head end only	55	1.00%	Trough	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	4884.74	5550.00
Unit Aluminum Hoppers	Empty	100	Head end only	60	0.50%	Decline	> 1.0%	6.00	6.00	< 10%	4.00%	5119.41	5691.00
Unit Aluminum Hoppers	Empty	100	Head end only	60	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	4205.62	4571.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Aluminum Hoppers	Empty	100	Head end only	60	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	1.00%	4664.19	5177.00
Unit Aluminum Hoppers	Loaded	100	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	556.95	685.00
Unit Aluminum Hoppers	Loaded	100	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	372.66	430.00
Unit Aluminum Hoppers	Loaded	100	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	806.93	1010.00
Unit Aluminum Hoppers	Loaded	100	Distributed (Head and Rear)	10	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	254.16	271.00
Unit Aluminum Hoppers	Loaded	100	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	443.09	516.00
Unit Aluminum Hoppers	Loaded	100	Distributed (Head and Rear)	14	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	649.01	745.00
Unit Aluminum Hoppers	Loaded	100	Distributed (Head and Rear)	15	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5382.74	6384.00
Unit Aluminum Hoppers	Loaded	100	Distributed (Head and Rear)	15	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6171.76	7174.00
Unit Aluminum Hoppers	Loaded	100	Distributed (Head and Rear)	23	1.00%	Trough	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	1564.45	1958.00
Unit Aluminum Hoppers	Loaded	100	Distributed (Head and Rear)	26	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1410.35	1587.00
Unit Aluminum Hoppers	Loaded	100	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2531.47	3027.00
Unit Aluminum Hoppers	Loaded	100	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3685.89	4704.00
Unit Aluminum Hoppers	Loaded	100	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2087.23	2414.00
Unit Aluminum Hoppers	Loaded	100	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	8253.02	10243.00
Unit Aluminum Hoppers	Loaded	100	Distributed (Head and Rear)	50	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5713.35	6954.00
Unit Aluminum Hoppers	Loaded	100	Distributed (Head and Rear)	50	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	4856.59	5657.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Aluminum Hoppers	Loaded	100	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	797.71	977.00
Unit Aluminum Hoppers	Loaded	100	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	436.82	496.00
Unit Aluminum Hoppers	Loaded	100	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1342.59	1860.00
Unit Aluminum Hoppers	Loaded	100	Head end only	10	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	274.61	292.00
Unit Aluminum Hoppers	Loaded	100	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	568.16	641.00
Unit Aluminum Hoppers	Loaded	100	Head end only	14	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	797.92	871.00
Unit Aluminum Hoppers	Loaded	100	Head end only	15	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6910.24	8508.00
Unit Aluminum Hoppers	Loaded	100	Head end only	15	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	10388.87	12333.00
Unit Aluminum Hoppers	Loaded	100	Head end only	23	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	2295.40	3088.00
Unit Aluminum Hoppers	Loaded	100	Head end only	26	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1719.55	1892.00
Unit Aluminum Hoppers	Loaded	100	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	3398.69	4177.00
Unit Aluminum Hoppers	Loaded	100	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5263.48	6291.00
Unit Aluminum Hoppers	Loaded	100	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2701.96	3180.00
Unit Aluminum Hoppers	Loaded	100	Head end only	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	10520.12	11903.00
Unit Aluminum Hoppers	Loaded	100	Head end only	50	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7229.41	8358.00
Unit Aluminum Hoppers	Loaded	100	Head end only	50	0.00%	Flat	<0.1%	0.00	0.00	< 10%	0.00%	5983.05	6855.00
Unit MultiLevel	Empty	100	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	720.28	895.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit MultiLevel	Empty	100	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	407.39	484.00
Unit MultiLevel	Empty	100	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1066.04	1486.00
Unit MultiLevel	Empty	100	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	528.77	608.00
Unit MultiLevel	Empty	100	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3974.23	5244.00
Unit MultiLevel	Empty	100	Distributed (Head and Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	873.65	950.00
Unit MultiLevel	Empty	100	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3862.93	5008.00
Unit MultiLevel	Empty	100	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2868.00	3499.00
Unit MultiLevel	Empty	100	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1962.15	2193.00
Unit MultiLevel	Empty	100	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3630.53	4830.00
Unit MultiLevel	Empty	100	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	2.00%	2352.69	2665.00
Unit MultiLevel	Empty	100	Distributed (Head and Rear)	34	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	2534.62	2882.00
Unit MultiLevel	Empty	100	Distributed (Head and Rear)	50	0.50%	Incline	<0.1%	0.00	0.00	< 10%	0.00%	4029.77	5016.00
Unit MultiLevel	Empty	100	Distributed (Head and Rear)	55	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7869.44	9637.00
Unit MultiLevel	Empty	100	Distributed (Head and Rear)	55	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	7104.85	8733.00
Unit MultiLevel	Empty	100	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	2.00%	7330.28	8799.00
Unit MultiLevel	Empty	100	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 25%, < 50%	1.00%	6184.12	7224.00
Unit MultiLevel	Empty	100	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	1254.66	1454.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit MultiLevel	Empty	100	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	501.64	596.00
Unit MultiLevel	Empty	100	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2320.36	2492.00
Unit MultiLevel	Empty	100	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	773.09	908.00
Unit MultiLevel	Empty	100	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7805.86	9288.00
Unit MultiLevel	Empty	100	Head end only	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1030.48	1094.00
Unit MultiLevel	Empty	100	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7892.33	11131.00
Unit MultiLevel	Empty	100	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	4471.43	5449.00
Unit MultiLevel	Empty	100	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	2622.49	2918.00
Unit MultiLevel	Empty	100	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6416.04	8279.00
Unit MultiLevel	Empty	100	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 10%	0.00%	3418.26	4106.00
Unit MultiLevel	Empty	100	Head end only	34	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	3324.90	3612.00
Unit MultiLevel	Empty	100	Head end only	50	0.50%	Incline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	5481.72	6291.00
Unit MultiLevel	Empty	100	Head end only	55	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	12562.58	16075.00
Unit MultiLevel	Empty	100	Head end only	55	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	11159.68	14370.00
Unit MultiLevel	Empty	100	Head end only	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	10717.80	12615.00
Unit MultiLevel	Empty	100	Head end only	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	8939.69	10002.00
Unit MultiLevel	Loaded	100	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	917.17	1169.00
Unit MultiLevel	Loaded	100	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	1.00%	426.67	508.00
Unit MultiLevel	Loaded	100	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1531.43	2085.00
Unit MultiLevel	Loaded	100	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	603.93	767.00
Unit MultiLevel	Loaded	100	Distributed (Head and Rear)	13	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	388.15	416.00
Unit MultiLevel	Loaded	100	Distributed (Head and Rear)	15	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	8135.52	11194.00
Unit MultiLevel	Loaded	100	Distributed (Head and Rear)	19	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	1408.22	1600.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit MultiLevel	Loaded	100	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7971.55	10515.00
Unit MultiLevel	Loaded	100	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3658.42	4706.00
Unit MultiLevel	Loaded	100	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5544.82	6962.00
Unit MultiLevel	Loaded	100	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	1.00%	2903.34	3455.00
Unit MultiLevel	Loaded	100	Distributed (Head and Rear)	33	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	4489.48	6440.00
Unit MultiLevel	Loaded	100	Distributed (Head and Rear)	34	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	2784.07	3117.00
Unit MultiLevel	Loaded	100	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	10602.43	13138.00
Unit MultiLevel	Loaded	100	Distributed (Head and Rear)	50	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7954.25	9529.00
Unit MultiLevel	Loaded	100	Distributed (Head and Rear)	50	0.00%	Flat	<0.1%	0.00	0.00	< 10%	2.00%	6397.40	7636.00
Unit MultiLevel	Loaded	100	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1850.85	2248.00
Unit MultiLevel	Loaded	100	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	527.44	676.00
Unit MultiLevel	Loaded	100	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3689.94	4590.00
Unit MultiLevel	Loaded	100	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	1002.58	1111.00
Unit MultiLevel	Loaded	100	Head end only	13	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	423.58	455.00
Unit MultiLevel	Loaded	100	Head end only	15	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	15277.95	18033.00
Unit MultiLevel	Loaded	100	Head end only	19	1.00%	Crest	<0.1%	0.00	0.00	< 10%	0.00%	1980.04	2186.00
Unit MultiLevel	Loaded	100	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	13386.76	16544.00
Unit MultiLevel	Loaded	100	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6324.90	7514.00
Unit MultiLevel	Loaded	100	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	10134.62	12957.00
Unit MultiLevel	Loaded	100	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	4508.06	5255.00
Unit MultiLevel	Loaded	100	Head end only	33	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	9301.15	11573.00
Unit MultiLevel	Loaded	100	Head end only	34	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	3748.99	4109.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit MultiLevel	Loaded	100	Head end only	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	16434.55	22273.00
Unit MultiLevel	Loaded	100	Head end only	50	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	12205.74	14825.00
Unit MultiLevel	Loaded	100	Head end only	50	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	9361.41	10633.00
Unit Refrigerated Box	Empty	100	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	686.86	863.00
Unit Refrigerated Box	Empty	100	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	391.13	465.00
Unit Refrigerated Box	Empty	100	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	961.37	1298.00
Unit Refrigerated Box	Empty	100	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	498.94	576.00
Unit Refrigerated Box	Empty	100	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3595.94	4928.00
Unit Refrigerated Box	Empty	100	Distributed (Head and Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	852.24	922.00
Unit Refrigerated Box	Empty	100	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3564.31	4746.00
Unit Refrigerated Box	Empty	100	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	2654.70	3303.00
Unit Refrigerated Box	Empty	100	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1907.41	2157.00
Unit Refrigerated Box	Empty	100	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3331.18	4059.00
Unit Refrigerated Box	Empty	100	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2226.81	2767.00
Unit Refrigerated Box	Empty	100	Distributed (Head and Rear)	34	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	1.00%	2395.94	2750.00
Unit Refrigerated Box	Empty	100	Distributed (Head and Rear)	50	0.50%	Incline	<0.1%	0.00	0.00	< 10%	0.00%	3875.81	4651.00
Unit Refrigerated Box	Empty	100	Distributed (Head and Rear)	55	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7499.28	8801.00
Unit Refrigerated Box	Empty	100	Distributed (Head and Rear)	55	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	6657.06	8722.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Refrigerated Box	Empty	100	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7067.09	8449.00
Unit Refrigerated Box	Empty	100	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	5990.76	7055.00
Unit Refrigerated Box	Empty	100	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	1108.71	1419.00
Unit Refrigerated Box	Empty	100	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	483.99	530.00
Unit Refrigerated Box	Empty	100	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1971.82	2819.00
Unit Refrigerated Box	Empty	100	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	704.94	924.00
Unit Refrigerated Box	Empty	100	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6892.68	8686.00
Unit Refrigerated Box	Empty	100	Head end only	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	993.01	1048.00
Unit Refrigerated Box	Empty	100	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6622.21	8730.00
Unit Refrigerated Box	Empty	100	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4020.57	5252.00
Unit Refrigerated Box	Empty	100	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	2512.03	2794.00
Unit Refrigerated Box	Empty	100	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5690.06	7394.00
Unit Refrigerated Box	Empty	100	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 10%	0.00%	3133.52	3783.00
Unit Refrigerated Box	Empty	100	Head end only	34	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	3067.94	3383.00
Unit Refrigerated Box	Empty	100	Head end only	50	0.50%	Incline	<0.1%	0.00	0.00	> 50%	0.00%	5120.35	6131.00
Unit Refrigerated Box	Empty	100	Head end only	55	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	11167.63	13428.00
Unit Refrigerated Box	Empty	100	Head end only	55	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	10125.42	12584.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Refrigerated Box	Empty	100	Head end only	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	9937.39	12167.00
Unit Refrigerated Box	Empty	100	Head end only	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	8160.98	9614.00
Unit Refrigerated Box	Loaded	100	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	831.51	1096.00
Unit Refrigerated Box	Loaded	100	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	424.37	472.00
Unit Refrigerated Box	Loaded	100	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1299.71	2072.00
Unit Refrigerated Box	Loaded	100	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	571.85	737.00
Unit Refrigerated Box	Loaded	100	Distributed (Head and Rear)	11	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	306.37	327.00
Unit Refrigerated Box	Loaded	100	Distributed (Head and Rear)	15	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6722.07	9287.00
Unit Refrigerated Box	Loaded	100	Distributed (Head and Rear)	15	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7937.01	9618.00
Unit Refrigerated Box	Loaded	100	Distributed (Head and Rear)	16	1.00%	Crest	> 1.0%	9.00	10.00	< 0.1%	2.00%	991.12	1216.00
Unit Refrigerated Box	Loaded	100	Distributed (Head and Rear)	26	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	2634.39	3301.00
Unit Refrigerated Box	Loaded	100	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3504.66	4379.00
Unit Refrigerated Box	Loaded	100	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	2184.80	2478.00
Unit Refrigerated Box	Loaded	100	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4993.39	6408.00
Unit Refrigerated Box	Loaded	100	Distributed (Head and Rear)	30	0.00%	Flat	> 1.0%	42.00	42.00	< 0.1%	4.00%	2713.16	3404.00
Unit Refrigerated Box	Loaded	100	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	10419.07	13073.00
Unit Refrigerated Box	Loaded	100	Distributed (Head and Rear)	50	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7322.07	9135.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Refrigerated Box	Loaded	100	Distributed (Head and Rear)	50	0.00%	Flat	<0.1%	0.00	0.00	< 10%	1.00%	5995.24	7557.00
Unit Refrigerated Box	Loaded	100	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1582.38	1882.00
Unit Refrigerated Box	Loaded	100	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	525.76	590.00
Unit Refrigerated Box	Loaded	100	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3043.42	4673.00
Unit Refrigerated Box	Loaded	100	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 10%	0.00%	883.35	1041.00
Unit Refrigerated Box	Loaded	100	Head end only	11	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	329.32	347.00
Unit Refrigerated Box	Loaded	100	Head end only	15	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	10242.15	13931.00
Unit Refrigerated Box	Loaded	100	Head end only	15	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	14373.96	16790.00
Unit Refrigerated Box	Loaded	100	Head end only	16	1.00%	Crest	<0.1%	0.00	0.00	< 10%	0.00%	1475.02	1733.00
Unit Refrigerated Box	Loaded	100	Head end only	26	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	5547.54	7613.00
Unit Refrigerated Box	Loaded	100	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5398.75	6754.00
Unit Refrigerated Box	Loaded	100	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	2885.81	3190.00
Unit Refrigerated Box	Loaded	100	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	8715.25	12768.00
Unit Refrigerated Box	Loaded	100	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 10%	0.00%	4080.37	4717.00
Unit Refrigerated Box	Loaded	100	Head end only	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	15005.52	19925.00
Unit Refrigerated Box	Loaded	100	Head end only	50	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	11186.20	14238.00
Unit Refrigerated Box	Loaded	100	Head end only	50	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	8740.34	11073.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Tank	Empty	100	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	369.89	428.00
Unit Tank	Empty	100	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	282.79	328.00
Unit Tank	Empty	100	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	444.57	536.00
Unit Tank	Empty	100	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	322.39	368.00
Unit Tank	Empty	100	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1274.15	1615.00
Unit Tank	Empty	100	Distributed (Head and Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	693.76	750.00
Unit Tank	Empty	100	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1475.15	1812.00
Unit Tank	Empty	100	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	1421.21	1627.00
Unit Tank	Empty	100	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1151.45	1323.00
Unit Tank	Empty	100	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	1629.47	1914.00
Unit Tank	Empty	100	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	1286.77	1479.00
Unit Tank	Empty	100	Distributed (Head and Rear)	47	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	2189.62	2430.00
Unit Tank	Empty	100	Distributed (Head and Rear)	55	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	3861.24	4658.00
Unit Tank	Empty	100	Distributed (Head and Rear)	55	1.00%	Trough	<0.1%	0.00	0.00	< 10%	0.00%	3625.69	4195.00
Unit Tank	Empty	100	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	4002.68	4569.00
Unit Tank	Empty	100	Distributed (Head and Rear)	60	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	3223.04	3572.00
Unit Tank	Empty	100	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	3669.75	4081.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Tank	Empty	100	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	492.20	563.00
Unit Tank	Empty	100	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	335.29	388.00
Unit Tank	Empty	100	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	645.55	752.00
Unit Tank	Empty	100	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	407.02	446.00
Unit Tank	Empty	100	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1997.94	2431.00
Unit Tank	Empty	100	Head end only	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	831.12	882.00
Unit Tank	Empty	100	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2155.35	2473.00
Unit Tank	Empty	100	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	1910.61	2164.00
Unit Tank	Empty	100	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1447.57	1638.00
Unit Tank	Empty	100	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	2252.70	2723.00
Unit Tank	Empty	100	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	1673.23	1850.00
Unit Tank	Empty	100	Head end only	47	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	5.00%	2685.81	2901.00
Unit Tank	Empty	100	Head end only	55	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5040.92	5751.00
Unit Tank	Empty	100	Head end only	55	1.00%	Trough	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	4725.91	5355.00
Unit Tank	Empty	100	Head end only	60	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	5001.56	5593.00
Unit Tank	Empty	100	Head end only	60	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	3992.58	4411.00
Unit Tank	Empty	100	Head end only	60	0.00%	Flat	<0.1%	0.00	0.00	< 10%	0.00%	4544.24	5050.00
Unit Tank	Loaded	100	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	548.55	650.00
Unit Tank	Loaded	100	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	376.02	439.00
Unit Tank	Loaded	100	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	805.51	1066.00
Unit Tank	Loaded	100	Distributed (Head and Rear)	10	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	241.15	265.00
Unit Tank	Loaded	100	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	423.28	509.00
Unit Tank	Loaded	100	Distributed (Head and Rear)	15	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	670.35	773.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Tank	Loaded	100	Distributed (Head and Rear)	15	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6840.50	9077.00
Unit Tank	Loaded	100	Distributed (Head and Rear)	20	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6591.85	8781.00
Unit Tank	Loaded	100	Distributed (Head and Rear)	25	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	2020.82	2683.00
Unit Tank	Loaded	100	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	2723.64	3288.00
Unit Tank	Loaded	100	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1758.38	1997.00
Unit Tank	Loaded	100	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4133.55	5496.00
Unit Tank	Loaded	100	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2176.21	2508.00
Unit Tank	Loaded	100	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	9463.87	12604.00
Unit Tank	Loaded	100	Distributed (Head and Rear)	50	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6563.66	8637.00
Unit Tank	Loaded	100	Distributed (Head and Rear)	50	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	5272.83	6077.00
Unit Tank	Loaded	100	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	748.37	896.00
Unit Tank	Loaded	100	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	427.83	482.00
Unit Tank	Loaded	100	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1204.40	1636.00
Unit Tank	Loaded	100	Head end only	10	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	267.63	312.00
Unit Tank	Loaded	100	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	540.43	612.00
Unit Tank	Loaded	100	Head end only	15	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	863.54	989.00
Unit Tank	Loaded	100	Head end only	15	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	11242.51	12863.00
Unit Tank	Loaded	100	Head end only	20	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7878.11	11471.00
Unit Tank	Loaded	100	Head end only	25	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	2873.92	3602.00
Unit Tank	Loaded	100	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	3408.69	4024.00
Unit Tank	Loaded	100	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	2061.95	2240.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Tank	Loaded	100	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5466.39	7218.00
Unit Tank	Loaded	100	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2637.14	2935.00
Unit Tank	Loaded	100	Head end only	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	11310.71	13165.00
Unit Tank	Loaded	100	Head end only	50	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7644.35	8621.00
Unit Tank	Loaded	100	Head end only	50	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	6087.52	6682.00
Unit Steel Hoppers	Empty	135	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	471.96	562.00
Unit Steel Hoppers	Empty	135	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	325.06	390.00
Unit Steel Hoppers	Empty	135	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	601.15	814.00
Unit Steel Hoppers	Empty	135	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	391.40	449.00
Unit Steel Hoppers	Empty	135	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1867.96	2825.00
Unit Steel Hoppers	Empty	135	Distributed (Head and Rear)	25	1.50%	Incline	> 1.0%	3.50	4.00	< 0.1%	4.00%	822.68	911.00
Unit Steel Hoppers	Empty	135	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2059.45	2549.00
Unit Steel Hoppers	Empty	135	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	2.00%	1839.47	2215.00
Unit Steel Hoppers	Empty	135	Distributed (Head and Rear)	30	0.50%	Incline	< 0.5%	1.00	1.00	< 0.1%	0.00%	1432.36	1662.00
Unit Steel Hoppers	Empty	135	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2181.28	2969.00
Unit Steel Hoppers	Empty	135	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	1622.09	1854.00
Unit Steel Hoppers	Empty	135	Distributed (Head and Rear)	50	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	1.00%	2922.14	3242.00
Unit Steel Hoppers	Empty	135	Distributed (Head and Rear)	55	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	4835.98	5451.00
Unit Steel Hoppers	Empty	135	Distributed (Head and Rear)	55	1.00%	Trough	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	4506.34	5457.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Steel Hoppers	Empty	135	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	1.00%	4913.15	5662.00
Unit Steel Hoppers	Empty	135	Distributed (Head and Rear)	60	0.50%	Incline	< 0.5%	14.00	14.00	< 0.1%	2.00%	3871.85	4282.00
Unit Steel Hoppers	Empty	135	Distributed (Head and Rear)	60	0.00%	Flat	< 0.5%	16.00	16.00	< 0.1%	4.00%	4468.99	5135.00
Unit Steel Hoppers	Empty	135	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	404.39	496.00
Unit Steel Hoppers	Empty	135	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	304.14	352.00
Unit Steel Hoppers	Empty	135	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	497.95	650.00
Unit Steel Hoppers	Empty	135	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	346.84	396.00
Unit Steel Hoppers	Empty	135	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1504.10	1930.00
Unit Steel Hoppers	Empty	135	Distributed (Head, Mid, Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	1.00%	755.40	855.00
Unit Steel Hoppers	Empty	135	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1684.40	2114.00
Unit Steel Hoppers	Empty	135	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	1584.25	1883.00
Unit Steel Hoppers	Empty	135	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1253.69	1393.00
Unit Steel Hoppers	Empty	135	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	1820.43	2249.00
Unit Steel Hoppers	Empty	135	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	1432.80	1637.00
Unit Steel Hoppers	Empty	135	Distributed (Head, Mid, Rear)	50	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	1.00%	2645.65	2962.00
Unit Steel Hoppers	Empty	135	Distributed (Head, Mid, Rear)	55	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	4247.46	5089.00
Unit Steel Hoppers	Empty	135	Distributed (Head, Mid, Rear)	55	1.00%	Trough	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	3865.98	4667.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Steel Hoppers	Empty	135	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	4309.62	4844.00
Unit Steel Hoppers	Empty	135	Distributed (Head, Mid, Rear)	60	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	3463.09	4055.00
Unit Steel Hoppers	Empty	135	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	3977.37	4502.00
Unit Steel Hoppers	Loaded	135	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	708.01	856.00
Unit Steel Hoppers	Loaded	135	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	431.05	476.00
Unit Steel Hoppers	Loaded	135	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1108.71	1481.00
Unit Steel Hoppers	Loaded	135	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	515.41	603.00
Unit Steel Hoppers	Loaded	135	Distributed (Head and Rear)	11	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	286.29	324.00
Unit Steel Hoppers	Loaded	135	Distributed (Head and Rear)	15	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6742.25	8013.00
Unit Steel Hoppers	Loaded	135	Distributed (Head and Rear)	16	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	930.11	1114.00
Unit Steel Hoppers	Loaded	135	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	8035.70	10599.00
Unit Steel Hoppers	Loaded	135	Distributed (Head and Rear)	27	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	2619.42	3908.00
Unit Steel Hoppers	Loaded	135	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	3197.64	3612.00
Unit Steel Hoppers	Loaded	135	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	2097.43	2415.00
Unit Steel Hoppers	Loaded	135	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4718.89	6250.00
Unit Steel Hoppers	Loaded	135	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	1.00%	2526.38	2848.00
Unit Steel Hoppers	Loaded	135	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	10249.88	12455.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Steel Hoppers	Loaded	135	Distributed (Head and Rear)	50	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7209.80	8764.00
Unit Steel Hoppers	Loaded	135	Distributed (Head and Rear)	50	0.00%	Flat	<0.1%	0.00	0.00	< 10%	1.00%	5812.85	6474.00
Unit Steel Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	589.34	770.00
Unit Steel Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	390.18	451.00
Unit Steel Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	888.46	1168.00
Unit Steel Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	453.92	552.00
Unit Steel Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	11	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	280.13	309.00
Unit Steel Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	15	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6269.90	7843.00
Unit Steel Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	16	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	1.00%	847.63	1045.00
Unit Steel Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7393.91	10000.00
Unit Steel Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	27	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	2240.88	3048.00
Unit Steel Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	2825.58	3409.00
Unit Steel Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1898.24	2158.00
Unit Steel Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4132.03	5400.00
Unit Steel Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2274.52	2684.00
Unit Steel Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	9579.00	12268.00
Unit Steel Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	50	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6552.46	7853.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Steel Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	50	0.00%	Flat	<0.1%	0.00	0.00	< 10%	0.00%	5340.66	6254.00
Unit Covered Hoppers	Empty	135	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	481.25	593.00
Unit Covered Hoppers	Empty	135	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	328.91	368.00
Unit Covered Hoppers	Empty	135	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	620.09	881.00
Unit Covered Hoppers	Empty	135	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	401.17	473.00
Unit Covered Hoppers	Empty	135	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1940.43	2672.00
Unit Covered Hoppers	Empty	135	Distributed (Head and Rear)	25	1.50%	Incline	> 1.0%	2.50	4.00	< 0.1%	6.00%	846.75	924.00
Unit Covered Hoppers	Empty	135	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2195.87	3396.00
Unit Covered Hoppers	Empty	135	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	3.00%	1890.01	2756.00
Unit Covered Hoppers	Empty	135	Distributed (Head and Rear)	30	0.50%	Incline	> 1.0%	9.00	9.00	< 0.1%	3.00%	1461.98	1806.00
Unit Covered Hoppers	Empty	135	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	2225.36	2868.00
Unit Covered Hoppers	Empty	135	Distributed (Head and Rear)	30	0.00%	Flat	< 0.5%	3.00	3.00	< 0.1%	1.00%	1681.49	2000.00
Unit Covered Hoppers	Empty	135	Distributed (Head and Rear)	47	1.00%	Crest	< 0.5%	1.00	1.00	< 0.1%	11.00%	2857.28	3240.00
Unit Covered Hoppers	Empty	135	Distributed (Head and Rear)	55	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	5034.03	6524.00
Unit Covered Hoppers	Empty	135	Distributed (Head and Rear)	55	1.00%	Trough	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	4540.79	5449.00
Unit Covered Hoppers	Empty	135	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	< 10%	6.00%	5021.03	6184.00
Unit Covered Hoppers	Empty	135	Distributed (Head and Rear)	60	0.50%	Incline	< 0.5%	3.00	3.00	< 0.1%	3.00%	3970.22	4694.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Covered Hoppers	Empty	135	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 10%	4.00%	4616.82	5832.00
Unit Covered Hoppers	Empty	135	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	404.05	544.00
Unit Covered Hoppers	Empty	135	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	296.76	363.00
Unit Covered Hoppers	Empty	135	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	501.61	748.00
Unit Covered Hoppers	Empty	135	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	347.72	406.00
Unit Covered Hoppers	Empty	135	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1537.02	2047.00
Unit Covered Hoppers	Empty	135	Distributed (Head, Mid, Rear)	25	1.50%	Incline	< 0.5%	1.00	1.00	< 0.1%	7.00%	777.49	888.00
Unit Covered Hoppers	Empty	135	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1680.88	2122.00
Unit Covered Hoppers	Empty	135	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	1.00%	1585.55	1927.00
Unit Covered Hoppers	Empty	135	Distributed (Head, Mid, Rear)	30	0.50%	Incline	> 1.0%	4.50	5.00	< 0.1%	6.00%	1259.75	1503.00
Unit Covered Hoppers	Empty	135	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	1814.81	2289.00
Unit Covered Hoppers	Empty	135	Distributed (Head, Mid, Rear)	30	0.00%	Flat	> 1.0%	3.00	3.00	< 0.1%	3.00%	1424.71	1704.00
Unit Covered Hoppers	Empty	135	Distributed (Head, Mid, Rear)	47	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	4.00%	2526.03	2857.00
Unit Covered Hoppers	Empty	135	Distributed (Head, Mid, Rear)	55	1.10%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	4309.82	5094.00
Unit Covered Hoppers	Empty	135	Distributed (Head, Mid, Rear)	55	1.00%	Trough	<0.1%	0.00	0.00	< 10%	1.00%	3829.53	4490.00
Unit Covered Hoppers	Empty	135	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	11.00%	4360.96	4837.00
Unit Covered Hoppers	Empty	135	Distributed (Head, Mid, Rear)	60	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	5.00%	3515.40	4147.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Covered Hoppers	Empty	135	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	14.00%	3996.78	4970.00
Unit Covered Hoppers	Loaded	135	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	686.65	802.00
Unit Covered Hoppers	Loaded	135	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	404.21	470.00
Unit Covered Hoppers	Loaded	135	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1081.26	1436.00
Unit Covered Hoppers	Loaded	135	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	514.04	661.00
Unit Covered Hoppers	Loaded	135	Distributed (Head and Rear)	11	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	299.37	326.00
Unit Covered Hoppers	Loaded	135	Distributed (Head and Rear)	15	1.00%	Crest	< 0.5%	2.00	2.00	< 0.1%	2.00%	854.58	951.00
Unit Covered Hoppers	Loaded	135	Distributed (Head and Rear)	15	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7003.98	8771.00
Unit Covered Hoppers	Loaded	135	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7923.09	9795.00
Unit Covered Hoppers	Loaded	135	Distributed (Head and Rear)	27	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	2461.92	3089.00
Unit Covered Hoppers	Loaded	135	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	3116.81	3835.00
Unit Covered Hoppers	Loaded	135	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	2034.07	2334.00
Unit Covered Hoppers	Loaded	135	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4676.82	5801.00
Unit Covered Hoppers	Loaded	135	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	6.00%	2498.90	2999.00
Unit Covered Hoppers	Loaded	135	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	10165.40	13777.00
Unit Covered Hoppers	Loaded	135	Distributed (Head and Rear)	50	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6952.51	8604.00
Unit Covered Hoppers	Loaded	135	Distributed (Head and Rear)	50	0.00%	Flat	<0.1%	0.00	0.00	< 10%	0.00%	5682.83	7018.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Covered Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	582.58	815.00
Unit Covered Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	388.34	479.00
Unit Covered Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	859.32	1195.00
Unit Covered Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	445.54	572.00
Unit Covered Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	11	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	282.15	310.00
Unit Covered Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	15	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	1.00%	765.89	881.00
Unit Covered Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	15	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6506.45	8454.00
Unit Covered Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7423.12	9006.00
Unit Covered Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	27	1.00%	Trough	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	2124.94	2600.00
Unit Covered Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2732.65	3111.00
Unit Covered Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1840.80	2099.00
Unit Covered Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4086.28	5326.00
Unit Covered Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	1.00%	2228.83	2566.00
Unit Covered Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	9317.81	11374.00
Unit Covered Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	50	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6258.84	7878.00
Unit Covered Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	50	0.00%	Flat	<0.1%	0.00	0.00	< 10%	0.00%	5193.09	6074.00
Unit Aluminum Hoppers	Empty	135	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	427.82	493.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Aluminum Hoppers	Empty	135	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	309.26	370.00
Unit Aluminum Hoppers	Empty	135	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	527.40	661.00
Unit Aluminum Hoppers	Empty	135	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	359.49	412.00
Unit Aluminum Hoppers	Empty	135	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1570.07	1976.00
Unit Aluminum Hoppers	Empty	135	Distributed (Head and Rear)	25	1.50%	Incline	> 1.0%	5.00	11.00	< 0.1%	7.00%	817.56	904.00
Unit Aluminum Hoppers	Empty	135	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1759.11	2122.00
Unit Aluminum Hoppers	Empty	135	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	1640.13	1882.00
Unit Aluminum Hoppers	Empty	135	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	1.00%	1313.88	1486.00
Unit Aluminum Hoppers	Empty	135	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	1894.77	2338.00
Unit Aluminum Hoppers	Empty	135	Distributed (Head and Rear)	30	0.00%	Flat	> 1.0%	7.67	18.00	< 0.1%	5.00%	1471.67	1747.00
Unit Aluminum Hoppers	Empty	135	Distributed (Head and Rear)	55	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	4252.04	4728.00
Unit Aluminum Hoppers	Empty	135	Distributed (Head and Rear)	55	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	24.00%	3186.67	3465.00
Unit Aluminum Hoppers	Empty	135	Distributed (Head and Rear)	55	1.00%	Trough	<0.1%	0.00	0.00	< 10%	0.00%	3916.54	4589.00
Unit Aluminum Hoppers	Empty	135	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	10.00%	4372.46	4880.00
Unit Aluminum Hoppers	Empty	135	Distributed (Head and Rear)	60	0.50%	Incline	< 0.5%	4.00	4.00	< 0.1%	6.00%	3673.81	4112.00
Unit Aluminum Hoppers	Empty	135	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	11.00%	3967.09	4598.00
Unit Aluminum Hoppers	Empty	135	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	370.78	444.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Aluminum Hoppers	Empty	135	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	278.06	334.00
Unit Aluminum Hoppers	Empty	135	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	433.49	512.00
Unit Aluminum Hoppers	Empty	135	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	318.99	372.00
Unit Aluminum Hoppers	Empty	135	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1265.21	1701.00
Unit Aluminum Hoppers	Empty	135	Distributed (Head, Mid, Rear)	25	1.50%	Incline	< 0.5%	1.00	1.00	< 0.1%	2.00%	735.87	815.00
Unit Aluminum Hoppers	Empty	135	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1444.38	1759.00
Unit Aluminum Hoppers	Empty	135	Distributed (Head, Mid, Rear)	30	0.50%	Decline	> 1.0%	5.00	5.00	< 0.1%	2.00%	1410.34	1665.00
Unit Aluminum Hoppers	Empty	135	Distributed (Head, Mid, Rear)	30	0.50%	Incline	> 1.0%	8.00	8.00	< 0.1%	2.00%	1155.24	1434.00
Unit Aluminum Hoppers	Empty	135	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	1588.59	1920.00
Unit Aluminum Hoppers	Empty	135	Distributed (Head, Mid, Rear)	30	0.00%	Flat	< 0.5%	0.00	0.00	< 0.1%	3.00%	1266.80	1432.00
Unit Aluminum Hoppers	Empty	135	Distributed (Head, Mid, Rear)	55	1.10%	Decline	<0.1%	0.00	0.00	< 10%	4.00%	3718.54	4274.00
Unit Aluminum Hoppers	Empty	135	Distributed (Head, Mid, Rear)	55	1.00%	Crest	< 0.5%	0.00	0.00	< 0.1%	14.00%	2845.23	3285.00
Unit Aluminum Hoppers	Empty	135	Distributed (Head, Mid, Rear)	55	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	9.00%	3361.49	3914.00
Unit Aluminum Hoppers	Empty	135	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	19.00%	3834.58	4247.00
Unit Aluminum Hoppers	Empty	135	Distributed (Head, Mid, Rear)	60	0.50%	Incline	< 0.5%	2.00	2.00	< 0.1%	11.00%	3203.57	3536.00
Unit Aluminum Hoppers	Empty	135	Distributed (Head, Mid, Rear)	60	0.00%	Flat	< 0.5%	10.00	10.00	< 0.1%	12.00%	3519.17	3918.00
Unit Aluminum Hoppers	Loaded	135	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	609.90	720.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Aluminum Hoppers	Loaded	135	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	398.14	457.00
Unit Aluminum Hoppers	Loaded	135	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	892.56	1198.00
Unit Aluminum Hoppers	Loaded	135	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	463.32	532.00
Unit Aluminum Hoppers	Loaded	135	Distributed (Head and Rear)	11	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	280.37	311.00
Unit Aluminum Hoppers	Loaded	135	Distributed (Head and Rear)	15	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	778.91	888.00
Unit Aluminum Hoppers	Loaded	135	Distributed (Head and Rear)	15	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5816.99	7172.00
Unit Aluminum Hoppers	Loaded	135	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6807.65	8698.00
Unit Aluminum Hoppers	Loaded	135	Distributed (Head and Rear)	27	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	2168.42	2784.00
Unit Aluminum Hoppers	Loaded	135	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2732.01	3129.00
Unit Aluminum Hoppers	Loaded	135	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1882.14	2108.00
Unit Aluminum Hoppers	Loaded	135	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3924.07	4764.00
Unit Aluminum Hoppers	Loaded	135	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	3.00%	2262.32	2623.00
Unit Aluminum Hoppers	Loaded	135	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	8874.75	10883.00
Unit Aluminum Hoppers	Loaded	135	Distributed (Head and Rear)	50	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6111.55	6923.00
Unit Aluminum Hoppers	Loaded	135	Distributed (Head and Rear)	50	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	5102.56	5748.00
Unit Aluminum Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	511.19	636.00
Unit Aluminum Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	362.21	412.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Aluminum Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	707.77	866.00
Unit Aluminum Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	404.52	444.00
Unit Aluminum Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	11	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	273.27	296.00
Unit Aluminum Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	15	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	679.40	786.00
Unit Aluminum Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	15	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5458.62	7282.00
Unit Aluminum Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6324.36	7783.00
Unit Aluminum Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	27	1.00%	Trough	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	1871.17	2427.00
Unit Aluminum Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2418.07	2929.00
Unit Aluminum Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1709.08	1945.00
Unit Aluminum Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3474.03	4470.00
Unit Aluminum Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	1996.60	2248.00
Unit Aluminum Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	8306.86	11523.00
Unit Aluminum Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	50	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5633.84	7492.00
Unit Aluminum Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	50	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	4681.87	5450.00
Unit MultiLevel	Empty	135	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	839.54	1238.00
Unit MultiLevel	Empty	135	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	435.62	536.00
Unit MultiLevel	Empty	135	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1300.30	1954.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit MultiLevel	Empty	135	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	578.98	743.00
Unit MultiLevel	Empty	135	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5063.05	7980.00
Unit MultiLevel	Empty	135	Distributed (Head and Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	977.27	1076.00
Unit MultiLevel	Empty	135	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4610.22	7072.00
Unit MultiLevel	Empty	135	Distributed (Head and Rear)	30	0.50%	Decline	> 1.0%	18.00	18.00	< 10%	6.00%	3246.25	4247.00
Unit MultiLevel	Empty	135	Distributed (Head and Rear)	30	0.50%	Incline	> 1.0%	22.00	22.00	< 0.1%	5.00%	2156.39	2704.00
Unit MultiLevel	Empty	135	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4206.64	6660.00
Unit MultiLevel	Empty	135	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	9.00%	2596.17	3271.00
Unit MultiLevel	Empty	135	Distributed (Head and Rear)	36	1.00%	Crest	> 1.0%	40.40	60.00	< 0.1%	17.00%	3086.45	3874.00
Unit MultiLevel	Empty	135	Distributed (Head and Rear)	53	0.50%	Incline	<0.1%	0.00	0.00	< 10%	3.00%	4801.75	5884.00
Unit MultiLevel	Empty	135	Distributed (Head and Rear)	55	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	9069.07	13227.00
Unit MultiLevel	Empty	135	Distributed (Head and Rear)	55	1.00%	Trough	<0.1%	0.00	0.00	> 50%	1.00%	7557.28	10368.00
Unit MultiLevel	Empty	135	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	3.00%	8308.92	10579.00
Unit MultiLevel	Empty	135	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 25%, < 50%	11.00%	7096.56	9596.00
Unit MultiLevel	Empty	135	Distributed (Head, Mid, Rear)	10	0.50%	Decline	< 0.5%	16.00	16.00	< 0.1%	1.00%	643.46	860.00
Unit MultiLevel	Empty	135	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	375.35	475.00
Unit MultiLevel	Empty	135	Distributed (Head, Mid, Rear)	10	1.10%	Decline	< 0.5%	19.00	19.00	> 25%, < 50%	1.00%	923.41	1488.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit MultiLevel	Empty	135	Distributed (Head, Mid, Rear)	10	0.00%	Flat	> 1.0%	10.00	10.00	< 0.1%	2.00%	483.24	649.00
Unit MultiLevel	Empty	135	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3300.98	5998.00
Unit MultiLevel	Empty	135	Distributed (Head, Mid, Rear)	25	1.50%	Incline	> 1.0%	10.50	26.00	< 0.1%	4.00%	871.66	978.00
Unit MultiLevel	Empty	135	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3329.32	4617.00
Unit MultiLevel	Empty	135	Distributed (Head, Mid, Rear)	30	0.50%	Decline	> 1.0%	48.00	106.00	< 10%	7.00%	2422.46	3854.00
Unit MultiLevel	Empty	135	Distributed (Head, Mid, Rear)	30	0.50%	Incline	> 1.0%	43.00	159.00	< 0.1%	7.00%	1884.61	2399.00
Unit MultiLevel	Empty	135	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	1.00%	3184.11	4763.00
Unit MultiLevel	Empty	135	Distributed (Head, Mid, Rear)	30	0.00%	Flat	> 1.0%	56.57	135.00	< 0.1%	8.00%	2167.53	2685.00
Unit MultiLevel	Empty	135	Distributed (Head, Mid, Rear)	36	1.00%	Crest	> 1.0%	44.25	71.00	< 0.1%	12.00%	2640.10	3190.00
Unit MultiLevel	Empty	135	Distributed (Head, Mid, Rear)	53	0.50%	Incline	> 1.0%	63.20	130.00	< 10%	11.00%	4238.70	5213.00
Unit MultiLevel	Empty	135	Distributed (Head, Mid, Rear)	55	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7167.40	9503.00
Unit MultiLevel	Empty	135	Distributed (Head, Mid, Rear)	55	1.00%	Trough	> 1.0%	23.00	23.00	> 50%	20.00%	5961.99	7943.00
Unit MultiLevel	Empty	135	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	7.00%	6595.64	8102.00
Unit MultiLevel	Empty	135	Distributed (Head, Mid, Rear)	60	0.00%	Flat	> 1.0%	136.11	294.00	> 10%, < 25%	24.00%	5652.03	6974.00
Unit MultiLevel	Loaded	135	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	1074.06	1603.00
Unit MultiLevel	Loaded	135	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	451.47	512.00
Unit MultiLevel	Loaded	135	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1911.24	3465.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit MultiLevel	Loaded	135	Distributed (Head and Rear)	10	0.00%	Flat	> 1.0%	3.00	3.00	< 0.1%	3.00%	667.16	837.00
Unit MultiLevel	Loaded	135	Distributed (Head and Rear)	14	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	431.72	484.00
Unit MultiLevel	Loaded	135	Distributed (Head and Rear)	15	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	8754.67	11862.00
Unit MultiLevel	Loaded	135	Distributed (Head and Rear)	21	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	1790.05	2280.00
Unit MultiLevel	Loaded	135	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	9337.43	14679.00
Unit MultiLevel	Loaded	135	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4274.28	5607.00
Unit MultiLevel	Loaded	135	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6227.46	8408.00
Unit MultiLevel	Loaded	135	Distributed (Head and Rear)	30	0.00%	Flat	> 1.0%	14.50	28.00	< 0.1%	7.00%	3215.87	3825.00
Unit MultiLevel	Loaded	135	Distributed (Head and Rear)	37	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	4.00%	3454.78	4330.00
Unit MultiLevel	Loaded	135	Distributed (Head and Rear)	37	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	5555.54	7757.00
Unit MultiLevel	Loaded	135	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	11573.43	18339.00
Unit MultiLevel	Loaded	135	Distributed (Head and Rear)	50	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	8650.02	11592.00
Unit MultiLevel	Loaded	135	Distributed (Head and Rear)	50	0.00%	Flat	<0.1%	0.00	0.00	< 10%	15.00%	6983.03	8455.00
Unit MultiLevel	Loaded	135	Distributed (Head, Mid, Rear)	10	0.50%	Decline	> 1.0%	36.00	36.00	< 10%	1.00%	788.63	1191.00
Unit MultiLevel	Loaded	135	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	433.04	519.00
Unit MultiLevel	Loaded	135	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1223.17	2084.00
Unit MultiLevel	Loaded	135	Distributed (Head, Mid, Rear)	10	0.00%	Flat	> 1.0%	20.00	20.00	< 0.1%	1.00%	550.46	741.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit MultiLevel	Loaded	135	Distributed (Head, Mid, Rear)	14	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	409.49	464.00
Unit MultiLevel	Loaded	135	Distributed (Head, Mid, Rear)	15	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6870.67	9160.00
Unit MultiLevel	Loaded	135	Distributed (Head, Mid, Rear)	21	1.00%	Crest	> 1.0%	18.82	60.00	< 10%	31.00%	1380.68	1931.00
Unit MultiLevel	Loaded	135	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6825.04	9969.00
Unit MultiLevel	Loaded	135	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	1.00%	3272.68	4098.00
Unit MultiLevel	Loaded	135	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4722.52	7108.00
Unit MultiLevel	Loaded	135	Distributed (Head, Mid, Rear)	30	0.00%	Flat	> 1.0%	17.80	49.00	< 0.1%	10.00%	2697.75	3516.00
Unit MultiLevel	Loaded	135	Distributed (Head, Mid, Rear)	37	0.50%	Incline	> 1.0%	112.00	169.00	< 10%	8.00%	3012.96	4117.00
Unit MultiLevel	Loaded	135	Distributed (Head, Mid, Rear)	37	1.00%	Trough	<0.1%	0.00	0.00	> 25%, < 50%	1.00%	4334.28	5868.00
Unit MultiLevel	Loaded	135	Distributed (Head, Mid, Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	9246.59	11180.00
Unit MultiLevel	Loaded	135	Distributed (Head, Mid, Rear)	50	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7224.52	9252.00
Unit MultiLevel	Loaded	135	Distributed (Head, Mid, Rear)	50	0.00%	Flat	> 1.0%	142.00	176.00	< 10%	21.00%	5959.66	7416.00
Unit Refrigerated Box	Empty	135	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	796.02	1146.00
Unit Refrigerated Box	Empty	135	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	413.74	487.00
Unit Refrigerated Box	Empty	135	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1249.23	1885.00
Unit Refrigerated Box	Empty	135	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	557.40	709.00
Unit Refrigerated Box	Empty	135	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4653.70	7371.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Refrigerated Box	Empty	135	Distributed (Head and Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	968.51	1042.00
Unit Refrigerated Box	Empty	135	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4446.73	6741.00
Unit Refrigerated Box	Empty	135	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 10%	1.00%	3032.27	3744.00
Unit Refrigerated Box	Empty	135	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	2099.78	2377.00
Unit Refrigerated Box	Empty	135	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3987.73	6195.00
Unit Refrigerated Box	Empty	135	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 10%	1.00%	2513.33	3196.00
Unit Refrigerated Box	Empty	135	Distributed (Head and Rear)	35	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	2881.22	3326.00
Unit Refrigerated Box	Empty	135	Distributed (Head and Rear)	52	0.50%	Incline	<0.1%	0.00	0.00	> 10%, < 25%	1.00%	4616.89	5417.00
Unit Refrigerated Box	Empty	135	Distributed (Head and Rear)	55	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	8699.41	11327.00
Unit Refrigerated Box	Empty	135	Distributed (Head and Rear)	55	1.00%	Trough	<0.1%	0.00	0.00	> 50%	1.00%	7485.97	9687.00
Unit Refrigerated Box	Empty	135	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	1.00%	7962.37	9967.00
Unit Refrigerated Box	Empty	135	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	1.00%	6615.25	8713.00
Unit Refrigerated Box	Empty	135	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	633.60	776.00
Unit Refrigerated Box	Empty	135	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	372.20	426.00
Unit Refrigerated Box	Empty	135	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	911.19	1303.00
Unit Refrigerated Box	Empty	135	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	474.05	582.00
Unit Refrigerated Box	Empty	135	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3371.88	4731.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Refrigerated Box	Empty	135	Distributed (Head, Mid, Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	888.60	977.00
Unit Refrigerated Box	Empty	135	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3273.78	4320.00
Unit Refrigerated Box	Empty	135	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	2532.37	3051.00
Unit Refrigerated Box	Empty	135	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	1.00%	1852.85	2176.00
Unit Refrigerated Box	Empty	135	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3151.90	4708.00
Unit Refrigerated Box	Empty	135	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2141.99	2500.00
Unit Refrigerated Box	Empty	135	Distributed (Head, Mid, Rear)	35	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	2.00%	2506.97	3068.00
Unit Refrigerated Box	Empty	135	Distributed (Head, Mid, Rear)	52	0.50%	Incline	> 1.0%	29.00	29.00	> 10%, < 25%	2.00%	3934.34	4791.00
Unit Refrigerated Box	Empty	135	Distributed (Head, Mid, Rear)	55	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7171.35	8637.00
Unit Refrigerated Box	Empty	135	Distributed (Head, Mid, Rear)	55	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	6110.94	7627.00
Unit Refrigerated Box	Empty	135	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	1.00%	6650.62	8122.00
Unit Refrigerated Box	Empty	135	Distributed (Head, Mid, Rear)	60	0.00%	Flat	> 1.0%	126.00	248.00	> 50%	4.00%	5775.94	6970.00
Unit Refrigerated Box	Loaded	135	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 10%	3.00%	984.53	1236.00
Unit Refrigerated Box	Loaded	135	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	456.31	536.00
Unit Refrigerated Box	Loaded	135	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1707.45	2604.00
Unit Refrigerated Box	Loaded	135	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	646.75	899.00
Unit Refrigerated Box	Loaded	135	Distributed (Head and Rear)	12	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	342.54	384.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Refrigerated Box	Loaded	135	Distributed (Head and Rear)	15	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	8430.20	11302.00
Unit Refrigerated Box	Loaded	135	Distributed (Head and Rear)	17	1.00%	Crest	<0.1%	0.00	0.00	< 10%	0.00%	1261.32	1765.00
Unit Refrigerated Box	Loaded	135	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	9278.07	12260.00
Unit Refrigerated Box	Loaded	135	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4010.13	5393.00
Unit Refrigerated Box	Loaded	135	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5899.99	8023.00
Unit Refrigerated Box	Loaded	135	Distributed (Head and Rear)	30	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	3754.53	5054.00
Unit Refrigerated Box	Loaded	135	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 10%	4.00%	3090.28	4196.00
Unit Refrigerated Box	Loaded	135	Distributed (Head and Rear)	31	0.50%	Incline	> 1.0%	8.00	8.00	< 0.1%	2.00%	2572.42	3380.00
Unit Refrigerated Box	Loaded	135	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	11760.73	16285.00
Unit Refrigerated Box	Loaded	135	Distributed (Head and Rear)	50	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	8305.03	11017.00
Unit Refrigerated Box	Loaded	135	Distributed (Head and Rear)	50	0.00%	Flat	<0.1%	0.00	0.00	> 10%, < 25%	6.00%	6715.72	8604.00
Unit Refrigerated Box	Loaded	135	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	742.97	982.00
Unit Refrigerated Box	Loaded	135	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	420.96	486.00
Unit Refrigerated Box	Loaded	135	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1168.21	1763.00
Unit Refrigerated Box	Loaded	135	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	527.87	641.00
Unit Refrigerated Box	Loaded	135	Distributed (Head, Mid, Rear)	12	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	338.87	374.00
Unit Refrigerated Box	Loaded	135	Distributed (Head, Mid, Rear)	15	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7131.36	9590.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Refrigerated Box	Loaded	135	Distributed (Head, Mid, Rear)	17	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	1063.32	1351.00
Unit Refrigerated Box	Loaded	135	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7927.49	11550.00
Unit Refrigerated Box	Loaded	135	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	3122.57	4064.00
Unit Refrigerated Box	Loaded	135	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4648.27	6037.00
Unit Refrigerated Box	Loaded	135	Distributed (Head, Mid, Rear)	30	1.00%	Trough	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	2927.12	3905.00
Unit Refrigerated Box	Loaded	135	Distributed (Head, Mid, Rear)	30	0.00%	Flat	< 0.5%	2.00	2.00	< 0.1%	2.00%	2527.20	3020.00
Unit Refrigerated Box	Loaded	135	Distributed (Head, Mid, Rear)	31	0.50%	Incline	> 1.0%	21.00	21.00	< 0.1%	2.00%	2186.18	2579.00
Unit Refrigerated Box	Loaded	135	Distributed (Head, Mid, Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	9941.82	12883.00
Unit Refrigerated Box	Loaded	135	Distributed (Head, Mid, Rear)	50	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6961.41	8791.00
Unit Refrigerated Box	Loaded	135	Distributed (Head, Mid, Rear)	50	0.00%	Flat	<0.1%	0.00	0.00	< 10%	3.00%	5808.78	6812.00
Unit Tank	Empty	135	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	400.12	474.00
Unit Tank	Empty	135	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	305.49	353.00
Unit Tank	Empty	135	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	488.61	585.00
Unit Tank	Empty	135	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	342.35	388.00
Unit Tank	Empty	135	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1447.68	1871.00
Unit Tank	Empty	135	Distributed (Head and Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	5.00%	746.16	805.00
Unit Tank	Empty	135	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1677.39	2014.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Tank	Empty	135	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	1.00%	1564.58	1784.00
Unit Tank	Empty	135	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1257.88	1440.00
Unit Tank	Empty	135	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	1787.43	1995.00
Unit Tank	Empty	135	Distributed (Head and Rear)	30	0.00%	Flat	< 0.5%	0.00	0.00	< 0.1%	0.00%	1400.39	1602.00
Unit Tank	Empty	135	Distributed (Head and Rear)	48	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	5.00%	2480.22	2743.00
Unit Tank	Empty	135	Distributed (Head and Rear)	55	1.10%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	4199.75	4974.00
Unit Tank	Empty	135	Distributed (Head and Rear)	55	1.00%	Trough	<0.1%	0.00	0.00	< 10%	0.00%	3899.16	4494.00
Unit Tank	Empty	135	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	1.00%	4292.24	4863.00
Unit Tank	Empty	135	Distributed (Head and Rear)	60	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	3.00%	3483.92	4055.00
Unit Tank	Empty	135	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	3.00%	3918.88	4321.00
Unit Tank	Empty	135	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	344.09	413.00
Unit Tank	Empty	135	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	277.33	321.00
Unit Tank	Empty	135	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	402.66	458.00
Unit Tank	Empty	135	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	304.41	346.00
Unit Tank	Empty	135	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1186.25	1526.00
Unit Tank	Empty	135	Distributed (Head, Mid, Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	686.42	740.00
Unit Tank	Empty	135	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	1371.29	1697.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Tank	Empty	135	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	1346.13	1486.00
Unit Tank	Empty	135	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1099.13	1287.00
Unit Tank	Empty	135	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	1526.46	1742.00
Unit Tank	Empty	135	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	1220.91	1400.00
Unit Tank	Empty	135	Distributed (Head, Mid, Rear)	48	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	1.00%	2220.30	2485.00
Unit Tank	Empty	135	Distributed (Head, Mid, Rear)	55	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	3701.03	4217.00
Unit Tank	Empty	135	Distributed (Head, Mid, Rear)	55	1.00%	Trough	<0.1%	0.00	0.00	< 10%	0.00%	3387.23	3991.00
Unit Tank	Empty	135	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	3763.13	4350.00
Unit Tank	Empty	135	Distributed (Head, Mid, Rear)	60	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	3141.28	3534.00
Unit Tank	Empty	135	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	3474.47	3968.00
Unit Tank	Loaded	135	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	587.70	667.00
Unit Tank	Loaded	135	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	382.19	443.00
Unit Tank	Loaded	135	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	904.23	1188.00
Unit Tank	Loaded	135	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	460.47	528.00
Unit Tank	Loaded	135	Distributed (Head and Rear)	12	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	311.08	340.00
Unit Tank	Loaded	135	Distributed (Head and Rear)	15	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6416.45	7786.00
Unit Tank	Loaded	135	Distributed (Head and Rear)	17	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	880.89	963.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Tank	Loaded	135	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7684.62	10496.00
Unit Tank	Loaded	135	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	2889.85	3403.00
Unit Tank	Loaded	135	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4228.08	5483.00
Unit Tank	Loaded	135	Distributed (Head and Rear)	30	1.00%	Trough	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	3022.89	3911.00
Unit Tank	Loaded	135	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2299.05	2631.00
Unit Tank	Loaded	135	Distributed (Head and Rear)	31	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	2009.90	2200.00
Unit Tank	Loaded	135	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	9997.12	12721.00
Unit Tank	Loaded	135	Distributed (Head and Rear)	50	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6840.31	8171.00
Unit Tank	Loaded	135	Distributed (Head and Rear)	50	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	5512.97	6312.00
Unit Tank	Loaded	135	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	508.15	585.00
Unit Tank	Loaded	135	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	344.11	414.00
Unit Tank	Loaded	135	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	732.18	1017.00
Unit Tank	Loaded	135	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	398.84	463.00
Unit Tank	Loaded	135	Distributed (Head, Mid, Rear)	12	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	302.42	322.00
Unit Tank	Loaded	135	Distributed (Head, Mid, Rear)	15	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5951.93	7872.00
Unit Tank	Loaded	135	Distributed (Head, Mid, Rear)	17	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	793.30	886.00
Unit Tank	Loaded	135	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7155.37	11360.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Tank	Loaded	135	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	2616.63	3164.00
Unit Tank	Loaded	135	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3844.14	5743.00
Unit Tank	Loaded	135	Distributed (Head, Mid, Rear)	30	1.00%	Trough	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	2586.16	3546.00
Unit Tank	Loaded	135	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2097.09	2444.00
Unit Tank	Loaded	135	Distributed (Head, Mid, Rear)	31	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1866.43	2033.00
Unit Tank	Loaded	135	Distributed (Head, Mid, Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	9363.19	11881.00
Unit Tank	Loaded	135	Distributed (Head, Mid, Rear)	50	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6276.76	7433.00
Unit Tank	Loaded	135	Distributed (Head, Mid, Rear)	50	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	5108.97	5970.00
Unit Steel Hoppers	Empty	200	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	588.33	728.00
Unit Steel Hoppers	Empty	200	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	378.28	468.00
Unit Steel Hoppers	Empty	200	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	826.07	1219.00
Unit Steel Hoppers	Empty	200	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	463.27	559.00
Unit Steel Hoppers	Empty	200	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2558.85	3734.00
Unit Steel Hoppers	Empty	200	Distributed (Head and Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	986.73	1117.00
Unit Steel Hoppers	Empty	200	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2709.41	3834.00
Unit Steel Hoppers	Empty	200	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2288.78	2972.00
Unit Steel Hoppers	Empty	200	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1700.51	1914.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Steel Hoppers	Empty	200	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	2797.14	3488.00
Unit Steel Hoppers	Empty	200	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	1964.59	2332.00
Unit Steel Hoppers	Empty	200	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4545.75	5612.00
Unit Steel Hoppers	Empty	200	Distributed (Head and Rear)	45	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	2.00%	3188.32	3647.00
Unit Steel Hoppers	Empty	200	Distributed (Head and Rear)	45	1.00%	Trough	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	3908.04	4878.00
Unit Steel Hoppers	Empty	200	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	5737.92	6565.00
Unit Steel Hoppers	Empty	200	Distributed (Head and Rear)	60	0.50%	Incline	<0.1%	0.00	0.00	< 10%	1.00%	4536.83	5216.00
Unit Steel Hoppers	Empty	200	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 10%	0.00%	5165.09	6142.00
Unit Steel Hoppers	Empty	200	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	478.57	580.00
Unit Steel Hoppers	Empty	200	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	336.87	405.00
Unit Steel Hoppers	Empty	200	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	626.19	813.00
Unit Steel Hoppers	Empty	200	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	395.97	456.00
Unit Steel Hoppers	Empty	200	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1926.32	2693.00
Unit Steel Hoppers	Empty	200	Distributed (Head, Mid, Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	870.37	981.00
Unit Steel Hoppers	Empty	200	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2103.47	3056.00
Unit Steel Hoppers	Empty	200	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	1914.93	2349.00
Unit Steel Hoppers	Empty	200	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1469.46	1731.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Steel Hoppers	Empty	200	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	2212.17	2731.00
Unit Steel Hoppers	Empty	200	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	1.00%	1662.57	1955.00
Unit Steel Hoppers	Empty	200	Distributed (Head, Mid, Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	3769.92	4640.00
Unit Steel Hoppers	Empty	200	Distributed (Head, Mid, Rear)	45	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	1.00%	2807.69	3316.00
Unit Steel Hoppers	Empty	200	Distributed (Head, Mid, Rear)	45	1.00%	Trough	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	3237.15	4343.00
Unit Steel Hoppers	Empty	200	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	4902.82	5740.00
Unit Steel Hoppers	Empty	200	Distributed (Head, Mid, Rear)	60	0.50%	Incline	<0.1%	0.00	0.00	< 10%	0.00%	3972.03	4622.00
Unit Steel Hoppers	Empty	200	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 10%	2.00%	4398.41	5312.00
Unit Steel Hoppers	Loaded	200	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	926.94	1270.00
Unit Steel Hoppers	Loaded	200	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	450.30	521.00
Unit Steel Hoppers	Loaded	200	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1603.03	2648.00
Unit Steel Hoppers	Loaded	200	Distributed (Head and Rear)	10	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	276.80	310.00
Unit Steel Hoppers	Loaded	200	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	624.78	761.00
Unit Steel Hoppers	Loaded	200	Distributed (Head and Rear)	15	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	1052.82	1261.00
Unit Steel Hoppers	Loaded	200	Distributed (Head and Rear)	15	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	9320.77	10964.00
Unit Steel Hoppers	Loaded	200	Distributed (Head and Rear)	20	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6157.20	7755.00
Unit Steel Hoppers	Loaded	200	Distributed (Head and Rear)	27	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	2011.81	2263.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Steel Hoppers	Loaded	200	Distributed (Head and Rear)	27	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	3046.60	3881.00
Unit Steel Hoppers	Loaded	200	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	3916.86	4915.00
Unit Steel Hoppers	Loaded	200	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5650.21	7679.00
Unit Steel Hoppers	Loaded	200	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	1.00%	2988.64	3698.00
Unit Steel Hoppers	Loaded	200	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	10561.96	12966.00
Unit Steel Hoppers	Loaded	200	Distributed (Head and Rear)	50	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	8286.59	11131.00
Unit Steel Hoppers	Loaded	200	Distributed (Head and Rear)	50	0.00%	Flat	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	6619.87	7750.00
Unit Steel Hoppers	Loaded	200	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	741.10	1066.00
Unit Steel Hoppers	Loaded	200	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	410.21	486.00
Unit Steel Hoppers	Loaded	200	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1182.00	1648.00
Unit Steel Hoppers	Loaded	200	Distributed (Head, Mid, Rear)	10	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	266.02	290.00
Unit Steel Hoppers	Loaded	200	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	526.18	603.00
Unit Steel Hoppers	Loaded	200	Distributed (Head, Mid, Rear)	15	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	903.06	1078.00
Unit Steel Hoppers	Loaded	200	Distributed (Head, Mid, Rear)	15	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	8523.82	10853.00
Unit Steel Hoppers	Loaded	200	Distributed (Head, Mid, Rear)	20	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5346.66	7343.00
Unit Steel Hoppers	Loaded	200	Distributed (Head, Mid, Rear)	27	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1826.80	2048.00
Unit Steel Hoppers	Loaded	200	Distributed (Head, Mid, Rear)	27	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	2532.65	3241.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Steel Hoppers	Loaded	200	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	3249.71	4085.00
Unit Steel Hoppers	Loaded	200	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4783.30	6180.00
Unit Steel Hoppers	Loaded	200	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2582.73	3338.00
Unit Steel Hoppers	Loaded	200	Distributed (Head, Mid, Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	9416.49	12099.00
Unit Steel Hoppers	Loaded	200	Distributed (Head, Mid, Rear)	50	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7265.80	9256.00
Unit Steel Hoppers	Loaded	200	Distributed (Head, Mid, Rear)	50	0.00%	Flat	<0.1%	0.00	0.00	< 10%	0.00%	5871.35	6960.00
Unit Aluminum Hoppers	Empty	200	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	524.07	720.00
Unit Aluminum Hoppers	Empty	200	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	345.35	421.00
Unit Aluminum Hoppers	Empty	200	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	680.21	968.00
Unit Aluminum Hoppers	Empty	200	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	424.32	547.00
Unit Aluminum Hoppers	Empty	200	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2119.42	3172.00
Unit Aluminum Hoppers	Empty	200	Distributed (Head and Rear)	25	1.50%	Incline	< 0.5%	2.00	2.00	< 0.1%	4.00%	888.03	993.00
Unit Aluminum Hoppers	Empty	200	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2268.21	3180.00
Unit Aluminum Hoppers	Empty	200	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	1.00%	2036.36	2721.00
Unit Aluminum Hoppers	Empty	200	Distributed (Head and Rear)	30	0.50%	Incline	> 1.0%	5.00	8.00	< 0.1%	3.00%	1538.53	1926.00
Unit Aluminum Hoppers	Empty	200	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	2430.32	3304.00
Unit Aluminum Hoppers	Empty	200	Distributed (Head and Rear)	30	0.00%	Flat	< 0.5%	1.00	1.00	< 0.1%	1.00%	1776.42	2342.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Aluminum Hoppers	Empty	200	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	4048.77	5812.00
Unit Aluminum Hoppers	Empty	200	Distributed (Head and Rear)	45	1.00%	Crest	> 1.0%	7.00	10.00	< 10%	3.00%	2997.72	3690.00
Unit Aluminum Hoppers	Empty	200	Distributed (Head and Rear)	45	1.00%	Trough	<0.1%	0.00	0.00	> 10%, < 25%	1.00%	3368.68	4604.00
Unit Aluminum Hoppers	Empty	200	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	7.00%	5125.55	6450.00
Unit Aluminum Hoppers	Empty	200	Distributed (Head and Rear)	60	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	1.00%	4193.74	4851.00
Unit Aluminum Hoppers	Empty	200	Distributed (Head and Rear)	60	0.00%	Flat	< 0.5%	1.00	1.00	< 10%	5.00%	4801.76	5970.00
Unit Aluminum Hoppers	Empty	200	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	429.70	605.00
Unit Aluminum Hoppers	Empty	200	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	311.10	397.00
Unit Aluminum Hoppers	Empty	200	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	531.17	873.00
Unit Aluminum Hoppers	Empty	200	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	368.17	454.00
Unit Aluminum Hoppers	Empty	200	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1668.50	2856.00
Unit Aluminum Hoppers	Empty	200	Distributed (Head, Mid, Rear)	25	1.50%	Incline	< 0.5%	2.00	2.00	< 0.1%	1.00%	835.09	1001.00
Unit Aluminum Hoppers	Empty	200	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1845.61	2628.00
Unit Aluminum Hoppers	Empty	200	Distributed (Head, Mid, Rear)	30	0.50%	Decline	> 1.0%	3.00	5.00	< 0.1%	5.00%	1678.08	2182.00
Unit Aluminum Hoppers	Empty	200	Distributed (Head, Mid, Rear)	30	0.50%	Incline	> 1.0%	8.00	8.00	< 0.1%	2.00%	1362.28	1717.00
Unit Aluminum Hoppers	Empty	200	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	1936.74	2710.00
Unit Aluminum Hoppers	Empty	200	Distributed (Head, Mid, Rear)	30	0.00%	Flat	> 1.0%	2.00	3.00	< 0.1%	3.00%	1506.32	1956.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Aluminum Hoppers	Empty	200	Distributed (Head, Mid, Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	1.00%	3280.57	4409.00
Unit Aluminum Hoppers	Empty	200	Distributed (Head, Mid, Rear)	45	1.00%	Crest	> 1.0%	16.00	18.00	< 0.1%	8.00%	2600.02	3318.00
Unit Aluminum Hoppers	Empty	200	Distributed (Head, Mid, Rear)	45	1.00%	Trough	<0.1%	0.00	0.00	< 10%	6.00%	2818.91	3664.00
Unit Aluminum Hoppers	Empty	200	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	< 10%	8.00%	4442.64	5222.00
Unit Aluminum Hoppers	Empty	200	Distributed (Head, Mid, Rear)	60	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	6.00%	3724.28	4387.00
Unit Aluminum Hoppers	Empty	200	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 10%	8.00%	4145.97	5446.00
Unit Aluminum Hoppers	Loaded	200	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	810.00	1166.00
Unit Aluminum Hoppers	Loaded	200	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	415.64	508.00
Unit Aluminum Hoppers	Loaded	200	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1321.67	2041.00
Unit Aluminum Hoppers	Loaded	200	Distributed (Head and Rear)	10	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	272.16	294.00
Unit Aluminum Hoppers	Loaded	200	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	565.64	762.00
Unit Aluminum Hoppers	Loaded	200	Distributed (Head and Rear)	14	1.00%	Crest	< 0.5%	4.00	4.00	< 0.1%	1.00%	897.90	1118.00
Unit Aluminum Hoppers	Loaded	200	Distributed (Head and Rear)	15	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	8450.35	9962.00
Unit Aluminum Hoppers	Loaded	200	Distributed (Head and Rear)	20	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5477.88	7464.00
Unit Aluminum Hoppers	Loaded	200	Distributed (Head and Rear)	25	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	2339.98	3354.00
Unit Aluminum Hoppers	Loaded	200	Distributed (Head and Rear)	26	0.50%	Incline	<0.1%	0.00	0.00	< 10%	0.00%	1796.48	2164.00
Unit Aluminum Hoppers	Loaded	200	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	3400.77	4469.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Aluminum Hoppers	Loaded	200	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4842.08	9182.00
Unit Aluminum Hoppers	Loaded	200	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	1.00%	2725.77	3406.00
Unit Aluminum Hoppers	Loaded	200	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	9311.96	12634.00
Unit Aluminum Hoppers	Loaded	200	Distributed (Head and Rear)	50	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7275.52	9229.00
Unit Aluminum Hoppers	Loaded	200	Distributed (Head and Rear)	50	0.00%	Flat	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	5980.09	7484.00
Unit Aluminum Hoppers	Loaded	200	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	651.01	961.00
Unit Aluminum Hoppers	Loaded	200	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	376.92	478.00
Unit Aluminum Hoppers	Loaded	200	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	929.27	1451.00
Unit Aluminum Hoppers	Loaded	200	Distributed (Head, Mid, Rear)	10	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	261.84	281.00
Unit Aluminum Hoppers	Loaded	200	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	1.00%	473.34	581.00
Unit Aluminum Hoppers	Loaded	200	Distributed (Head, Mid, Rear)	14	1.00%	Crest	> 1.0%	5.50	7.00	< 0.1%	5.00%	702.91	965.00
Unit Aluminum Hoppers	Loaded	200	Distributed (Head, Mid, Rear)	15	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7485.58	9126.00
Unit Aluminum Hoppers	Loaded	200	Distributed (Head, Mid, Rear)	20	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4609.46	6152.00
Unit Aluminum Hoppers	Loaded	200	Distributed (Head, Mid, Rear)	25	1.00%	Trough	< 0.5%	10.00	10.00	> 25%, < 50%	2.00%	1887.86	2628.00
Unit Aluminum Hoppers	Loaded	200	Distributed (Head, Mid, Rear)	26	0.50%	Incline	< 0.5%	3.00	3.00	< 10%	1.00%	1559.49	1901.00
Unit Aluminum Hoppers	Loaded	200	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	2815.18	3734.00
Unit Aluminum Hoppers	Loaded	200	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3990.40	5848.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Aluminum Hoppers	Loaded	200	Distributed (Head, Mid, Rear)	30	0.00%	Flat	> 1.0%	2.00	2.00	< 0.1%	7.00%	2292.19	2845.00
Unit Aluminum Hoppers	Loaded	200	Distributed (Head, Mid, Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	8270.05	10868.00
Unit Aluminum Hoppers	Loaded	200	Distributed (Head, Mid, Rear)	50	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6323.50	8293.00
Unit Aluminum Hoppers	Loaded	200	Distributed (Head, Mid, Rear)	50	0.00%	Flat	<0.1%	0.00	0.00	< 10%	1.00%	5185.75	6242.00
Unit Steel Hoppers	Empty	260	Distributed (Head, Mid, Rear)	10	0.50%	Decline	> 1.0%	17.00	17.00	< 0.1%	1.00%	528.99	748.00
Unit Steel Hoppers	Empty	260	Distributed (Head, Mid, Rear)	10	0.50%	Incline	> 1.0%	9.00	9.00	< 0.1%	0.00%	345.83	430.00
Unit Steel Hoppers	Empty	260	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	712.98	1060.00
Unit Steel Hoppers	Empty	260	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	426.86	586.00
Unit Steel Hoppers	Empty	260	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2121.75	3511.00
Unit Steel Hoppers	Empty	260	Distributed (Head, Mid, Rear)	25	1.50%	Incline	> 1.0%	20.43	35.00	< 0.1%	7.00%	933.22	1097.00
Unit Steel Hoppers	Empty	260	Distributed (Head, Mid, Rear)	25	1.70%	Decline	< 0.5%	11.00	11.00	> 50%	1.00%	2284.54	3462.00
Unit Steel Hoppers	Empty	260	Distributed (Head, Mid, Rear)	30	0.50%	Decline	> 1.0%	36.00	81.00	< 0.1%	6.00%	2065.07	2688.00
Unit Steel Hoppers	Empty	260	Distributed (Head, Mid, Rear)	30	0.50%	Incline	> 1.0%	19.25	54.00	< 0.1%	13.00%	1578.44	1906.00
Unit Steel Hoppers	Empty	260	Distributed (Head, Mid, Rear)	30	1.10%	Decline	< 0.5%	12.00	12.00	> 10%, < 25%	1.00%	2463.77	3813.00
Unit Steel Hoppers	Empty	260	Distributed (Head, Mid, Rear)	30	0.00%	Flat	> 1.0%	41.13	105.00	< 0.1%	11.00%	1795.57	2406.00
Unit Steel Hoppers	Empty	260	Distributed (Head, Mid, Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	3.00%	4047.57	6015.00
Unit Steel Hoppers	Empty	260	Distributed (Head, Mid, Rear)	45	1.00%	Crest	> 1.0%	21.33	25.00	< 0.1%	9.00%	3076.59	3739.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Steel Hoppers	Empty	260	Distributed (Head, Mid, Rear)	45	1.00%	Trough	> 1.0%	31.33	67.00	< 10%	11.00%	3441.80	4942.00
Unit Steel Hoppers	Empty	260	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	14.00%	5359.79	6868.00
Unit Steel Hoppers	Empty	260	Distributed (Head, Mid, Rear)	60	0.50%	Incline	> 1.0%	50.00	81.00	< 10%	8.00%	4287.86	5445.00
Unit Steel Hoppers	Empty	260	Distributed (Head, Mid, Rear)	60	0.00%	Flat	> 1.0%	103.00	167.00	< 10%	19.00%	4698.04	6018.00
Unit Steel Hoppers	Loaded	260	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	797.34	1393.00
Unit Steel Hoppers	Loaded	260	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	417.59	510.00
Unit Steel Hoppers	Loaded	260	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1335.93	2495.00
Unit Steel Hoppers	Loaded	260	Distributed (Head, Mid, Rear)	10	0.00%	Flat	> 1.0%	13.40	26.00	< 0.1%	5.00%	562.23	713.00
Unit Steel Hoppers	Loaded	260	Distributed (Head, Mid, Rear)	12	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	340.48	375.00
Unit Steel Hoppers	Loaded	260	Distributed (Head, Mid, Rear)	15	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7786.16	10019.00
Unit Steel Hoppers	Loaded	260	Distributed (Head, Mid, Rear)	17	1.00%	Crest	> 1.0%	11.10	43.00	< 0.1%	17.00%	1134.45	1357.00
Unit Steel Hoppers	Loaded	260	Distributed (Head, Mid, Rear)	20	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5225.61	7552.00
Unit Steel Hoppers	Loaded	260	Distributed (Head, Mid, Rear)	28	1.00%	Trough	> 1.0%	55.75	134.00	> 50%	5.00%	2689.67	3492.00
Unit Steel Hoppers	Loaded	260	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	3416.76	4778.00
Unit Steel Hoppers	Loaded	260	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4882.84	6501.00
Unit Steel Hoppers	Loaded	260	Distributed (Head, Mid, Rear)	30	0.00%	Flat	> 1.0%	15.33	64.00	< 0.1%	15.00%	2734.95	3749.00
Unit Steel Hoppers	Loaded	260	Distributed (Head, Mid, Rear)	31	0.50%	Incline	> 1.0%	39.86	83.00	< 0.1%	12.00%	2334.42	2858.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Steel Hoppers	Loaded	260	Distributed (Head, Mid, Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	9580.44	11920.00
Unit Steel Hoppers	Loaded	260	Distributed (Head, Mid, Rear)	50	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7577.08	9230.00
Unit Steel Hoppers	Loaded	260	Distributed (Head, Mid, Rear)	50	0.00%	Flat	> 1.0%	78.50	252.00	< 10%	14.00%	6086.35	7173.00
Unit Aluminum Hoppers	Empty	260	Distributed (Head, Mid, Rear)	10	0.50%	Decline	> 1.0%	10.50	13.00	< 0.1%	2.00%	484.10	710.00
Unit Aluminum Hoppers	Empty	260	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	332.41	409.00
Unit Aluminum Hoppers	Empty	260	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	638.54	1063.00
Unit Aluminum Hoppers	Empty	260	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	395.32	540.00
Unit Aluminum Hoppers	Empty	260	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	1.00%	1889.36	3553.00
Unit Aluminum Hoppers	Empty	260	Distributed (Head, Mid, Rear)	25	1.50%	Incline	> 1.0%	19.46	55.00	< 0.1%	13.00%	855.02	1003.00
Unit Aluminum Hoppers	Empty	260	Distributed (Head, Mid, Rear)	25	1.70%	Decline	> 1.0%	20.67	30.00	> 50%	3.00%	2124.12	3482.00
Unit Aluminum Hoppers	Empty	260	Distributed (Head, Mid, Rear)	30	0.50%	Decline	> 1.0%	48.75	88.00	< 0.1%	7.00%	1921.81	2701.00
Unit Aluminum Hoppers	Empty	260	Distributed (Head, Mid, Rear)	30	0.50%	Incline	> 1.0%	31.71	52.00	< 0.1%	8.00%	1502.90	2064.00
Unit Aluminum Hoppers	Empty	260	Distributed (Head, Mid, Rear)	30	1.10%	Decline	> 1.0%	20.75	46.00	< 10%	8.00%	2200.18	3351.00
Unit Aluminum Hoppers	Empty	260	Distributed (Head, Mid, Rear)	30	0.00%	Flat	> 1.0%	57.40	84.00	< 0.1%	8.00%	1663.68	2458.00
Unit Aluminum Hoppers	Empty	260	Distributed (Head, Mid, Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	8.00%	3756.74	5474.00
Unit Aluminum Hoppers	Empty	260	Distributed (Head, Mid, Rear)	45	1.00%	Crest	> 1.0%	31.63	65.00	< 0.1%	15.00%	2863.56	3601.00
Unit Aluminum Hoppers	Empty	260	Distributed (Head, Mid, Rear)	45	1.00%	Trough	> 1.0%	60.56	137.00	< 0.1%	20.00%	3103.96	3929.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Aluminum Hoppers	Empty	260	Distributed (Head, Mid, Rear)	60	0.50%	Decline	> 1.0%	52.67	94.00	> 10%, < 25%	12.00%	4936.04	6950.00
Unit Aluminum Hoppers	Empty	260	Distributed (Head, Mid, Rear)	60	0.50%	Incline	> 1.0%	40.00	79.00	< 10%	15.00%	3983.87	4992.00
Unit Aluminum Hoppers	Empty	260	Distributed (Head, Mid, Rear)	60	0.00%	Flat	> 1.0%	49.00	113.00	< 10%	14.00%	4416.51	9359.00
Unit Aluminum Hoppers	Loaded	260	Distributed (Head, Mid, Rear)	10	0.50%	Decline	> 1.0%	28.00	28.00	< 10%	1.00%	734.82	1059.00
Unit Aluminum Hoppers	Loaded	260	Distributed (Head, Mid, Rear)	10	0.50%	Incline	> 1.0%	13.00	13.00	< 0.1%	1.00%	403.96	503.00
Unit Aluminum Hoppers	Loaded	260	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1150.40	1993.00
Unit Aluminum Hoppers	Loaded	260	Distributed (Head, Mid, Rear)	10	0.00%	Flat	> 1.0%	14.20	29.00	< 0.1%	7.00%	532.31	727.00
Unit Aluminum Hoppers	Loaded	260	Distributed (Head, Mid, Rear)	11	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	297.21	332.00
Unit Aluminum Hoppers	Loaded	260	Distributed (Head, Mid, Rear)	15	2.20%	Decline	<0.1%	0.00	0.00	> 50%	3.00%	7277.65	9969.00
Unit Aluminum Hoppers	Loaded	260	Distributed (Head, Mid, Rear)	16	1.00%	Crest	> 1.0%	19.67	40.00	< 0.1%	7.00%	1001.78	1318.00
Unit Aluminum Hoppers	Loaded	260	Distributed (Head, Mid, Rear)	20	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4802.83	7849.00
Unit Aluminum Hoppers	Loaded	260	Distributed (Head, Mid, Rear)	27	1.00%	Trough	> 1.0%	26.00	67.00	> 50%	4.00%	2434.46	3461.00
Unit Aluminum Hoppers	Loaded	260	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	1.00%	3111.85	4191.00
Unit Aluminum Hoppers	Loaded	260	Distributed (Head, Mid, Rear)	30	0.50%	Incline	> 1.0%	29.00	47.00	< 0.1%	8.00%	2144.19	2731.00
Unit Aluminum Hoppers	Loaded	260	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4370.21	6075.00
Unit Aluminum Hoppers	Loaded	260	Distributed (Head, Mid, Rear)	30	0.00%	Flat	> 1.0%	13.83	31.00	< 10%	10.00%	2544.13	3377.00
Unit Aluminum Hoppers	Loaded	260	Distributed (Head, Mid, Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	8448.54	11825.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Aluminum Hoppers	Loaded	260	Distributed (Head, Mid, Rear)	50	0.50%	Decline	<0.1%	0.00	0.00	> 50%	2.00%	6994.80	9277.00
Unit Aluminum Hoppers	Loaded	260	Distributed (Head, Mid, Rear)	50	0.00%	Flat	> 1.0%	12.00	12.00	> 10%, < 25%	5.00%	5629.19	7379.00

Appendix I.
Detailed Simulation Results from Evaluation of Phase 2
Developmental Enforcement Algorithm

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Steel Hoppers	Empty	100	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	1.00%	356.01	412.00
Unit Steel Hoppers	Empty	100	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	255.85	278.00
Unit Steel Hoppers	Empty	100	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	386.62	464.00
Unit Steel Hoppers	Empty	100	Distributed (Head and Rear)	10	0.00%	Flat	< 0.5%	1.00	1.00	< 0.1%	1.00%	300.16	333.00
Unit Steel Hoppers	Empty	100	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	< 0.1%	12.00%	821.00	961.00
Unit Steel Hoppers	Empty	100	Distributed (Head and Rear)	25	1.50%	Incline	> 1.0%	3.88	11.00	< 0.1%	60.00%	697.30	754.00
Unit Steel Hoppers	Empty	100	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	< 0.1%	37.00%	1101.07	1284.00
Unit Steel Hoppers	Empty	100	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	9.00%	1474.35	1676.00
Unit Steel Hoppers	Empty	100	Distributed (Head and Rear)	30	0.50%	Incline	> 1.0%	6.00	6.00	< 0.1%	23.00%	1204.15	1321.00
Unit Steel Hoppers	Empty	100	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	36.00%	1467.67	1599.00
Unit Steel Hoppers	Empty	100	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	19.00%	1345.64	1547.00
Unit Steel Hoppers	Empty	100	Distributed (Head and Rear)	46	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	25.00%	2201.08	2418.00
Unit Steel Hoppers	Empty	100	Distributed (Head and Rear)	55	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	3.00%	3576.82	4113.00
Unit Steel Hoppers	Empty	100	Distributed (Head and Rear)	55	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	0.00%	3371.28	3783.00
Unit Steel Hoppers	Empty	100	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	7.00%	4183.80	4829.00
Unit Steel Hoppers	Empty	100	Distributed (Head and Rear)	60	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	4.00%	3328.96	3719.00
Unit Steel Hoppers	Empty	100	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	5.00%	3878.26	4412.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Steel Hoppers	Empty	100	Head end only	10	0.50%	Decline	> 1.0%	3.57	5.00	< 0.1%	14.00%	440.64	508.00
Unit Steel Hoppers	Empty	100	Head end only	10	0.50%	Incline	> 1.0%	3.50	5.00	< 0.1%	1.00%	290.31	321.00
Unit Steel Hoppers	Empty	100	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	10.00%	481.20	634.00
Unit Steel Hoppers	Empty	100	Head end only	10	0.00%	Flat	> 1.0%	6.29	13.00	< 0.1%	34.00%	362.80	396.00
Unit Steel Hoppers	Empty	100	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	< 0.1%	67.00%	1023.01	1295.00
Unit Steel Hoppers	Empty	100	Head end only	25	1.50%	Incline	> 1.0%	4.53	9.00	< 0.1%	98.00%	789.32	847.00
Unit Steel Hoppers	Empty	100	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	< 0.1%	93.00%	1354.64	1613.00
Unit Steel Hoppers	Empty	100	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	24.00%	1901.74	2200.00
Unit Steel Hoppers	Empty	100	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	74.00%	1452.19	1574.00
Unit Steel Hoppers	Empty	100	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	69.00%	1775.70	2145.00
Unit Steel Hoppers	Empty	100	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	71.00%	1654.24	1834.00
Unit Steel Hoppers	Empty	100	Head end only	46	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	88.00%	2655.79	2886.00
Unit Steel Hoppers	Empty	100	Head end only	55	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	29.00%	4467.31	5362.00
Unit Steel Hoppers	Empty	100	Head end only	55	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	13.00%	4332.38	4923.00
Unit Steel Hoppers	Empty	100	Head end only	60	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	19.00%	5216.72	5676.00
Unit Steel Hoppers	Empty	100	Head end only	60	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	26.00%	4040.89	4336.00
Unit Steel Hoppers	Empty	100	Head end only	60	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	22.00%	4685.12	5156.00
Unit Steel Hoppers	Loaded	100	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	528.55	638.00
Unit Steel Hoppers	Loaded	100	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	376.08	427.00
Unit Steel Hoppers	Loaded	100	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	661.83	818.00
Unit Steel Hoppers	Loaded	100	Distributed (Head and Rear)	10	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	241.31	265.00
Unit Steel Hoppers	Loaded	100	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	459.03	535.00
Unit Steel Hoppers	Loaded	100	Distributed (Head and Rear)	15	1.70%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	1020.31	1421.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Steel Hoppers	Loaded	100	Distributed (Head and Rear)	15	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	708.61	810.00
Unit Steel Hoppers	Loaded	100	Distributed (Head and Rear)	15	2.20%	Decline	<0.1%	0.00	0.00	> 50%	6.00%	1428.93	7635.00
Unit Steel Hoppers	Loaded	100	Distributed (Head and Rear)	24	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	0.00%	1537.07	1825.00
Unit Steel Hoppers	Loaded	100	Distributed (Head and Rear)	27	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1616.73	1802.00
Unit Steel Hoppers	Loaded	100	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	1.00%	2428.99	3193.00
Unit Steel Hoppers	Loaded	100	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	1.00%	2573.34	3303.00
Unit Steel Hoppers	Loaded	100	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2358.11	2685.00
Unit Steel Hoppers	Loaded	100	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	1.00%	5334.26	6578.00
Unit Steel Hoppers	Loaded	100	Distributed (Head and Rear)	50	0.50%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	23.00%	5641.02	6899.00
Unit Steel Hoppers	Loaded	100	Distributed (Head and Rear)	50	0.00%	Flat	<0.1%	0.00	0.00	< 10%	0.00%	5670.43	6239.00
Unit Steel Hoppers	Loaded	100	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	2.00%	706.41	894.00
Unit Steel Hoppers	Loaded	100	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	416.88	461.00
Unit Steel Hoppers	Loaded	100	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	933.32	1084.00
Unit Steel Hoppers	Loaded	100	Head end only	10	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	259.97	289.00
Unit Steel Hoppers	Loaded	100	Head end only	10	0.00%	Flat	> 1.0%	4.00	4.00	< 0.1%	8.00%	555.34	616.00
Unit Steel Hoppers	Loaded	100	Head end only	15	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1344.10	1759.00
Unit Steel Hoppers	Loaded	100	Head end only	15	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	6.00%	868.85	962.00
Unit Steel Hoppers	Loaded	100	Head end only	15	2.20%	Decline	<0.1%	0.00	0.00	> 50%	10.00%	1747.14	12111.00
Unit Steel Hoppers	Loaded	100	Head end only	24	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	0.00%	1820.17	2220.00
Unit Steel Hoppers	Loaded	100	Head end only	27	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	1.00%	1897.85	2058.00
Unit Steel Hoppers	Loaded	100	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	3.00%	3037.24	3584.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Steel Hoppers	Loaded	100	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	3192.40	3967.00
Unit Steel Hoppers	Loaded	100	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2912.54	3232.00
Unit Steel Hoppers	Loaded	100	Head end only	45	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	6163.85	7464.00
Unit Steel Hoppers	Loaded	100	Head end only	50	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	6885.07	8255.00
Unit Steel Hoppers	Loaded	100	Head end only	50	0.00%	Flat	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	6728.87	7695.00
Unit Covered Hoppers	Empty	100	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	2.00%	362.07	404.00
Unit Covered Hoppers	Empty	100	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	258.18	279.00
Unit Covered Hoppers	Empty	100	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	389.02	462.00
Unit Covered Hoppers	Empty	100	Distributed (Head and Rear)	10	0.00%	Flat	> 1.0%	2.00	3.00	< 0.1%	2.00%	310.53	338.00
Unit Covered Hoppers	Empty	100	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	< 0.1%	21.00%	835.41	1070.00
Unit Covered Hoppers	Empty	100	Distributed (Head and Rear)	25	1.50%	Incline	> 1.0%	5.88	15.00	< 0.1%	80.00%	709.15	751.00
Unit Covered Hoppers	Empty	100	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	< 0.1%	59.00%	1110.36	1316.00
Unit Covered Hoppers	Empty	100	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	14.00%	1518.18	1704.00
Unit Covered Hoppers	Empty	100	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	38.00%	1235.20	1361.00
Unit Covered Hoppers	Empty	100	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	65.00%	1485.67	1745.00
Unit Covered Hoppers	Empty	100	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	26.00%	1388.66	1486.00
Unit Covered Hoppers	Empty	100	Distributed (Head and Rear)	45	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	45.00%	2206.48	2412.00
Unit Covered Hoppers	Empty	100	Distributed (Head and Rear)	55	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	16.00%	3626.53	4531.00
Unit Covered	Empty	100	Distributed (Head and	55	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	7.00%	3404.14	4180.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Hoppers			Rear)										
Unit Covered Hoppers	Empty	100	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	14.00%	4273.55	4769.00
Unit Covered Hoppers	Empty	100	Distributed (Head and Rear)	60	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	17.00%	3427.76	3821.00
Unit Covered Hoppers	Empty	100	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	17.00%	3977.78	4507.00
Unit Covered Hoppers	Empty	100	Head end only	10	0.50%	Decline	> 1.0%	3.50	6.00	< 0.1%	4.00%	459.20	511.00
Unit Covered Hoppers	Empty	100	Head end only	10	0.50%	Incline	> 1.0%	6.00	9.00	< 0.1%	2.00%	296.68	343.00
Unit Covered Hoppers	Empty	100	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	4.00%	495.77	658.00
Unit Covered Hoppers	Empty	100	Head end only	10	0.00%	Flat	> 25%	3.65	10.00	< 0.1%	28.00%	372.17	406.00
Unit Covered Hoppers	Empty	100	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	< 0.1%	55.00%	1069.89	1328.00
Unit Covered Hoppers	Empty	100	Head end only	25	1.50%	Incline	> 1.0%	4.82	15.00	< 0.1%	97.00%	801.75	861.00
Unit Covered Hoppers	Empty	100	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	< 0.1%	94.00%	1419.36	1854.00
Unit Covered Hoppers	Empty	100	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	25.00%	1985.06	2214.00
Unit Covered Hoppers	Empty	100	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	68.00%	1497.05	1606.00
Unit Covered Hoppers	Empty	100	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	68.00%	1871.92	2161.00
Unit Covered Hoppers	Empty	100	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	53.00%	1705.77	1888.00
Unit Covered Hoppers	Empty	100	Head end only	45	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	88.00%	2728.44	2946.00
Unit Covered Hoppers	Empty	100	Head end only	55	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	32.00%	4585.52	5477.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Covered Hoppers	Empty	100	Head end only	55	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	8.00%	4397.15	5134.00
Unit Covered Hoppers	Empty	100	Head end only	60	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	16.00%	5429.69	6034.00
Unit Covered Hoppers	Empty	100	Head end only	60	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	14.00%	4190.51	4588.00
Unit Covered Hoppers	Empty	100	Head end only	60	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	15.00%	4941.77	5436.00
Unit Covered Hoppers	Loaded	100	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	523.33	705.00
Unit Covered Hoppers	Loaded	100	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	367.40	420.00
Unit Covered Hoppers	Loaded	100	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	677.81	855.00
Unit Covered Hoppers	Loaded	100	Distributed (Head and Rear)	10	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	245.64	261.00
Unit Covered Hoppers	Loaded	100	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	2.00%	454.91	527.00
Unit Covered Hoppers	Loaded	100	Distributed (Head and Rear)	14	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	4.00%	653.07	738.00
Unit Covered Hoppers	Loaded	100	Distributed (Head and Rear)	15	1.70%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	997.28	1582.00
Unit Covered Hoppers	Loaded	100	Distributed (Head and Rear)	15	2.20%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	2.00%	1250.54	1883.00
Unit Covered Hoppers	Loaded	100	Distributed (Head and Rear)	23	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	6.00%	1446.26	1769.00
Unit Covered Hoppers	Loaded	100	Distributed (Head and Rear)	26	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1502.38	1649.00
Unit Covered Hoppers	Loaded	100	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	4.00%	2379.65	2876.00
Unit Covered Hoppers	Loaded	100	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2566.11	3376.00
Unit Covered Hoppers	Loaded	100	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	2.00%	2335.06	2654.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Covered Hoppers	Loaded	100	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	1.00%	5249.57	6291.00
Unit Covered Hoppers	Loaded	100	Distributed (Head and Rear)	50	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	23.00%	5494.50	6850.00
Unit Covered Hoppers	Loaded	100	Distributed (Head and Rear)	50	0.00%	Flat	<0.1%	0.00	0.00	< 10%	0.00%	5610.45	6357.00
Unit Covered Hoppers	Loaded	100	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	739.84	888.00
Unit Covered Hoppers	Loaded	100	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	418.98	471.00
Unit Covered Hoppers	Loaded	100	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	1019.46	2238.00
Unit Covered Hoppers	Loaded	100	Head end only	10	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	258.56	276.00
Unit Covered Hoppers	Loaded	100	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	15.00%	561.74	627.00
Unit Covered Hoppers	Loaded	100	Head end only	14	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	4.00%	830.10	934.00
Unit Covered Hoppers	Loaded	100	Head end only	15	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1408.90	2031.00
Unit Covered Hoppers	Loaded	100	Head end only	15	2.20%	Decline	<0.1%	0.00	0.00	> 50%	3.00%	1646.96	2299.00
Unit Covered Hoppers	Loaded	100	Head end only	23	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	0.00%	1850.06	2123.00
Unit Covered Hoppers	Loaded	100	Head end only	26	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1796.34	1969.00
Unit Covered Hoppers	Loaded	100	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	1.00%	3152.68	3781.00
Unit Covered Hoppers	Loaded	100	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	3145.54	3820.00
Unit Covered Hoppers	Loaded	100	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2964.72	3274.00
Unit Covered Hoppers	Loaded	100	Head end only	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6291.55	7643.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Covered Hoppers	Loaded	100	Head end only	50	0.50%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	6893.36	8369.00
Unit Covered Hoppers	Loaded	100	Head end only	50	0.00%	Flat	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	6908.43	7705.00
Unit Aluminum Hoppers	Empty	100	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	324.78	357.00
Unit Aluminum Hoppers	Empty	100	Distributed (Head and Rear)	10	0.50%	Incline	< 0.5%	1.00	1.00	< 0.1%	1.00%	250.53	298.00
Unit Aluminum Hoppers	Empty	100	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	341.08	384.00
Unit Aluminum Hoppers	Empty	100	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	283.91	313.00
Unit Aluminum Hoppers	Empty	100	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	< 0.1%	34.00%	782.07	895.00
Unit Aluminum Hoppers	Empty	100	Distributed (Head and Rear)	25	1.50%	Incline	> 1.0%	2.00	2.00	< 0.1%	45.00%	694.56	764.00
Unit Aluminum Hoppers	Empty	100	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	< 0.1%	50.00%	1006.13	1284.00
Unit Aluminum Hoppers	Empty	100	Distributed (Head and Rear)	30	0.50%	Decline	> 1.0%	2.00	2.00	< 0.1%	13.00%	1339.12	1467.00
Unit Aluminum Hoppers	Empty	100	Distributed (Head and Rear)	30	0.50%	Incline	> 1.0%	3.00	3.00	< 0.1%	26.00%	1101.08	1252.00
Unit Aluminum Hoppers	Empty	100	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	26.00%	1290.76	1539.00
Unit Aluminum Hoppers	Empty	100	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	36.00%	1219.16	1317.00
Unit Aluminum Hoppers	Empty	100	Distributed (Head and Rear)	52	1.00%	Crest	> 1.0%	8.00	8.00	< 0.1%	49.00%	2457.56	2634.00
Unit Aluminum Hoppers	Empty	100	Distributed (Head and Rear)	55	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	34.00%	3275.74	3659.00
Unit Aluminum Hoppers	Empty	100	Distributed (Head and Rear)	55	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	13.00%	3171.38	3473.00
Unit Aluminum Hoppers	Empty	100	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	25.00%	3796.71	4068.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Aluminum Hoppers	Empty	100	Distributed (Head and Rear)	60	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	26.00%	3188.54	3454.00
Unit Aluminum Hoppers	Empty	100	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	22.00%	3481.52	3809.00
Unit Aluminum Hoppers	Empty	100	Head end only	10	0.50%	Decline	> 1.0%	8.00	8.00	< 0.1%	2.00%	405.66	474.00
Unit Aluminum Hoppers	Empty	100	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	276.96	302.00
Unit Aluminum Hoppers	Empty	100	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	443.23	570.00
Unit Aluminum Hoppers	Empty	100	Head end only	10	0.00%	Flat	> 1.0%	3.67	5.00	< 0.1%	7.00%	339.69	379.00
Unit Aluminum Hoppers	Empty	100	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	< 0.1%	65.00%	982.31	1210.00
Unit Aluminum Hoppers	Empty	100	Head end only	25	1.50%	Incline	> 1.0%	3.00	5.00	< 0.1%	92.00%	795.49	855.00
Unit Aluminum Hoppers	Empty	100	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	< 0.1%	78.00%	1236.58	1451.00
Unit Aluminum Hoppers	Empty	100	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	18.00%	1696.63	1923.00
Unit Aluminum Hoppers	Empty	100	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	57.00%	1326.40	1490.00
Unit Aluminum Hoppers	Empty	100	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	56.00%	1650.24	2194.00
Unit Aluminum Hoppers	Empty	100	Head end only	30	0.00%	Flat	< 0.5%	1.00	1.00	< 0.1%	42.00%	1509.08	1646.00
Unit Aluminum Hoppers	Empty	100	Head end only	52	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	85.00%	2963.74	3190.00
Unit Aluminum Hoppers	Empty	100	Head end only	55	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	28.00%	4231.35	4865.00
Unit Aluminum Hoppers	Empty	100	Head end only	55	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	2.00%	4015.73	4826.00
Unit Aluminum Hoppers	Empty	100	Head end only	60	0.50%	Decline	< 0.5%	3.00	3.00	< 0.1%	18.00%	4709.44	5166.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Aluminum Hoppers	Empty	100	Head end only	60	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	17.00%	3894.52	4225.00
Unit Aluminum Hoppers	Empty	100	Head end only	60	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	18.00%	4289.69	4729.00
Unit Aluminum Hoppers	Loaded	100	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	479.37	583.00
Unit Aluminum Hoppers	Loaded	100	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	346.70	401.00
Unit Aluminum Hoppers	Loaded	100	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	590.57	705.00
Unit Aluminum Hoppers	Loaded	100	Distributed (Head and Rear)	10	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	240.66	259.00
Unit Aluminum Hoppers	Loaded	100	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	1.00%	415.55	467.00
Unit Aluminum Hoppers	Loaded	100	Distributed (Head and Rear)	14	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	621.85	722.00
Unit Aluminum Hoppers	Loaded	100	Distributed (Head and Rear)	15	1.70%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	884.99	1208.00
Unit Aluminum Hoppers	Loaded	100	Distributed (Head and Rear)	15	2.20%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	1.00%	1070.58	1566.00
Unit Aluminum Hoppers	Loaded	100	Distributed (Head and Rear)	23	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	1.00%	1312.49	1598.00
Unit Aluminum Hoppers	Loaded	100	Distributed (Head and Rear)	26	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	1.00%	1396.16	1538.00
Unit Aluminum Hoppers	Loaded	100	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	1.00%	2150.83	2792.00
Unit Aluminum Hoppers	Loaded	100	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2322.52	3060.00
Unit Aluminum Hoppers	Loaded	100	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2106.75	2333.00
Unit Aluminum Hoppers	Loaded	100	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	1.00%	4688.16	5840.00
Unit Aluminum Hoppers	Loaded	100	Distributed (Head and Rear)	50	0.50%	Decline	<0.1%	0.00	0.00	< 10%	5.00%	4987.57	6390.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Aluminum Hoppers	Loaded	100	Distributed (Head and Rear)	50	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	5061.28	5761.00
Unit Aluminum Hoppers	Loaded	100	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	628.36	757.00
Unit Aluminum Hoppers	Loaded	100	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	390.80	439.00
Unit Aluminum Hoppers	Loaded	100	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	852.01	1056.00
Unit Aluminum Hoppers	Loaded	100	Head end only	10	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	254.69	271.00
Unit Aluminum Hoppers	Loaded	100	Head end only	10	0.00%	Flat	< 0.5%	0.00	0.00	< 0.1%	5.00%	508.14	592.00
Unit Aluminum Hoppers	Loaded	100	Head end only	14	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	3.00%	745.72	820.00
Unit Aluminum Hoppers	Loaded	100	Head end only	15	1.70%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	1198.23	1522.00
Unit Aluminum Hoppers	Loaded	100	Head end only	15	2.20%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	1340.15	1804.00
Unit Aluminum Hoppers	Loaded	100	Head end only	23	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	0.00%	1640.74	1890.00
Unit Aluminum Hoppers	Loaded	100	Head end only	26	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	2.00%	1640.75	1764.00
Unit Aluminum Hoppers	Loaded	100	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2699.76	3553.00
Unit Aluminum Hoppers	Loaded	100	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2830.71	3904.00
Unit Aluminum Hoppers	Loaded	100	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2653.68	2964.00
Unit Aluminum Hoppers	Loaded	100	Head end only	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5640.82	6667.00
Unit Aluminum Hoppers	Loaded	100	Head end only	50	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	6237.44	7526.00
Unit Aluminum Hoppers	Loaded	100	Head end only	50	0.00%	Flat	<0.1%	0.00	0.00	< 10%	0.00%	6074.14	6699.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit MultiLevel	Empty	100	Distributed (Head and Rear)	10	0.50%	Decline	> 1.0%	2.50	3.00	< 0.1%	11.00%	514.67	693.00
Unit MultiLevel	Empty	100	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	342.76	385.00
Unit MultiLevel	Empty	100	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	3.00%	629.56	845.00
Unit MultiLevel	Empty	100	Distributed (Head and Rear)	10	0.00%	Flat	< 0.5%	2.00	2.00	< 0.1%	1.00%	436.87	508.00
Unit MultiLevel	Empty	100	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	< 10%	30.00%	1420.51	2313.00
Unit MultiLevel	Empty	100	Distributed (Head and Rear)	25	1.50%	Incline	> 1.0%	10.33	22.00	< 0.1%	32.00%	784.81	846.00
Unit MultiLevel	Empty	100	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	< 10%	60.00%	1825.11	2587.00
Unit MultiLevel	Empty	100	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	11.00%	2435.40	3005.00
Unit MultiLevel	Empty	100	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	24.00%	1777.42	2092.00
Unit MultiLevel	Empty	100	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	25.00%	2265.06	3101.00
Unit MultiLevel	Empty	100	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	20.00%	2122.21	2442.00
Unit MultiLevel	Empty	100	Distributed (Head and Rear)	34	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	20.00%	2338.88	2638.00
Unit MultiLevel	Empty	100	Distributed (Head and Rear)	50	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	5.00%	3730.02	4164.00
Unit MultiLevel	Empty	100	Distributed (Head and Rear)	55	1.10%	Decline	<0.1%	0.00	0.00	< 10%	4.00%	5470.67	6311.00
Unit MultiLevel	Empty	100	Distributed (Head and Rear)	55	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	1.00%	5144.83	6082.00
Unit MultiLevel	Empty	100	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	6762.52	8097.00
Unit MultiLevel	Empty	100	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 10%	5.00%	5855.18	6703.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit MultiLevel	Empty	100	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	804.49	1099.00
Unit MultiLevel	Empty	100	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	396.01	471.00
Unit MultiLevel	Empty	100	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1199.76	2488.00
Unit MultiLevel	Empty	100	Head end only	10	0.00%	Flat	> 1.0%	17.00	17.00	< 0.1%	1.00%	569.19	685.00
Unit MultiLevel	Empty	100	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	2.00%	3032.69	7607.00
Unit MultiLevel	Empty	100	Head end only	25	1.50%	Incline	< 0.5%	0.00	0.00	< 0.1%	2.00%	920.61	967.00
Unit MultiLevel	Empty	100	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	10.00%	3343.71	4936.00
Unit MultiLevel	Empty	100	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	< 10%	1.00%	3654.39	4504.00
Unit MultiLevel	Empty	100	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	4.00%	2263.65	2490.00
Unit MultiLevel	Empty	100	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	5.00%	3656.88	4886.00
Unit MultiLevel	Empty	100	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	6.00%	2880.81	3416.00
Unit MultiLevel	Empty	100	Head end only	34	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	46.00%	2972.81	3332.00
Unit MultiLevel	Empty	100	Head end only	50	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	4827.57	5356.00
Unit MultiLevel	Empty	100	Head end only	55	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	7890.71	9479.00
Unit MultiLevel	Empty	100	Head end only	55	1.00%	Trough	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	7239.05	8349.00
Unit MultiLevel	Empty	100	Head end only	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	9730.36	12081.00
Unit MultiLevel	Empty	100	Head end only	60	0.00%	Flat	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	8098.11	9205.00
Unit MultiLevel	Loaded	100	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	1.00%	694.22	913.00
Unit MultiLevel	Loaded	100	Distributed (Head and Rear)	10	0.50%	Incline	> 1.0%	7.80	18.00	< 0.1%	11.00%	385.73	447.00
Unit MultiLevel	Loaded	100	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	985.77	2083.00
Unit MultiLevel	Loaded	100	Distributed (Head and Rear)	10	0.00%	Flat	> 1.0%	15.67	24.00	< 0.1%	9.00%	538.30	648.00
Unit MultiLevel	Loaded	100	Distributed (Head and Rear)	13	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	362.35	398.00
Unit MultiLevel	Loaded	100	Distributed (Head and Rear)	15	2.20%	Decline	<0.1%	0.00	0.00	> 50%	1.00%	1606.29	2904.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit MultiLevel	Loaded	100	Distributed (Head and Rear)	19	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	13.00%	1309.23	1570.00
Unit MultiLevel	Loaded	100	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	8.00%	2317.93	3092.00
Unit MultiLevel	Loaded	100	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	4.00%	3011.31	3837.00
Unit MultiLevel	Loaded	100	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	3442.32	6417.00
Unit MultiLevel	Loaded	100	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2839.06	3421.00
Unit MultiLevel	Loaded	100	Distributed (Head and Rear)	33	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	32.00%	3189.68	3644.00
Unit MultiLevel	Loaded	100	Distributed (Head and Rear)	34	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	2710.64	3056.00
Unit MultiLevel	Loaded	100	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	3.00%	6524.15	10401.00
Unit MultiLevel	Loaded	100	Distributed (Head and Rear)	50	0.50%	Decline	<0.1%	0.00	0.00	> 50%	1.00%	6696.08	8360.00
Unit MultiLevel	Loaded	100	Distributed (Head and Rear)	50	0.00%	Flat	<0.1%	0.00	0.00	< 10%	0.00%	6449.38	7480.00
Unit MultiLevel	Loaded	100	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	1.00%	1387.38	2004.00
Unit MultiLevel	Loaded	100	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	466.20	508.00
Unit MultiLevel	Loaded	100	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2323.75	3878.00
Unit MultiLevel	Loaded	100	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	839.92	998.00
Unit MultiLevel	Loaded	100	Head end only	13	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	391.24	418.00
Unit MultiLevel	Loaded	100	Head end only	15	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7116.85	17864.00
Unit MultiLevel	Loaded	100	Head end only	19	1.00%	Crest	> 1.0%	1.00	1.00	< 0.1%	18.00%	1809.36	1990.00
Unit MultiLevel	Loaded	100	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6184.28	15280.00
Unit MultiLevel	Loaded	100	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5347.68	7125.00
Unit MultiLevel	Loaded	100	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5829.25	9911.00
Unit MultiLevel	Loaded	100	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 10%	0.00%	4217.56	4907.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit MultiLevel	Loaded	100	Head end only	33	1.00%	Trough	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	4510.05	11946.00
Unit MultiLevel	Loaded	100	Head end only	34	0.50%	Incline	< 0.5%	5.00	5.00	< 0.1%	2.00%	3478.97	3960.00
Unit MultiLevel	Loaded	100	Head end only	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	10086.22	21161.00
Unit MultiLevel	Loaded	100	Head end only	50	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	11651.09	14108.00
Unit MultiLevel	Loaded	100	Head end only	50	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	9202.75	10702.00
Unit Refrigerated Box	Empty	100	Distributed (Head and Rear)	10	0.50%	Decline	> 1.0%	14.00	14.00	< 0.1%	3.00%	509.09	671.00
Unit Refrigerated Box	Empty	100	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	330.76	366.00
Unit Refrigerated Box	Empty	100	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	1.00%	598.92	745.00
Unit Refrigerated Box	Empty	100	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	413.88	474.00
Unit Refrigerated Box	Empty	100	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	< 10%	13.00%	1284.78	2111.00
Unit Refrigerated Box	Empty	100	Distributed (Head and Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	13.00%	775.95	824.00
Unit Refrigerated Box	Empty	100	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	< 10%	41.00%	1730.82	2308.00
Unit Refrigerated Box	Empty	100	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	1.00%	2311.69	2997.00
Unit Refrigerated Box	Empty	100	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1735.16	1890.00
Unit Refrigerated Box	Empty	100	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	2.00%	2085.53	3290.00
Unit Refrigerated Box	Empty	100	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	2.00%	2020.12	2329.00
Unit Refrigerated Box	Empty	100	Distributed (Head and Rear)	34	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	5.00%	2211.32	2551.00
Unit Refrigerated Box	Empty	100	Distributed (Head and Rear)	50	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	3598.68	4231.00
Unit Refrigerated	Empty	100	Distributed (Head and	55	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	5207.40	6243.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Box			Rear)										
Unit Refrigerated Box	Empty	100	Distributed (Head and Rear)	55	1.00%	Trough	<0.1%	0.00	0.00	> 10%, < 25%	1.00%	4925.82	6156.00
Unit Refrigerated Box	Empty	100	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6555.63	7648.00
Unit Refrigerated Box	Empty	100	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	5597.03	6273.00
Unit Refrigerated Box	Empty	100	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	771.34	964.00
Unit Refrigerated Box	Empty	100	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	398.89	474.00
Unit Refrigerated Box	Empty	100	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	1015.35	1560.00
Unit Refrigerated Box	Empty	100	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	531.36	610.00
Unit Refrigerated Box	Empty	100	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	1.00%	2536.20	4343.00
Unit Refrigerated Box	Empty	100	Head end only	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	887.47	939.00
Unit Refrigerated Box	Empty	100	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	5.00%	2854.98	4394.00
Unit Refrigerated Box	Empty	100	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	3294.00	3987.00
Unit Refrigerated Box	Empty	100	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	2161.95	2421.00
Unit Refrigerated Box	Empty	100	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	2.00%	3247.98	4706.00
Unit Refrigerated Box	Empty	100	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2674.22	3082.00
Unit Refrigerated Box	Empty	100	Head end only	34	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	9.00%	2760.30	3083.00
Unit Refrigerated Box	Empty	100	Head end only	50	0.50%	Incline	<0.1%	0.00	0.00	< 10%	0.00%	4549.96	5344.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Refrigerated Box	Empty	100	Head end only	55	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7291.88	10035.00
Unit Refrigerated Box	Empty	100	Head end only	55	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	6706.00	9672.00
Unit Refrigerated Box	Empty	100	Head end only	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	8943.99	11109.00
Unit Refrigerated Box	Empty	100	Head end only	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	7368.99	8391.00
Unit Refrigerated Box	Loaded	100	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	1.00%	637.54	822.00
Unit Refrigerated Box	Loaded	100	Distributed (Head and Rear)	10	0.50%	Incline	> 1.0%	4.50	6.00	< 0.1%	2.00%	389.14	427.00
Unit Refrigerated Box	Loaded	100	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	822.32	1924.00
Unit Refrigerated Box	Loaded	100	Distributed (Head and Rear)	10	0.00%	Flat	> 1.0%	14.00	15.00	< 0.1%	6.00%	506.15	598.00
Unit Refrigerated Box	Loaded	100	Distributed (Head and Rear)	11	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	286.62	306.00
Unit Refrigerated Box	Loaded	100	Distributed (Head and Rear)	15	1.70%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	1197.71	1688.00
Unit Refrigerated Box	Loaded	100	Distributed (Head and Rear)	15	2.20%	Decline	<0.1%	0.00	0.00	> 50%	7.00%	1483.07	6147.00
Unit Refrigerated Box	Loaded	100	Distributed (Head and Rear)	16	1.00%	Crest	> 1.0%	10.42	22.00	< 0.1%	21.00%	885.51	1134.00
Unit Refrigerated Box	Loaded	100	Distributed (Head and Rear)	26	1.00%	Trough	<0.1%	0.00	0.00	> 25%, < 50%	6.00%	1965.86	2745.00
Unit Refrigerated Box	Loaded	100	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	1.00%	2833.51	3540.00
Unit Refrigerated Box	Loaded	100	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	2114.27	2414.00
Unit Refrigerated Box	Loaded	100	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	1.00%	3105.10	5308.00
Unit Refrigerated Box	Loaded	100	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	1.00%	2654.91	3227.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Refrigerated Box	Loaded	100	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	4.00%	6004.52	9321.00
Unit Refrigerated Box	Loaded	100	Distributed (Head and Rear)	50	0.50%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	6172.78	8187.00
Unit Refrigerated Box	Loaded	100	Distributed (Head and Rear)	50	0.00%	Flat	<0.1%	0.00	0.00	< 10%	2.00%	6072.88	7131.00
Unit Refrigerated Box	Loaded	100	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1144.03	1614.00
Unit Refrigerated Box	Loaded	100	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	451.53	502.00
Unit Refrigerated Box	Loaded	100	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1698.86	2505.00
Unit Refrigerated Box	Loaded	100	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	737.92	853.00
Unit Refrigerated Box	Loaded	100	Head end only	11	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	307.01	322.00
Unit Refrigerated Box	Loaded	100	Head end only	15	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2543.91	10068.00
Unit Refrigerated Box	Loaded	100	Head end only	15	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5321.17	15010.00
Unit Refrigerated Box	Loaded	100	Head end only	16	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	1.00%	1284.21	1486.00
Unit Refrigerated Box	Loaded	100	Head end only	26	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	3078.66	3850.00
Unit Refrigerated Box	Loaded	100	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4964.34	6374.00
Unit Refrigerated Box	Loaded	100	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	2658.17	3054.00
Unit Refrigerated Box	Loaded	100	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5104.20	7888.00
Unit Refrigerated Box	Loaded	100	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	3806.86	4412.00
Unit Refrigerated Box	Loaded	100	Head end only	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	9260.97	19182.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Refrigerated Box	Loaded	100	Head end only	50	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	10250.87	13768.00
Unit Refrigerated Box	Loaded	100	Head end only	50	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	8502.38	9547.00
Unit Tank	Empty	100	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	329.99	369.00
Unit Tank	Empty	100	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	255.16	280.00
Unit Tank	Empty	100	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	345.63	412.00
Unit Tank	Empty	100	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	286.15	329.00
Unit Tank	Empty	100	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	< 0.1%	2.00%	749.92	881.00
Unit Tank	Empty	100	Distributed (Head and Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	31.00%	652.61	704.00
Unit Tank	Empty	100	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	< 0.1%	16.00%	1012.50	1355.00
Unit Tank	Empty	100	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	2.00%	1334.33	1549.00
Unit Tank	Empty	100	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	1.00%	1090.36	1251.00
Unit Tank	Empty	100	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	7.00%	1353.74	1615.00
Unit Tank	Empty	100	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	1.00%	1230.98	1404.00
Unit Tank	Empty	100	Distributed (Head and Rear)	47	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	3.00%	2151.89	2357.00
Unit Tank	Empty	100	Distributed (Head and Rear)	55	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	2.00%	3349.95	4140.00
Unit Tank	Empty	100	Distributed (Head and Rear)	55	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	0.00%	3161.09	3624.00
Unit Tank	Empty	100	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	4001.32	4487.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Tank	Empty	100	Distributed (Head and Rear)	60	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	3206.81	3650.00
Unit Tank	Empty	100	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	3680.02	4044.00
Unit Tank	Empty	100	Head end only	10	0.50%	Decline	> 1.0%	6.00	6.00	< 0.1%	7.00%	394.01	460.00
Unit Tank	Empty	100	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	282.52	315.00
Unit Tank	Empty	100	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	3.00%	420.24	515.00
Unit Tank	Empty	100	Head end only	10	0.00%	Flat	> 1.0%	0.00	0.00	< 0.1%	6.00%	332.18	371.00
Unit Tank	Empty	100	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	< 0.1%	37.00%	915.58	1080.00
Unit Tank	Empty	100	Head end only	25	1.50%	Incline	> 1.0%	4.93	16.00	< 0.1%	88.00%	743.55	778.00
Unit Tank	Empty	100	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	< 0.1%	73.00%	1221.26	1448.00
Unit Tank	Empty	100	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	11.00%	1666.68	1877.00
Unit Tank	Empty	100	Head end only	30	0.50%	Incline	> 1.0%	4.50	5.00	< 0.1%	51.00%	1293.30	1464.00
Unit Tank	Empty	100	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	45.00%	1574.39	2003.00
Unit Tank	Empty	100	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	36.00%	1494.12	1659.00
Unit Tank	Empty	100	Head end only	47	1.00%	Crest	> 1.0%	36.00	36.00	< 0.1%	60.00%	2505.98	2748.00
Unit Tank	Empty	100	Head end only	55	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	3.00%	4004.68	4635.00
Unit Tank	Empty	100	Head end only	55	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	1.00%	3887.05	4662.00
Unit Tank	Empty	100	Head end only	60	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	1.00%	4649.85	5114.00
Unit Tank	Empty	100	Head end only	60	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	8.00%	3737.21	4068.00
Unit Tank	Empty	100	Head end only	60	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	4.00%	4208.12	4671.00
Unit Tank	Loaded	100	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	474.89	580.00
Unit Tank	Loaded	100	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	361.72	407.00
Unit Tank	Loaded	100	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	593.30	785.00
Unit Tank	Loaded	100	Distributed (Head and Rear)	10	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	227.80	257.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Tank	Loaded	100	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	409.52	466.00
Unit Tank	Loaded	100	Distributed (Head and Rear)	15	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	662.69	760.00
Unit Tank	Loaded	100	Distributed (Head and Rear)	15	2.20%	Decline	<0.1%	0.00	0.00	> 50%	31.00%	1942.00	8440.00
Unit Tank	Loaded	100	Distributed (Head and Rear)	20	1.70%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	1415.15	2167.00
Unit Tank	Loaded	100	Distributed (Head and Rear)	25	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	1.00%	1527.16	1727.00
Unit Tank	Loaded	100	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	23.00%	2298.40	2775.00
Unit Tank	Loaded	100	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1775.55	1967.00
Unit Tank	Loaded	100	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	1.00%	2530.53	3173.00
Unit Tank	Loaded	100	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2248.36	2542.00
Unit Tank	Loaded	100	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	1.00%	5436.68	6929.00
Unit Tank	Loaded	100	Distributed (Head and Rear)	50	0.50%	Decline	<0.1%	0.00	0.00	> 50%	66.00%	5592.18	7905.00
Unit Tank	Loaded	100	Distributed (Head and Rear)	50	0.00%	Flat	<0.1%	0.00	0.00	< 10%	0.00%	5584.76	6384.00
Unit Tank	Loaded	100	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	607.22	753.00
Unit Tank	Loaded	100	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	394.16	443.00
Unit Tank	Loaded	100	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	789.80	978.00
Unit Tank	Loaded	100	Head end only	10	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	252.92	289.00
Unit Tank	Loaded	100	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	500.77	557.00
Unit Tank	Loaded	100	Head end only	15	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	3.00%	820.37	922.00
Unit Tank	Loaded	100	Head end only	15	2.20%	Decline	<0.1%	0.00	0.00	> 50%	30.00%	1948.10	12139.00
Unit Tank	Loaded	100	Head end only	20	1.70%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	1639.75	2726.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Tank	Loaded	100	Head end only	25	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	0.00%	1753.85	2090.00
Unit Tank	Loaded	100	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	2.00%	2741.25	3363.00
Unit Tank	Loaded	100	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	2039.10	2276.00
Unit Tank	Loaded	100	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2967.06	3853.00
Unit Tank	Loaded	100	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2643.71	2966.00
Unit Tank	Loaded	100	Head end only	45	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	5908.06	7513.00
Unit Tank	Loaded	100	Head end only	50	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	3.00%	6513.20	7658.00
Unit Tank	Loaded	100	Head end only	50	0.00%	Flat	<0.1%	0.00	0.00	< 10%	0.00%	6345.34	6971.00
Unit Steel Hoppers	Empty	135	Distributed (Head and Rear)	10	0.50%	Decline	> 1.0%	3.50	8.00	< 0.1%	13.00%	369.06	436.00
Unit Steel Hoppers	Empty	135	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	278.89	317.00
Unit Steel Hoppers	Empty	135	Distributed (Head and Rear)	10	1.10%	Decline	> 1.0%	9.50	15.00	< 0.1%	2.00%	403.95	496.00
Unit Steel Hoppers	Empty	135	Distributed (Head and Rear)	10	0.00%	Flat	> 1.0%	5.00	10.00	< 0.1%	9.00%	320.15	354.00
Unit Steel Hoppers	Empty	135	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	< 0.1%	46.00%	907.30	1258.00
Unit Steel Hoppers	Empty	135	Distributed (Head and Rear)	25	1.50%	Incline	> 50%	9.04	33.00	< 0.1%	95.00%	744.62	800.00
Unit Steel Hoppers	Empty	135	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	< 0.1%	76.00%	1203.86	1381.00
Unit Steel Hoppers	Empty	135	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	26.00%	1619.70	1936.00
Unit Steel Hoppers	Empty	135	Distributed (Head and Rear)	30	0.50%	Incline	> 1.0%	7.50	19.00	< 0.1%	58.00%	1277.01	1428.00
Unit Steel Hoppers	Empty	135	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	50.00%	1574.54	1931.00
Unit Steel Hoppers	Empty	135	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	43.00%	1458.58	1670.00
Unit Steel Hoppers	Empty	135	Distributed (Head and Rear)	50	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	46.00%	2745.68	2965.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Steel Hoppers	Empty	135	Distributed (Head and Rear)	55	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	31.00%	3893.30	4829.00
Unit Steel Hoppers	Empty	135	Distributed (Head and Rear)	55	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	9.00%	3638.52	4491.00
Unit Steel Hoppers	Empty	135	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	19.00%	4596.26	5220.00
Unit Steel Hoppers	Empty	135	Distributed (Head and Rear)	60	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	23.00%	3649.45	3953.00
Unit Steel Hoppers	Empty	135	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	27.00%	4177.15	4706.00
Unit Steel Hoppers	Empty	135	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	337.49	398.00
Unit Steel Hoppers	Empty	135	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	266.94	307.00
Unit Steel Hoppers	Empty	135	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	363.97	440.00
Unit Steel Hoppers	Empty	135	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	299.63	332.00
Unit Steel Hoppers	Empty	135	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	< 0.1%	22.00%	836.83	1088.00
Unit Steel Hoppers	Empty	135	Distributed (Head, Mid, Rear)	25	1.50%	Incline	> 1.0%	4.50	9.00	< 0.1%	42.00%	701.09	786.00
Unit Steel Hoppers	Empty	135	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	< 0.1%	24.00%	1066.06	1308.00
Unit Steel Hoppers	Empty	135	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	1460.25	1672.00
Unit Steel Hoppers	Empty	135	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	2.00%	1162.98	1277.00
Unit Steel Hoppers	Empty	135	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	8.00%	1385.68	1704.00
Unit Steel Hoppers	Empty	135	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	1.00%	1319.62	1484.00
Unit Steel Hoppers	Empty	135	Distributed (Head, Mid, Rear)	50	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	2.00%	2547.57	2748.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Steel Hoppers	Empty	135	Distributed (Head, Mid, Rear)	55	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	3.00%	3549.00	4260.00
Unit Steel Hoppers	Empty	135	Distributed (Head, Mid, Rear)	55	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	3.00%	3265.55	3817.00
Unit Steel Hoppers	Empty	135	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	4158.07	4956.00
Unit Steel Hoppers	Empty	135	Distributed (Head, Mid, Rear)	60	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	1.00%	3364.46	3720.00
Unit Steel Hoppers	Empty	135	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	3831.73	4276.00
Unit Steel Hoppers	Loaded	135	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	1.00%	571.63	732.00
Unit Steel Hoppers	Loaded	135	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	398.94	442.00
Unit Steel Hoppers	Loaded	135	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	751.21	953.00
Unit Steel Hoppers	Loaded	135	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	2.00%	480.47	530.00
Unit Steel Hoppers	Loaded	135	Distributed (Head and Rear)	11	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	270.44	299.00
Unit Steel Hoppers	Loaded	135	Distributed (Head and Rear)	15	2.20%	Decline	<0.1%	0.00	0.00	> 50%	12.00%	1691.15	7613.00
Unit Steel Hoppers	Loaded	135	Distributed (Head and Rear)	16	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	1.00%	893.77	1020.00
Unit Steel Hoppers	Loaded	135	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	2.00%	2063.32	2671.00
Unit Steel Hoppers	Loaded	135	Distributed (Head and Rear)	27	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	4.00%	1969.90	2526.00
Unit Steel Hoppers	Loaded	135	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	11.00%	2643.63	3153.00
Unit Steel Hoppers	Loaded	135	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	2077.60	2403.00
Unit Steel Hoppers	Loaded	135	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2842.31	3532.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Steel Hoppers	Loaded	135	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2537.58	2849.00
Unit Steel Hoppers	Loaded	135	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	1.00%	5613.82	7066.00
Unit Steel Hoppers	Loaded	135	Distributed (Head and Rear)	50	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	19.00%	6222.20	7572.00
Unit Steel Hoppers	Loaded	135	Distributed (Head and Rear)	50	0.00%	Flat	<0.1%	0.00	0.00	< 10%	0.00%	6007.61	6826.00
Unit Steel Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	503.80	593.00
Unit Steel Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	368.60	438.00
Unit Steel Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	640.80	778.00
Unit Steel Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	426.38	512.00
Unit Steel Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	11	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	267.13	286.00
Unit Steel Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	15	2.20%	Decline	<0.1%	0.00	0.00	> 50%	19.00%	1394.39	3009.00
Unit Steel Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	16	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	1.00%	830.46	935.00
Unit Steel Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	1.00%	1923.97	2388.00
Unit Steel Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	27	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	10.00%	1721.49	2003.00
Unit Steel Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	2.00%	2425.45	2861.00
Unit Steel Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1894.64	2041.00
Unit Steel Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2651.05	3735.00
Unit Steel Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2321.16	2674.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Steel Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	1.00%	5595.15	7399.00
Unit Steel Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	50	0.50%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	15.00%	5772.82	7267.00
Unit Steel Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	50	0.00%	Flat	<0.1%	0.00	0.00	< 10%	0.00%	5574.78	6240.00
Unit Covered Hoppers	Empty	135	Distributed (Head and Rear)	10	0.50%	Decline	> 1.0%	4.43	7.00	< 0.1%	25.00%	377.98	432.00
Unit Covered Hoppers	Empty	135	Distributed (Head and Rear)	10	0.50%	Incline	> 1.0%	7.67	20.00	< 0.1%	4.00%	280.81	327.00
Unit Covered Hoppers	Empty	135	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	1.00%	412.14	499.00
Unit Covered Hoppers	Empty	135	Distributed (Head and Rear)	10	0.00%	Flat	> 1.0%	5.00	9.00	< 0.1%	10.00%	329.82	401.00
Unit Covered Hoppers	Empty	135	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	< 0.1%	61.00%	954.65	1319.00
Unit Covered Hoppers	Empty	135	Distributed (Head and Rear)	25	1.50%	Incline	> 25%	8.64	35.00	< 0.1%	90.00%	772.98	827.00
Unit Covered Hoppers	Empty	135	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	< 0.1%	74.00%	1242.78	1504.00
Unit Covered Hoppers	Empty	135	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	43.00%	1689.89	2171.00
Unit Covered Hoppers	Empty	135	Distributed (Head and Rear)	30	0.50%	Incline	> 1.0%	14.00	16.00	< 0.1%	68.00%	1312.31	1551.00
Unit Covered Hoppers	Empty	135	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	70.00%	1610.44	2005.00
Unit Covered Hoppers	Empty	135	Distributed (Head and Rear)	30	0.00%	Flat	> 1.0%	2.50	3.00	< 0.1%	56.00%	1491.83	1779.00
Unit Covered Hoppers	Empty	135	Distributed (Head and Rear)	47	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	62.00%	2693.75	3117.00
Unit Covered Hoppers	Empty	135	Distributed (Head and Rear)	55	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	43.00%	4011.67	5166.00
Unit Covered Hoppers	Empty	135	Distributed (Head and Rear)	55	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	37.00%	3664.94	4328.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Covered Hoppers	Empty	135	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	34.00%	4710.26	5634.00
Unit Covered Hoppers	Empty	135	Distributed (Head and Rear)	60	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	27.00%	3732.57	4185.00
Unit Covered Hoppers	Empty	135	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 10%	38.00%	4303.48	5568.00
Unit Covered Hoppers	Empty	135	Distributed (Head, Mid, Rear)	10	0.50%	Decline	< 0.5%	2.00	2.00	< 0.1%	1.00%	345.71	426.00
Unit Covered Hoppers	Empty	135	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	261.10	290.00
Unit Covered Hoppers	Empty	135	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	1.00%	368.71	447.00
Unit Covered Hoppers	Empty	135	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	299.90	338.00
Unit Covered Hoppers	Empty	135	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	< 0.1%	34.00%	841.90	1139.00
Unit Covered Hoppers	Empty	135	Distributed (Head, Mid, Rear)	25	1.50%	Incline	> 1.0%	2.50	4.00	< 0.1%	55.00%	723.41	781.00
Unit Covered Hoppers	Empty	135	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	< 0.1%	42.00%	1100.00	1284.00
Unit Covered Hoppers	Empty	135	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	12.00%	1483.95	1726.00
Unit Covered Hoppers	Empty	135	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	20.00%	1187.32	1311.00
Unit Covered Hoppers	Empty	135	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	42.00%	1382.47	1790.00
Unit Covered Hoppers	Empty	135	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	18.00%	1331.93	1527.00
Unit Covered Hoppers	Empty	135	Distributed (Head, Mid, Rear)	47	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	14.00%	2450.83	2777.00
Unit Covered Hoppers	Empty	135	Distributed (Head, Mid, Rear)	55	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	21.00%	3610.56	4231.00
Unit Covered Hoppers	Empty	135	Distributed (Head, Mid, Rear)	55	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	19.00%	3440.97	4252.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Covered Hoppers	Empty	135	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	4.00%	4270.70	5068.00
Unit Covered Hoppers	Empty	135	Distributed (Head, Mid, Rear)	60	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	8.00%	3399.87	3719.00
Unit Covered Hoppers	Empty	135	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	5.00%	3917.25	4613.00
Unit Covered Hoppers	Loaded	135	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	1.00%	560.03	681.00
Unit Covered Hoppers	Loaded	135	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	372.35	433.00
Unit Covered Hoppers	Loaded	135	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	720.43	913.00
Unit Covered Hoppers	Loaded	135	Distributed (Head and Rear)	10	0.00%	Flat	> 1.0%	0.00	0.00	< 0.1%	14.00%	474.69	568.00
Unit Covered Hoppers	Loaded	135	Distributed (Head and Rear)	11	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	280.67	306.00
Unit Covered Hoppers	Loaded	135	Distributed (Head and Rear)	15	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	11.00%	820.26	935.00
Unit Covered Hoppers	Loaded	135	Distributed (Head and Rear)	15	2.20%	Decline	<0.1%	0.00	0.00	> 50%	8.00%	1475.41	8158.00
Unit Covered Hoppers	Loaded	135	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	1965.50	2690.00
Unit Covered Hoppers	Loaded	135	Distributed (Head and Rear)	27	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	8.00%	2051.64	2351.00
Unit Covered Hoppers	Loaded	135	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	13.00%	2651.23	3613.00
Unit Covered Hoppers	Loaded	135	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	1.00%	2023.25	2280.00
Unit Covered Hoppers	Loaded	135	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	1.00%	2722.40	3476.00
Unit Covered Hoppers	Loaded	135	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	2.00%	2511.91	2868.00
Unit Covered Hoppers	Loaded	135	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	5402.36	7023.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Covered Hoppers	Loaded	135	Distributed (Head and Rear)	50	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	21.00%	6053.83	8145.00
Unit Covered Hoppers	Loaded	135	Distributed (Head and Rear)	50	0.00%	Flat	<0.1%	0.00	0.00	< 10%	0.00%	5909.04	7152.00
Unit Covered Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	500.72	635.00
Unit Covered Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	364.85	429.00
Unit Covered Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	623.18	796.00
Unit Covered Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	1.00%	418.68	534.00
Unit Covered Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	11	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	269.04	289.00
Unit Covered Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	15	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	3.00%	743.23	856.00
Unit Covered Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	15	2.20%	Decline	<0.1%	0.00	0.00	> 50%	7.00%	1262.38	1767.00
Unit Covered Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	1853.68	2490.00
Unit Covered Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	27	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	2.00%	1928.62	2252.00
Unit Covered Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	7.00%	2363.60	2882.00
Unit Covered Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1840.07	2084.00
Unit Covered Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2550.25	3561.00
Unit Covered Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2273.78	2623.00
Unit Covered Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	1.00%	5100.44	6945.00
Unit Covered Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	50	0.50%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	21.00%	5641.76	6974.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Covered Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	50	0.00%	Flat	<0.1%	0.00	0.00	< 10%	1.00%	5440.48	6167.00
Unit Aluminum Hoppers	Empty	135	Distributed (Head and Rear)	10	0.50%	Decline	< 0.5%	2.00	2.00	< 0.1%	1.00%	341.70	404.00
Unit Aluminum Hoppers	Empty	135	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	260.61	312.00
Unit Aluminum Hoppers	Empty	135	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	369.31	460.00
Unit Aluminum Hoppers	Empty	135	Distributed (Head and Rear)	10	0.00%	Flat	< 0.5%	0.00	0.00	< 0.1%	0.00%	298.21	321.00
Unit Aluminum Hoppers	Empty	135	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	< 0.1%	33.00%	843.16	995.00
Unit Aluminum Hoppers	Empty	135	Distributed (Head and Rear)	25	1.50%	Incline	> 25%	6.33	25.00	< 0.1%	91.00%	734.19	793.00
Unit Aluminum Hoppers	Empty	135	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	< 0.1%	72.00%	1089.92	1309.00
Unit Aluminum Hoppers	Empty	135	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	33.00%	1467.40	1615.00
Unit Aluminum Hoppers	Empty	135	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	70.00%	1183.12	1304.00
Unit Aluminum Hoppers	Empty	135	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	61.00%	1431.33	1812.00
Unit Aluminum Hoppers	Empty	135	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	64.00%	1323.49	1531.00
Unit Aluminum Hoppers	Empty	135	Distributed (Head and Rear)	55	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	69.00%	3578.83	3984.00
Unit Aluminum Hoppers	Empty	135	Distributed (Head and Rear)	55	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	66.00%	3009.62	3376.00
Unit Aluminum Hoppers	Empty	135	Distributed (Head and Rear)	55	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	33.00%	3347.22	3854.00
Unit Aluminum Hoppers	Empty	135	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	61.00%	4098.54	4535.00
Unit Aluminum Hoppers	Empty	135	Distributed (Head and Rear)	60	0.50%	Incline	< 0.5%	0.00	0.00	< 0.1%	51.00%	3459.44	3831.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Aluminum Hoppers	Empty	135	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	57.00%	3738.06	4228.00
Unit Aluminum Hoppers	Empty	135	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	309.99	361.00
Unit Aluminum Hoppers	Empty	135	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	243.50	282.00
Unit Aluminum Hoppers	Empty	135	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	323.81	378.00
Unit Aluminum Hoppers	Empty	135	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	275.09	299.00
Unit Aluminum Hoppers	Empty	135	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	< 0.1%	4.00%	737.59	851.00
Unit Aluminum Hoppers	Empty	135	Distributed (Head, Mid, Rear)	25	1.50%	Incline	> 1.0%	3.00	3.00	< 0.1%	61.00%	674.81	735.00
Unit Aluminum Hoppers	Empty	135	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	< 0.1%	42.00%	980.57	1229.00
Unit Aluminum Hoppers	Empty	135	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	10.00%	1305.63	1481.00
Unit Aluminum Hoppers	Empty	135	Distributed (Head, Mid, Rear)	30	0.50%	Incline	> 1.0%	2.00	2.00	< 0.1%	28.00%	1073.46	1221.00
Unit Aluminum Hoppers	Empty	135	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	35.00%	1260.21	1658.00
Unit Aluminum Hoppers	Empty	135	Distributed (Head, Mid, Rear)	30	0.00%	Flat	> 1.0%	0.00	0.00	< 0.1%	33.00%	1168.10	1298.00
Unit Aluminum Hoppers	Empty	135	Distributed (Head, Mid, Rear)	55	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	51.00%	3244.95	3678.00
Unit Aluminum Hoppers	Empty	135	Distributed (Head, Mid, Rear)	55	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	36.00%	2715.77	2971.00
Unit Aluminum Hoppers	Empty	135	Distributed (Head, Mid, Rear)	55	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	26.00%	3152.71	3444.00
Unit Aluminum Hoppers	Empty	135	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	30.00%	3702.77	4178.00
Unit Aluminum Hoppers	Empty	135	Distributed (Head, Mid, Rear)	60	0.50%	Incline	< 0.5%	0.00	0.00	< 0.1%	28.00%	3073.98	3292.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Aluminum Hoppers	Empty	135	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	27.00%	3376.01	3663.00
Unit Aluminum Hoppers	Loaded	135	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	1.00%	517.65	605.00
Unit Aluminum Hoppers	Loaded	135	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	367.90	406.00
Unit Aluminum Hoppers	Loaded	135	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	624.12	877.00
Unit Aluminum Hoppers	Loaded	135	Distributed (Head and Rear)	10	0.00%	Flat	> 1.0%	2.00	3.00	< 0.1%	8.00%	426.64	481.00
Unit Aluminum Hoppers	Loaded	135	Distributed (Head and Rear)	11	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	264.57	289.00
Unit Aluminum Hoppers	Loaded	135	Distributed (Head and Rear)	15	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	7.00%	744.87	819.00
Unit Aluminum Hoppers	Loaded	135	Distributed (Head and Rear)	15	2.20%	Decline	<0.1%	0.00	0.00	< 10%	1.00%	1121.75	1575.00
Unit Aluminum Hoppers	Loaded	135	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	1786.70	2249.00
Unit Aluminum Hoppers	Loaded	135	Distributed (Head and Rear)	27	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	9.00%	1824.63	2052.00
Unit Aluminum Hoppers	Loaded	135	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	5.00%	2393.44	2760.00
Unit Aluminum Hoppers	Loaded	135	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1869.43	2089.00
Unit Aluminum Hoppers	Loaded	135	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2453.72	3073.00
Unit Aluminum Hoppers	Loaded	135	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2262.83	2620.00
Unit Aluminum Hoppers	Loaded	135	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	4965.14	6035.00
Unit Aluminum Hoppers	Loaded	135	Distributed (Head and Rear)	50	0.50%	Decline	<0.1%	0.00	0.00	< 10%	10.00%	5302.97	6126.00
Unit Aluminum Hoppers	Loaded	135	Distributed (Head and Rear)	50	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	5330.64	6112.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Aluminum Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	447.83	526.00
Unit Aluminum Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	339.35	395.00
Unit Aluminum Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	543.02	673.00
Unit Aluminum Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	10	0.00%	Flat	< 0.5%	1.00	1.00	< 0.1%	0.00%	382.63	451.00
Unit Aluminum Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	11	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	260.56	285.00
Unit Aluminum Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	15	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	2.00%	660.10	767.00
Unit Aluminum Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	15	2.20%	Decline	<0.1%	0.00	0.00	< 10%	2.00%	1029.97	1556.00
Unit Aluminum Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	1652.56	2167.00
Unit Aluminum Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	27	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	0.00%	1742.44	1924.00
Unit Aluminum Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	3.00%	2123.75	2568.00
Unit Aluminum Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	1.00%	1716.20	1889.00
Unit Aluminum Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2294.70	2875.00
Unit Aluminum Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2049.16	2363.00
Unit Aluminum Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	1.00%	4708.19	6631.00
Unit Aluminum Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	50	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	14.00%	4985.23	6088.00
Unit Aluminum Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	50	0.00%	Flat	<0.1%	0.00	0.00	< 10%	0.00%	4942.13	6260.00
Unit MultiLevel	Empty	135	Distributed (Head and Rear)	10	0.50%	Decline	> 1.0%	20.38	48.00	< 0.1%	22.00%	609.18	830.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit MultiLevel	Empty	135	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	362.55	410.00
Unit MultiLevel	Empty	135	Distributed (Head and Rear)	10	1.10%	Decline	< 0.5%	2.00	2.00	< 10%	4.00%	779.37	1229.00
Unit MultiLevel	Empty	135	Distributed (Head and Rear)	10	0.00%	Flat	> 1.0%	7.40	16.00	< 0.1%	5.00%	469.16	562.00
Unit MultiLevel	Empty	135	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	36.00%	1868.40	4537.00
Unit MultiLevel	Empty	135	Distributed (Head and Rear)	25	1.50%	Incline	> 1.0%	8.60	13.00	< 0.1%	35.00%	886.60	969.00
Unit MultiLevel	Empty	135	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	< 10%	71.00%	2263.74	3994.00
Unit MultiLevel	Empty	135	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	43.00%	2710.30	3677.00
Unit MultiLevel	Empty	135	Distributed (Head and Rear)	30	0.50%	Incline	> 1.0%	17.00	29.00	< 0.1%	37.00%	1934.42	2339.00
Unit MultiLevel	Empty	135	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 10%	39.00%	2771.69	5176.00
Unit MultiLevel	Empty	135	Distributed (Head and Rear)	30	0.00%	Flat	> 1.0%	19.50	29.00	< 0.1%	37.00%	2316.80	2709.00
Unit MultiLevel	Empty	135	Distributed (Head and Rear)	36	1.00%	Crest	> 1.0%	14.80	38.00	< 0.1%	65.00%	2852.80	3337.00
Unit MultiLevel	Empty	135	Distributed (Head and Rear)	53	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	14.00%	4485.03	5195.00
Unit MultiLevel	Empty	135	Distributed (Head and Rear)	55	1.10%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	24.00%	6358.97	8888.00
Unit MultiLevel	Empty	135	Distributed (Head and Rear)	55	1.00%	Trough	<0.1%	0.00	0.00	< 10%	38.00%	5376.28	10132.00
Unit MultiLevel	Empty	135	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	8.00%	7734.11	9708.00
Unit MultiLevel	Empty	135	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 10%	28.00%	6682.93	8197.00
Unit MultiLevel	Empty	135	Distributed (Head, Mid, Rear)	10	0.50%	Decline	> 1.0%	7.86	25.00	< 0.1%	15.00%	492.84	682.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit MultiLevel	Empty	135	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	322.70	404.00
Unit MultiLevel	Empty	135	Distributed (Head, Mid, Rear)	10	1.10%	Decline	> 1.0%	26.50	30.00	< 0.1%	7.00%	593.33	844.00
Unit MultiLevel	Empty	135	Distributed (Head, Mid, Rear)	10	0.00%	Flat	> 1.0%	8.50	16.00	< 0.1%	11.00%	405.19	514.00
Unit MultiLevel	Empty	135	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	< 10%	48.00%	1307.33	2160.00
Unit MultiLevel	Empty	135	Distributed (Head, Mid, Rear)	25	1.50%	Incline	> 1.0%	14.47	50.00	< 0.1%	15.00%	808.39	898.00
Unit MultiLevel	Empty	135	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	< 10%	61.00%	1703.98	2470.00
Unit MultiLevel	Empty	135	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	23.00%	2212.46	3069.00
Unit MultiLevel	Empty	135	Distributed (Head, Mid, Rear)	30	0.50%	Incline	> 1.0%	44.33	81.00	< 0.1%	17.00%	1733.48	2157.00
Unit MultiLevel	Empty	135	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	32.00%	2271.89	3292.00
Unit MultiLevel	Empty	135	Distributed (Head, Mid, Rear)	30	0.00%	Flat	> 1.0%	18.67	31.00	< 0.1%	20.00%	1993.68	2458.00
Unit MultiLevel	Empty	135	Distributed (Head, Mid, Rear)	36	1.00%	Crest	< 0.5%	1.00	1.00	< 0.1%	34.00%	2498.61	2963.00
Unit MultiLevel	Empty	135	Distributed (Head, Mid, Rear)	53	0.50%	Incline	<0.1%	0.00	0.00	< 10%	20.00%	4032.15	4980.00
Unit MultiLevel	Empty	135	Distributed (Head, Mid, Rear)	55	1.10%	Decline	<0.1%	0.00	0.00	< 10%	18.00%	5214.56	9434.00
Unit MultiLevel	Empty	135	Distributed (Head, Mid, Rear)	55	1.00%	Trough	<0.1%	0.00	0.00	< 10%	40.00%	5043.83	5862.00
Unit MultiLevel	Empty	135	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	15.00%	6222.70	7331.00
Unit MultiLevel	Empty	135	Distributed (Head, Mid, Rear)	60	0.00%	Flat	> 1.0%	44.00	75.00	< 10%	35.00%	5523.49	6622.00
Unit MultiLevel	Loaded	135	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	805.74	1100.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit MultiLevel	Loaded	135	Distributed (Head and Rear)	10	0.50%	Incline	< 0.5%	3.00	3.00	< 0.1%	1.00%	405.23	461.00
Unit MultiLevel	Loaded	135	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	2.00%	1165.97	1780.00
Unit MultiLevel	Loaded	135	Distributed (Head and Rear)	10	0.00%	Flat	> 1.0%	15.44	31.00	< 0.1%	37.00%	586.08	683.00
Unit MultiLevel	Loaded	135	Distributed (Head and Rear)	14	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	402.99	445.00
Unit MultiLevel	Loaded	135	Distributed (Head and Rear)	15	2.20%	Decline	<0.1%	0.00	0.00	> 50%	2.00%	2204.46	9270.00
Unit MultiLevel	Loaded	135	Distributed (Head and Rear)	21	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	3.00%	1655.46	2034.00
Unit MultiLevel	Loaded	135	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	17.00%	3277.83	14443.00
Unit MultiLevel	Loaded	135	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	19.00%	3559.68	4474.00
Unit MultiLevel	Loaded	135	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	1.00%	3789.07	5700.00
Unit MultiLevel	Loaded	135	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	8.00%	3097.08	3513.00
Unit MultiLevel	Loaded	135	Distributed (Head and Rear)	37	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	5.00%	3359.20	3956.00
Unit MultiLevel	Loaded	135	Distributed (Head and Rear)	37	1.00%	Trough	<0.1%	0.00	0.00	< 10%	20.00%	4172.70	4877.00
Unit MultiLevel	Loaded	135	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	3.00%	7324.50	13639.00
Unit MultiLevel	Loaded	135	Distributed (Head and Rear)	50	0.50%	Decline	<0.1%	0.00	0.00	> 50%	4.00%	7525.51	9760.00
Unit MultiLevel	Loaded	135	Distributed (Head and Rear)	50	0.00%	Flat	<0.1%	0.00	0.00	< 10%	13.00%	6951.05	7935.00
Unit MultiLevel	Loaded	135	Distributed (Head, Mid, Rear)	10	0.50%	Decline	> 1.0%	13.00	30.00	< 0.1%	10.00%	635.71	820.00
Unit MultiLevel	Loaded	135	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	388.62	457.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit MultiLevel	Loaded	135	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 10%	1.00%	815.32	1981.00
Unit MultiLevel	Loaded	135	Distributed (Head, Mid, Rear)	10	0.00%	Flat	> 1.0%	9.33	24.00	< 0.1%	16.00%	495.76	686.00
Unit MultiLevel	Loaded	135	Distributed (Head, Mid, Rear)	14	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	382.40	423.00
Unit MultiLevel	Loaded	135	Distributed (Head, Mid, Rear)	15	2.20%	Decline	<0.1%	0.00	0.00	> 50%	1.00%	1319.16	2117.00
Unit MultiLevel	Loaded	135	Distributed (Head, Mid, Rear)	21	1.00%	Crest	> 1.0%	14.21	48.00	< 0.1%	47.00%	1286.08	1743.00
Unit MultiLevel	Loaded	135	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	2.00%	2123.09	3334.00
Unit MultiLevel	Loaded	135	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	11.00%	2696.71	3599.00
Unit MultiLevel	Loaded	135	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 10%	2.00%	2873.63	3971.00
Unit MultiLevel	Loaded	135	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	15.00%	2637.95	3299.00
Unit MultiLevel	Loaded	135	Distributed (Head, Mid, Rear)	37	0.50%	Incline	> 1.0%	82.00	111.00	< 0.1%	12.00%	2973.35	3690.00
Unit MultiLevel	Loaded	135	Distributed (Head, Mid, Rear)	37	1.00%	Trough	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	3943.64	4548.00
Unit MultiLevel	Loaded	135	Distributed (Head, Mid, Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	5625.32	7447.00
Unit MultiLevel	Loaded	135	Distributed (Head, Mid, Rear)	50	0.50%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	8.00%	6236.54	7785.00
Unit MultiLevel	Loaded	135	Distributed (Head, Mid, Rear)	50	0.00%	Flat	<0.1%	0.00	0.00	< 10%	21.00%	6055.73	7360.00
Unit Refrigerated Box	Empty	135	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	19.00%	581.16	834.00
Unit Refrigerated Box	Empty	135	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	356.18	412.00
Unit Refrigerated Box	Empty	135	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	726.88	1032.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Refrigerated Box	Empty	135	Distributed (Head and Rear)	10	0.00%	Flat	> 1.0%	24.00	28.00	< 0.1%	2.00%	454.41	564.00
Unit Refrigerated Box	Empty	135	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	25.00%	1653.80	2467.00
Unit Refrigerated Box	Empty	135	Distributed (Head and Rear)	25	1.50%	Incline	> 1.0%	9.00	9.00	< 0.1%	12.00%	872.32	976.00
Unit Refrigerated Box	Empty	135	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	26.00%	2154.19	3625.00
Unit Refrigerated Box	Empty	135	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	14.00%	2580.12	3363.00
Unit Refrigerated Box	Empty	135	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	2.00%	1889.63	2182.00
Unit Refrigerated Box	Empty	135	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	28.00%	2501.78	3716.00
Unit Refrigerated Box	Empty	135	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	2.00%	2242.73	2673.00
Unit Refrigerated Box	Empty	135	Distributed (Head and Rear)	35	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	7.00%	2644.63	3017.00
Unit Refrigerated Box	Empty	135	Distributed (Head and Rear)	52	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	2.00%	4308.02	4769.00
Unit Refrigerated Box	Empty	135	Distributed (Head and Rear)	55	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	3.00%	5918.48	7068.00
Unit Refrigerated Box	Empty	135	Distributed (Head and Rear)	55	1.00%	Trough	<0.1%	0.00	0.00	> 10%, < 25%	2.00%	5335.55	6163.00
Unit Refrigerated Box	Empty	135	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7399.97	8823.00
Unit Refrigerated Box	Empty	135	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 25%, < 50%	3.00%	6200.98	7232.00
Unit Refrigerated Box	Empty	135	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	483.45	611.00
Unit Refrigerated Box	Empty	135	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	323.62	362.00
Unit Refrigerated Box	Empty	135	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	604.57	894.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Refrigerated Box	Empty	135	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	1.00%	398.80	464.00
Unit Refrigerated Box	Empty	135	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	< 10%	9.00%	1312.34	2160.00
Unit Refrigerated Box	Empty	135	Distributed (Head, Mid, Rear)	25	1.50%	Incline	< 0.5%	0.00	0.00	< 0.1%	2.00%	817.73	901.00
Unit Refrigerated Box	Empty	135	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	< 10%	13.00%	1653.98	2362.00
Unit Refrigerated Box	Empty	135	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	2.00%	2302.67	2800.00
Unit Refrigerated Box	Empty	135	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	2.00%	1692.22	1952.00
Unit Refrigerated Box	Empty	135	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 10%	4.00%	2204.68	3294.00
Unit Refrigerated Box	Empty	135	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	1.00%	1955.08	2314.00
Unit Refrigerated Box	Empty	135	Distributed (Head, Mid, Rear)	35	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	4.00%	2325.83	2869.00
Unit Refrigerated Box	Empty	135	Distributed (Head, Mid, Rear)	52	0.50%	Incline	<0.1%	0.00	0.00	< 10%	5.00%	3692.51	4280.00
Unit Refrigerated Box	Empty	135	Distributed (Head, Mid, Rear)	55	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	1.00%	5167.11	5973.00
Unit Refrigerated Box	Empty	135	Distributed (Head, Mid, Rear)	55	1.00%	Trough	<0.1%	0.00	0.00	< 10%	11.00%	4729.91	5303.00
Unit Refrigerated Box	Empty	135	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	2.00%	6244.81	7507.00
Unit Refrigerated Box	Empty	135	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	6.00%	5484.66	6545.00
Unit Refrigerated Box	Loaded	135	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	11.00%	774.70	1084.00
Unit Refrigerated Box	Loaded	135	Distributed (Head and Rear)	10	0.50%	Incline	> 1.0%	5.00	9.00	< 0.1%	7.00%	418.18	478.00
Unit Refrigerated Box	Loaded	135	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	1034.59	1975.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Refrigerated Box	Loaded	135	Distributed (Head and Rear)	10	0.00%	Flat	> 1.0%	9.00	22.00	< 0.1%	27.00%	561.24	652.00
Unit Refrigerated Box	Loaded	135	Distributed (Head and Rear)	12	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	316.46	362.00
Unit Refrigerated Box	Loaded	135	Distributed (Head and Rear)	15	2.20%	Decline	<0.1%	0.00	0.00	> 50%	11.00%	2636.73	7769.00
Unit Refrigerated Box	Loaded	135	Distributed (Head and Rear)	17	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	16.00%	1103.48	1416.00
Unit Refrigerated Box	Loaded	135	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	2.00%	2563.55	3800.00
Unit Refrigerated Box	Loaded	135	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	9.00%	3242.29	4499.00
Unit Refrigerated Box	Loaded	135	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	2.00%	3574.49	5411.00
Unit Refrigerated Box	Loaded	135	Distributed (Head and Rear)	30	1.00%	Trough	<0.1%	0.00	0.00	< 10%	5.00%	2920.89	4244.00
Unit Refrigerated Box	Loaded	135	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	13.00%	2973.58	3668.00
Unit Refrigerated Box	Loaded	135	Distributed (Head and Rear)	31	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	4.00%	2459.77	2885.00
Unit Refrigerated Box	Loaded	135	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	3.00%	6706.43	10794.00
Unit Refrigerated Box	Loaded	135	Distributed (Head and Rear)	50	0.50%	Decline	<0.1%	0.00	0.00	> 50%	1.00%	6844.21	9526.00
Unit Refrigerated Box	Loaded	135	Distributed (Head and Rear)	50	0.00%	Flat	<0.1%	0.00	0.00	< 10%	8.00%	6729.24	8161.00
Unit Refrigerated Box	Loaded	135	Distributed (Head, Mid, Rear)	10	0.50%	Decline	> 1.0%	2.50	4.00	< 0.1%	9.00%	604.87	774.00
Unit Refrigerated Box	Loaded	135	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	390.24	425.00
Unit Refrigerated Box	Loaded	135	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	775.44	1071.00
Unit Refrigerated Box	Loaded	135	Distributed (Head, Mid, Rear)	10	0.00%	Flat	> 1.0%	5.80	12.00	< 0.1%	5.00%	475.59	538.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Refrigerated Box	Loaded	135	Distributed (Head, Mid, Rear)	12	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	314.37	345.00
Unit Refrigerated Box	Loaded	135	Distributed (Head, Mid, Rear)	15	2.20%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	4.00%	1444.33	6097.00
Unit Refrigerated Box	Loaded	135	Distributed (Head, Mid, Rear)	17	1.00%	Crest	< 0.5%	15.00	15.00	< 0.1%	1.00%	986.57	1311.00
Unit Refrigerated Box	Loaded	135	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1985.56	2623.00
Unit Refrigerated Box	Loaded	135	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	2.00%	2575.38	3219.00
Unit Refrigerated Box	Loaded	135	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 10%	1.00%	2761.92	3526.00
Unit Refrigerated Box	Loaded	135	Distributed (Head, Mid, Rear)	30	1.00%	Trough	<0.1%	0.00	0.00	< 10%	7.00%	2420.35	3684.00
Unit Refrigerated Box	Loaded	135	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	10.00%	2487.31	3053.00
Unit Refrigerated Box	Loaded	135	Distributed (Head, Mid, Rear)	31	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	2147.07	2531.00
Unit Refrigerated Box	Loaded	135	Distributed (Head, Mid, Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	1.00%	5508.48	7563.00
Unit Refrigerated Box	Loaded	135	Distributed (Head, Mid, Rear)	50	0.50%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	2.00%	5855.43	7655.00
Unit Refrigerated Box	Loaded	135	Distributed (Head, Mid, Rear)	50	0.00%	Flat	<0.1%	0.00	0.00	< 10%	6.00%	5862.06	6782.00
Unit Tank	Empty	135	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	336.76	403.00
Unit Tank	Empty	135	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	269.67	304.00
Unit Tank	Empty	135	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	367.64	422.00
Unit Tank	Empty	135	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	298.88	350.00
Unit Tank	Empty	135	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	< 0.1%	21.00%	817.71	1050.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Tank	Empty	135	Distributed (Head and Rear)	25	1.50%	Incline	> 1.0%	6.24	17.00	< 0.1%	76.00%	698.07	764.00
Unit Tank	Empty	135	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	< 0.1%	44.00%	1068.94	1232.00
Unit Tank	Empty	135	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	5.00%	1469.08	1653.00
Unit Tank	Empty	135	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	27.00%	1184.60	1302.00
Unit Tank	Empty	135	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	21.00%	1397.65	1645.00
Unit Tank	Empty	135	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	18.00%	1324.94	1475.00
Unit Tank	Empty	135	Distributed (Head and Rear)	48	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	18.00%	2403.63	2605.00
Unit Tank	Empty	135	Distributed (Head and Rear)	55	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	8.00%	3638.13	4359.00
Unit Tank	Empty	135	Distributed (Head and Rear)	55	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	0.00%	3336.32	3987.00
Unit Tank	Empty	135	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	2.00%	4192.98	4762.00
Unit Tank	Empty	135	Distributed (Head and Rear)	60	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	1.00%	3425.89	3795.00
Unit Tank	Empty	135	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	2.00%	3869.56	4245.00
Unit Tank	Empty	135	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	308.69	356.00
Unit Tank	Empty	135	Distributed (Head, Mid, Rear)	10	0.50%	Incline	< 0.5%	3.00	3.00	< 0.1%	1.00%	250.14	286.00
Unit Tank	Empty	135	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	327.25	365.00
Unit Tank	Empty	135	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	276.78	300.00
Unit Tank	Empty	135	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	< 0.1%	10.00%	748.71	996.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Tank	Empty	135	Distributed (Head, Mid, Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	19.00%	655.44	703.00
Unit Tank	Empty	135	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	< 0.1%	8.00%	984.37	1238.00
Unit Tank	Empty	135	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	1311.13	1490.00
Unit Tank	Empty	135	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	2.00%	1065.04	1173.00
Unit Tank	Empty	135	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	7.00%	1246.47	1496.00
Unit Tank	Empty	135	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	1199.12	1306.00
Unit Tank	Empty	135	Distributed (Head, Mid, Rear)	48	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	2235.36	2476.00
Unit Tank	Empty	135	Distributed (Head, Mid, Rear)	55	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	3344.10	3847.00
Unit Tank	Empty	135	Distributed (Head, Mid, Rear)	55	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	0.00%	3050.37	3524.00
Unit Tank	Empty	135	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	3877.64	4378.00
Unit Tank	Empty	135	Distributed (Head, Mid, Rear)	60	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	3197.68	3457.00
Unit Tank	Empty	135	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	1.00%	3570.47	3937.00
Unit Tank	Loaded	135	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	516.34	594.00
Unit Tank	Loaded	135	Distributed (Head and Rear)	10	0.50%	Incline	< 0.5%	1.00	1.00	< 0.1%	0.00%	358.12	395.00
Unit Tank	Loaded	135	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	640.66	836.00
Unit Tank	Loaded	135	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	435.67	475.00
Unit Tank	Loaded	135	Distributed (Head and Rear)	12	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	297.54	322.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Tank	Loaded	135	Distributed (Head and Rear)	15	2.20%	Decline	<0.1%	0.00	0.00	> 50%	47.00%	1727.99	7764.00
Unit Tank	Loaded	135	Distributed (Head and Rear)	17	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	2.00%	874.72	993.00
Unit Tank	Loaded	135	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	1.00%	2067.69	11916.00
Unit Tank	Loaded	135	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	28.00%	2520.94	3061.00
Unit Tank	Loaded	135	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2667.64	3389.00
Unit Tank	Loaded	135	Distributed (Head and Rear)	30	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	9.00%	2166.49	2479.00
Unit Tank	Loaded	135	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2370.42	2740.00
Unit Tank	Loaded	135	Distributed (Head and Rear)	31	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	2038.60	2210.00
Unit Tank	Loaded	135	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	2.00%	5466.15	7710.00
Unit Tank	Loaded	135	Distributed (Head and Rear)	50	0.50%	Decline	<0.1%	0.00	0.00	> 50%	68.00%	5798.38	7862.00
Unit Tank	Loaded	135	Distributed (Head and Rear)	50	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	5849.48	6748.00
Unit Tank	Loaded	135	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	462.75	518.00
Unit Tank	Loaded	135	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	336.61	405.00
Unit Tank	Loaded	135	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	565.39	664.00
Unit Tank	Loaded	135	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	1.00%	387.72	430.00
Unit Tank	Loaded	135	Distributed (Head, Mid, Rear)	12	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	293.95	313.00
Unit Tank	Loaded	135	Distributed (Head, Mid, Rear)	15	2.20%	Decline	<0.1%	0.00	0.00	> 50%	49.00%	1682.87	7922.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Tank	Loaded	135	Distributed (Head, Mid, Rear)	17	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	1.00%	801.28	891.00
Unit Tank	Loaded	135	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	1868.38	2439.00
Unit Tank	Loaded	135	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	16.00%	2253.74	2736.00
Unit Tank	Loaded	135	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	2.00%	2617.77	3704.00
Unit Tank	Loaded	135	Distributed (Head, Mid, Rear)	30	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	14.00%	2112.11	2284.00
Unit Tank	Loaded	135	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2179.23	2535.00
Unit Tank	Loaded	135	Distributed (Head, Mid, Rear)	31	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1905.44	2088.00
Unit Tank	Loaded	135	Distributed (Head, Mid, Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	8.00%	5366.33	7558.00
Unit Tank	Loaded	135	Distributed (Head, Mid, Rear)	50	0.50%	Decline	<0.1%	0.00	0.00	> 50%	63.00%	5501.77	7033.00
Unit Tank	Loaded	135	Distributed (Head, Mid, Rear)	50	0.00%	Flat	<0.1%	0.00	0.00	< 10%	0.00%	5488.22	6623.00
Unit Steel Hoppers	Empty	200	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	576.96	739.00
Unit Steel Hoppers	Empty	200	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	376.07	472.00
Unit Steel Hoppers	Empty	200	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	659.93	886.00
Unit Steel Hoppers	Empty	200	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	461.82	536.00
Unit Steel Hoppers	Empty	200	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	< 10%	1.00%	1381.59	2019.00
Unit Steel Hoppers	Empty	200	Distributed (Head and Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	984.88	1109.00
Unit Steel Hoppers	Empty	200	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	< 10%	10.00%	1695.37	2258.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Steel Hoppers	Empty	200	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2265.49	2793.00
Unit Steel Hoppers	Empty	200	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1690.90	2030.00
Unit Steel Hoppers	Empty	200	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2146.61	2772.00
Unit Steel Hoppers	Empty	200	Distributed (Head and Rear)	30	0.00%	Flat	< 0.5%	1.00	1.00	< 0.1%	1.00%	1974.32	2382.00
Unit Steel Hoppers	Empty	200	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	< 10%	1.00%	3750.60	4691.00
Unit Steel Hoppers	Empty	200	Distributed (Head and Rear)	45	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	2.00%	3189.93	3647.00
Unit Steel Hoppers	Empty	200	Distributed (Head and Rear)	45	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	4.00%	3647.17	4489.00
Unit Steel Hoppers	Empty	200	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	5773.12	6910.00
Unit Steel Hoppers	Empty	200	Distributed (Head and Rear)	60	0.50%	Incline	< 0.5%	6.00	6.00	< 10%	2.00%	4545.69	5298.00
Unit Steel Hoppers	Empty	200	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 10%	0.00%	5186.38	6232.00
Unit Steel Hoppers	Empty	200	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	475.27	594.00
Unit Steel Hoppers	Empty	200	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	340.88	406.00
Unit Steel Hoppers	Empty	200	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	524.02	690.00
Unit Steel Hoppers	Empty	200	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	398.66	470.00
Unit Steel Hoppers	Empty	200	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	< 0.1%	2.00%	1139.55	1453.00
Unit Steel Hoppers	Empty	200	Distributed (Head, Mid, Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	2.00%	866.32	990.00
Unit Steel Hoppers	Empty	200	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	< 10%	2.00%	1440.41	3057.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Steel Hoppers	Empty	200	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	1.00%	1864.73	2311.00
Unit Steel Hoppers	Empty	200	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1474.65	1717.00
Unit Steel Hoppers	Empty	200	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	1815.97	2429.00
Unit Steel Hoppers	Empty	200	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	1666.34	1974.00
Unit Steel Hoppers	Empty	200	Distributed (Head, Mid, Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	< 10%	2.00%	3182.55	4026.00
Unit Steel Hoppers	Empty	200	Distributed (Head, Mid, Rear)	45	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	1.00%	2805.28	3261.00
Unit Steel Hoppers	Empty	200	Distributed (Head, Mid, Rear)	45	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	1.00%	3045.61	3683.00
Unit Steel Hoppers	Empty	200	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	< 10%	3.00%	4895.59	5917.00
Unit Steel Hoppers	Empty	200	Distributed (Head, Mid, Rear)	60	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	3957.13	4611.00
Unit Steel Hoppers	Empty	200	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 10%	0.00%	4404.68	5232.00
Unit Steel Hoppers	Loaded	200	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	781.05	1206.00
Unit Steel Hoppers	Loaded	200	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	454.37	544.00
Unit Steel Hoppers	Loaded	200	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	1049.10	1563.00
Unit Steel Hoppers	Loaded	200	Distributed (Head and Rear)	10	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	276.75	304.00
Unit Steel Hoppers	Loaded	200	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	622.80	757.00
Unit Steel Hoppers	Loaded	200	Distributed (Head and Rear)	15	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	1047.31	1223.00
Unit Steel Hoppers	Loaded	200	Distributed (Head and Rear)	15	2.20%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	5.00%	1305.05	1978.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Steel Hoppers	Loaded	200	Distributed (Head and Rear)	20	1.70%	Decline	<0.1%	0.00	0.00	< 0.1%	4.00%	1534.12	1900.00
Unit Steel Hoppers	Loaded	200	Distributed (Head and Rear)	27	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	2007.96	2214.00
Unit Steel Hoppers	Loaded	200	Distributed (Head and Rear)	27	1.00%	Trough	<0.1%	0.00	0.00	> 10%, < 25%	1.00%	2429.09	3059.00
Unit Steel Hoppers	Loaded	200	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	8.00%	3135.46	4111.00
Unit Steel Hoppers	Loaded	200	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	13.00%	2631.38	3344.00
Unit Steel Hoppers	Loaded	200	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	1.00%	2977.12	3507.00
Unit Steel Hoppers	Loaded	200	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	36.00%	5072.03	6011.00
Unit Steel Hoppers	Loaded	200	Distributed (Head and Rear)	50	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	2.00%	7140.63	11429.00
Unit Steel Hoppers	Loaded	200	Distributed (Head and Rear)	50	0.00%	Flat	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	6619.68	8117.00
Unit Steel Hoppers	Loaded	200	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	657.73	909.00
Unit Steel Hoppers	Loaded	200	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	416.07	501.00
Unit Steel Hoppers	Loaded	200	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	830.01	1252.00
Unit Steel Hoppers	Loaded	200	Distributed (Head, Mid, Rear)	10	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	265.55	286.00
Unit Steel Hoppers	Loaded	200	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	525.89	610.00
Unit Steel Hoppers	Loaded	200	Distributed (Head, Mid, Rear)	15	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	905.62	1139.00
Unit Steel Hoppers	Loaded	200	Distributed (Head, Mid, Rear)	15	2.20%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	1.00%	1171.15	1619.00
Unit Steel Hoppers	Loaded	200	Distributed (Head, Mid, Rear)	20	1.70%	Decline	<0.1%	0.00	0.00	< 0.1%	2.00%	1360.71	1638.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Steel Hoppers	Loaded	200	Distributed (Head, Mid, Rear)	27	0.50%	Incline	<0.1%	0.00	0.00	< 10%	0.00%	1828.28	2102.00
Unit Steel Hoppers	Loaded	200	Distributed (Head, Mid, Rear)	27	1.00%	Trough	<0.1%	0.00	0.00	< 10%	3.00%	2099.46	2790.00
Unit Steel Hoppers	Loaded	200	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	3.00%	2711.63	3146.00
Unit Steel Hoppers	Loaded	200	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	4.00%	2418.69	3105.00
Unit Steel Hoppers	Loaded	200	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	1.00%	2588.65	3129.00
Unit Steel Hoppers	Loaded	200	Distributed (Head, Mid, Rear)	45	1.10%	Decline	> 1.0%	46.50	59.00	< 0.1%	44.00%	4554.06	5401.00
Unit Steel Hoppers	Loaded	200	Distributed (Head, Mid, Rear)	50	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	3.00%	6245.61	7066.00
Unit Steel Hoppers	Loaded	200	Distributed (Head, Mid, Rear)	50	0.00%	Flat	<0.1%	0.00	0.00	< 10%	1.00%	5903.37	6966.00
Unit Aluminum Hoppers	Empty	200	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	529.29	741.00
Unit Aluminum Hoppers	Empty	200	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	347.51	427.00
Unit Aluminum Hoppers	Empty	200	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	564.48	732.00
Unit Aluminum Hoppers	Empty	200	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	424.99	535.00
Unit Aluminum Hoppers	Empty	200	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	< 10%	2.00%	1291.56	3178.00
Unit Aluminum Hoppers	Empty	200	Distributed (Head and Rear)	25	1.50%	Incline	> 1.0%	10.00	11.00	< 0.1%	5.00%	888.70	1007.00
Unit Aluminum Hoppers	Empty	200	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	< 10%	16.00%	1539.66	3209.00
Unit Aluminum Hoppers	Empty	200	Distributed (Head and Rear)	30	0.50%	Decline	< 0.5%	1.00	1.00	< 0.1%	2.00%	2018.16	2716.00
Unit Aluminum Hoppers	Empty	200	Distributed (Head and Rear)	30	0.50%	Incline	> 1.0%	30.00	30.00	< 0.1%	1.00%	1542.67	1933.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Aluminum Hoppers	Empty	200	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 10%	8.00%	2062.48	3355.00
Unit Aluminum Hoppers	Empty	200	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	1787.89	2289.00
Unit Aluminum Hoppers	Empty	200	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	< 10%	2.00%	3437.09	4552.00
Unit Aluminum Hoppers	Empty	200	Distributed (Head and Rear)	45	1.00%	Crest	> 1.0%	8.50	10.00	< 10%	3.00%	3013.57	3736.00
Unit Aluminum Hoppers	Empty	200	Distributed (Head and Rear)	45	1.00%	Trough	<0.1%	0.00	0.00	< 10%	3.00%	3335.08	4673.00
Unit Aluminum Hoppers	Empty	200	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	7.00%	5116.21	6699.00
Unit Aluminum Hoppers	Empty	200	Distributed (Head and Rear)	60	0.50%	Incline	> 1.0%	7.50	10.00	< 0.1%	2.00%	4193.60	4853.00
Unit Aluminum Hoppers	Empty	200	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 10%, < 25%	3.00%	4767.72	5869.00
Unit Aluminum Hoppers	Empty	200	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	432.34	653.00
Unit Aluminum Hoppers	Empty	200	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	313.76	407.00
Unit Aluminum Hoppers	Empty	200	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	463.96	793.00
Unit Aluminum Hoppers	Empty	200	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	370.18	472.00
Unit Aluminum Hoppers	Empty	200	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	< 0.1%	2.00%	1000.37	1405.00
Unit Aluminum Hoppers	Empty	200	Distributed (Head, Mid, Rear)	25	1.50%	Incline	> 1.0%	21.00	21.00	< 0.1%	2.00%	835.71	969.00
Unit Aluminum Hoppers	Empty	200	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	< 0.1%	4.00%	1340.70	1640.00
Unit Aluminum Hoppers	Empty	200	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	2.00%	1676.88	2202.00
Unit Aluminum Hoppers	Empty	200	Distributed (Head, Mid, Rear)	30	0.50%	Incline	> 1.0%	2.00	2.00	< 0.1%	4.00%	1372.53	1771.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Aluminum Hoppers	Empty	200	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	4.00%	1609.98	2352.00
Unit Aluminum Hoppers	Empty	200	Distributed (Head, Mid, Rear)	30	0.00%	Flat	> 1.0%	4.33	7.00	< 0.1%	5.00%	1517.57	1933.00
Unit Aluminum Hoppers	Empty	200	Distributed (Head, Mid, Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	10.00%	2888.68	3499.00
Unit Aluminum Hoppers	Empty	200	Distributed (Head, Mid, Rear)	45	1.00%	Crest	> 1.0%	7.00	7.00	< 0.1%	6.00%	2611.04	3309.00
Unit Aluminum Hoppers	Empty	200	Distributed (Head, Mid, Rear)	45	1.00%	Trough	> 1.0%	19.00	19.00	< 10%	5.00%	2834.11	3680.00
Unit Aluminum Hoppers	Empty	200	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	< 10%	7.00%	4432.82	5307.00
Unit Aluminum Hoppers	Empty	200	Distributed (Head, Mid, Rear)	60	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	6.00%	3723.90	4272.00
Unit Aluminum Hoppers	Empty	200	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 10%	8.00%	4126.92	5163.00
Unit Aluminum Hoppers	Loaded	200	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	709.10	999.00
Unit Aluminum Hoppers	Loaded	200	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	413.88	515.00
Unit Aluminum Hoppers	Loaded	200	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	911.27	1403.00
Unit Aluminum Hoppers	Loaded	200	Distributed (Head and Rear)	10	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	270.32	295.00
Unit Aluminum Hoppers	Loaded	200	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	564.96	712.00
Unit Aluminum Hoppers	Loaded	200	Distributed (Head and Rear)	14	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	899.96	1099.00
Unit Aluminum Hoppers	Loaded	200	Distributed (Head and Rear)	15	2.20%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	1107.14	1492.00
Unit Aluminum Hoppers	Loaded	200	Distributed (Head and Rear)	20	1.70%	Decline	<0.1%	0.00	0.00	< 10%	5.00%	1388.65	1886.00
Unit Aluminum Hoppers	Loaded	200	Distributed (Head and Rear)	25	1.00%	Trough	< 0.5%	10.00	10.00	< 10%	2.00%	2022.83	2725.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Aluminum Hoppers	Loaded	200	Distributed (Head and Rear)	26	0.50%	Incline	<0.1%	0.00	0.00	< 10%	0.00%	1788.41	2176.00
Unit Aluminum Hoppers	Loaded	200	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	7.00%	2804.16	3991.00
Unit Aluminum Hoppers	Loaded	200	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	11.00%	2388.79	3318.00
Unit Aluminum Hoppers	Loaded	200	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2731.22	3383.00
Unit Aluminum Hoppers	Loaded	200	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	35.00%	4618.11	5737.00
Unit Aluminum Hoppers	Loaded	200	Distributed (Head and Rear)	50	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	3.00%	6207.23	8386.00
Unit Aluminum Hoppers	Loaded	200	Distributed (Head and Rear)	50	0.00%	Flat	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	5939.76	7127.00
Unit Aluminum Hoppers	Loaded	200	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	590.49	906.00
Unit Aluminum Hoppers	Loaded	200	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	373.07	481.00
Unit Aluminum Hoppers	Loaded	200	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	703.84	1027.00
Unit Aluminum Hoppers	Loaded	200	Distributed (Head, Mid, Rear)	10	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	261.56	290.00
Unit Aluminum Hoppers	Loaded	200	Distributed (Head, Mid, Rear)	10	0.00%	Flat	> 1.0%	5.00	7.00	< 0.1%	2.00%	473.28	592.00
Unit Aluminum Hoppers	Loaded	200	Distributed (Head, Mid, Rear)	14	1.00%	Crest	< 0.5%	1.00	1.00	< 0.1%	1.00%	708.96	1033.00
Unit Aluminum Hoppers	Loaded	200	Distributed (Head, Mid, Rear)	15	2.20%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	959.74	1379.00
Unit Aluminum Hoppers	Loaded	200	Distributed (Head, Mid, Rear)	20	1.70%	Decline	<0.1%	0.00	0.00	< 10%	8.00%	1195.63	1912.00
Unit Aluminum Hoppers	Loaded	200	Distributed (Head, Mid, Rear)	25	1.00%	Trough	< 0.5%	2.00	2.00	< 10%	5.00%	1783.84	2170.00
Unit Aluminum Hoppers	Loaded	200	Distributed (Head, Mid, Rear)	26	0.50%	Incline	> 1.0%	3.00	3.00	< 0.1%	2.00%	1554.74	1877.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Aluminum Hoppers	Loaded	200	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	5.00%	2390.71	3265.00
Unit Aluminum Hoppers	Loaded	200	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	17.00%	2129.59	2832.00
Unit Aluminum Hoppers	Loaded	200	Distributed (Head, Mid, Rear)	30	0.00%	Flat	< 0.5%	8.00	8.00	< 0.1%	6.00%	2296.36	2931.00
Unit Aluminum Hoppers	Loaded	200	Distributed (Head, Mid, Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	< 10%	42.00%	4168.72	5583.00
Unit Aluminum Hoppers	Loaded	200	Distributed (Head, Mid, Rear)	50	0.50%	Decline	<0.1%	0.00	0.00	< 10%	7.00%	5437.46	6367.00
Unit Aluminum Hoppers	Loaded	200	Distributed (Head, Mid, Rear)	50	0.00%	Flat	<0.1%	0.00	0.00	< 10%	2.00%	5171.43	6465.00
Unit Steel Hoppers	Empty	260	Distributed (Head, Mid, Rear)	10	0.50%	Decline	> 1.0%	7.50	10.00	< 0.1%	2.00%	527.55	796.00
Unit Steel Hoppers	Empty	260	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	350.20	440.00
Unit Steel Hoppers	Empty	260	Distributed (Head, Mid, Rear)	10	1.10%	Decline	< 0.5%	7.00	7.00	< 0.1%	1.00%	587.22	871.00
Unit Steel Hoppers	Empty	260	Distributed (Head, Mid, Rear)	10	0.00%	Flat	> 1.0%	7.00	7.00	< 0.1%	1.00%	427.25	563.00
Unit Steel Hoppers	Empty	260	Distributed (Head, Mid, Rear)	20	2.20%	Decline	> 1.0%	12.00	12.00	< 10%	21.00%	1240.33	3869.00
Unit Steel Hoppers	Empty	260	Distributed (Head, Mid, Rear)	25	1.50%	Incline	> 1.0%	12.83	29.00	< 0.1%	7.00%	931.40	1073.00
Unit Steel Hoppers	Empty	260	Distributed (Head, Mid, Rear)	25	1.70%	Decline	> 1.0%	13.00	13.00	< 10%	19.00%	1586.37	3394.00
Unit Steel Hoppers	Empty	260	Distributed (Head, Mid, Rear)	30	0.50%	Decline	> 1.0%	30.25	55.00	< 0.1%	8.00%	2067.36	2711.00
Unit Steel Hoppers	Empty	260	Distributed (Head, Mid, Rear)	30	0.50%	Incline	> 1.0%	21.09	51.00	< 0.1%	11.00%	1571.12	1913.00
Unit Steel Hoppers	Empty	260	Distributed (Head, Mid, Rear)	30	1.10%	Decline	> 1.0%	17.00	19.00	< 0.1%	10.00%	1917.89	2736.00
Unit Steel Hoppers	Empty	260	Distributed (Head, Mid, Rear)	30	0.00%	Flat	> 1.0%	37.40	72.00	< 0.1%	10.00%	1802.83	2353.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Steel Hoppers	Empty	260	Distributed (Head, Mid, Rear)	45	1.10%	Decline	< 0.5%	0.00	0.00	< 10%	1.00%	2829.31	3443.00
Unit Steel Hoppers	Empty	260	Distributed (Head, Mid, Rear)	45	1.00%	Crest	> 1.0%	10.33	15.00	< 0.1%	10.00%	3086.88	3737.00
Unit Steel Hoppers	Empty	260	Distributed (Head, Mid, Rear)	45	1.00%	Trough	> 1.0%	77.33	166.00	< 10%	11.00%	3351.78	4872.00
Unit Steel Hoppers	Empty	260	Distributed (Head, Mid, Rear)	60	0.50%	Decline	> 1.0%	122.00	122.00	> 10%, < 25%	12.00%	5344.58	6956.00
Unit Steel Hoppers	Empty	260	Distributed (Head, Mid, Rear)	60	0.50%	Incline	> 1.0%	17.50	50.00	< 10%	13.00%	4256.56	5274.00
Unit Steel Hoppers	Empty	260	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 10%	16.00%	4739.75	5754.00
Unit Steel Hoppers	Loaded	260	Distributed (Head, Mid, Rear)	10	0.50%	Decline	> 1.0%	4.33	10.00	< 10%	6.00%	698.13	1079.00
Unit Steel Hoppers	Loaded	260	Distributed (Head, Mid, Rear)	10	0.50%	Incline	> 1.0%	6.00	6.00	< 0.1%	1.00%	418.15	518.00
Unit Steel Hoppers	Loaded	260	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	1.00%	928.40	1680.00
Unit Steel Hoppers	Loaded	260	Distributed (Head, Mid, Rear)	10	0.00%	Flat	> 1.0%	6.83	17.00	< 0.1%	6.00%	566.04	760.00
Unit Steel Hoppers	Loaded	260	Distributed (Head, Mid, Rear)	12	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	339.03	368.00
Unit Steel Hoppers	Loaded	260	Distributed (Head, Mid, Rear)	15	2.20%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	11.00%	1253.32	1787.00
Unit Steel Hoppers	Loaded	260	Distributed (Head, Mid, Rear)	17	1.00%	Crest	> 1.0%	21.11	49.00	< 0.1%	14.00%	1137.24	1316.00
Unit Steel Hoppers	Loaded	260	Distributed (Head, Mid, Rear)	20	1.70%	Decline	<0.1%	0.00	0.00	< 10%	30.00%	1440.82	2070.00
Unit Steel Hoppers	Loaded	260	Distributed (Head, Mid, Rear)	28	1.00%	Trough	> 1.0%	48.60	63.00	> 10%, < 25%	23.00%	2287.53	2791.00
Unit Steel Hoppers	Loaded	260	Distributed (Head, Mid, Rear)	30	0.50%	Decline	> 1.0%	40.50	67.00	< 0.1%	26.00%	2784.16	4021.00
Unit Steel Hoppers	Loaded	260	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	42.00%	2479.53	3207.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Steel Hoppers	Loaded	260	Distributed (Head, Mid, Rear)	30	0.00%	Flat	> 1.0%	39.50	51.00	< 0.1%	14.00%	2730.60	3623.00
Unit Steel Hoppers	Loaded	260	Distributed (Head, Mid, Rear)	31	0.50%	Incline	> 1.0%	38.00	112.00	< 0.1%	16.00%	2327.23	2841.00
Unit Steel Hoppers	Loaded	260	Distributed (Head, Mid, Rear)	45	1.10%	Decline	< 0.5%	31.00	31.00	< 10%	16.00%	4858.15	6302.00
Unit Steel Hoppers	Loaded	260	Distributed (Head, Mid, Rear)	50	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	38.00%	6469.69	9227.00
Unit Steel Hoppers	Loaded	260	Distributed (Head, Mid, Rear)	50	0.00%	Flat	> 1.0%	70.20	117.00	< 10%	12.00%	6078.49	7386.00
Unit Aluminum Hoppers	Empty	260	Distributed (Head, Mid, Rear)	10	0.50%	Decline	> 1.0%	7.55	14.00	< 0.1%	14.00%	383.23	525.00
Unit Aluminum Hoppers	Empty	260	Distributed (Head, Mid, Rear)	10	0.50%	Incline	> 1.0%	4.40	10.00	< 0.1%	5.00%	279.27	362.00
Unit Aluminum Hoppers	Empty	260	Distributed (Head, Mid, Rear)	10	1.10%	Decline	> 1.0%	7.00	12.00	< 0.1%	4.00%	433.37	646.00
Unit Aluminum Hoppers	Empty	260	Distributed (Head, Mid, Rear)	10	0.00%	Flat	> 1.0%	13.43	27.00	< 0.1%	10.00%	320.70	386.00
Unit Aluminum Hoppers	Empty	260	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	< 0.1%	52.00%	984.11	1530.00
Unit Aluminum Hoppers	Empty	260	Distributed (Head, Mid, Rear)	25	1.50%	Incline	> 1.0%	20.10	53.00	< 0.1%	43.00%	776.98	904.00
Unit Aluminum Hoppers	Empty	260	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	< 0.1%	58.00%	1263.06	1726.00
Unit Aluminum Hoppers	Empty	260	Distributed (Head, Mid, Rear)	30	0.50%	Decline	> 1.0%	2.00	2.00	< 0.1%	20.00%	1697.67	2349.00
Unit Aluminum Hoppers	Empty	260	Distributed (Head, Mid, Rear)	30	0.50%	Incline	> 1.0%	23.38	45.00	< 0.1%	29.00%	1346.18	1730.00
Unit Aluminum Hoppers	Empty	260	Distributed (Head, Mid, Rear)	30	1.10%	Decline	< 0.5%	11.00	11.00	< 0.1%	29.00%	1742.24	2433.00
Unit Aluminum Hoppers	Empty	260	Distributed (Head, Mid, Rear)	30	0.00%	Flat	> 1.0%	24.00	46.00	< 0.1%	28.00%	1484.53	2032.00
Unit Aluminum Hoppers	Empty	260	Distributed (Head, Mid, Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	2330.48	3102.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Aluminum Hoppers	Empty	260	Distributed (Head, Mid, Rear)	45	1.00%	Crest	< 0.5%	0.00	0.00	< 0.1%	29.00%	2632.00	3177.00
Unit Aluminum Hoppers	Empty	260	Distributed (Head, Mid, Rear)	45	1.00%	Trough	> 1.0%	9.00	9.00	< 0.1%	29.00%	2838.37	3663.00
Unit Aluminum Hoppers	Empty	260	Distributed (Head, Mid, Rear)	60	0.50%	Decline	> 1.0%	3.67	6.00	< 10%	35.00%	4589.60	5872.00
Unit Aluminum Hoppers	Empty	260	Distributed (Head, Mid, Rear)	60	0.50%	Incline	> 1.0%	4.00	4.00	< 0.1%	27.00%	3766.03	4735.00
Unit Aluminum Hoppers	Empty	260	Distributed (Head, Mid, Rear)	60	0.00%	Flat	< 0.5%	2.00	2.00	< 0.1%	29.00%	4084.31	4909.00
Unit Aluminum Hoppers	Loaded	260	Distributed (Head, Mid, Rear)	10	0.50%	Decline	> 1.0%	8.60	20.00	< 0.1%	7.00%	589.45	765.00
Unit Aluminum Hoppers	Loaded	260	Distributed (Head, Mid, Rear)	10	0.50%	Incline	> 1.0%	6.00	11.00	< 0.1%	3.00%	365.45	460.00
Unit Aluminum Hoppers	Loaded	260	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	753.99	1010.00
Unit Aluminum Hoppers	Loaded	260	Distributed (Head, Mid, Rear)	10	0.00%	Flat	> 1.0%	11.25	30.00	< 0.1%	17.00%	478.03	628.00
Unit Aluminum Hoppers	Loaded	260	Distributed (Head, Mid, Rear)	11	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	276.76	304.00
Unit Aluminum Hoppers	Loaded	260	Distributed (Head, Mid, Rear)	15	2.20%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	8.00%	1265.90	1769.00
Unit Aluminum Hoppers	Loaded	260	Distributed (Head, Mid, Rear)	16	1.00%	Crest	> 1.0%	8.57	25.00	< 0.1%	13.00%	930.46	1256.00
Unit Aluminum Hoppers	Loaded	260	Distributed (Head, Mid, Rear)	20	1.70%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	11.00%	1469.81	2230.00
Unit Aluminum Hoppers	Loaded	260	Distributed (Head, Mid, Rear)	27	1.00%	Trough	<0.1%	0.00	0.00	> 25%, < 50%	8.00%	2116.72	3001.00
Unit Aluminum Hoppers	Loaded	260	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	19.00%	2562.81	3583.00
Unit Aluminum Hoppers	Loaded	260	Distributed (Head, Mid, Rear)	30	0.50%	Incline	< 0.5%	5.00	5.00	< 0.1%	12.00%	2055.08	2480.00
Unit Aluminum Hoppers	Loaded	260	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 10%	9.00%	2663.29	3496.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Aluminum Hoppers	Loaded	260	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	16.00%	2466.07	2990.00
Unit Aluminum Hoppers	Loaded	260	Distributed (Head, Mid, Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	12.00%	5283.55	6961.00
Unit Aluminum Hoppers	Loaded	260	Distributed (Head, Mid, Rear)	50	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	20.00%	6081.55	9208.00
Unit Aluminum Hoppers	Loaded	260	Distributed (Head, Mid, Rear)	50	0.00%	Flat	<0.1%	0.00	0.00	< 10%	4.00%	5580.07	6579.00

Appendix J.
Detailed Simulation Results from Evaluation of Phase 3
Developmental Enforcement Algorithm

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-A	Empty	5000	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	673.59	806.00
Intermodal-A	Empty	5000	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	422.10	487.00
Intermodal-A	Empty	5000	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	768.70	977.00
Intermodal-A	Empty	5000	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	489.39	582.00
Intermodal-A	Empty	5000	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	1645.98	3003.00
Intermodal-A	Empty	5000	Head end only	20	2.80%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	5.00%	1785.06	2682.00
Intermodal-A	Empty	5000	Head end only	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1042.76	1142.00
Intermodal-A	Empty	5000	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	2.00%	2042.02	3020.00
Intermodal-A	Empty	5000	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2646.56	3182.00
Intermodal-A	Empty	5000	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1889.98	2121.00
Intermodal-A	Empty	5000	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	< 10%	1.00%	2453.15	3512.00
Intermodal-A	Empty	5000	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2226.63	2480.00
Intermodal-A	Empty	5000	Head end only	57	1.00%	Crest	<0.1%	0.00	0.00	< 10%	2.00%	4633.94	5006.00
Intermodal-A	Empty	5000	Head end only	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7286.87	8086.00
Intermodal-A	Empty	5000	Head end only	60	0.50%	Incline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	5283.10	5687.00
Intermodal-A	Empty	5000	Head end only	60	1.10%	Decline	<0.1%	0.00	0.00	> 50%	4.00%	6793.97	9237.00
Intermodal-A	Empty	5000	Head end only	60	1.00%	Trough	<0.1%	0.00	0.00	> 50%	1.00%	6748.05	9039.00
Intermodal-A	Empty	5000	Head end only	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	6323.01	6939.00
Intermodal-B	Empty	5000	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	591.96	662.00
Intermodal-B	Empty	5000	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	386.26	454.00
Intermodal-B	Empty	5000	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	657.97	811.00
Intermodal-B	Empty	5000	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	451.44	515.00
Intermodal-B	Empty	5000	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	1426.99	1804.00
Intermodal-B	Empty	5000	Head end only	20	2.80%	Decline	<0.1%	0.00	0.00	< 10%	8.00%	1546.31	2288.00
Intermodal-B	Empty	5000	Head end only	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	983.58	1091.00
Intermodal-B	Empty	5000	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	< 10%	20.00%	1747.96	2388.00
Intermodal-B	Empty	5000	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2336.62	2627.00

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-B	Empty	5000	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1729.20	1956.00
Intermodal-B	Empty	5000	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	4.00%	2160.82	2511.00
Intermodal-B	Empty	5000	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2022.38	2356.00
Intermodal-B	Empty	5000	Head end only	57	1.00%	Crest	< 0.5%	2.00	2.00	< 0.1%	5.00%	4262.91	4639.00
Intermodal-B	Empty	5000	Head end only	60	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	6230.04	6858.00
Intermodal-B	Empty	5000	Head end only	60	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	4818.67	5168.00
Intermodal-B	Empty	5000	Head end only	60	1.10%	Decline	<0.1%	0.00	0.00	< 10%	9.00%	5971.63	6653.00
Intermodal-B	Empty	5000	Head end only	60	1.00%	Trough	<0.1%	0.00	0.00	< 10%	2.00%	5778.20	6929.00
Intermodal-B	Empty	5000	Head end only	60	0.00%	Flat	<0.1%	0.00	0.00	< 10%	1.00%	5498.83	6162.00
Intermodal-C	Empty	5000	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	606.40	711.00
Intermodal-C	Empty	5000	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	386.81	480.00
Intermodal-C	Empty	5000	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	683.50	817.00
Intermodal-C	Empty	5000	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	455.64	547.00
Intermodal-C	Empty	5000	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	< 10%	2.00%	1475.82	1970.00
Intermodal-C	Empty	5000	Head end only	20	2.80%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	3.00%	1604.25	2173.00
Intermodal-C	Empty	5000	Head end only	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1001.31	1103.00
Intermodal-C	Empty	5000	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	< 10%	12.00%	1821.68	2718.00
Intermodal-C	Empty	5000	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2438.24	2758.00
Intermodal-C	Empty	5000	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1778.56	2031.00
Intermodal-C	Empty	5000	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2235.81	2616.00
Intermodal-C	Empty	5000	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2081.51	2343.00
Intermodal-C	Empty	5000	Head end only	57	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	4337.87	4750.00
Intermodal-C	Empty	5000	Head end only	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	1.00%	6508.99	7220.00
Intermodal-C	Empty	5000	Head end only	60	0.50%	Incline	<0.1%	0.00	0.00	< 10%	0.00%	4932.11	5332.00
Intermodal-C	Empty	5000	Head end only	60	1.10%	Decline	<0.1%	0.00	0.00	< 10%	1.00%	6128.83	6845.00
Intermodal-C	Empty	5000	Head end only	60	1.00%	Trough	<0.1%	0.00	0.00	< 10%	0.00%	5940.31	6948.00
Intermodal-C	Empty	5000	Head end only	60	0.00%	Flat	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	5721.82	6402.00

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-D	Empty	5000	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	602.28	708.00
Intermodal-D	Empty	5000	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	395.50	462.00
Intermodal-D	Empty	5000	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	682.44	852.00
Intermodal-D	Empty	5000	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	457.28	529.00
Intermodal-D	Empty	5000	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	< 10%	2.00%	1485.88	1877.00
Intermodal-D	Empty	5000	Head end only	20	2.80%	Decline	<0.1%	0.00	0.00	< 10%	10.00%	1609.38	2658.00
Intermodal-D	Empty	5000	Head end only	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1005.69	1103.00
Intermodal-D	Empty	5000	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	< 0.1%	21.00%	1807.41	2413.00
Intermodal-D	Empty	5000	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2417.39	2805.00
Intermodal-D	Empty	5000	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1761.75	1957.00
Intermodal-D	Empty	5000	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	4.00%	2225.14	2909.00
Intermodal-D	Empty	5000	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2080.11	2346.00
Intermodal-D	Empty	5000	Head end only	57	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	5.00%	4328.06	4698.00
Intermodal-D	Empty	5000	Head end only	60	0.50%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	6504.50	7220.00
Intermodal-D	Empty	5000	Head end only	60	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	4933.89	5340.00
Intermodal-D	Empty	5000	Head end only	60	1.10%	Decline	<0.1%	0.00	0.00	< 10%	18.00%	6159.94	6855.00
Intermodal-D	Empty	5000	Head end only	60	1.00%	Trough	<0.1%	0.00	0.00	< 10%	0.00%	5882.08	7268.00
Intermodal-D	Empty	5000	Head end only	60	0.00%	Flat	<0.1%	0.00	0.00	< 10%	0.00%	5759.08	6419.00
Intermodal-E	Empty	5000	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	574.97	642.00
Intermodal-E	Empty	5000	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	364.90	422.00
Intermodal-E	Empty	5000	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	648.92	904.00
Intermodal-E	Empty	5000	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	439.18	529.00
Intermodal-E	Empty	5000	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	< 0.1%	1.00%	1378.19	1701.00
Intermodal-E	Empty	5000	Head end only	20	2.80%	Decline	<0.1%	0.00	0.00	< 10%	2.00%	1414.57	1887.00
Intermodal-E	Empty	5000	Head end only	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	969.75	1091.00
Intermodal-E	Empty	5000	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	< 0.1%	26.00%	1695.08	2238.00
Intermodal-E	Empty	5000	Head end only	30	0.50%	Decline	> 1.0%	17.00	17.00	< 0.1%	2.00%	2270.41	2542.00

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-E	Empty	5000	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1683.44	1865.00
Intermodal-E	Empty	5000	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	6.00%	2079.68	2500.00
Intermodal-E	Empty	5000	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	1954.74	2295.00
Intermodal-E	Empty	5000	Head end only	57	1.00%	Crest	> 1.0%	7.20	15.00	< 0.1%	12.00%	4104.25	4476.00
Intermodal-E	Empty	5000	Head end only	60	0.50%	Decline	<0.1%	0.00	0.00	< 10%	1.00%	5961.47	6783.00
Intermodal-E	Empty	5000	Head end only	60	0.50%	Incline	< 0.5%	20.00	20.00	< 0.1%	2.00%	4658.81	5173.00
Intermodal-E	Empty	5000	Head end only	60	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	29.00%	5582.43	6725.00
Intermodal-E	Empty	5000	Head end only	60	1.00%	Trough	<0.1%	0.00	0.00	< 10%	8.00%	5507.47	6680.00
Intermodal-E	Empty	5000	Head end only	60	0.00%	Flat	<0.1%	0.00	0.00	< 10%	1.00%	5289.56	5875.00
Intermodal-A	Loaded	5000	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	722.90	898.00
Intermodal-A	Loaded	5000	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	412.50	549.00
Intermodal-A	Loaded	5000	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	905.33	1150.00
Intermodal-A	Loaded	5000	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	571.07	662.00
Intermodal-A	Loaded	5000	Head end only	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	14.00%	2318.09	7809.00
Intermodal-A	Loaded	5000	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	17.00%	2052.08	7626.00
Intermodal-A	Loaded	5000	Head end only	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	988.73	1115.00
Intermodal-A	Loaded	5000	Head end only	25	1.70%	Decline	> 1.0%	24.75	87.00	< 0.1%	66.00%	2185.82	3261.00
Intermodal-A	Loaded	5000	Head end only	30	0.50%	Decline	> 1.0%	36.00	36.00	< 10%	20.00%	3027.66	3875.00
Intermodal-A	Loaded	5000	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	2.00%	2085.20	2327.00
Intermodal-A	Loaded	5000	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	71.00%	2856.58	5126.00
Intermodal-A	Loaded	5000	Head end only	30	0.00%	Flat	> 1.0%	4.00	4.00	< 0.1%	10.00%	2581.29	2868.00
Intermodal-A	Loaded	5000	Head end only	35	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	17.00%	2578.50	2779.00
Intermodal-A	Loaded	5000	Head end only	55	0.50%	Incline	< 0.5%	1.00	1.00	< 0.1%	1.00%	5556.67	6220.00
Intermodal-A	Loaded	5000	Head end only	70	0.50%	Decline	< 0.5%	79.00	79.00	< 10%	50.00%	10632.06	14108.00
Intermodal-A	Loaded	5000	Head end only	70	1.10%	Decline	<0.1%	0.00	0.00	< 10%	26.00%	9731.65	20482.00
Intermodal-A	Loaded	5000	Head end only	70	1.00%	Trough	<0.1%	0.00	0.00	> 50%	17.00%	13008.43	15653.00
Intermodal-A	Loaded	5000	Head end only	70	0.00%	Flat	<0.1%	0.00	0.00	< 10%	6.00%	9889.48	11442.00

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-B	Loaded	5000	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	624.35	784.00
Intermodal-B	Loaded	5000	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	371.83	423.00
Intermodal-B	Loaded	5000	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	758.30	954.00
Intermodal-B	Loaded	5000	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	505.08	580.00
Intermodal-B	Loaded	5000	Head end only	15	2.80%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	1050.55	1474.00
Intermodal-B	Loaded	5000	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	< 10%	2.00%	1479.72	1933.00
Intermodal-B	Loaded	5000	Head end only	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	986.95	1092.00
Intermodal-B	Loaded	5000	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	< 0.1%	12.00%	1865.01	2227.00
Intermodal-B	Loaded	5000	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	3.00%	2447.73	3421.00
Intermodal-B	Loaded	5000	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1903.90	2110.00
Intermodal-B	Loaded	5000	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	10.00%	2343.56	3057.00
Intermodal-B	Loaded	5000	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2232.24	2506.00
Intermodal-B	Loaded	5000	Head end only	35	1.00%	Crest	> 1.0%	4.00	4.00	< 0.1%	6.00%	2376.89	2597.00
Intermodal-B	Loaded	5000	Head end only	55	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	4738.00	5301.00
Intermodal-B	Loaded	5000	Head end only	70	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	21.00%	8707.67	10744.00
Intermodal-B	Loaded	5000	Head end only	70	1.10%	Decline	<0.1%	0.00	0.00	< 10%	9.00%	8154.13	14664.00
Intermodal-B	Loaded	5000	Head end only	70	1.00%	Trough	<0.1%	0.00	0.00	< 10%	4.00%	8163.12	9797.00
Intermodal-B	Loaded	5000	Head end only	70	0.00%	Flat	<0.1%	0.00	0.00	< 10%	0.00%	8142.37	9217.00
Intermodal-C	Loaded	5000	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	610.11	786.00
Intermodal-C	Loaded	5000	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	373.03	423.00
Intermodal-C	Loaded	5000	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	720.21	944.00
Intermodal-C	Loaded	5000	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	480.80	573.00
Intermodal-C	Loaded	5000	Head end only	15	2.80%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	981.68	1367.00
Intermodal-C	Loaded	5000	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	< 10%	8.00%	1519.54	2118.00
Intermodal-C	Loaded	5000	Head end only	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	918.15	977.00
Intermodal-C	Loaded	5000	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	< 0.1%	7.00%	1797.23	2289.00
Intermodal-C	Loaded	5000	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	2.00%	2481.59	3008.00

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-C	Loaded	5000	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1819.99	2182.00
Intermodal-C	Loaded	5000	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	17.00%	2210.67	2834.00
Intermodal-C	Loaded	5000	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2126.55	2561.00
Intermodal-C	Loaded	5000	Head end only	35	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	7.00%	2289.88	2539.00
Intermodal-C	Loaded	5000	Head end only	55	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	4592.68	5138.00
Intermodal-C	Loaded	5000	Head end only	70	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	16.00%	8245.24	10745.00
Intermodal-C	Loaded	5000	Head end only	70	1.10%	Decline	<0.1%	0.00	0.00	< 10%	11.00%	7793.94	8921.00
Intermodal-C	Loaded	5000	Head end only	70	1.00%	Trough	<0.1%	0.00	0.00	< 10%	4.00%	7657.76	9625.00
Intermodal-C	Loaded	5000	Head end only	70	0.00%	Flat	<0.1%	0.00	0.00	< 10%	0.00%	7605.14	9008.00
Intermodal-D	Loaded	5000	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	679.16	829.00
Intermodal-D	Loaded	5000	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	383.89	468.00
Intermodal-D	Loaded	5000	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	765.37	946.00
Intermodal-D	Loaded	5000	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	518.56	593.00
Intermodal-D	Loaded	5000	Head end only	15	2.80%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	1129.59	1512.00
Intermodal-D	Loaded	5000	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	< 0.1%	6.00%	1577.14	1905.00
Intermodal-D	Loaded	5000	Head end only	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	946.98	1089.00
Intermodal-D	Loaded	5000	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	< 10%	18.00%	2020.60	2656.00
Intermodal-D	Loaded	5000	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	1.00%	2632.80	2968.00
Intermodal-D	Loaded	5000	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1934.36	2066.00
Intermodal-D	Loaded	5000	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	8.00%	2492.28	3243.00
Intermodal-D	Loaded	5000	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	1.00%	2320.83	2771.00
Intermodal-D	Loaded	5000	Head end only	35	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	3.00%	2408.09	2649.00
Intermodal-D	Loaded	5000	Head end only	55	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	4881.33	5381.00
Intermodal-D	Loaded	5000	Head end only	70	0.50%	Decline	<0.1%	0.00	0.00	< 10%	15.00%	8668.58	9924.00
Intermodal-D	Loaded	5000	Head end only	70	1.10%	Decline	<0.1%	0.00	0.00	< 10%	8.00%	8513.32	9586.00
Intermodal-D	Loaded	5000	Head end only	70	1.00%	Trough	<0.1%	0.00	0.00	< 10%	1.00%	8544.09	9811.00
Intermodal-D	Loaded	5000	Head end only	70	0.00%	Flat	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	8450.96	9189.00

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-E	Loaded	5000	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	635.98	788.00
Intermodal-E	Loaded	5000	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	385.99	466.00
Intermodal-E	Loaded	5000	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	753.98	971.00
Intermodal-E	Loaded	5000	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	506.00	605.00
Intermodal-E	Loaded	5000	Head end only	15	2.80%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	1039.57	1330.00
Intermodal-E	Loaded	5000	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	< 0.1%	3.00%	1502.65	1851.00
Intermodal-E	Loaded	5000	Head end only	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	938.13	1060.00
Intermodal-E	Loaded	5000	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	< 0.1%	20.00%	1919.26	2398.00
Intermodal-E	Loaded	5000	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2486.48	2990.00
Intermodal-E	Loaded	5000	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1907.59	2201.00
Intermodal-E	Loaded	5000	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	13.00%	2418.29	4094.00
Intermodal-E	Loaded	5000	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2254.55	2600.00
Intermodal-E	Loaded	5000	Head end only	35	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	3.00%	2351.44	2556.00
Intermodal-E	Loaded	5000	Head end only	55	0.50%	Incline	<0.1%	0.00	0.00	< 10%	0.00%	4754.06	5374.00
Intermodal-E	Loaded	5000	Head end only	70	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	4.00%	8689.62	11056.00
Intermodal-E	Loaded	5000	Head end only	70	1.10%	Decline	<0.1%	0.00	0.00	< 10%	7.00%	8354.82	9450.00
Intermodal-E	Loaded	5000	Head end only	70	1.00%	Trough	<0.1%	0.00	0.00	< 10%	2.00%	8022.36	10231.00
Intermodal-E	Loaded	5000	Head end only	70	0.00%	Flat	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	8090.21	9306.00
Intermodal-A	Empty	5000	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	456.53	522.00
Intermodal-A	Empty	5000	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	338.08	404.00
Intermodal-A	Empty	5000	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	500.16	642.00
Intermodal-A	Empty	5000	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	378.05	451.00
Intermodal-A	Empty	5000	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	< 0.1%	6.00%	1073.26	1395.00
Intermodal-A	Empty	5000	Distributed (Head and Rear)	20	2.80%	Decline	<0.1%	0.00	0.00	< 0.1%	10.00%	1127.32	1622.00
Intermodal-A	Empty	5000	Distributed (Head and Rear)	25	1.50%	Incline	< 0.5%	1.00	1.00	< 0.1%	1.00%	827.69	869.00
Intermodal-A	Empty	5000	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	< 10%	34.00%	1373.38	2216.00
Intermodal-A	Empty	5000	Distributed (Head and Rear)	30	0.50%	Decline	< 0.5%	0.00	0.00	< 0.1%	1.00%	1857.05	2181.00

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-A	Empty	5000	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1434.77	1652.00
Intermodal-A	Empty	5000	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	22.00%	1773.65	2421.00
Intermodal-A	Empty	5000	Distributed (Head and Rear)	30	0.00%	Flat	< 0.5%	6.00	6.00	< 0.1%	1.00%	1625.62	1885.00
Intermodal-A	Empty	5000	Distributed (Head and Rear)	57	1.00%	Crest	> 1.0%	3.00	4.00	< 0.1%	29.00%	3679.91	4148.00
Intermodal-A	Empty	5000	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	< 10%	19.00%	5248.07	5988.00
Intermodal-A	Empty	5000	Distributed (Head and Rear)	60	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	5.00%	4126.63	4809.00
Intermodal-A	Empty	5000	Distributed (Head and Rear)	60	1.10%	Decline	<0.1%	0.00	0.00	< 10%	85.00%	4896.95	7935.00
Intermodal-A	Empty	5000	Distributed (Head and Rear)	60	1.00%	Trough	<0.1%	0.00	0.00	< 10%	55.00%	4950.28	6824.00
Intermodal-A	Empty	5000	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 10%	13.00%	4647.15	5333.00
Intermodal-B	Empty	5000	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	441.66	513.00
Intermodal-B	Empty	5000	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	310.68	369.00
Intermodal-B	Empty	5000	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	488.24	627.00
Intermodal-B	Empty	5000	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	371.01	425.00
Intermodal-B	Empty	5000	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	< 0.1%	5.00%	1073.47	1490.00
Intermodal-B	Empty	5000	Distributed (Head and Rear)	20	2.80%	Decline	<0.1%	0.00	0.00	< 0.1%	10.00%	1094.24	1489.00
Intermodal-B	Empty	5000	Distributed (Head and Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	818.04	904.00
Intermodal-B	Empty	5000	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	< 0.1%	26.00%	1359.74	1713.00
Intermodal-B	Empty	5000	Distributed (Head and Rear)	30	0.50%	Decline	> 1.0%	13.00	13.00	< 0.1%	2.00%	1830.74	2106.00
Intermodal-B	Empty	5000	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1403.56	1569.00
Intermodal-B	Empty	5000	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	21.00%	1720.82	2283.00
Intermodal-B	Empty	5000	Distributed (Head and Rear)	30	0.00%	Flat	> 1.0%	10.00	10.00	< 0.1%	1.00%	1605.05	1815.00
Intermodal-B	Empty	5000	Distributed (Head and Rear)	57	1.00%	Crest	> 1.0%	10.00	10.00	< 0.1%	23.00%	3640.16	4022.00
Intermodal-B	Empty	5000	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	15.00%	5202.45	6327.00
Intermodal-B	Empty	5000	Distributed (Head and Rear)	60	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	6.00%	4062.08	4469.00
Intermodal-B	Empty	5000	Distributed (Head and Rear)	60	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	89.00%	4887.60	5643.00
Intermodal-B	Empty	5000	Distributed (Head and Rear)	60	1.00%	Trough	<0.1%	0.00	0.00	< 10%	51.00%	4903.46	7161.00
Intermodal-B	Empty	5000	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	4.00%	4628.57	5285.00

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-C	Empty	5000	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	442.08	540.00
Intermodal-C	Empty	5000	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	310.57	375.00
Intermodal-C	Empty	5000	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	492.89	647.00
Intermodal-C	Empty	5000	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	372.72	421.00
Intermodal-C	Empty	5000	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	< 0.1%	1.00%	1072.89	1313.00
Intermodal-C	Empty	5000	Distributed (Head and Rear)	20	2.80%	Decline	<0.1%	0.00	0.00	< 0.1%	7.00%	1106.34	1459.00
Intermodal-C	Empty	5000	Distributed (Head and Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	820.13	930.00
Intermodal-C	Empty	5000	Distributed (Head and Rear)	25	1.70%	Decline	> 1.0%	6.00	6.00	< 0.1%	37.00%	1336.83	1949.00
Intermodal-C	Empty	5000	Distributed (Head and Rear)	30	0.50%	Decline	> 1.0%	10.33	19.00	< 0.1%	4.00%	1847.71	2194.00
Intermodal-C	Empty	5000	Distributed (Head and Rear)	30	0.50%	Incline	< 0.5%	5.00	5.00	< 0.1%	2.00%	1410.57	1603.00
Intermodal-C	Empty	5000	Distributed (Head and Rear)	30	1.10%	Decline	> 1.0%	1.50	2.00	< 0.1%	27.00%	1747.39	2291.00
Intermodal-C	Empty	5000	Distributed (Head and Rear)	30	0.00%	Flat	< 0.5%	4.00	4.00	< 0.1%	1.00%	1603.21	1825.00
Intermodal-C	Empty	5000	Distributed (Head and Rear)	57	1.00%	Crest	> 1.0%	20.00	20.00	< 0.1%	26.00%	3640.01	4067.00
Intermodal-C	Empty	5000	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	15.00%	5151.85	6067.00
Intermodal-C	Empty	5000	Distributed (Head and Rear)	60	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	5.00%	4066.00	4724.00
Intermodal-C	Empty	5000	Distributed (Head and Rear)	60	1.10%	Decline	<0.1%	0.00	0.00	< 10%	86.00%	4863.49	7759.00
Intermodal-C	Empty	5000	Distributed (Head and Rear)	60	1.00%	Trough	<0.1%	0.00	0.00	< 10%	51.00%	4861.78	6186.00
Intermodal-C	Empty	5000	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	6.00%	4575.00	5261.00
Intermodal-D	Empty	5000	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	453.89	561.00
Intermodal-D	Empty	5000	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	312.09	374.00
Intermodal-D	Empty	5000	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	505.00	649.00
Intermodal-D	Empty	5000	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	372.26	416.00
Intermodal-D	Empty	5000	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	< 0.1%	2.00%	1097.78	1306.00
Intermodal-D	Empty	5000	Distributed (Head and Rear)	20	2.80%	Decline	<0.1%	0.00	0.00	< 0.1%	9.00%	1139.84	1494.00
Intermodal-D	Empty	5000	Distributed (Head and Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	827.68	982.00
Intermodal-D	Empty	5000	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	< 0.1%	42.00%	1378.55	2025.00
Intermodal-D	Empty	5000	Distributed (Head and Rear)	30	0.50%	Decline	< 0.5%	12.00	12.00	< 0.1%	2.00%	1855.93	2234.00

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-D	Empty	5000	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1424.30	1580.00
Intermodal-D	Empty	5000	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	24.00%	1791.36	2631.00
Intermodal-D	Empty	5000	Distributed (Head and Rear)	30	0.00%	Flat	> 1.0%	12.50	14.00	< 0.1%	2.00%	1644.23	1964.00
Intermodal-D	Empty	5000	Distributed (Head and Rear)	57	1.00%	Crest	> 1.0%	4.00	4.00	< 0.1%	34.00%	3687.10	4022.00
Intermodal-D	Empty	5000	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	< 10%	32.00%	5232.82	5977.00
Intermodal-D	Empty	5000	Distributed (Head and Rear)	60	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	15.00%	4138.69	4726.00
Intermodal-D	Empty	5000	Distributed (Head and Rear)	60	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	89.00%	4910.74	5738.00
Intermodal-D	Empty	5000	Distributed (Head and Rear)	60	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	55.00%	4662.76	5570.00
Intermodal-D	Empty	5000	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	14.00%	4668.89	5320.00
Intermodal-E	Empty	5000	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	445.02	523.00
Intermodal-E	Empty	5000	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	311.25	343.00
Intermodal-E	Empty	5000	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	489.69	643.00
Intermodal-E	Empty	5000	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	368.60	421.00
Intermodal-E	Empty	5000	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	< 0.1%	1.00%	1069.42	1309.00
Intermodal-E	Empty	5000	Distributed (Head and Rear)	20	2.80%	Decline	<0.1%	0.00	0.00	< 0.1%	7.00%	1126.70	1547.00
Intermodal-E	Empty	5000	Distributed (Head and Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	824.24	961.00
Intermodal-E	Empty	5000	Distributed (Head and Rear)	25	1.70%	Decline	< 0.5%	0.00	0.00	< 0.1%	38.00%	1362.79	1889.00
Intermodal-E	Empty	5000	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	1.00%	1809.51	2153.00
Intermodal-E	Empty	5000	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1410.83	1613.00
Intermodal-E	Empty	5000	Distributed (Head and Rear)	30	1.10%	Decline	> 1.0%	4.00	5.00	< 0.1%	28.00%	1748.44	2625.00
Intermodal-E	Empty	5000	Distributed (Head and Rear)	30	0.00%	Flat	> 1.0%	10.67	18.00	< 0.1%	3.00%	1607.39	1895.00
Intermodal-E	Empty	5000	Distributed (Head and Rear)	57	1.00%	Crest	> 1.0%	18.00	18.00	< 0.1%	31.00%	3597.11	3916.00
Intermodal-E	Empty	5000	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	19.00%	5091.43	6132.00
Intermodal-E	Empty	5000	Distributed (Head and Rear)	60	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	7.00%	4043.68	4645.00
Intermodal-E	Empty	5000	Distributed (Head and Rear)	60	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	86.00%	4804.07	5654.00
Intermodal-E	Empty	5000	Distributed (Head and Rear)	60	1.00%	Trough	<0.1%	0.00	0.00	< 10%	54.00%	4914.63	6448.00
Intermodal-E	Empty	5000	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	9.00%	4557.42	5092.00

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-A	Loaded	5000	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	527.50	644.00
Intermodal-A	Loaded	5000	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	383.80	421.00
Intermodal-A	Loaded	5000	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	632.23	766.00
Intermodal-A	Loaded	5000	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	459.73	516.00
Intermodal-A	Loaded	5000	Distributed (Head and Rear)	15	2.80%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	42.00%	1671.33	6557.00
Intermodal-A	Loaded	5000	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	< 0.1%	30.00%	1367.34	1949.00
Intermodal-A	Loaded	5000	Distributed (Head and Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	871.35	965.00
Intermodal-A	Loaded	5000	Distributed (Head and Rear)	25	1.70%	Decline	> 1.0%	12.33	27.00	< 0.1%	61.00%	1725.24	2283.00
Intermodal-A	Loaded	5000	Distributed (Head and Rear)	30	0.50%	Decline	> 1.0%	10.33	16.00	< 0.1%	30.00%	2275.64	3331.00
Intermodal-A	Loaded	5000	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1780.21	2003.00
Intermodal-A	Loaded	5000	Distributed (Head and Rear)	30	1.10%	Decline	> 1.0%	11.40	43.00	< 0.1%	56.00%	2211.40	2879.00
Intermodal-A	Loaded	5000	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	1.00%	2109.64	2488.00
Intermodal-A	Loaded	5000	Distributed (Head and Rear)	35	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	2214.94	2532.00
Intermodal-A	Loaded	5000	Distributed (Head and Rear)	55	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	2.00%	4743.67	5202.00
Intermodal-A	Loaded	5000	Distributed (Head and Rear)	70	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	47.00%	9069.02	11158.00
Intermodal-A	Loaded	5000	Distributed (Head and Rear)	70	1.10%	Decline	< 0.5%	74.00	74.00	< 10%	25.00%	8548.63	19398.00
Intermodal-A	Loaded	5000	Distributed (Head and Rear)	70	1.00%	Trough	<0.1%	0.00	0.00	> 25%, < 50%	16.00%	10763.38	14755.00
Intermodal-A	Loaded	5000	Distributed (Head and Rear)	70	0.00%	Flat	> 1.0%	14.50	25.00	< 0.1%	5.00%	8720.79	9942.00
Intermodal-B	Loaded	5000	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	454.30	607.00
Intermodal-B	Loaded	5000	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	352.12	400.00
Intermodal-B	Loaded	5000	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	540.58	641.00
Intermodal-B	Loaded	5000	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	404.72	500.00
Intermodal-B	Loaded	5000	Distributed (Head and Rear)	15	2.80%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	772.43	1028.00
Intermodal-B	Loaded	5000	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	< 0.1%	1.00%	1152.08	1414.00
Intermodal-B	Loaded	5000	Distributed (Head and Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	865.11	949.00
Intermodal-B	Loaded	5000	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	< 0.1%	1.00%	1453.52	1778.00
Intermodal-B	Loaded	5000	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	12.00%	1828.35	2185.00

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-B	Loaded	5000	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1523.55	1774.00
Intermodal-B	Loaded	5000	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	3.00%	1868.75	2258.00
Intermodal-B	Loaded	5000	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	1789.63	2040.00
Intermodal-B	Loaded	5000	Distributed (Head and Rear)	35	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	2027.34	2206.00
Intermodal-B	Loaded	5000	Distributed (Head and Rear)	55	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	4028.61	4638.00
Intermodal-B	Loaded	5000	Distributed (Head and Rear)	70	0.50%	Decline	<0.1%	0.00	0.00	< 10%	14.00%	7407.71	9849.00
Intermodal-B	Loaded	5000	Distributed (Head and Rear)	70	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	5.00%	6831.30	8142.00
Intermodal-B	Loaded	5000	Distributed (Head and Rear)	70	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	4.00%	6801.11	8387.00
Intermodal-B	Loaded	5000	Distributed (Head and Rear)	70	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	7026.03	7817.00
Intermodal-C	Loaded	5000	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	441.20	492.00
Intermodal-C	Loaded	5000	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	376.25	411.00
Intermodal-C	Loaded	5000	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	514.35	607.00
Intermodal-C	Loaded	5000	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	388.64	447.00
Intermodal-C	Loaded	5000	Distributed (Head and Rear)	15	2.80%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	714.99	870.00
Intermodal-C	Loaded	5000	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	< 0.1%	1.00%	1136.41	1358.00
Intermodal-C	Loaded	5000	Distributed (Head and Rear)	25	1.50%	Incline	< 0.5%	4.00	4.00	< 0.1%	1.00%	810.86	893.00
Intermodal-C	Loaded	5000	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	< 0.1%	2.00%	1402.47	1657.00
Intermodal-C	Loaded	5000	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	2.00%	1831.68	2367.00
Intermodal-C	Loaded	5000	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1455.62	1734.00
Intermodal-C	Loaded	5000	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	7.00%	1795.61	2141.00
Intermodal-C	Loaded	5000	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	1719.25	2135.00
Intermodal-C	Loaded	5000	Distributed (Head and Rear)	35	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	1900.01	2075.00
Intermodal-C	Loaded	5000	Distributed (Head and Rear)	55	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	3913.65	4470.00
Intermodal-C	Loaded	5000	Distributed (Head and Rear)	70	0.50%	Decline	<0.1%	0.00	0.00	< 10%	10.00%	6979.33	8807.00
Intermodal-C	Loaded	5000	Distributed (Head and Rear)	70	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	11.00%	6666.54	7728.00
Intermodal-C	Loaded	5000	Distributed (Head and Rear)	70	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	9.00%	6470.46	7609.00
Intermodal-C	Loaded	5000	Distributed (Head and Rear)	70	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	6547.70	7901.00

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-D	Loaded	5000	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	471.61	578.00
Intermodal-D	Loaded	5000	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	364.77	416.00
Intermodal-D	Loaded	5000	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	565.16	669.00
Intermodal-D	Loaded	5000	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	418.42	462.00
Intermodal-D	Loaded	5000	Distributed (Head and Rear)	15	2.80%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	825.19	1050.00
Intermodal-D	Loaded	5000	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	< 0.1%	1.00%	1170.18	1531.00
Intermodal-D	Loaded	5000	Distributed (Head and Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	832.87	936.00
Intermodal-D	Loaded	5000	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	< 0.1%	14.00%	1531.03	1859.00
Intermodal-D	Loaded	5000	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	6.00%	1886.96	2194.00
Intermodal-D	Loaded	5000	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1569.96	1782.00
Intermodal-D	Loaded	5000	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	13.00%	1919.68	2352.00
Intermodal-D	Loaded	5000	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	1865.50	2179.00
Intermodal-D	Loaded	5000	Distributed (Head and Rear)	35	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	1.00%	2025.56	2183.00
Intermodal-D	Loaded	5000	Distributed (Head and Rear)	55	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	4203.83	4642.00
Intermodal-D	Loaded	5000	Distributed (Head and Rear)	70	0.50%	Decline	<0.1%	0.00	0.00	< 10%	17.00%	7672.94	10054.00
Intermodal-D	Loaded	5000	Distributed (Head and Rear)	70	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	5.00%	7284.51	9104.00
Intermodal-D	Loaded	5000	Distributed (Head and Rear)	70	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	3.00%	7143.22	8821.00
Intermodal-D	Loaded	5000	Distributed (Head and Rear)	70	0.00%	Flat	<0.1%	0.00	0.00	< 10%	0.00%	7301.70	8222.00
Intermodal-E	Loaded	5000	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	464.59	586.00
Intermodal-E	Loaded	5000	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	371.23	421.00
Intermodal-E	Loaded	5000	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	534.69	651.00
Intermodal-E	Loaded	5000	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	407.63	474.00
Intermodal-E	Loaded	5000	Distributed (Head and Rear)	15	2.80%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	761.09	939.00
Intermodal-E	Loaded	5000	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	1134.78	1413.00
Intermodal-E	Loaded	5000	Distributed (Head and Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	826.96	931.00
Intermodal-E	Loaded	5000	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	< 0.1%	8.00%	1449.57	1733.00
Intermodal-E	Loaded	5000	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	7.00%	1882.53	2315.00

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-E	Loaded	5000	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1518.69	1820.00
Intermodal-E	Loaded	5000	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	11.00%	1828.05	2421.00
Intermodal-E	Loaded	5000	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	1787.79	2045.00
Intermodal-E	Loaded	5000	Distributed (Head and Rear)	35	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	1948.98	2226.00
Intermodal-E	Loaded	5000	Distributed (Head and Rear)	55	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	4033.39	4462.00
Intermodal-E	Loaded	5000	Distributed (Head and Rear)	70	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	9.00%	7382.63	9123.00
Intermodal-E	Loaded	5000	Distributed (Head and Rear)	70	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	16.00%	7063.04	7863.00
Intermodal-E	Loaded	5000	Distributed (Head and Rear)	70	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	4.00%	6718.53	7993.00
Intermodal-E	Loaded	5000	Distributed (Head and Rear)	70	0.00%	Flat	<0.1%	0.00	0.00	< 10%	0.00%	6892.59	7883.00
Intermodal-A	Empty	7500	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	745.15	888.00
Intermodal-A	Empty	7500	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	442.43	493.00
Intermodal-A	Empty	7500	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	853.24	1053.00
Intermodal-A	Empty	7500	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	530.17	666.00
Intermodal-A	Empty	7500	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	1836.51	2502.00
Intermodal-A	Empty	7500	Head end only	20	2.80%	Decline	<0.1%	0.00	0.00	> 50%	2.00%	1851.61	2633.00
Intermodal-A	Empty	7500	Head end only	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1080.28	1176.00
Intermodal-A	Empty	7500	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	2148.37	3091.00
Intermodal-A	Empty	7500	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	2891.84	3306.00
Intermodal-A	Empty	7500	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1985.80	2204.00
Intermodal-A	Empty	7500	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2655.10	3258.00
Intermodal-A	Empty	7500	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2384.39	2676.00
Intermodal-A	Empty	7500	Head end only	52	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	4365.77	4771.00
Intermodal-A	Empty	7500	Head end only	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7509.96	8622.00
Intermodal-A	Empty	7500	Head end only	60	0.50%	Incline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	5486.32	6139.00
Intermodal-A	Empty	7500	Head end only	60	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7141.43	8142.00
Intermodal-A	Empty	7500	Head end only	60	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	6804.19	9586.00
Intermodal-A	Empty	7500	Head end only	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	6556.54	7538.00

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-B	Empty	7500	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	655.64	783.00
Intermodal-B	Empty	7500	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	405.57	472.00
Intermodal-B	Empty	7500	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	728.93	1005.00
Intermodal-B	Empty	7500	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	483.32	574.00
Intermodal-B	Empty	7500	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	< 0.1%	11.00%	1556.77	2217.00
Intermodal-B	Empty	7500	Head end only	20	2.80%	Decline	<0.1%	0.00	0.00	< 10%	5.00%	1590.61	2078.00
Intermodal-B	Empty	7500	Head end only	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1016.38	1114.00
Intermodal-B	Empty	7500	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	< 0.1%	13.00%	1820.25	2308.00
Intermodal-B	Empty	7500	Head end only	30	0.50%	Decline	< 0.5%	2.00	2.00	< 0.1%	1.00%	2503.06	2986.00
Intermodal-B	Empty	7500	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1796.99	2125.00
Intermodal-B	Empty	7500	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	16.00%	2307.29	2752.00
Intermodal-B	Empty	7500	Head end only	30	0.00%	Flat	> 1.0%	21.00	32.00	< 0.1%	2.00%	2109.88	2353.00
Intermodal-B	Empty	7500	Head end only	52	1.00%	Crest	> 1.0%	27.67	152.00	< 0.1%	45.00%	4000.34	4503.00
Intermodal-B	Empty	7500	Head end only	60	0.50%	Decline	> 1.0%	88.00	91.00	< 0.1%	7.00%	6331.13	7129.00
Intermodal-B	Empty	7500	Head end only	60	0.50%	Incline	> 1.0%	47.50	61.00	< 0.1%	2.00%	4925.79	5451.00
Intermodal-B	Empty	7500	Head end only	60	1.10%	Decline	< 0.5%	7.00	7.00	< 0.1%	40.00%	6126.84	7776.00
Intermodal-B	Empty	7500	Head end only	60	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	6.00%	5766.62	6963.00
Intermodal-B	Empty	7500	Head end only	60	0.00%	Flat	> 1.0%	47.33	86.00	< 0.1%	4.00%	5635.13	6307.00
Intermodal-C	Empty	7500	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	689.57	823.00
Intermodal-C	Empty	7500	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	437.08	482.00
Intermodal-C	Empty	7500	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	781.24	1020.00
Intermodal-C	Empty	7500	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	504.48	560.00
Intermodal-C	Empty	7500	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	< 10%	4.00%	1642.00	2169.00
Intermodal-C	Empty	7500	Head end only	20	2.80%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	6.00%	1695.60	2569.00
Intermodal-C	Empty	7500	Head end only	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1065.21	1141.00
Intermodal-C	Empty	7500	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	< 10%	5.00%	2004.78	2615.00
Intermodal-C	Empty	7500	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2679.96	3262.00

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-C	Empty	7500	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1877.60	2197.00
Intermodal-C	Empty	7500	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	1.00%	2448.07	3247.00
Intermodal-C	Empty	7500	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2243.23	2461.00
Intermodal-C	Empty	7500	Head end only	52	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	6.00%	4194.92	4500.00
Intermodal-C	Empty	7500	Head end only	60	0.50%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	6881.22	8082.00
Intermodal-C	Empty	7500	Head end only	60	0.50%	Incline	<0.1%	0.00	0.00	< 10%	0.00%	5219.40	5622.00
Intermodal-C	Empty	7500	Head end only	60	1.10%	Decline	<0.1%	0.00	0.00	< 10%	6.00%	6545.29	7867.00
Intermodal-C	Empty	7500	Head end only	60	1.00%	Trough	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	6248.12	7473.00
Intermodal-C	Empty	7500	Head end only	60	0.00%	Flat	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	6058.61	6853.00
Intermodal-D	Empty	7500	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	675.85	808.00
Intermodal-D	Empty	7500	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	411.09	480.00
Intermodal-D	Empty	7500	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	751.37	1126.00
Intermodal-D	Empty	7500	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	496.43	575.00
Intermodal-D	Empty	7500	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	< 10%	7.00%	1607.35	2191.00
Intermodal-D	Empty	7500	Head end only	20	2.80%	Decline	<0.1%	0.00	0.00	< 10%	2.00%	1597.34	2021.00
Intermodal-D	Empty	7500	Head end only	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1045.32	1145.00
Intermodal-D	Empty	7500	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	< 10%	8.00%	1917.27	2399.00
Intermodal-D	Empty	7500	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2579.24	3116.00
Intermodal-D	Empty	7500	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1840.29	2037.00
Intermodal-D	Empty	7500	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	3.00%	2367.20	3033.00
Intermodal-D	Empty	7500	Head end only	30	0.00%	Flat	< 0.5%	8.00	8.00	< 0.1%	1.00%	2168.59	2456.00
Intermodal-D	Empty	7500	Head end only	52	1.00%	Crest	> 1.0%	45.00	45.00	< 0.1%	12.00%	4096.19	4480.00
Intermodal-D	Empty	7500	Head end only	60	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	2.00%	6633.88	8100.00
Intermodal-D	Empty	7500	Head end only	60	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	5050.76	5718.00
Intermodal-D	Empty	7500	Head end only	60	1.10%	Decline	<0.1%	0.00	0.00	< 10%	11.00%	6280.26	7490.00
Intermodal-D	Empty	7500	Head end only	60	1.00%	Trough	<0.1%	0.00	0.00	< 10%	0.00%	5935.98	6945.00
Intermodal-D	Empty	7500	Head end only	60	0.00%	Flat	< 0.5%	56.00	56.00	< 10%	1.00%	5811.84	6491.00

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-E	Empty	7500	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	694.80	943.00
Intermodal-E	Empty	7500	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	423.51	510.00
Intermodal-E	Empty	7500	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	775.75	978.00
Intermodal-E	Empty	7500	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	505.00	557.00
Intermodal-E	Empty	7500	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	< 10%	4.00%	1693.01	2355.00
Intermodal-E	Empty	7500	Head end only	20	2.80%	Decline	<0.1%	0.00	0.00	< 10%	5.00%	1687.01	2159.00
Intermodal-E	Empty	7500	Head end only	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1061.48	1149.00
Intermodal-E	Empty	7500	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	< 10%	6.00%	1985.37	2608.00
Intermodal-E	Empty	7500	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2663.98	3253.00
Intermodal-E	Empty	7500	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1880.27	2116.00
Intermodal-E	Empty	7500	Head end only	30	1.10%	Decline	< 0.5%	5.00	5.00	< 0.1%	1.00%	2432.88	3193.00
Intermodal-E	Empty	7500	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2243.51	2496.00
Intermodal-E	Empty	7500	Head end only	52	1.00%	Crest	> 1.0%	79.00	79.00	< 0.1%	9.00%	4173.66	4565.00
Intermodal-E	Empty	7500	Head end only	60	0.50%	Decline	> 1.0%	10.00	10.00	> 25%, < 50%	3.00%	6878.38	8008.00
Intermodal-E	Empty	7500	Head end only	60	0.50%	Incline	<0.1%	0.00	0.00	< 10%	0.00%	5184.69	5879.00
Intermodal-E	Empty	7500	Head end only	60	1.10%	Decline	<0.1%	0.00	0.00	< 10%	2.00%	6460.68	7689.00
Intermodal-E	Empty	7500	Head end only	60	1.00%	Trough	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	6173.05	7643.00
Intermodal-E	Empty	7500	Head end only	60	0.00%	Flat	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	6023.77	6915.00
Intermodal-A	Loaded	7500	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	919.06	1172.00
Intermodal-A	Loaded	7500	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	627.09	760.00
Intermodal-A	Loaded	7500	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	1099.28	1343.00
Intermodal-A	Loaded	7500	Head end only	10	0.00%	Flat	> 1.0%	3.00	3.00	< 0.1%	1.00%	651.36	738.00
Intermodal-A	Loaded	7500	Head end only	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	23.00%	4540.05	12675.00
Intermodal-A	Loaded	7500	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	3.00%	4636.13	13814.00
Intermodal-A	Loaded	7500	Head end only	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1121.97	1202.00
Intermodal-A	Loaded	7500	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	11.00%	3859.85	14079.00
Intermodal-A	Loaded	7500	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	< 10%	3.00%	3551.42	4520.00

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-A	Loaded	7500	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	1.00%	2344.73	2584.00
Intermodal-A	Loaded	7500	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	48.00%	3230.25	4027.00
Intermodal-A	Loaded	7500	Head end only	30	0.00%	Flat	< 0.5%	1.00	1.00	< 0.1%	2.00%	2941.49	3301.00
Intermodal-A	Loaded	7500	Head end only	33	1.00%	Crest	> 1.0%	11.50	22.00	< 0.1%	10.00%	2855.36	3136.00
Intermodal-A	Loaded	7500	Head end only	50	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	1.00%	5208.71	5785.00
Intermodal-A	Loaded	7500	Head end only	70	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	26.00%	11703.31	16487.00
Intermodal-A	Loaded	7500	Head end only	70	1.10%	Decline	< 0.5%	46.00	46.00	< 10%	20.00%	11044.22	26899.00
Intermodal-A	Loaded	7500	Head end only	70	1.00%	Trough	<0.1%	0.00	0.00	< 10%	1.00%	9390.06	17549.00
Intermodal-A	Loaded	7500	Head end only	70	0.00%	Flat	<0.1%	0.00	0.00	> 25%, < 50%	6.00%	10978.43	12217.00
Intermodal-B	Loaded	7500	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	748.83	872.00
Intermodal-B	Loaded	7500	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	389.91	492.00
Intermodal-B	Loaded	7500	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	911.84	1198.00
Intermodal-B	Loaded	7500	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	573.21	652.00
Intermodal-B	Loaded	7500	Head end only	15	2.80%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	1242.66	1630.00
Intermodal-B	Loaded	7500	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	4.00%	1784.26	2539.00
Intermodal-B	Loaded	7500	Head end only	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1082.63	1172.00
Intermodal-B	Loaded	7500	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	< 10%	6.00%	2233.34	7003.00
Intermodal-B	Loaded	7500	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2939.19	3419.00
Intermodal-B	Loaded	7500	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	2131.66	2358.00
Intermodal-B	Loaded	7500	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	10.00%	2742.35	3540.00
Intermodal-B	Loaded	7500	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2561.92	2990.00
Intermodal-B	Loaded	7500	Head end only	33	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	2562.67	2910.00
Intermodal-B	Loaded	7500	Head end only	50	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	4543.30	4853.00
Intermodal-B	Loaded	7500	Head end only	70	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	7.00%	9445.79	11339.00
Intermodal-B	Loaded	7500	Head end only	70	1.10%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	2.00%	9246.43	11001.00
Intermodal-B	Loaded	7500	Head end only	70	1.00%	Trough	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	8125.24	10163.00
Intermodal-B	Loaded	7500	Head end only	70	0.00%	Flat	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	8982.26	10396.00

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-C	Loaded	7500	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	755.30	893.00
Intermodal-C	Loaded	7500	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	390.53	434.00
Intermodal-C	Loaded	7500	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	935.20	1250.00
Intermodal-C	Loaded	7500	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	573.84	648.00
Intermodal-C	Loaded	7500	Head end only	15	2.80%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	1261.56	1683.00
Intermodal-C	Loaded	7500	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	2.00%	1784.55	2613.00
Intermodal-C	Loaded	7500	Head end only	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1060.79	1171.00
Intermodal-C	Loaded	7500	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	< 10%	10.00%	2248.96	3025.00
Intermodal-C	Loaded	7500	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	2895.24	3431.00
Intermodal-C	Loaded	7500	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	2158.78	2371.00
Intermodal-C	Loaded	7500	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	< 10%	4.00%	2818.68	3750.00
Intermodal-C	Loaded	7500	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2600.07	2944.00
Intermodal-C	Loaded	7500	Head end only	33	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	2613.41	2863.00
Intermodal-C	Loaded	7500	Head end only	50	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	4632.35	5075.00
Intermodal-C	Loaded	7500	Head end only	70	0.50%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	5.00%	9864.08	12303.00
Intermodal-C	Loaded	7500	Head end only	70	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	3.00%	9333.23	10784.00
Intermodal-C	Loaded	7500	Head end only	70	1.00%	Trough	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	8190.32	10382.00
Intermodal-C	Loaded	7500	Head end only	70	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	9096.66	10601.00
Intermodal-D	Loaded	7500	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	736.56	953.00
Intermodal-D	Loaded	7500	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	396.61	442.00
Intermodal-D	Loaded	7500	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	920.09	1127.00
Intermodal-D	Loaded	7500	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	575.21	651.00
Intermodal-D	Loaded	7500	Head end only	15	2.80%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	1217.64	1526.00
Intermodal-D	Loaded	7500	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	1927.89	7470.00
Intermodal-D	Loaded	7500	Head end only	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1003.76	1131.00
Intermodal-D	Loaded	7500	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	5.00%	2246.65	2805.00
Intermodal-D	Loaded	7500	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2922.02	3521.00

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-D	Loaded	7500	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	2110.26	2447.00
Intermodal-D	Loaded	7500	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	3.00%	2739.09	3497.00
Intermodal-D	Loaded	7500	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2574.95	2862.00
Intermodal-D	Loaded	7500	Head end only	33	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	1.00%	2613.71	2909.00
Intermodal-D	Loaded	7500	Head end only	50	0.50%	Incline	<0.1%	0.00	0.00	< 10%	0.00%	4634.01	5148.00
Intermodal-D	Loaded	7500	Head end only	70	0.50%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	2.00%	9600.50	12719.00
Intermodal-D	Loaded	7500	Head end only	70	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	9250.41	10911.00
Intermodal-D	Loaded	7500	Head end only	70	1.00%	Trough	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	8268.56	9563.00
Intermodal-D	Loaded	7500	Head end only	70	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	9078.86	10452.00
Intermodal-E	Loaded	7500	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	751.03	1024.00
Intermodal-E	Loaded	7500	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	392.60	426.00
Intermodal-E	Loaded	7500	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	917.58	1111.00
Intermodal-E	Loaded	7500	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	572.27	675.00
Intermodal-E	Loaded	7500	Head end only	15	2.80%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	1217.99	1644.00
Intermodal-E	Loaded	7500	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	1733.75	2097.00
Intermodal-E	Loaded	7500	Head end only	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1055.74	1169.00
Intermodal-E	Loaded	7500	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	< 10%	3.00%	2208.54	2712.00
Intermodal-E	Loaded	7500	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2855.04	3349.00
Intermodal-E	Loaded	7500	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	2140.10	2354.00
Intermodal-E	Loaded	7500	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	1.00%	2749.75	3172.00
Intermodal-E	Loaded	7500	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2534.94	2864.00
Intermodal-E	Loaded	7500	Head end only	33	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	1.00%	2604.44	2918.00
Intermodal-E	Loaded	7500	Head end only	50	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	4578.26	5063.00
Intermodal-E	Loaded	7500	Head end only	70	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	4.00%	9553.74	11501.00
Intermodal-E	Loaded	7500	Head end only	70	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	9082.54	10800.00
Intermodal-E	Loaded	7500	Head end only	70	1.00%	Trough	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	8096.16	10071.00
Intermodal-E	Loaded	7500	Head end only	70	0.00%	Flat	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	8900.93	9898.00

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-A	Empty	7500	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	498.14	616.00
Intermodal-A	Empty	7500	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	324.97	377.00
Intermodal-A	Empty	7500	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	542.43	709.00
Intermodal-A	Empty	7500	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	402.12	482.00
Intermodal-A	Empty	7500	Distributed (Head and Rear)	20	2.20%	Decline	> 1.0%	7.00	7.00	< 0.1%	19.00%	1189.56	1684.00
Intermodal-A	Empty	7500	Distributed (Head and Rear)	20	2.80%	Decline	<0.1%	0.00	0.00	< 0.1%	10.00%	1202.83	1575.00
Intermodal-A	Empty	7500	Distributed (Head and Rear)	25	1.50%	Incline	< 0.5%	2.00	2.00	< 0.1%	1.00%	878.02	1023.00
Intermodal-A	Empty	7500	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	< 10%	28.00%	1482.53	1946.00
Intermodal-A	Empty	7500	Distributed (Head and Rear)	30	0.50%	Decline	> 1.0%	14.00	24.00	< 0.1%	9.00%	2018.58	2442.00
Intermodal-A	Empty	7500	Distributed (Head and Rear)	30	0.50%	Incline	> 1.0%	10.75	21.00	< 0.1%	8.00%	1510.87	1791.00
Intermodal-A	Empty	7500	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	45.00%	1856.97	2326.00
Intermodal-A	Empty	7500	Distributed (Head and Rear)	30	0.00%	Flat	> 1.0%	14.33	29.00	< 0.1%	20.00%	1715.16	2092.00
Intermodal-A	Empty	7500	Distributed (Head and Rear)	52	1.00%	Crest	> 1.0%	15.75	33.00	< 0.1%	57.00%	3466.42	3990.00
Intermodal-A	Empty	7500	Distributed (Head and Rear)	60	0.50%	Decline	> 1.0%	21.00	30.00	> 10%, < 25%	38.00%	5530.64	6584.00
Intermodal-A	Empty	7500	Distributed (Head and Rear)	60	0.50%	Incline	> 1.0%	19.25	33.00	< 0.1%	17.00%	4271.44	5054.00
Intermodal-A	Empty	7500	Distributed (Head and Rear)	60	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	65.00%	5256.43	6286.00
Intermodal-A	Empty	7500	Distributed (Head and Rear)	60	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	34.00%	4846.95	5881.00
Intermodal-A	Empty	7500	Distributed (Head and Rear)	60	0.00%	Flat	> 1.0%	25.75	67.00	< 10%	35.00%	4901.96	5617.00
Intermodal-B	Empty	7500	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	475.31	603.00
Intermodal-B	Empty	7500	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	316.21	361.00
Intermodal-B	Empty	7500	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	522.53	671.00
Intermodal-B	Empty	7500	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	386.40	462.00
Intermodal-B	Empty	7500	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	< 0.1%	26.00%	1155.88	1749.00
Intermodal-B	Empty	7500	Distributed (Head and Rear)	20	2.80%	Decline	<0.1%	0.00	0.00	< 0.1%	20.00%	1176.32	1553.00
Intermodal-B	Empty	7500	Distributed (Head and Rear)	25	1.50%	Incline	> 1.0%	8.00	8.00	< 0.1%	1.00%	866.61	997.00
Intermodal-B	Empty	7500	Distributed (Head and Rear)	25	1.70%	Decline	> 1.0%	3.50	4.00	< 0.1%	34.00%	1419.05	1838.00
Intermodal-B	Empty	7500	Distributed (Head and Rear)	30	0.50%	Decline	> 1.0%	14.13	30.00	< 0.1%	30.00%	1931.59	2443.00

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-B	Empty	7500	Distributed (Head and Rear)	30	0.50%	Incline	> 1.0%	11.09	22.00	< 0.1%	14.00%	1476.54	1702.00
Intermodal-B	Empty	7500	Distributed (Head and Rear)	30	1.10%	Decline	> 1.0%	3.00	3.00	< 0.1%	62.00%	1796.69	2200.00
Intermodal-B	Empty	7500	Distributed (Head and Rear)	30	0.00%	Flat	> 25%	11.74	25.00	< 0.1%	35.00%	1667.02	1914.00
Intermodal-B	Empty	7500	Distributed (Head and Rear)	52	1.00%	Crest	> 1.0%	16.39	35.00	< 0.1%	84.00%	3346.30	3833.00
Intermodal-B	Empty	7500	Distributed (Head and Rear)	60	0.50%	Decline	> 1.0%	21.00	21.00	< 0.1%	62.00%	5271.57	6049.00
Intermodal-B	Empty	7500	Distributed (Head and Rear)	60	0.50%	Incline	> 1.0%	21.73	40.00	< 0.1%	40.00%	4119.96	4882.00
Intermodal-B	Empty	7500	Distributed (Head and Rear)	60	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	95.00%	4984.17	6120.00
Intermodal-B	Empty	7500	Distributed (Head and Rear)	60	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	65.00%	4710.43	5738.00
Intermodal-B	Empty	7500	Distributed (Head and Rear)	60	0.00%	Flat	> 1.0%	24.15	46.00	< 0.1%	55.00%	4693.65	5503.00
Intermodal-C	Empty	7500	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	482.96	589.00
Intermodal-C	Empty	7500	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	319.64	391.00
Intermodal-C	Empty	7500	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	533.74	665.00
Intermodal-C	Empty	7500	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	391.67	437.00
Intermodal-C	Empty	7500	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	< 0.1%	18.00%	1162.61	1622.00
Intermodal-C	Empty	7500	Distributed (Head and Rear)	20	2.80%	Decline	<0.1%	0.00	0.00	< 0.1%	6.00%	1174.82	1406.00
Intermodal-C	Empty	7500	Distributed (Head and Rear)	25	1.50%	Incline	> 1.0%	4.00	4.00	< 0.1%	1.00%	868.96	997.00
Intermodal-C	Empty	7500	Distributed (Head and Rear)	25	1.70%	Decline	> 1.0%	2.00	2.00	< 0.1%	35.00%	1450.24	2048.00
Intermodal-C	Empty	7500	Distributed (Head and Rear)	30	0.50%	Decline	> 1.0%	8.25	20.00	< 0.1%	16.00%	1943.56	2305.00
Intermodal-C	Empty	7500	Distributed (Head and Rear)	30	0.50%	Incline	> 1.0%	4.50	12.00	< 0.1%	7.00%	1480.33	1699.00
Intermodal-C	Empty	7500	Distributed (Head and Rear)	30	1.10%	Decline	< 0.5%	3.00	3.00	< 0.1%	49.00%	1839.71	2449.00
Intermodal-C	Empty	7500	Distributed (Head and Rear)	30	0.00%	Flat	> 1.0%	9.83	15.00	< 0.1%	10.00%	1696.80	1994.00
Intermodal-C	Empty	7500	Distributed (Head and Rear)	52	1.00%	Crest	> 1.0%	14.31	47.00	< 0.1%	64.00%	3449.96	3920.00
Intermodal-C	Empty	7500	Distributed (Head and Rear)	60	0.50%	Decline	> 1.0%	17.33	38.00	< 0.1%	34.00%	5349.27	6069.00
Intermodal-C	Empty	7500	Distributed (Head and Rear)	60	0.50%	Incline	> 1.0%	18.67	47.00	< 0.1%	19.00%	4192.26	4798.00
Intermodal-C	Empty	7500	Distributed (Head and Rear)	60	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	84.00%	5062.22	5915.00
Intermodal-C	Empty	7500	Distributed (Head and Rear)	60	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	36.00%	4720.53	5646.00
Intermodal-C	Empty	7500	Distributed (Head and Rear)	60	0.00%	Flat	> 1.0%	9.00	15.00	< 0.1%	29.00%	4812.80	5583.00

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-D	Empty	7500	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	477.51	549.00
Intermodal-D	Empty	7500	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	324.92	407.00
Intermodal-D	Empty	7500	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	523.68	618.00
Intermodal-D	Empty	7500	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	390.64	432.00
Intermodal-D	Empty	7500	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	< 0.1%	18.00%	1126.00	1367.00
Intermodal-D	Empty	7500	Distributed (Head and Rear)	20	2.80%	Decline	<0.1%	0.00	0.00	< 0.1%	7.00%	1179.91	1583.00
Intermodal-D	Empty	7500	Distributed (Head and Rear)	25	1.50%	Incline	> 1.0%	5.00	5.00	< 0.1%	1.00%	865.70	979.00
Intermodal-D	Empty	7500	Distributed (Head and Rear)	25	1.70%	Decline	< 0.5%	2.00	2.00	< 0.1%	27.00%	1417.12	1707.00
Intermodal-D	Empty	7500	Distributed (Head and Rear)	30	0.50%	Decline	> 1.0%	15.78	29.00	< 0.1%	15.00%	1935.92	2340.00
Intermodal-D	Empty	7500	Distributed (Head and Rear)	30	0.50%	Incline	> 1.0%	7.67	14.00	< 0.1%	7.00%	1480.65	1657.00
Intermodal-D	Empty	7500	Distributed (Head and Rear)	30	1.10%	Decline	> 1.0%	2.50	4.00	< 0.1%	61.00%	1784.46	2106.00
Intermodal-D	Empty	7500	Distributed (Head and Rear)	30	0.00%	Flat	> 1.0%	12.60	27.00	< 0.1%	16.00%	1680.52	1883.00
Intermodal-D	Empty	7500	Distributed (Head and Rear)	52	1.00%	Crest	> 1.0%	15.78	32.00	< 0.1%	74.00%	3392.29	3773.00
Intermodal-D	Empty	7500	Distributed (Head and Rear)	60	0.50%	Decline	> 1.0%	11.00	11.00	< 0.1%	37.00%	5309.33	5969.00
Intermodal-D	Empty	7500	Distributed (Head and Rear)	60	0.50%	Incline	> 1.0%	29.50	45.00	< 0.1%	26.00%	4161.12	4821.00
Intermodal-D	Empty	7500	Distributed (Head and Rear)	60	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	94.00%	4939.38	6199.00
Intermodal-D	Empty	7500	Distributed (Head and Rear)	60	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	43.00%	4619.78	5469.00
Intermodal-D	Empty	7500	Distributed (Head and Rear)	60	0.00%	Flat	> 1.0%	26.67	41.00	< 0.1%	33.00%	4737.10	5501.00
Intermodal-E	Empty	7500	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	478.72	611.00
Intermodal-E	Empty	7500	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	320.92	371.00
Intermodal-E	Empty	7500	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	522.60	660.00
Intermodal-E	Empty	7500	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	391.37	455.00
Intermodal-E	Empty	7500	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	23.00%	1277.62	2623.00
Intermodal-E	Empty	7500	Distributed (Head and Rear)	20	2.80%	Decline	<0.1%	0.00	0.00	< 0.1%	11.00%	1175.20	1436.00
Intermodal-E	Empty	7500	Distributed (Head and Rear)	25	1.50%	Incline	> 1.0%	3.50	5.00	< 0.1%	3.00%	866.68	1002.00
Intermodal-E	Empty	7500	Distributed (Head and Rear)	25	1.70%	Decline	> 1.0%	4.00	6.00	< 0.1%	37.00%	1431.11	1920.00
Intermodal-E	Empty	7500	Distributed (Head and Rear)	30	0.50%	Decline	> 1.0%	11.77	27.00	< 0.1%	19.00%	1918.52	2263.00

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-E	Empty	7500	Distributed (Head and Rear)	30	0.50%	Incline	> 1.0%	11.88	26.00	< 0.1%	8.00%	1485.70	1735.00
Intermodal-E	Empty	7500	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	57.00%	1840.18	2400.00
Intermodal-E	Empty	7500	Distributed (Head and Rear)	30	0.00%	Flat	> 1.0%	9.28	22.00	< 0.1%	19.00%	1693.28	1957.00
Intermodal-E	Empty	7500	Distributed (Head and Rear)	52	1.00%	Crest	> 1.0%	15.88	31.00	< 0.1%	62.00%	3442.13	3802.00
Intermodal-E	Empty	7500	Distributed (Head and Rear)	60	0.50%	Decline	> 1.0%	67.50	121.00	< 0.1%	41.00%	5339.22	6156.00
Intermodal-E	Empty	7500	Distributed (Head and Rear)	60	0.50%	Incline	> 1.0%	28.57	55.00	< 0.1%	32.00%	4182.47	4976.00
Intermodal-E	Empty	7500	Distributed (Head and Rear)	60	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	78.00%	5025.37	5931.00
Intermodal-E	Empty	7500	Distributed (Head and Rear)	60	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	49.00%	4631.54	5365.00
Intermodal-E	Empty	7500	Distributed (Head and Rear)	60	0.00%	Flat	> 1.0%	15.00	17.00	< 0.1%	31.00%	4759.22	5511.00
Intermodal-A	Loaded	7500	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	1.00%	582.47	734.00
Intermodal-A	Loaded	7500	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	364.04	409.00
Intermodal-A	Loaded	7500	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	707.04	932.00
Intermodal-A	Loaded	7500	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	483.18	555.00
Intermodal-A	Loaded	7500	Distributed (Head and Rear)	15	2.80%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	41.00%	1349.42	8286.00
Intermodal-A	Loaded	7500	Distributed (Head and Rear)	20	2.20%	Decline	< 0.5%	10.00	10.00	< 0.1%	52.00%	1432.54	1892.00
Intermodal-A	Loaded	7500	Distributed (Head and Rear)	25	1.50%	Incline	> 1.0%	4.67	11.00	< 0.1%	5.00%	920.41	1023.00
Intermodal-A	Loaded	7500	Distributed (Head and Rear)	25	1.70%	Decline	> 1.0%	15.17	28.00	< 0.1%	82.00%	1864.03	2307.00
Intermodal-A	Loaded	7500	Distributed (Head and Rear)	30	0.50%	Decline	> 1.0%	11.00	20.00	< 0.1%	50.00%	2532.65	3129.00
Intermodal-A	Loaded	7500	Distributed (Head and Rear)	30	0.50%	Incline	> 1.0%	3.60	7.00	< 0.1%	25.00%	1890.78	2149.00
Intermodal-A	Loaded	7500	Distributed (Head and Rear)	30	1.10%	Decline	> 1.0%	26.56	74.00	< 0.1%	87.00%	2369.59	3091.00
Intermodal-A	Loaded	7500	Distributed (Head and Rear)	30	0.00%	Flat	> 1.0%	17.25	49.00	< 0.1%	35.00%	2250.43	2533.00
Intermodal-A	Loaded	7500	Distributed (Head and Rear)	33	1.00%	Crest	> 1.0%	17.11	37.00	< 0.1%	33.00%	2333.18	2577.00
Intermodal-A	Loaded	7500	Distributed (Head and Rear)	50	0.50%	Incline	> 1.0%	18.00	18.00	< 0.1%	12.00%	4262.96	4771.00
Intermodal-A	Loaded	7500	Distributed (Head and Rear)	70	0.50%	Decline	< 0.5%	57.00	57.00	< 0.1%	74.00%	9204.93	11831.00
Intermodal-A	Loaded	7500	Distributed (Head and Rear)	70	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	72.00%	8754.35	10682.00
Intermodal-A	Loaded	7500	Distributed (Head and Rear)	70	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	39.00%	7408.06	9505.00
Intermodal-A	Loaded	7500	Distributed (Head and Rear)	70	0.00%	Flat	> 1.0%	93.67	121.00	< 0.1%	33.00%	8937.06	10216.00

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-B	Loaded	7500	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	509.91	620.00
Intermodal-B	Loaded	7500	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	353.81	382.00
Intermodal-B	Loaded	7500	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	584.15	767.00
Intermodal-B	Loaded	7500	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	425.34	472.00
Intermodal-B	Loaded	7500	Distributed (Head and Rear)	15	2.80%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	825.68	1065.00
Intermodal-B	Loaded	7500	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	< 0.1%	9.00%	1210.69	1494.00
Intermodal-B	Loaded	7500	Distributed (Head and Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	917.01	1014.00
Intermodal-B	Loaded	7500	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	< 0.1%	25.00%	1571.10	1886.00
Intermodal-B	Loaded	7500	Distributed (Head and Rear)	30	0.50%	Decline	> 1.0%	9.00	30.00	< 0.1%	42.00%	1988.79	2434.00
Intermodal-B	Loaded	7500	Distributed (Head and Rear)	30	0.50%	Incline	> 1.0%	2.00	2.00	< 0.1%	1.00%	1610.40	1944.00
Intermodal-B	Loaded	7500	Distributed (Head and Rear)	30	1.10%	Decline	< 0.5%	1.00	1.00	< 0.1%	34.00%	2021.72	2509.00
Intermodal-B	Loaded	7500	Distributed (Head and Rear)	30	0.00%	Flat	> 1.0%	10.00	17.00	< 0.1%	7.00%	1906.06	2225.00
Intermodal-B	Loaded	7500	Distributed (Head and Rear)	33	1.00%	Crest	> 1.0%	14.20	46.00	< 0.1%	24.00%	2052.37	2520.00
Intermodal-B	Loaded	7500	Distributed (Head and Rear)	50	0.50%	Incline	> 1.0%	9.00	9.00	< 0.1%	7.00%	3609.73	4049.00
Intermodal-B	Loaded	7500	Distributed (Head and Rear)	70	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	58.00%	7534.69	8707.00
Intermodal-B	Loaded	7500	Distributed (Head and Rear)	70	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	56.00%	7231.93	8730.00
Intermodal-B	Loaded	7500	Distributed (Head and Rear)	70	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	35.00%	6907.93	7675.00
Intermodal-B	Loaded	7500	Distributed (Head and Rear)	70	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	7.00%	7181.69	8181.00
Intermodal-C	Loaded	7500	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	526.60	664.00
Intermodal-C	Loaded	7500	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	360.38	402.00
Intermodal-C	Loaded	7500	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	593.09	721.00
Intermodal-C	Loaded	7500	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	429.58	496.00
Intermodal-C	Loaded	7500	Distributed (Head and Rear)	15	2.80%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	828.25	1084.00
Intermodal-C	Loaded	7500	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	< 0.1%	11.00%	1259.39	1626.00
Intermodal-C	Loaded	7500	Distributed (Head and Rear)	25	1.50%	Incline	< 0.5%	1.00	1.00	< 0.1%	1.00%	893.71	978.00
Intermodal-C	Loaded	7500	Distributed (Head and Rear)	25	1.70%	Decline	< 0.5%	4.00	4.00	< 0.1%	21.00%	1572.76	2032.00
Intermodal-C	Loaded	7500	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	25.00%	1997.56	2509.00

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-C	Loaded	7500	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1610.01	1886.00
Intermodal-C	Loaded	7500	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	25.00%	2047.46	2424.00
Intermodal-C	Loaded	7500	Distributed (Head and Rear)	30	0.00%	Flat	> 1.0%	10.67	22.00	< 0.1%	6.00%	1923.45	2171.00
Intermodal-C	Loaded	7500	Distributed (Head and Rear)	33	1.00%	Crest	< 0.5%	6.00	6.00	< 0.1%	8.00%	2088.22	2429.00
Intermodal-C	Loaded	7500	Distributed (Head and Rear)	50	0.50%	Incline	< 0.5%	1.00	1.00	< 0.1%	2.00%	3657.94	4045.00
Intermodal-C	Loaded	7500	Distributed (Head and Rear)	70	0.50%	Decline	<0.1%	0.00	0.00	< 10%	28.00%	7595.34	8894.00
Intermodal-C	Loaded	7500	Distributed (Head and Rear)	70	1.10%	Decline	<0.1%	0.00	0.00	< 10%	33.00%	7356.05	8650.00
Intermodal-C	Loaded	7500	Distributed (Head and Rear)	70	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	11.00%	7036.64	7881.00
Intermodal-C	Loaded	7500	Distributed (Head and Rear)	70	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	7285.70	8414.00
Intermodal-D	Loaded	7500	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	507.88	600.00
Intermodal-D	Loaded	7500	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	352.67	396.00
Intermodal-D	Loaded	7500	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	593.69	733.00
Intermodal-D	Loaded	7500	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	423.44	479.00
Intermodal-D	Loaded	7500	Distributed (Head and Rear)	15	2.80%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	810.67	1016.00
Intermodal-D	Loaded	7500	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	< 0.1%	4.00%	1218.02	1511.00
Intermodal-D	Loaded	7500	Distributed (Head and Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	853.96	968.00
Intermodal-D	Loaded	7500	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	< 0.1%	26.00%	1558.92	2011.00
Intermodal-D	Loaded	7500	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	8.00%	2089.27	2735.00
Intermodal-D	Loaded	7500	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	1.00%	1582.17	1764.00
Intermodal-D	Loaded	7500	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	19.00%	1979.34	2475.00
Intermodal-D	Loaded	7500	Distributed (Head and Rear)	30	0.00%	Flat	> 1.0%	8.00	8.00	< 0.1%	2.00%	1881.36	2270.00
Intermodal-D	Loaded	7500	Distributed (Head and Rear)	33	1.00%	Crest	> 1.0%	3.50	5.00	< 0.1%	6.00%	2070.40	2323.00
Intermodal-D	Loaded	7500	Distributed (Head and Rear)	50	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	2.00%	3625.95	4126.00
Intermodal-D	Loaded	7500	Distributed (Head and Rear)	70	0.50%	Decline	<0.1%	0.00	0.00	< 10%	27.00%	7426.50	9120.00
Intermodal-D	Loaded	7500	Distributed (Head and Rear)	70	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	28.00%	7233.23	8947.00
Intermodal-D	Loaded	7500	Distributed (Head and Rear)	70	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	4.00%	6246.15	7149.00
Intermodal-D	Loaded	7500	Distributed (Head and Rear)	70	0.00%	Flat	<0.1%	0.00	0.00	< 10%	2.00%	7065.16	8791.00

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-E	Loaded	7500	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	511.32	608.00
Intermodal-E	Loaded	7500	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	358.75	414.00
Intermodal-E	Loaded	7500	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	589.15	759.00
Intermodal-E	Loaded	7500	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	425.78	483.00
Intermodal-E	Loaded	7500	Distributed (Head and Rear)	15	2.80%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	814.92	1050.00
Intermodal-E	Loaded	7500	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	< 0.1%	10.00%	1239.70	1481.00
Intermodal-E	Loaded	7500	Distributed (Head and Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	900.80	1015.00
Intermodal-E	Loaded	7500	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	< 0.1%	25.00%	1558.67	1886.00
Intermodal-E	Loaded	7500	Distributed (Head and Rear)	30	0.50%	Decline	> 1.0%	10.00	16.00	< 0.1%	33.00%	1988.48	2549.00
Intermodal-E	Loaded	7500	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1592.64	1807.00
Intermodal-E	Loaded	7500	Distributed (Head and Rear)	30	1.10%	Decline	> 1.0%	3.50	4.00	< 0.1%	39.00%	1993.12	2554.00
Intermodal-E	Loaded	7500	Distributed (Head and Rear)	30	0.00%	Flat	> 1.0%	3.00	3.00	< 0.1%	2.00%	1894.70	2155.00
Intermodal-E	Loaded	7500	Distributed (Head and Rear)	33	1.00%	Crest	> 1.0%	6.00	17.00	< 0.1%	25.00%	2062.87	2276.00
Intermodal-E	Loaded	7500	Distributed (Head and Rear)	50	0.50%	Incline	> 1.0%	42.00	42.00	< 0.1%	5.00%	3596.43	4131.00
Intermodal-E	Loaded	7500	Distributed (Head and Rear)	70	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	42.00%	7432.11	8980.00
Intermodal-E	Loaded	7500	Distributed (Head and Rear)	70	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	39.00%	7150.14	8234.00
Intermodal-E	Loaded	7500	Distributed (Head and Rear)	70	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	16.00%	6970.73	7669.00
Intermodal-E	Loaded	7500	Distributed (Head and Rear)	70	0.00%	Flat	<0.1%	0.00	0.00	< 10%	4.00%	7084.96	8064.00
Intermodal-A	Empty	10000	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	577.65	888.00
Intermodal-A	Empty	10000	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	340.31	438.00
Intermodal-A	Empty	10000	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	652.67	878.00
Intermodal-A	Empty	10000	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	446.34	567.00
Intermodal-A	Empty	10000	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	< 10%	11.00%	1412.86	2382.00
Intermodal-A	Empty	10000	Distributed (Head and Rear)	20	2.80%	Decline	<0.1%	0.00	0.00	< 10%	18.00%	1416.01	2208.00
Intermodal-A	Empty	10000	Distributed (Head and Rear)	25	1.50%	Incline	> 1.0%	8.00	8.00	< 0.1%	1.00%	986.13	1136.00
Intermodal-A	Empty	10000	Distributed (Head and Rear)	25	1.70%	Decline	> 1.0%	10.60	24.00	< 10%	27.00%	1759.54	2583.00
Intermodal-A	Empty	10000	Distributed (Head and Rear)	30	0.50%	Decline	> 1.0%	19.67	27.00	< 10%	8.00%	2367.10	3276.00

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-A	Empty	10000	Distributed (Head and Rear)	30	0.50%	Incline	> 1.0%	13.82	41.00	< 0.1%	11.00%	1711.05	1986.00
Intermodal-A	Empty	10000	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	30.00%	2099.29	2795.00
Intermodal-A	Empty	10000	Distributed (Head and Rear)	30	0.00%	Flat	> 1.0%	14.27	36.00	< 0.1%	12.00%	1986.46	2530.00
Intermodal-A	Empty	10000	Distributed (Head and Rear)	53	1.00%	Crest	> 1.0%	14.50	31.00	< 0.1%	20.00%	4005.88	4681.00
Intermodal-A	Empty	10000	Distributed (Head and Rear)	60	0.50%	Decline	> 1.0%	12.33	17.00	> 50%	13.00%	6370.55	7796.00
Intermodal-A	Empty	10000	Distributed (Head and Rear)	60	0.50%	Incline	> 1.0%	46.00	66.00	< 10%	9.00%	4826.98	5547.00
Intermodal-A	Empty	10000	Distributed (Head and Rear)	60	1.10%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	34.00%	5980.70	9398.00
Intermodal-A	Empty	10000	Distributed (Head and Rear)	60	1.00%	Trough	<0.1%	0.00	0.00	> 10%, < 25%	17.00%	5426.37	7569.00
Intermodal-A	Empty	10000	Distributed (Head and Rear)	60	0.00%	Flat	> 1.0%	27.00	36.00	> 25%, < 50%	17.00%	5547.90	6730.00
Intermodal-B	Empty	10000	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	518.51	679.00
Intermodal-B	Empty	10000	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	326.15	376.00
Intermodal-B	Empty	10000	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	578.14	734.00
Intermodal-B	Empty	10000	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	410.68	488.00
Intermodal-B	Empty	10000	Distributed (Head and Rear)	20	2.20%	Decline	> 1.0%	7.50	11.00	< 0.1%	22.00%	1239.76	1684.00
Intermodal-B	Empty	10000	Distributed (Head and Rear)	20	2.80%	Decline	<0.1%	0.00	0.00	< 0.1%	14.00%	1306.35	1972.00
Intermodal-B	Empty	10000	Distributed (Head and Rear)	25	1.50%	Incline	> 1.0%	7.00	10.00	< 0.1%	2.00%	937.46	1061.00
Intermodal-B	Empty	10000	Distributed (Head and Rear)	25	1.70%	Decline	> 1.0%	8.00	13.00	< 0.1%	49.00%	1564.47	1998.00
Intermodal-B	Empty	10000	Distributed (Head and Rear)	30	0.50%	Decline	> 1.0%	14.75	39.00	< 0.1%	12.00%	2047.01	2501.00
Intermodal-B	Empty	10000	Distributed (Head and Rear)	30	0.50%	Incline	> 1.0%	15.07	30.00	< 0.1%	16.00%	1565.44	1796.00
Intermodal-B	Empty	10000	Distributed (Head and Rear)	30	1.10%	Decline	> 1.0%	6.00	6.00	< 0.1%	47.00%	1942.70	2696.00
Intermodal-B	Empty	10000	Distributed (Head and Rear)	30	0.00%	Flat	> 1.0%	13.89	32.00	< 0.1%	22.00%	1814.17	2227.00
Intermodal-B	Empty	10000	Distributed (Head and Rear)	53	1.00%	Crest	> 1.0%	15.11	43.00	< 0.1%	48.00%	3729.31	4316.00
Intermodal-B	Empty	10000	Distributed (Head and Rear)	60	0.50%	Decline	> 1.0%	4.00	5.00	< 10%	24.00%	5628.98	6912.00
Intermodal-B	Empty	10000	Distributed (Head and Rear)	60	0.50%	Incline	> 1.0%	23.50	33.00	< 0.1%	18.00%	4395.06	5032.00
Intermodal-B	Empty	10000	Distributed (Head and Rear)	60	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	76.00%	5256.40	6602.00
Intermodal-B	Empty	10000	Distributed (Head and Rear)	60	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	48.00%	4869.81	6093.00
Intermodal-B	Empty	10000	Distributed (Head and Rear)	60	0.00%	Flat	> 1.0%	11.67	23.00	< 0.1%	29.00%	4999.10	6002.00

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-C	Empty	10000	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	549.73	789.00
Intermodal-C	Empty	10000	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	334.16	388.00
Intermodal-C	Empty	10000	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	602.37	775.00
Intermodal-C	Empty	10000	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	420.84	517.00
Intermodal-C	Empty	10000	Distributed (Head and Rear)	20	2.20%	Decline	< 0.5%	3.00	3.00	< 0.1%	21.00%	1319.66	1792.00
Intermodal-C	Empty	10000	Distributed (Head and Rear)	20	2.80%	Decline	> 1.0%	7.00	7.00	< 0.1%	24.00%	1337.78	1739.00
Intermodal-C	Empty	10000	Distributed (Head and Rear)	25	1.50%	Incline	> 1.0%	5.00	5.00	< 0.1%	1.00%	960.50	1105.00
Intermodal-C	Empty	10000	Distributed (Head and Rear)	25	1.70%	Decline	> 1.0%	35.00	35.00	< 0.1%	44.00%	1587.46	2203.00
Intermodal-C	Empty	10000	Distributed (Head and Rear)	30	0.50%	Decline	> 1.0%	6.40	11.00	< 10%	12.00%	2193.00	3154.00
Intermodal-C	Empty	10000	Distributed (Head and Rear)	30	0.50%	Incline	> 1.0%	12.73	26.00	< 0.1%	13.00%	1615.04	1859.00
Intermodal-C	Empty	10000	Distributed (Head and Rear)	30	1.10%	Decline	> 1.0%	17.50	24.00	< 0.1%	51.00%	1992.61	2995.00
Intermodal-C	Empty	10000	Distributed (Head and Rear)	30	0.00%	Flat	> 1.0%	12.63	40.00	< 0.1%	22.00%	1859.29	2236.00
Intermodal-C	Empty	10000	Distributed (Head and Rear)	53	1.00%	Crest	> 1.0%	12.63	36.00	< 0.1%	38.00%	3811.23	4231.00
Intermodal-C	Empty	10000	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	< 10%	20.00%	5868.48	6837.00
Intermodal-C	Empty	10000	Distributed (Head and Rear)	60	0.50%	Incline	> 1.0%	15.75	22.00	< 10%	13.00%	4540.43	5449.00
Intermodal-C	Empty	10000	Distributed (Head and Rear)	60	1.10%	Decline	<0.1%	0.00	0.00	< 10%	66.00%	5594.29	6775.00
Intermodal-C	Empty	10000	Distributed (Head and Rear)	60	1.00%	Trough	< 0.5%	9.00	9.00	< 0.1%	36.00%	4920.39	5655.00
Intermodal-C	Empty	10000	Distributed (Head and Rear)	60	0.00%	Flat	> 1.0%	26.75	41.00	< 10%	16.00%	5155.27	6467.00
Intermodal-D	Empty	10000	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	536.08	685.00
Intermodal-D	Empty	10000	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	326.08	383.00
Intermodal-D	Empty	10000	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	579.67	800.00
Intermodal-D	Empty	10000	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	414.58	484.00
Intermodal-D	Empty	10000	Distributed (Head and Rear)	20	2.20%	Decline	> 1.0%	13.33	25.00	< 0.1%	28.00%	1248.15	1655.00
Intermodal-D	Empty	10000	Distributed (Head and Rear)	20	2.80%	Decline	<0.1%	0.00	0.00	< 0.1%	14.00%	1268.37	1692.00
Intermodal-D	Empty	10000	Distributed (Head and Rear)	25	1.50%	Incline	> 1.0%	8.17	12.00	< 0.1%	7.00%	916.06	1007.00
Intermodal-D	Empty	10000	Distributed (Head and Rear)	25	1.70%	Decline	> 1.0%	32.00	58.00	< 10%	39.00%	1591.18	2294.00
Intermodal-D	Empty	10000	Distributed (Head and Rear)	30	0.50%	Decline	> 1.0%	16.80	35.00	< 0.1%	16.00%	2088.38	2830.00

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-D	Empty	10000	Distributed (Head and Rear)	30	0.50%	Incline	> 1.0%	16.20	32.00	< 0.1%	11.00%	1590.97	1852.00
Intermodal-D	Empty	10000	Distributed (Head and Rear)	30	1.10%	Decline	> 1.0%	11.50	26.00	< 0.1%	35.00%	1964.85	2890.00
Intermodal-D	Empty	10000	Distributed (Head and Rear)	30	0.00%	Flat	> 1.0%	13.13	37.00	< 0.1%	25.00%	1818.37	2274.00
Intermodal-D	Empty	10000	Distributed (Head and Rear)	53	1.00%	Crest	> 1.0%	28.11	68.00	< 0.1%	35.00%	3693.77	4174.00
Intermodal-D	Empty	10000	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	< 10%	15.00%	5694.63	7175.00
Intermodal-D	Empty	10000	Distributed (Head and Rear)	60	0.50%	Incline	> 1.0%	26.60	37.00	< 0.1%	9.00%	4427.55	5210.00
Intermodal-D	Empty	10000	Distributed (Head and Rear)	60	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	53.00%	5382.21	6491.00
Intermodal-D	Empty	10000	Distributed (Head and Rear)	60	1.00%	Trough	<0.1%	0.00	0.00	< 10%	44.00%	4923.90	6717.00
Intermodal-D	Empty	10000	Distributed (Head and Rear)	60	0.00%	Flat	> 1.0%	44.50	61.00	< 10%	16.00%	4982.97	6382.00
Intermodal-E	Empty	10000	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	521.80	665.00
Intermodal-E	Empty	10000	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	328.65	384.00
Intermodal-E	Empty	10000	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	583.66	772.00
Intermodal-E	Empty	10000	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	414.97	494.00
Intermodal-E	Empty	10000	Distributed (Head and Rear)	20	2.20%	Decline	> 1.0%	6.00	6.00	< 0.1%	30.00%	1256.36	1632.00
Intermodal-E	Empty	10000	Distributed (Head and Rear)	20	2.80%	Decline	<0.1%	0.00	0.00	< 0.1%	12.00%	1274.74	2031.00
Intermodal-E	Empty	10000	Distributed (Head and Rear)	25	1.50%	Incline	> 1.0%	8.75	18.00	< 0.1%	9.00%	909.94	1048.00
Intermodal-E	Empty	10000	Distributed (Head and Rear)	25	1.70%	Decline	> 1.0%	3.67	8.00	< 0.1%	44.00%	1537.08	2065.00
Intermodal-E	Empty	10000	Distributed (Head and Rear)	30	0.50%	Decline	> 1.0%	18.50	35.00	< 0.1%	9.00%	2095.01	2638.00
Intermodal-E	Empty	10000	Distributed (Head and Rear)	30	0.50%	Incline	> 1.0%	14.93	36.00	< 0.1%	14.00%	1565.05	1842.00
Intermodal-E	Empty	10000	Distributed (Head and Rear)	30	1.10%	Decline	> 1.0%	6.00	14.00	< 0.1%	52.00%	1917.38	2391.00
Intermodal-E	Empty	10000	Distributed (Head and Rear)	30	0.00%	Flat	> 1.0%	19.50	67.00	< 0.1%	27.00%	1779.19	2051.00
Intermodal-E	Empty	10000	Distributed (Head and Rear)	53	1.00%	Crest	> 1.0%	20.18	48.00	< 0.1%	37.00%	3694.04	4182.00
Intermodal-E	Empty	10000	Distributed (Head and Rear)	60	0.50%	Decline	> 1.0%	23.50	28.00	< 0.1%	31.00%	5526.73	6393.00
Intermodal-E	Empty	10000	Distributed (Head and Rear)	60	0.50%	Incline	> 1.0%	25.67	37.00	< 0.1%	21.00%	4395.71	4947.00
Intermodal-E	Empty	10000	Distributed (Head and Rear)	60	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	67.00%	5338.89	6399.00
Intermodal-E	Empty	10000	Distributed (Head and Rear)	60	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	51.00%	4854.38	5832.00
Intermodal-E	Empty	10000	Distributed (Head and Rear)	60	0.00%	Flat	< 0.5%	2.00	2.00	< 0.1%	21.00%	5010.16	5988.00

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-A	Loaded	10000	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	1.00%	625.09	810.00
Intermodal-A	Loaded	10000	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	422.04	531.00
Intermodal-A	Loaded	10000	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	811.19	1194.00
Intermodal-A	Loaded	10000	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	1.00%	523.27	655.00
Intermodal-A	Loaded	10000	Distributed (Head and Rear)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	33.00%	1460.26	3908.00
Intermodal-A	Loaded	10000	Distributed (Head and Rear)	20	1.50%	Incline	> 1.0%	4.33	8.00	< 0.1%	2.00%	708.83	766.00
Intermodal-A	Loaded	10000	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	9.00%	1778.20	2586.00
Intermodal-A	Loaded	10000	Distributed (Head and Rear)	25	1.70%	Decline	> 1.0%	19.50	51.00	< 0.1%	72.00%	1946.07	2464.00
Intermodal-A	Loaded	10000	Distributed (Head and Rear)	30	0.50%	Decline	> 1.0%	16.67	33.00	< 0.1%	88.00%	2481.79	3032.00
Intermodal-A	Loaded	10000	Distributed (Head and Rear)	30	0.50%	Incline	> 1.0%	8.50	34.00	< 0.1%	16.00%	1990.40	2409.00
Intermodal-A	Loaded	10000	Distributed (Head and Rear)	30	1.10%	Decline	> 1.0%	17.38	42.00	< 0.1%	85.00%	2599.77	3363.00
Intermodal-A	Loaded	10000	Distributed (Head and Rear)	30	1.00%	Crest	> 1.0%	24.67	89.00	< 0.1%	54.00%	2252.23	2680.00
Intermodal-A	Loaded	10000	Distributed (Head and Rear)	30	0.00%	Flat	> 1.0%	18.36	50.00	< 0.1%	45.00%	2422.21	2921.00
Intermodal-A	Loaded	10000	Distributed (Head and Rear)	48	0.50%	Incline	> 1.0%	34.50	53.00	< 0.1%	29.00%	4187.51	4830.00
Intermodal-A	Loaded	10000	Distributed (Head and Rear)	60	0.50%	Decline	> 1.0%	71.57	226.00	< 0.1%	87.00%	7423.91	9893.00
Intermodal-A	Loaded	10000	Distributed (Head and Rear)	60	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	63.00%	7179.13	8538.00
Intermodal-A	Loaded	10000	Distributed (Head and Rear)	60	1.00%	Trough	<0.1%	0.00	0.00	< 10%	47.00%	6534.97	13411.00
Intermodal-A	Loaded	10000	Distributed (Head and Rear)	60	0.00%	Flat	> 1.0%	7.00	7.00	< 10%	41.00%	7320.14	8917.00
Intermodal-B	Loaded	10000	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	552.97	674.00
Intermodal-B	Loaded	10000	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	371.72	424.00
Intermodal-B	Loaded	10000	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	668.93	923.00
Intermodal-B	Loaded	10000	Distributed (Head and Rear)	10	0.00%	Flat	< 0.5%	6.00	6.00	< 0.1%	1.00%	464.85	537.00
Intermodal-B	Loaded	10000	Distributed (Head and Rear)	15	2.80%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	917.24	1165.00
Intermodal-B	Loaded	10000	Distributed (Head and Rear)	20	1.50%	Incline	> 1.0%	4.00	4.00	< 0.1%	3.00%	658.15	749.00
Intermodal-B	Loaded	10000	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	< 0.1%	16.00%	1342.22	1739.00
Intermodal-B	Loaded	10000	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	< 0.1%	43.00%	1716.19	2131.00
Intermodal-B	Loaded	10000	Distributed (Head and Rear)	30	0.50%	Decline	> 1.0%	14.00	27.00	< 0.1%	33.00%	2154.57	2733.00

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-B	Loaded	10000	Distributed (Head and Rear)	30	0.50%	Incline	> 1.0%	7.50	13.00	< 0.1%	6.00%	1744.71	2205.00
Intermodal-B	Loaded	10000	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	51.00%	2168.30	2845.00
Intermodal-B	Loaded	10000	Distributed (Head and Rear)	30	1.00%	Crest	> 1.0%	10.50	15.00	< 0.1%	13.00%	1985.23	2233.00
Intermodal-B	Loaded	10000	Distributed (Head and Rear)	30	0.00%	Flat	> 1.0%	13.50	26.00	< 0.1%	11.00%	2067.71	2638.00
Intermodal-B	Loaded	10000	Distributed (Head and Rear)	48	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	7.00%	3646.19	4693.00
Intermodal-B	Loaded	10000	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	< 10%	54.00%	6361.70	8336.00
Intermodal-B	Loaded	10000	Distributed (Head and Rear)	60	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	41.00%	5938.79	7425.00
Intermodal-B	Loaded	10000	Distributed (Head and Rear)	60	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	34.00%	5400.59	6079.00
Intermodal-B	Loaded	10000	Distributed (Head and Rear)	60	0.00%	Flat	< 0.5%	4.00	4.00	< 0.1%	5.00%	5969.87	7089.00
Intermodal-C	Loaded	10000	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	622.43	783.00
Intermodal-C	Loaded	10000	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	374.23	428.00
Intermodal-C	Loaded	10000	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	688.91	898.00
Intermodal-C	Loaded	10000	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	477.88	611.00
Intermodal-C	Loaded	10000	Distributed (Head and Rear)	15	2.80%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	948.04	1338.00
Intermodal-C	Loaded	10000	Distributed (Head and Rear)	20	1.50%	Incline	> 1.0%	4.00	4.00	< 0.1%	1.00%	659.89	761.00
Intermodal-C	Loaded	10000	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	< 0.1%	3.00%	1360.66	1769.00
Intermodal-C	Loaded	10000	Distributed (Head and Rear)	25	1.70%	Decline	< 0.5%	2.00	2.00	< 0.1%	44.00%	1772.63	2139.00
Intermodal-C	Loaded	10000	Distributed (Head and Rear)	30	0.50%	Decline	> 1.0%	25.00	25.00	< 0.1%	52.00%	2192.53	2720.00
Intermodal-C	Loaded	10000	Distributed (Head and Rear)	30	0.50%	Incline	> 1.0%	10.00	14.00	< 0.1%	6.00%	1769.38	2171.00
Intermodal-C	Loaded	10000	Distributed (Head and Rear)	30	1.10%	Decline	> 1.0%	27.00	27.00	< 0.1%	55.00%	2176.04	2811.00
Intermodal-C	Loaded	10000	Distributed (Head and Rear)	30	1.00%	Crest	> 1.0%	27.00	61.00	< 0.1%	54.00%	2008.33	2491.00
Intermodal-C	Loaded	10000	Distributed (Head and Rear)	30	0.00%	Flat	> 1.0%	11.40	39.00	< 0.1%	14.00%	2122.48	2431.00
Intermodal-C	Loaded	10000	Distributed (Head and Rear)	48	0.50%	Incline	> 1.0%	15.00	20.00	< 0.1%	8.00%	3708.32	4342.00
Intermodal-C	Loaded	10000	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	< 10%	49.00%	6600.52	8256.00
Intermodal-C	Loaded	10000	Distributed (Head and Rear)	60	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	48.00%	6174.50	7212.00
Intermodal-C	Loaded	10000	Distributed (Head and Rear)	60	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	9.00%	5536.82	6577.00
Intermodal-C	Loaded	10000	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	5.00%	6179.46	7262.00

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-D	Loaded	10000	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	565.61	686.00
Intermodal-D	Loaded	10000	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	369.99	419.00
Intermodal-D	Loaded	10000	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	670.96	952.00
Intermodal-D	Loaded	10000	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	471.41	602.00
Intermodal-D	Loaded	10000	Distributed (Head and Rear)	15	2.80%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	936.89	1186.00
Intermodal-D	Loaded	10000	Distributed (Head and Rear)	20	1.50%	Incline	> 1.0%	1.00	1.00	< 0.1%	2.00%	658.97	748.00
Intermodal-D	Loaded	10000	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	< 0.1%	13.00%	1356.34	1692.00
Intermodal-D	Loaded	10000	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	< 10%	46.00%	1749.67	2377.00
Intermodal-D	Loaded	10000	Distributed (Head and Rear)	30	0.50%	Decline	> 1.0%	13.50	23.00	< 0.1%	42.00%	2150.48	2703.00
Intermodal-D	Loaded	10000	Distributed (Head and Rear)	30	0.50%	Incline	> 1.0%	7.33	18.00	< 0.1%	7.00%	1758.43	2166.00
Intermodal-D	Loaded	10000	Distributed (Head and Rear)	30	1.10%	Decline	> 1.0%	11.50	20.00	< 0.1%	63.00%	2204.80	2658.00
Intermodal-D	Loaded	10000	Distributed (Head and Rear)	30	1.00%	Crest	> 1.0%	11.30	34.00	< 0.1%	22.00%	1988.08	2316.00
Intermodal-D	Loaded	10000	Distributed (Head and Rear)	30	0.00%	Flat	> 1.0%	14.14	40.00	< 0.1%	29.00%	2076.12	2485.00
Intermodal-D	Loaded	10000	Distributed (Head and Rear)	48	0.50%	Incline	> 1.0%	24.67	56.00	< 0.1%	19.00%	3661.19	4335.00
Intermodal-D	Loaded	10000	Distributed (Head and Rear)	60	0.50%	Decline	> 1.0%	14.00	14.00	< 10%	71.00%	6285.46	8341.00
Intermodal-D	Loaded	10000	Distributed (Head and Rear)	60	1.10%	Decline	<0.1%	0.00	0.00	< 10%	71.00%	6119.69	11037.00
Intermodal-D	Loaded	10000	Distributed (Head and Rear)	60	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	49.00%	5540.38	6300.00
Intermodal-D	Loaded	10000	Distributed (Head and Rear)	60	0.00%	Flat	> 1.0%	16.33	34.00	< 10%	18.00%	6068.90	7444.00
Intermodal-E	Loaded	10000	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	562.15	712.00
Intermodal-E	Loaded	10000	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	367.53	413.00
Intermodal-E	Loaded	10000	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	664.82	850.00
Intermodal-E	Loaded	10000	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	455.30	537.00
Intermodal-E	Loaded	10000	Distributed (Head and Rear)	15	2.80%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	925.07	1243.00
Intermodal-E	Loaded	10000	Distributed (Head and Rear)	20	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	657.49	721.00
Intermodal-E	Loaded	10000	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	< 10%	3.00%	1332.67	1826.00
Intermodal-E	Loaded	10000	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	< 0.1%	49.00%	1675.52	2151.00
Intermodal-E	Loaded	10000	Distributed (Head and Rear)	30	0.50%	Decline	> 1.0%	8.25	16.00	< 0.1%	53.00%	2140.70	2584.00

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-E	Loaded	10000	Distributed (Head and Rear)	30	0.50%	Incline	> 1.0%	15.50	18.00	< 0.1%	6.00%	1717.58	2037.00
Intermodal-E	Loaded	10000	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	48.00%	2131.73	2559.00
Intermodal-E	Loaded	10000	Distributed (Head and Rear)	30	1.00%	Crest	> 1.0%	8.33	13.00	< 0.1%	6.00%	1972.29	2244.00
Intermodal-E	Loaded	10000	Distributed (Head and Rear)	30	0.00%	Flat	> 1.0%	3.92	8.00	< 0.1%	22.00%	2048.80	2604.00
Intermodal-E	Loaded	10000	Distributed (Head and Rear)	48	0.50%	Incline	> 1.0%	21.00	33.00	< 0.1%	11.00%	3600.24	4068.00
Intermodal-E	Loaded	10000	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	< 10%	64.00%	6330.30	8431.00
Intermodal-E	Loaded	10000	Distributed (Head and Rear)	60	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	41.00%	5859.61	7097.00
Intermodal-E	Loaded	10000	Distributed (Head and Rear)	60	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	34.00%	5361.36	6177.00
Intermodal-E	Loaded	10000	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 10%	11.00%	5984.12	6916.00
Intermodal-A	Empty	10000	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	461.70	632.00
Intermodal-A	Empty	10000	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	309.62	374.00
Intermodal-A	Empty	10000	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	510.93	714.00
Intermodal-A	Empty	10000	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	378.52	472.00
Intermodal-A	Empty	10000	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	< 10%	14.00%	1127.28	1490.00
Intermodal-A	Empty	10000	Distributed (Head, Mid, Rear)	20	2.80%	Decline	<0.1%	0.00	0.00	< 10%	2.00%	1162.78	5572.00
Intermodal-A	Empty	10000	Distributed (Head, Mid, Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	870.50	1023.00
Intermodal-A	Empty	10000	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	< 10%	40.00%	1402.32	2042.00
Intermodal-A	Empty	10000	Distributed (Head, Mid, Rear)	30	0.50%	Decline	> 1.0%	11.75	18.00	< 0.1%	21.00%	1850.11	2451.00
Intermodal-A	Empty	10000	Distributed (Head, Mid, Rear)	30	0.50%	Incline	> 1.0%	5.60	9.00	< 0.1%	10.00%	1443.02	1707.00
Intermodal-A	Empty	10000	Distributed (Head, Mid, Rear)	30	1.10%	Decline	> 1.0%	2.00	2.00	< 0.1%	65.00%	1710.84	2611.00
Intermodal-A	Empty	10000	Distributed (Head, Mid, Rear)	30	0.00%	Flat	> 1.0%	11.11	28.00	< 0.1%	25.00%	1622.29	1905.00

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-A	Empty	10000	Rear) Distributed (Head, Mid, Rear)	53	1.00%	Crest	> 1.0%	17.50	46.00	< 0.1%	61.00%	3430.23	4395.00
Intermodal-A	Empty	10000	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	< 10%	48.00%	5227.84	7353.00
Intermodal-A	Empty	10000	Distributed (Head, Mid, Rear)	60	0.50%	Incline	> 1.0%	14.33	22.00	< 0.1%	31.00%	4160.96	5031.00
Intermodal-A	Empty	10000	Distributed (Head, Mid, Rear)	60	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	96.00%	4841.87	6146.00
Intermodal-A	Empty	10000	Distributed (Head, Mid, Rear)	60	1.00%	Trough	> 1.0%	7.00	13.00	< 0.1%	68.00%	4619.43	6243.00
Intermodal-A	Empty	10000	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 10%	44.00%	4658.96	6103.00
Intermodal-B	Empty	10000	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	462.16	645.00
Intermodal-B	Empty	10000	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	305.66	357.00
Intermodal-B	Empty	10000	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	497.35	609.00
Intermodal-B	Empty	10000	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	378.26	439.00
Intermodal-B	Empty	10000	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	< 0.1%	12.00%	1093.77	1463.00
Intermodal-B	Empty	10000	Distributed (Head, Mid, Rear)	20	2.80%	Decline	<0.1%	0.00	0.00	< 0.1%	6.00%	1114.37	1354.00
Intermodal-B	Empty	10000	Distributed (Head, Mid, Rear)	25	1.50%	Incline	> 1.0%	5.00	5.00	< 0.1%	1.00%	857.38	1008.00
Intermodal-B	Empty	10000	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	< 0.1%	41.00%	1353.03	1752.00
Intermodal-B	Empty	10000	Distributed (Head, Mid, Rear)	30	0.50%	Decline	> 1.0%	9.43	17.00	< 0.1%	22.00%	1842.04	2238.00
Intermodal-B	Empty	10000	Distributed (Head, Mid, Rear)	30	0.50%	Incline	> 1.0%	8.33	19.00	< 0.1%	13.00%	1424.61	1679.00
Intermodal-B	Empty	10000	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	71.00%	1711.30	2117.00

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-B	Empty	10000	Rear) Distributed (Head, Mid, Rear)	30	0.00%	Flat	> 1.0%	11.35	20.00	< 0.1%	29.00%	1610.99	1966.00
Intermodal-B	Empty	10000	Distributed (Head, Mid, Rear)	53	1.00%	Crest	> 1.0%	15.00	41.00	< 0.1%	60.00%	3423.11	3877.00
Intermodal-B	Empty	10000	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	57.00%	5208.08	6208.00
Intermodal-B	Empty	10000	Distributed (Head, Mid, Rear)	60	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	36.00%	4092.63	4600.00
Intermodal-B	Empty	10000	Distributed (Head, Mid, Rear)	60	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	97.00%	4806.90	6135.00
Intermodal-B	Empty	10000	Distributed (Head, Mid, Rear)	60	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	74.00%	4629.67	6011.00
Intermodal-B	Empty	10000	Distributed (Head, Mid, Rear)	60	0.00%	Flat	> 1.0%	17.00	25.00	< 0.1%	52.00%	4536.52	5380.00
Intermodal-C	Empty	10000	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	474.76	620.00
Intermodal-C	Empty	10000	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	303.96	369.00
Intermodal-C	Empty	10000	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	518.09	613.00
Intermodal-C	Empty	10000	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	385.53	473.00
Intermodal-C	Empty	10000	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	< 0.1%	24.00%	1167.53	1596.00
Intermodal-C	Empty	10000	Distributed (Head, Mid, Rear)	20	2.80%	Decline	<0.1%	0.00	0.00	< 0.1%	8.00%	1148.76	1523.00
Intermodal-C	Empty	10000	Distributed (Head, Mid, Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	1.00%	880.13	1043.00
Intermodal-C	Empty	10000	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	< 0.1%	35.00%	1437.88	1895.00
Intermodal-C	Empty	10000	Distributed (Head, Mid, Rear)	30	0.50%	Decline	> 1.0%	11.29	21.00	< 0.1%	15.00%	1896.91	2240.00
Intermodal-C	Empty	10000	Distributed (Head, Mid, Rear)	30	0.50%	Incline	> 1.0%	8.42	21.00	< 0.1%	17.00%	1468.71	1676.00

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-C	Empty	10000	Rear) Distributed (Head, Mid, Rear)	30	1.10%	Decline	> 1.0%	5.00	6.00	< 0.1%	73.00%	1747.09	2209.00
Intermodal-C	Empty	10000	Distributed (Head, Mid, Rear)	30	0.00%	Flat	> 25%	10.73	20.00	< 0.1%	36.00%	1644.82	1942.00
Intermodal-C	Empty	10000	Distributed (Head, Mid, Rear)	53	1.00%	Crest	> 1.0%	15.13	29.00	< 0.1%	66.00%	3497.16	3936.00
Intermodal-C	Empty	10000	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	56.00%	5277.66	6209.00
Intermodal-C	Empty	10000	Distributed (Head, Mid, Rear)	60	0.50%	Incline	> 1.0%	17.33	30.00	< 0.1%	40.00%	4169.30	4673.00
Intermodal-C	Empty	10000	Distributed (Head, Mid, Rear)	60	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	88.00%	5002.63	5983.00
Intermodal-C	Empty	10000	Distributed (Head, Mid, Rear)	60	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	71.00%	4608.52	5648.00
Intermodal-C	Empty	10000	Distributed (Head, Mid, Rear)	60	0.00%	Flat	< 0.5%	7.00	7.00	< 0.1%	54.00%	4695.10	5499.00
Intermodal-D	Empty	10000	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	460.93	578.00
Intermodal-D	Empty	10000	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	298.22	343.00
Intermodal-D	Empty	10000	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	505.33	673.00
Intermodal-D	Empty	10000	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	371.71	431.00
Intermodal-D	Empty	10000	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	< 0.1%	8.00%	1088.18	1448.00
Intermodal-D	Empty	10000	Distributed (Head, Mid, Rear)	20	2.80%	Decline	<0.1%	0.00	0.00	< 10%	3.00%	1111.20	1799.00
Intermodal-D	Empty	10000	Distributed (Head, Mid, Rear)	25	1.50%	Incline	> 1.0%	7.00	7.00	< 0.1%	1.00%	850.10	980.00
Intermodal-D	Empty	10000	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	< 0.1%	32.00%	1367.84	1768.00
Intermodal-D	Empty	10000	Distributed (Head, Mid, Rear)	30	0.50%	Decline	> 1.0%	11.67	22.00	< 0.1%	18.00%	1821.11	2366.00

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-D	Empty	10000	Rear) Distributed (Head, Mid, Rear)	30	0.50%	Incline	> 1.0%	8.27	17.00	< 0.1%	16.00%	1414.79	1598.00
Intermodal-D	Empty	10000	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	57.00%	1692.51	2084.00
Intermodal-D	Empty	10000	Distributed (Head, Mid, Rear)	30	0.00%	Flat	> 1.0%	10.11	23.00	< 0.1%	31.00%	1602.46	2054.00
Intermodal-D	Empty	10000	Distributed (Head, Mid, Rear)	53	1.00%	Crest	> 1.0%	16.30	44.00	< 0.1%	61.00%	3367.48	3840.00
Intermodal-D	Empty	10000	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	48.00%	5120.05	6284.00
Intermodal-D	Empty	10000	Distributed (Head, Mid, Rear)	60	0.50%	Incline	> 1.0%	24.00	26.00	< 0.1%	29.00%	4024.49	4521.00
Intermodal-D	Empty	10000	Distributed (Head, Mid, Rear)	60	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	93.00%	4801.68	6067.00
Intermodal-D	Empty	10000	Distributed (Head, Mid, Rear)	60	1.00%	Trough	<0.1%	0.00	0.00	< 10%	61.00%	4537.94	5734.00
Intermodal-D	Empty	10000	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	37.00%	4547.01	5214.00
Intermodal-E	Empty	10000	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	454.61	560.00
Intermodal-E	Empty	10000	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	301.56	347.00
Intermodal-E	Empty	10000	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	500.97	699.00
Intermodal-E	Empty	10000	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	371.52	461.00
Intermodal-E	Empty	10000	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	< 0.1%	17.00%	1089.34	1387.00
Intermodal-E	Empty	10000	Distributed (Head, Mid, Rear)	20	2.80%	Decline	<0.1%	0.00	0.00	< 0.1%	4.00%	1124.16	1444.00
Intermodal-E	Empty	10000	Distributed (Head, Mid, Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	1.00%	847.30	977.00
Intermodal-E	Empty	10000	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	< 0.1%	44.00%	1366.15	1705.00

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-E	Empty	10000	Rear) Distributed (Head, Mid, Rear)	30	0.50%	Decline	> 1.0%	10.42	24.00	< 0.1%	24.00%	1837.53	2233.00
Intermodal-E	Empty	10000	Distributed (Head, Mid, Rear)	30	0.50%	Incline	> 1.0%	8.32	18.00	< 0.1%	25.00%	1408.12	1714.00
Intermodal-E	Empty	10000	Distributed (Head, Mid, Rear)	30	1.10%	Decline	> 1.0%	3.00	3.00	< 0.1%	70.00%	1706.96	2109.00
Intermodal-E	Empty	10000	Distributed (Head, Mid, Rear)	30	0.00%	Flat	> 25%	11.00	26.00	< 0.1%	39.00%	1585.71	1842.00
Intermodal-E	Empty	10000	Distributed (Head, Mid, Rear)	53	1.00%	Crest	> 1.0%	14.40	37.00	< 0.1%	69.00%	3386.12	3732.00
Intermodal-E	Empty	10000	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	56.00%	5141.43	6467.00
Intermodal-E	Empty	10000	Distributed (Head, Mid, Rear)	60	0.50%	Incline	> 1.0%	25.50	44.00	< 0.1%	45.00%	4059.75	4691.00
Intermodal-E	Empty	10000	Distributed (Head, Mid, Rear)	60	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	93.00%	4814.53	5701.00
Intermodal-E	Empty	10000	Distributed (Head, Mid, Rear)	60	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	79.00%	4529.45	5403.00
Intermodal-E	Empty	10000	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	64.00%	4517.89	5398.00
Intermodal-A	Loaded	10000	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	550.13	786.00
Intermodal-A	Loaded	10000	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	377.42	426.00
Intermodal-A	Loaded	10000	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	655.50	978.00
Intermodal-A	Loaded	10000	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	455.25	605.00
Intermodal-A	Loaded	10000	Distributed (Head, Mid, Rear)	15	2.80%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	25.00%	1160.04	3556.00
Intermodal-A	Loaded	10000	Distributed (Head, Mid, Rear)	20	1.50%	Incline	> 1.0%	10.00	17.00	< 0.1%	2.00%	619.69	716.00
Intermodal-A	Loaded	10000	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	< 10%	13.00%	1373.74	1772.00

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-A	Loaded	10000	Rear) Distributed (Head, Mid, Rear)	25	1.70%	Decline	> 1.0%	11.50	20.00	< 0.1%	73.00%	1712.72	2227.00
Intermodal-A	Loaded	10000	Distributed (Head, Mid, Rear)	30	0.50%	Decline	> 1.0%	11.73	33.00	< 0.1%	79.00%	2215.43	2811.00
Intermodal-A	Loaded	10000	Distributed (Head, Mid, Rear)	30	0.50%	Incline	> 1.0%	9.75	25.00	< 0.1%	14.00%	1764.77	2080.00
Intermodal-A	Loaded	10000	Distributed (Head, Mid, Rear)	30	1.10%	Decline	> 1.0%	11.17	28.00	< 0.1%	83.00%	2214.58	2732.00
Intermodal-A	Loaded	10000	Distributed (Head, Mid, Rear)	30	1.00%	Crest	> 1.0%	21.00	39.00	< 0.1%	44.00%	1966.42	2306.00
Intermodal-A	Loaded	10000	Distributed (Head, Mid, Rear)	30	0.00%	Flat	> 1.0%	20.86	69.00	< 0.1%	29.00%	2148.21	2610.00
Intermodal-A	Loaded	10000	Distributed (Head, Mid, Rear)	48	0.50%	Incline	> 1.0%	17.00	24.00	< 0.1%	23.00%	3819.01	4338.00
Intermodal-A	Loaded	10000	Distributed (Head, Mid, Rear)	60	0.50%	Decline	> 1.0%	63.00	137.00	< 0.1%	84.00%	6767.44	8601.00
Intermodal-A	Loaded	10000	Distributed (Head, Mid, Rear)	60	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	57.00%	6393.05	7837.00
Intermodal-A	Loaded	10000	Distributed (Head, Mid, Rear)	60	1.00%	Trough	<0.1%	0.00	0.00	< 10%	43.00%	6026.09	11811.00
Intermodal-A	Loaded	10000	Distributed (Head, Mid, Rear)	60	0.00%	Flat	> 1.0%	25.33	66.00	< 0.1%	33.00%	6747.24	8397.00
Intermodal-B	Loaded	10000	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	463.81	649.00
Intermodal-B	Loaded	10000	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	345.27	387.00
Intermodal-B	Loaded	10000	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	560.84	759.00
Intermodal-B	Loaded	10000	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	409.38	501.00
Intermodal-B	Loaded	10000	Distributed (Head, Mid, Rear)	15	2.80%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	806.38	1048.00
Intermodal-B	Loaded	10000	Distributed (Head, Mid, Rear)	20	1.50%	Incline	> 1.0%	1.00	1.00	< 0.1%	1.00%	584.49	676.00

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-B	Loaded	10000	Rear) Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	< 0.1%	5.00%	1168.14	1404.00
Intermodal-B	Loaded	10000	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	< 0.1%	28.00%	1487.05	1937.00
Intermodal-B	Loaded	10000	Distributed (Head, Mid, Rear)	30	0.50%	Decline	> 1.0%	38.00	38.00	< 0.1%	39.00%	1912.37	2841.00
Intermodal-B	Loaded	10000	Distributed (Head, Mid, Rear)	30	0.50%	Incline	< 0.5%	0.00	0.00	< 0.1%	2.00%	1550.14	1894.00
Intermodal-B	Loaded	10000	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	25.00%	1927.64	2324.00
Intermodal-B	Loaded	10000	Distributed (Head, Mid, Rear)	30	1.00%	Crest	> 1.0%	16.00	22.00	< 0.1%	6.00%	1756.80	2137.00
Intermodal-B	Loaded	10000	Distributed (Head, Mid, Rear)	30	0.00%	Flat	> 1.0%	5.00	6.00	< 0.1%	6.00%	1827.50	2138.00
Intermodal-B	Loaded	10000	Distributed (Head, Mid, Rear)	48	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	3.00%	3328.42	3708.00
Intermodal-B	Loaded	10000	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	< 10%	34.00%	5766.10	7373.00
Intermodal-B	Loaded	10000	Distributed (Head, Mid, Rear)	60	1.10%	Decline	<0.1%	0.00	0.00	< 10%	40.00%	5597.27	6405.00
Intermodal-B	Loaded	10000	Distributed (Head, Mid, Rear)	60	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	33.00%	4787.44	5920.00
Intermodal-B	Loaded	10000	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	4.00%	5362.28	6042.00
Intermodal-C	Loaded	10000	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	484.25	636.00
Intermodal-C	Loaded	10000	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	337.62	391.00
Intermodal-C	Loaded	10000	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	584.81	803.00
Intermodal-C	Loaded	10000	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	418.05	518.00
Intermodal-C	Loaded	10000	Distributed (Head, Mid, Rear)	15	2.80%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	824.32	1003.00

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-C	Loaded	10000	Rear) Distributed (Head, Mid, Rear)	20	1.50%	Incline	< 0.5%	0.00	0.00	< 0.1%	0.00%	583.37	653.00
Intermodal-C	Loaded	10000	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	< 0.1%	2.00%	1216.82	1609.00
Intermodal-C	Loaded	10000	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	< 0.1%	23.00%	1520.34	2020.00
Intermodal-C	Loaded	10000	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	47.00%	2016.43	2845.00
Intermodal-C	Loaded	10000	Distributed (Head, Mid, Rear)	30	0.50%	Incline	> 1.0%	2.00	4.00	< 0.1%	6.00%	1566.96	1819.00
Intermodal-C	Loaded	10000	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	35.00%	1941.02	2554.00
Intermodal-C	Loaded	10000	Distributed (Head, Mid, Rear)	30	1.00%	Crest	> 1.0%	14.42	41.00	< 0.1%	53.00%	1749.89	1987.00
Intermodal-C	Loaded	10000	Distributed (Head, Mid, Rear)	30	0.00%	Flat	> 1.0%	9.00	9.00	< 0.1%	9.00%	1877.02	2173.00
Intermodal-C	Loaded	10000	Distributed (Head, Mid, Rear)	48	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	9.00%	3369.05	3789.00
Intermodal-C	Loaded	10000	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	< 10%	53.00%	5846.06	7273.00
Intermodal-C	Loaded	10000	Distributed (Head, Mid, Rear)	60	1.10%	Decline	<0.1%	0.00	0.00	< 10%	37.00%	5660.97	11747.00
Intermodal-C	Loaded	10000	Distributed (Head, Mid, Rear)	60	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	12.00%	4850.20	5506.00
Intermodal-C	Loaded	10000	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 10%	5.00%	5617.10	7069.00
Intermodal-D	Loaded	10000	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	478.79	682.00
Intermodal-D	Loaded	10000	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	344.59	393.00
Intermodal-D	Loaded	10000	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	565.76	717.00
Intermodal-D	Loaded	10000	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	416.46	511.00

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-D	Loaded	10000	Rear) Distributed (Head, Mid, Rear)	15	2.80%	Decline	<0.1%	0.00	0.00	< 0.1%	1.00%	808.09	1008.00
Intermodal-D	Loaded	10000	Distributed (Head, Mid, Rear)	20	1.50%	Incline	> 1.0%	5.00	5.00	< 0.1%	2.00%	581.22	689.00
Intermodal-D	Loaded	10000	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	< 10%	10.00%	1287.69	3875.00
Intermodal-D	Loaded	10000	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	< 0.1%	27.00%	1520.40	1922.00
Intermodal-D	Loaded	10000	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	57.00%	1909.40	2709.00
Intermodal-D	Loaded	10000	Distributed (Head, Mid, Rear)	30	0.50%	Incline	> 1.0%	6.33	9.00	< 0.1%	8.00%	1559.06	1825.00
Intermodal-D	Loaded	10000	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	43.00%	1909.65	2720.00
Intermodal-D	Loaded	10000	Distributed (Head, Mid, Rear)	30	1.00%	Crest	> 1.0%	7.55	20.00	< 0.1%	22.00%	1747.97	2016.00
Intermodal-D	Loaded	10000	Distributed (Head, Mid, Rear)	30	0.00%	Flat	> 1.0%	13.50	23.00	< 0.1%	19.00%	1827.63	2214.00
Intermodal-D	Loaded	10000	Distributed (Head, Mid, Rear)	48	0.50%	Incline	> 1.0%	14.25	24.00	< 0.1%	10.00%	3315.00	3783.00
Intermodal-D	Loaded	10000	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	72.00%	5690.15	6508.00
Intermodal-D	Loaded	10000	Distributed (Head, Mid, Rear)	60	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	57.00%	5495.95	6490.00
Intermodal-D	Loaded	10000	Distributed (Head, Mid, Rear)	60	1.00%	Trough	<0.1%	0.00	0.00	< 10%	47.00%	4785.66	8060.00
Intermodal-D	Loaded	10000	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	13.00%	5424.47	6126.00
Intermodal-E	Loaded	10000	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	459.79	627.00
Intermodal-E	Loaded	10000	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	336.76	374.00
Intermodal-E	Loaded	10000	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	548.19	760.00

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-E	Loaded	10000	Rear) Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	404.69	507.00
Intermodal-E	Loaded	10000	Distributed (Head, Mid, Rear)	15	2.80%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	793.25	1140.00
Intermodal-E	Loaded	10000	Distributed (Head, Mid, Rear)	20	1.50%	Incline	> 1.0%	3.33	5.00	< 0.1%	5.00%	588.23	675.00
Intermodal-E	Loaded	10000	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	< 10%	1.00%	1202.66	3612.00
Intermodal-E	Loaded	10000	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	< 0.1%	29.00%	1475.78	1862.00
Intermodal-E	Loaded	10000	Distributed (Head, Mid, Rear)	30	0.50%	Decline	> 1.0%	3.50	5.00	< 0.1%	45.00%	1914.77	2539.00
Intermodal-E	Loaded	10000	Distributed (Head, Mid, Rear)	30	0.50%	Incline	> 1.0%	8.50	25.00	< 0.1%	7.00%	1529.35	1863.00
Intermodal-E	Loaded	10000	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	38.00%	1863.27	2335.00
Intermodal-E	Loaded	10000	Distributed (Head, Mid, Rear)	30	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	2.00%	1716.01	2181.00
Intermodal-E	Loaded	10000	Distributed (Head, Mid, Rear)	30	0.00%	Flat	> 1.0%	11.25	19.00	< 0.1%	11.00%	1815.99	2129.00
Intermodal-E	Loaded	10000	Distributed (Head, Mid, Rear)	48	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	5.00%	3291.33	3915.00
Intermodal-E	Loaded	10000	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	52.00%	5752.32	7088.00
Intermodal-E	Loaded	10000	Distributed (Head, Mid, Rear)	60	1.10%	Decline	<0.1%	0.00	0.00	< 10%	56.00%	5480.55	7342.00
Intermodal-E	Loaded	10000	Distributed (Head, Mid, Rear)	60	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	41.00%	4771.33	5417.00
Intermodal-E	Loaded	10000	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	7.00%	5362.75	6547.00
Intermodal-A	Empty	15000	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	570.94	1059.00
Intermodal-A	Empty	15000	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	342.07	538.00

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-A	Empty	15000	Rear) Distributed (Head, Mid, Rear)	10	1.10%	Decline	< 0.5%	1.00	1.00	< 0.1%	0.00%	624.95	893.00
Intermodal-A	Empty	15000	Distributed (Head, Mid, Rear)	10	0.00%	Flat	> 1.0%	22.00	39.00	< 0.1%	2.00%	437.74	585.00
Intermodal-A	Empty	15000	Distributed (Head, Mid, Rear)	15	2.80%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	4.00%	1230.99	3802.00
Intermodal-A	Empty	15000	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	10.00%	1371.71	2163.00
Intermodal-A	Empty	15000	Distributed (Head, Mid, Rear)	25	1.50%	Incline	> 1.0%	14.08	43.00	< 0.1%	12.00%	965.00	1170.00
Intermodal-A	Empty	15000	Distributed (Head, Mid, Rear)	25	1.70%	Decline	> 1.0%	37.33	75.00	> 10%, < 25%	28.00%	1684.20	3444.00
Intermodal-A	Empty	15000	Distributed (Head, Mid, Rear)	30	0.50%	Decline	> 1.0%	26.75	68.00	< 10%	19.00%	2190.17	3256.00
Intermodal-A	Empty	15000	Distributed (Head, Mid, Rear)	30	0.50%	Incline	> 1.0%	25.17	102.00	< 0.1%	19.00%	1645.81	2462.00
Intermodal-A	Empty	15000	Distributed (Head, Mid, Rear)	30	1.10%	Decline	> 1.0%	25.00	82.00	< 10%	33.00%	2033.77	3059.00
Intermodal-A	Empty	15000	Distributed (Head, Mid, Rear)	30	0.00%	Flat	> 25%	32.79	123.00	< 0.1%	31.00%	1925.81	2843.00
Intermodal-A	Empty	15000	Distributed (Head, Mid, Rear)	52	1.00%	Crest	> 1.0%	24.27	62.00	< 10%	34.00%	3963.63	5026.00
Intermodal-A	Empty	15000	Distributed (Head, Mid, Rear)	60	0.50%	Decline	> 1.0%	86.00	86.00	> 25%, < 50%	36.00%	5889.34	8111.00
Intermodal-A	Empty	15000	Distributed (Head, Mid, Rear)	60	0.50%	Incline	> 1.0%	22.33	46.00	> 10%, < 25%	25.00%	4589.51	6638.00
Intermodal-A	Empty	15000	Distributed (Head, Mid, Rear)	60	1.10%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	50.00%	5565.93	8279.00
Intermodal-A	Empty	15000	Distributed (Head, Mid, Rear)	60	1.00%	Trough	> 1.0%	68.40	122.00	> 25%, < 50%	36.00%	5407.35	8735.00
Intermodal-A	Empty	15000	Distributed (Head, Mid, Rear)	60	0.00%	Flat	> 1.0%	66.71	147.00	> 25%, < 50%	33.00%	5340.79	7370.00
Intermodal-B	Empty	15000	Distributed (Head, Mid,	10	0.50%	Decline	> 1.0%	12.33	22.00	< 10%	3.00%	519.32	885.00

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-B	Empty	15000	Rear) Distributed (Head, Mid, Rear)	10	0.50%	Incline	> 1.0%	18.00	18.00	< 0.1%	1.00%	319.54	417.00
Intermodal-B	Empty	15000	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	566.46	877.00
Intermodal-B	Empty	15000	Distributed (Head, Mid, Rear)	10	0.00%	Flat	> 1.0%	22.00	22.00	< 0.1%	1.00%	426.45	605.00
Intermodal-B	Empty	15000	Distributed (Head, Mid, Rear)	15	2.80%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	3.00%	1077.90	2201.00
Intermodal-B	Empty	15000	Distributed (Head, Mid, Rear)	20	2.20%	Decline	> 1.0%	9.67	14.00	< 10%	25.00%	1252.73	2424.00
Intermodal-B	Empty	15000	Distributed (Head, Mid, Rear)	25	1.50%	Incline	> 1.0%	23.92	61.00	< 0.1%	12.00%	921.36	1147.00
Intermodal-B	Empty	15000	Distributed (Head, Mid, Rear)	25	1.70%	Decline	> 1.0%	39.00	39.00	< 10%	40.00%	1535.12	2312.00
Intermodal-B	Empty	15000	Distributed (Head, Mid, Rear)	30	0.50%	Decline	> 1.0%	26.14	100.00	< 10%	24.00%	2059.27	3357.00
Intermodal-B	Empty	15000	Distributed (Head, Mid, Rear)	30	0.50%	Incline	> 25%	30.96	96.00	< 0.1%	30.00%	1527.26	1939.00
Intermodal-B	Empty	15000	Distributed (Head, Mid, Rear)	30	1.10%	Decline	> 1.0%	29.00	29.00	< 10%	47.00%	1952.53	3725.00
Intermodal-B	Empty	15000	Distributed (Head, Mid, Rear)	30	0.00%	Flat	> 25%	25.17	127.00	< 0.1%	34.00%	1770.35	2409.00
Intermodal-B	Empty	15000	Distributed (Head, Mid, Rear)	52	1.00%	Crest	> 1.0%	36.40	189.00	< 0.1%	34.00%	3723.53	4419.00
Intermodal-B	Empty	15000	Distributed (Head, Mid, Rear)	60	0.50%	Decline	> 1.0%	21.00	21.00	< 10%	35.00%	5485.04	6813.00
Intermodal-B	Empty	15000	Distributed (Head, Mid, Rear)	60	0.50%	Incline	> 1.0%	40.36	123.00	< 10%	27.00%	4344.71	7512.00
Intermodal-B	Empty	15000	Distributed (Head, Mid, Rear)	60	1.10%	Decline	<0.1%	0.00	0.00	< 10%	58.00%	5305.92	7766.00
Intermodal-B	Empty	15000	Distributed (Head, Mid, Rear)	60	1.00%	Trough	> 1.0%	78.33	154.00	< 10%	37.00%	5194.64	6720.00
Intermodal-B	Empty	15000	Distributed (Head, Mid, Rear)	60	0.00%	Flat	> 1.0%	51.80	129.00	< 10%	34.00%	4830.15	7626.00

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-C	Empty	15000	Rear) Distributed (Head, Mid, Rear)	10	0.50%	Decline	> 1.0%	5.00	6.00	< 0.1%	2.00%	523.57	885.00
Intermodal-C	Empty	15000	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	322.82	498.00
Intermodal-C	Empty	15000	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	576.65	966.00
Intermodal-C	Empty	15000	Distributed (Head, Mid, Rear)	10	0.00%	Flat	> 1.0%	17.00	32.00	< 0.1%	3.00%	411.98	519.00
Intermodal-C	Empty	15000	Distributed (Head, Mid, Rear)	15	2.80%	Decline	> 1.0%	24.00	24.00	> 10%, < 25%	2.00%	1088.36	1700.00
Intermodal-C	Empty	15000	Distributed (Head, Mid, Rear)	20	2.20%	Decline	> 1.0%	12.00	17.00	< 10%	25.00%	1215.06	1877.00
Intermodal-C	Empty	15000	Distributed (Head, Mid, Rear)	25	1.50%	Incline	> 1.0%	25.64	95.00	< 0.1%	12.00%	936.70	1132.00
Intermodal-C	Empty	15000	Distributed (Head, Mid, Rear)	25	1.70%	Decline	> 1.0%	31.44	135.00	< 10%	37.00%	1513.93	2627.00
Intermodal-C	Empty	15000	Distributed (Head, Mid, Rear)	30	0.50%	Decline	> 1.0%	41.00	141.00	< 0.1%	25.00%	1968.29	2703.00
Intermodal-C	Empty	15000	Distributed (Head, Mid, Rear)	30	0.50%	Incline	> 25%	27.37	92.00	< 0.1%	30.00%	1535.23	2074.00
Intermodal-C	Empty	15000	Distributed (Head, Mid, Rear)	30	1.10%	Decline	> 1.0%	42.33	145.00	< 0.1%	49.00%	1903.81	3001.00
Intermodal-C	Empty	15000	Distributed (Head, Mid, Rear)	30	0.00%	Flat	> 25%	32.71	122.00	< 0.1%	36.00%	1753.70	2883.00
Intermodal-C	Empty	15000	Distributed (Head, Mid, Rear)	52	1.00%	Crest	> 25%	44.06	146.00	< 10%	57.00%	3659.42	4874.00
Intermodal-C	Empty	15000	Distributed (Head, Mid, Rear)	60	0.50%	Decline	> 1.0%	85.33	135.00	< 10%	40.00%	5349.78	6795.00
Intermodal-C	Empty	15000	Distributed (Head, Mid, Rear)	60	0.50%	Incline	> 1.0%	38.41	125.00	< 10%	36.00%	4257.45	6132.00
Intermodal-C	Empty	15000	Distributed (Head, Mid, Rear)	60	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	83.00%	5114.97	6454.00
Intermodal-C	Empty	15000	Distributed (Head, Mid, Rear)	60	1.00%	Trough	> 1.0%	43.33	102.00	< 10%	37.00%	5202.06	9002.00

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-C	Empty	15000	Rear) Distributed (Head, Mid, Rear)	60	0.00%	Flat	> 1.0%	57.14	106.00	< 10%	32.00%	4861.28	6491.00
Intermodal-D	Empty	15000	Distributed (Head, Mid, Rear)	10	0.50%	Decline	< 0.5%	0.00	0.00	< 0.1%	0.00%	510.21	712.00
Intermodal-D	Empty	15000	Distributed (Head, Mid, Rear)	10	0.50%	Incline	> 1.0%	27.00	27.00	< 0.1%	1.00%	320.42	523.00
Intermodal-D	Empty	15000	Distributed (Head, Mid, Rear)	10	1.10%	Decline	> 1.0%	13.00	18.00	< 10%	2.00%	580.46	1234.00
Intermodal-D	Empty	15000	Distributed (Head, Mid, Rear)	10	0.00%	Flat	> 1.0%	30.00	55.00	< 0.1%	2.00%	427.90	536.00
Intermodal-D	Empty	15000	Distributed (Head, Mid, Rear)	15	2.80%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	1.00%	1127.38	2536.00
Intermodal-D	Empty	15000	Distributed (Head, Mid, Rear)	20	2.20%	Decline	> 1.0%	6.00	6.00	< 10%	16.00%	1269.23	2245.00
Intermodal-D	Empty	15000	Distributed (Head, Mid, Rear)	25	1.50%	Incline	> 1.0%	24.80	49.00	< 0.1%	10.00%	916.25	1136.00
Intermodal-D	Empty	15000	Distributed (Head, Mid, Rear)	25	1.70%	Decline	> 1.0%	22.33	48.00	< 10%	49.00%	1504.42	3161.00
Intermodal-D	Empty	15000	Distributed (Head, Mid, Rear)	30	0.50%	Decline	> 1.0%	29.11	104.00	< 10%	27.00%	2006.10	3149.00
Intermodal-D	Empty	15000	Distributed (Head, Mid, Rear)	30	0.50%	Incline	> 25%	21.78	75.00	< 0.1%	27.00%	1575.81	2381.00
Intermodal-D	Empty	15000	Distributed (Head, Mid, Rear)	30	1.10%	Decline	> 1.0%	46.50	118.00	< 0.1%	58.00%	1871.53	2655.00
Intermodal-D	Empty	15000	Distributed (Head, Mid, Rear)	30	0.00%	Flat	> 25%	33.35	118.00	< 0.1%	35.00%	1785.49	2923.00
Intermodal-D	Empty	15000	Distributed (Head, Mid, Rear)	52	1.00%	Crest	> 1.0%	19.22	38.00	< 0.1%	37.00%	3729.30	4492.00
Intermodal-D	Empty	15000	Distributed (Head, Mid, Rear)	60	0.50%	Decline	> 1.0%	81.75	156.00	< 10%	33.00%	5442.46	6937.00
Intermodal-D	Empty	15000	Distributed (Head, Mid, Rear)	60	0.50%	Incline	> 1.0%	40.71	135.00	< 10%	23.00%	4309.64	5535.00
Intermodal-D	Empty	15000	Distributed (Head, Mid, Rear)	60	1.10%	Decline	<0.1%	0.00	0.00	< 10%	65.00%	5263.83	9888.00

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-D	Empty	15000	Rear) Distributed (Head, Mid, Rear)	60	1.00%	Trough	> 1.0%	19.33	29.00	< 10%	39.00%	5199.35	8565.00
Intermodal-D	Empty	15000	Distributed (Head, Mid, Rear)	60	0.00%	Flat	> 1.0%	49.63	171.00	< 10%	33.00%	4889.82	7357.00
Intermodal-E	Empty	15000	Distributed (Head, Mid, Rear)	10	0.50%	Decline	> 1.0%	18.00	25.00	< 10%	3.00%	526.51	1086.00
Intermodal-E	Empty	15000	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	326.73	542.00
Intermodal-E	Empty	15000	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	618.78	930.00
Intermodal-E	Empty	15000	Distributed (Head, Mid, Rear)	10	0.00%	Flat	< 0.5%	2.00	2.00	< 0.1%	0.00%	426.66	638.00
Intermodal-E	Empty	15000	Distributed (Head, Mid, Rear)	15	2.80%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	1.00%	1123.95	1911.00
Intermodal-E	Empty	15000	Distributed (Head, Mid, Rear)	20	2.20%	Decline	< 0.5%	0.00	0.00	< 10%	14.00%	1293.17	2132.00
Intermodal-E	Empty	15000	Distributed (Head, Mid, Rear)	25	1.50%	Incline	> 1.0%	12.00	24.00	< 0.1%	6.00%	930.11	1104.00
Intermodal-E	Empty	15000	Distributed (Head, Mid, Rear)	25	1.70%	Decline	< 0.5%	9.00	9.00	< 10%	29.00%	1591.01	2669.00
Intermodal-E	Empty	15000	Distributed (Head, Mid, Rear)	30	0.50%	Decline	> 1.0%	27.42	52.00	< 0.1%	20.00%	2026.94	2869.00
Intermodal-E	Empty	15000	Distributed (Head, Mid, Rear)	30	0.50%	Incline	> 25%	23.73	79.00	< 0.1%	26.00%	1568.92	2248.00
Intermodal-E	Empty	15000	Distributed (Head, Mid, Rear)	30	1.10%	Decline	> 1.0%	36.00	59.00	< 10%	64.00%	1901.31	3154.00
Intermodal-E	Empty	15000	Distributed (Head, Mid, Rear)	30	0.00%	Flat	> 1.0%	25.35	80.00	< 0.1%	25.00%	1830.33	2621.00
Intermodal-E	Empty	15000	Distributed (Head, Mid, Rear)	52	1.00%	Crest	> 1.0%	29.94	128.00	< 10%	37.00%	3751.82	5167.00
Intermodal-E	Empty	15000	Distributed (Head, Mid, Rear)	60	0.50%	Decline	> 1.0%	92.00	92.00	< 10%	30.00%	5606.85	9168.00
Intermodal-E	Empty	15000	Distributed (Head, Mid, Rear)	60	0.50%	Incline	> 1.0%	30.58	102.00	< 10%	24.00%	4374.37	5956.00

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-E	Empty	15000	Rear) Distributed (Head, Mid, Rear)	60	1.10%	Decline	> 1.0%	37.50	70.00	< 10%	61.00%	5267.45	10237.00
Intermodal-E	Empty	15000	Distributed (Head, Mid, Rear)	60	1.00%	Trough	> 1.0%	53.50	198.00	< 10%	34.00%	5112.41	6456.00
Intermodal-E	Empty	15000	Distributed (Head, Mid, Rear)	60	0.00%	Flat	> 1.0%	35.00	90.00	< 10%	29.00%	4850.32	6400.00
Intermodal-A	Loaded	15000	Distributed (Head, Mid, Rear)	10	0.50%	Decline	> 1.0%	16.00	34.00	< 10%	5.00%	664.49	1188.00
Intermodal-A	Loaded	15000	Distributed (Head, Mid, Rear)	10	0.50%	Incline	> 1.0%	6.00	6.00	< 0.1%	1.00%	409.72	521.00
Intermodal-A	Loaded	15000	Distributed (Head, Mid, Rear)	10	1.10%	Decline	< 0.5%	35.00	35.00	< 10%	1.00%	802.37	2129.00
Intermodal-A	Loaded	15000	Distributed (Head, Mid, Rear)	10	0.00%	Flat	> 1.0%	10.00	19.00	< 0.1%	6.00%	535.32	732.00
Intermodal-A	Loaded	15000	Distributed (Head, Mid, Rear)	15	2.20%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	4.00%	1430.67	2557.00
Intermodal-A	Loaded	15000	Distributed (Head, Mid, Rear)	15	2.80%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	24.00%	1315.67	3471.00
Intermodal-A	Loaded	15000	Distributed (Head, Mid, Rear)	21	1.50%	Incline	> 1.0%	28.80	37.00	< 0.1%	8.00%	740.28	829.00
Intermodal-A	Loaded	15000	Distributed (Head, Mid, Rear)	25	1.70%	Decline	> 1.0%	21.00	37.00	< 10%	55.00%	2068.80	4517.00
Intermodal-A	Loaded	15000	Distributed (Head, Mid, Rear)	30	0.50%	Decline	> 1.0%	36.82	73.00	< 10%	55.00%	2688.64	4258.00
Intermodal-A	Loaded	15000	Distributed (Head, Mid, Rear)	30	0.50%	Incline	> 25%	35.06	119.00	< 0.1%	45.00%	2021.69	2883.00
Intermodal-A	Loaded	15000	Distributed (Head, Mid, Rear)	30	1.10%	Decline	> 1.0%	27.40	65.00	< 10%	61.00%	2598.35	4795.00
Intermodal-A	Loaded	15000	Distributed (Head, Mid, Rear)	30	1.00%	Crest	> 25%	44.72	130.00	< 0.1%	55.00%	2320.00	3283.00
Intermodal-A	Loaded	15000	Distributed (Head, Mid, Rear)	30	0.00%	Flat	> 1.0%	60.55	156.00	< 10%	43.00%	2420.29	4106.00
Intermodal-A	Loaded	15000	Distributed (Head, Mid, Rear)	50	0.50%	Incline	> 1.0%	72.41	276.00	< 10%	34.00%	4509.35	6245.00

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-A	Loaded	15000	Rear) Distributed (Head, Mid, Rear)	60	0.50%	Decline	> 1.0%	60.00	60.00	< 10%	62.00%	7704.62	12608.00
Intermodal-A	Loaded	15000	Distributed (Head, Mid, Rear)	60	1.10%	Decline	<0.1%	0.00	0.00	< 10%	62.00%	7046.78	10942.00
Intermodal-A	Loaded	15000	Distributed (Head, Mid, Rear)	60	1.00%	Trough	<0.1%	0.00	0.00	> 10%, < 25%	50.00%	7312.09	11014.00
Intermodal-A	Loaded	15000	Distributed (Head, Mid, Rear)	60	0.00%	Flat	> 1.0%	163.75	458.00	> 10%, < 25%	38.00%	7308.28	10597.00
Intermodal-B	Loaded	15000	Distributed (Head, Mid, Rear)	10	0.50%	Decline	> 1.0%	37.00	37.00	< 0.1%	1.00%	547.37	846.00
Intermodal-B	Loaded	15000	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	372.91	451.00
Intermodal-B	Loaded	15000	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	649.11	976.00
Intermodal-B	Loaded	15000	Distributed (Head, Mid, Rear)	10	0.00%	Flat	> 1.0%	7.67	15.00	< 0.1%	4.00%	458.80	712.00
Intermodal-B	Loaded	15000	Distributed (Head, Mid, Rear)	15	2.20%	Decline	<0.1%	0.00	0.00	< 10%	1.00%	1087.62	1566.00
Intermodal-B	Loaded	15000	Distributed (Head, Mid, Rear)	15	2.80%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	904.08	1407.00
Intermodal-B	Loaded	15000	Distributed (Head, Mid, Rear)	21	1.50%	Incline	> 1.0%	25.50	49.00	< 0.1%	6.00%	680.42	799.00
Intermodal-B	Loaded	15000	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	< 10%	42.00%	1678.86	2478.00
Intermodal-B	Loaded	15000	Distributed (Head, Mid, Rear)	30	0.50%	Decline	> 1.0%	66.38	149.00	< 0.1%	43.00%	2099.47	2941.00
Intermodal-B	Loaded	15000	Distributed (Head, Mid, Rear)	30	0.50%	Incline	> 1.0%	19.79	100.00	< 0.1%	20.00%	1673.14	2622.00
Intermodal-B	Loaded	15000	Distributed (Head, Mid, Rear)	30	1.10%	Decline	> 1.0%	46.00	124.00	< 10%	47.00%	2092.14	3492.00
Intermodal-B	Loaded	15000	Distributed (Head, Mid, Rear)	30	1.00%	Crest	> 1.0%	36.87	170.00	< 0.1%	34.00%	1977.32	2688.00
Intermodal-B	Loaded	15000	Distributed (Head, Mid, Rear)	30	0.00%	Flat	> 1.0%	37.37	224.00	< 0.1%	35.00%	1983.55	2790.00

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-B	Loaded	15000	Rear) Distributed (Head, Mid, Rear)	50	0.50%	Incline	> 1.0%	10.44	23.00	< 10%	31.00%	3790.71	5713.00
Intermodal-B	Loaded	15000	Distributed (Head, Mid, Rear)	60	0.50%	Decline	> 1.0%	35.00	35.00	< 10%	70.00%	5900.96	7942.00
Intermodal-B	Loaded	15000	Distributed (Head, Mid, Rear)	60	1.10%	Decline	<0.1%	0.00	0.00	< 10%	63.00%	5669.44	7991.00
Intermodal-B	Loaded	15000	Distributed (Head, Mid, Rear)	60	1.00%	Trough	> 1.0%	139.50	203.00	< 10%	40.00%	5596.82	11014.00
Intermodal-B	Loaded	15000	Distributed (Head, Mid, Rear)	60	0.00%	Flat	> 1.0%	113.00	113.00	< 10%	26.00%	5661.38	7576.00
Intermodal-C	Loaded	15000	Distributed (Head, Mid, Rear)	10	0.50%	Decline	> 1.0%	5.50	8.00	< 10%	2.00%	559.40	1040.00
Intermodal-C	Loaded	15000	Distributed (Head, Mid, Rear)	10	0.50%	Incline	< 0.5%	5.00	5.00	< 0.1%	1.00%	378.41	486.00
Intermodal-C	Loaded	15000	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	683.20	1390.00
Intermodal-C	Loaded	15000	Distributed (Head, Mid, Rear)	10	0.00%	Flat	> 1.0%	8.00	8.00	< 0.1%	2.00%	481.58	674.00
Intermodal-C	Loaded	15000	Distributed (Head, Mid, Rear)	15	2.20%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	3.00%	1159.92	2275.00
Intermodal-C	Loaded	15000	Distributed (Head, Mid, Rear)	15	2.80%	Decline	<0.1%	0.00	0.00	< 10%	1.00%	938.57	1576.00
Intermodal-C	Loaded	15000	Distributed (Head, Mid, Rear)	21	1.50%	Incline	> 1.0%	23.00	34.00	< 0.1%	7.00%	697.01	847.00
Intermodal-C	Loaded	15000	Distributed (Head, Mid, Rear)	25	1.70%	Decline	> 1.0%	37.00	52.00	< 10%	36.00%	1742.98	2955.00
Intermodal-C	Loaded	15000	Distributed (Head, Mid, Rear)	30	0.50%	Decline	> 1.0%	32.33	70.00	< 10%	43.00%	2184.41	3859.00
Intermodal-C	Loaded	15000	Distributed (Head, Mid, Rear)	30	0.50%	Incline	> 1.0%	32.94	110.00	< 0.1%	24.00%	1756.08	2758.00
Intermodal-C	Loaded	15000	Distributed (Head, Mid, Rear)	30	1.10%	Decline	< 0.5%	2.00	2.00	< 0.1%	44.00%	2133.26	3465.00
Intermodal-C	Loaded	15000	Distributed (Head, Mid, Rear)	30	1.00%	Crest	> 1.0%	42.57	143.00	< 0.1%	30.00%	1990.56	2783.00

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-C	Loaded	15000	Rear) Distributed (Head, Mid, Rear)	30	0.00%	Flat	> 1.0%	24.80	85.00	< 0.1%	24.00%	2061.75	3067.00
Intermodal-C	Loaded	15000	Distributed (Head, Mid, Rear)	50	0.50%	Incline	> 1.0%	49.67	122.00	< 10%	20.00%	3840.22	5278.00
Intermodal-C	Loaded	15000	Distributed (Head, Mid, Rear)	60	0.50%	Decline	> 1.0%	74.00	74.00	< 10%	54.00%	6064.51	9267.00
Intermodal-C	Loaded	15000	Distributed (Head, Mid, Rear)	60	1.10%	Decline	<0.1%	0.00	0.00	< 10%	50.00%	5907.86	8603.00
Intermodal-C	Loaded	15000	Distributed (Head, Mid, Rear)	60	1.00%	Trough	> 1.0%	74.50	136.00	< 10%	38.00%	5656.54	10217.00
Intermodal-C	Loaded	15000	Distributed (Head, Mid, Rear)	60	0.00%	Flat	> 1.0%	110.00	326.00	> 10%, < 25%	21.00%	5942.17	9434.00
Intermodal-D	Loaded	15000	Distributed (Head, Mid, Rear)	10	0.50%	Decline	> 1.0%	11.20	24.00	< 0.1%	5.00%	578.06	844.00
Intermodal-D	Loaded	15000	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	1.00%	385.27	466.00
Intermodal-D	Loaded	15000	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	700.40	1706.00
Intermodal-D	Loaded	15000	Distributed (Head, Mid, Rear)	10	0.00%	Flat	> 1.0%	15.20	42.00	< 0.1%	5.00%	478.44	721.00
Intermodal-D	Loaded	15000	Distributed (Head, Mid, Rear)	15	2.20%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	1.00%	1147.97	2206.00
Intermodal-D	Loaded	15000	Distributed (Head, Mid, Rear)	15	2.80%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	937.18	1515.00
Intermodal-D	Loaded	15000	Distributed (Head, Mid, Rear)	21	1.50%	Incline	> 1.0%	11.67	28.00	< 0.1%	3.00%	690.66	799.00
Intermodal-D	Loaded	15000	Distributed (Head, Mid, Rear)	25	1.70%	Decline	> 1.0%	15.50	16.00	< 10%	32.00%	1719.18	2630.00
Intermodal-D	Loaded	15000	Distributed (Head, Mid, Rear)	30	0.50%	Decline	> 1.0%	47.22	164.00	< 0.1%	43.00%	2149.33	3160.00
Intermodal-D	Loaded	15000	Distributed (Head, Mid, Rear)	30	0.50%	Incline	> 1.0%	27.94	96.00	< 0.1%	17.00%	1728.18	2399.00
Intermodal-D	Loaded	15000	Distributed (Head, Mid, Rear)	30	1.10%	Decline	> 1.0%	42.00	80.00	< 0.1%	42.00%	2127.23	3376.00

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-D	Loaded	15000	Rear) Distributed (Head, Mid, Rear)	30	1.00%	Crest	> 1.0%	27.27	104.00	< 10%	22.00%	2044.60	3104.00
Intermodal-D	Loaded	15000	Distributed (Head, Mid, Rear)	30	0.00%	Flat	> 1.0%	38.20	217.00	< 10%	26.00%	2108.32	3727.00
Intermodal-D	Loaded	15000	Distributed (Head, Mid, Rear)	50	0.50%	Incline	> 1.0%	60.83	258.00	< 10%	26.00%	3865.38	5281.00
Intermodal-D	Loaded	15000	Distributed (Head, Mid, Rear)	60	0.50%	Decline	> 1.0%	86.00	201.00	< 10%	53.00%	6230.33	10666.00
Intermodal-D	Loaded	15000	Distributed (Head, Mid, Rear)	60	1.10%	Decline	<0.1%	0.00	0.00	< 10%	50.00%	6007.51	8970.00
Intermodal-D	Loaded	15000	Distributed (Head, Mid, Rear)	60	1.00%	Trough	> 1.0%	59.33	149.00	< 10%	43.00%	5718.45	10658.00
Intermodal-D	Loaded	15000	Distributed (Head, Mid, Rear)	60	0.00%	Flat	> 1.0%	155.00	455.00	< 10%	23.00%	5967.37	9513.00
Intermodal-E	Loaded	15000	Distributed (Head, Mid, Rear)	10	0.50%	Decline	> 1.0%	11.50	17.00	< 10%	4.00%	553.77	1125.00
Intermodal-E	Loaded	15000	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	365.85	452.00
Intermodal-E	Loaded	15000	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	671.19	1381.00
Intermodal-E	Loaded	15000	Distributed (Head, Mid, Rear)	10	0.00%	Flat	> 1.0%	7.75	18.00	< 0.1%	2.00%	462.24	669.00
Intermodal-E	Loaded	15000	Distributed (Head, Mid, Rear)	15	2.20%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	1113.50	1912.00
Intermodal-E	Loaded	15000	Distributed (Head, Mid, Rear)	15	2.80%	Decline	<0.1%	0.00	0.00	< 10%	2.00%	915.31	1766.00
Intermodal-E	Loaded	15000	Distributed (Head, Mid, Rear)	21	1.50%	Incline	> 1.0%	12.00	27.00	< 0.1%	3.00%	688.42	851.00
Intermodal-E	Loaded	15000	Distributed (Head, Mid, Rear)	25	1.70%	Decline	> 1.0%	4.00	4.00	< 10%	39.00%	1713.04	3201.00
Intermodal-E	Loaded	15000	Distributed (Head, Mid, Rear)	30	0.50%	Decline	> 1.0%	33.00	71.00	< 10%	37.00%	2173.34	4256.00
Intermodal-E	Loaded	15000	Distributed (Head, Mid, Rear)	30	0.50%	Incline	> 1.0%	28.39	111.00	< 0.1%	20.00%	1681.13	2443.00

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-E	Loaded	15000	Rear) Distributed (Head, Mid, Rear)	30	1.10%	Decline	> 1.0%	44.00	44.00	< 0.1%	54.00%	2084.69	2899.00
Intermodal-E	Loaded	15000	Distributed (Head, Mid, Rear)	30	1.00%	Crest	> 1.0%	46.71	171.00	< 0.1%	33.00%	1984.06	2824.00
Intermodal-E	Loaded	15000	Distributed (Head, Mid, Rear)	30	0.00%	Flat	> 1.0%	51.29	164.00	< 0.1%	29.00%	2026.86	2839.00
Intermodal-E	Loaded	15000	Distributed (Head, Mid, Rear)	50	0.50%	Incline	> 1.0%	60.64	161.00	< 10%	27.00%	3849.67	5719.00
Intermodal-E	Loaded	15000	Distributed (Head, Mid, Rear)	60	0.50%	Decline	> 1.0%	99.00	131.00	< 10%	61.00%	6070.83	8906.00
Intermodal-E	Loaded	15000	Distributed (Head, Mid, Rear)	60	1.10%	Decline	<0.1%	0.00	0.00	< 10%	50.00%	5928.22	14038.00
Intermodal-E	Loaded	15000	Distributed (Head, Mid, Rear)	60	1.00%	Trough	> 1.0%	113.00	223.00	< 10%	48.00%	5542.15	6962.00
Intermodal-E	Loaded	15000	Distributed (Head, Mid, Rear)	60	0.00%	Flat	> 1.0%	47.33	64.00	> 10%, < 25%	27.00%	5755.14	9341.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-A	0	Head end only (SD70s)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	338.96	408.00
Manifest-A	0	Head end only (SD70s)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	326.40	341.00
Manifest-A	0	Head end only (SD70s)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	482.77	494.00
Manifest-A	0	Head end only (SD70s)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	319.81	336.00
Manifest-A	0	Head end only (SD70s)	20	2.20%	Decline	> 25%	1767.63	5891.00	> 25%, < 50%	36.78%	1583.01	1664.00
Manifest-A	0	Head end only (SD70s)	20	2.80%	Decline	1	3294.57	20931.00	< 0.1%	100.00%	1370.69	1379.00
Manifest-A	0	Head end only (SD70s)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	757.46	867.00
Manifest-A	0	Head end only (SD70s)	25	1.70%	Decline	> 75%	399.57	1415.00	< 0.1%	100.00%	1362.71	1372.00
Manifest-A	0	Head end only (SD70s)	30	0.50%	Decline	> 25%	200.91	554.00	< 0.1%	33.00%	1855.52	1862.00
Manifest-A	0	Head end only (SD70s)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1325.21	1348.00
Manifest-A	0	Head end only (SD70s)	30	1.10%	Decline	> 1.0%	260.86	821.00	< 0.1%	14.00%	2337.46	2453.00
Manifest-A	0	Head end only (SD70s)	30	0.00%	Flat	> 1.0%	98.75	245.00	< 0.1%	8.00%	1608.96	1671.00
Manifest-A	0	Head end only (SD70s)	55	1.10%	Decline	> 25%	851.47	3276.00	> 10%, < 25%	47.00%	6342.26	6707.00
Manifest-A	0	Head end only (SD70s)	55	1.00%	Crest	> 1.0%	349.53	887.00	< 0.1%	15.00%	3660.07	3808.00
Manifest-A	0	Head end only (SD70s)	55	1.00%	Trough	> 1.0%	246.00	572.00	> 50%	12.00%	7281.23	7570.00
Manifest-A	0	Head end only (SD70s)	60	0.50%	Decline	> 75%	1188.95	4434.00	< 0.1%	99.00%	6212.23	6222.00
Manifest-A	0	Head end only (SD70s)	60	0.50%	Incline	> 1.0%	195.58	538.00	< 0.1%	18.00%	4744.71	4822.00
Manifest-A	0	Head end only (SD70s)	60	0.00%	Flat	> 50%	429.63	1158.00	< 0.1%	52.00%	5724.15	5884.00
Manifest-A	0	Head end only (GP40s)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	368.95	404.00
Manifest-A	0	Head end only (GP40s)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	274.74	332.00
Manifest-A	0	Head end only (GP40s)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	471.28	527.00
Manifest-A	0	Head end only (GP40s)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	319.15	362.00
Manifest-A	0	Head end only (GP40s)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1576.16	1642.00
Manifest-A	0	Head end only (GP40s)	20	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2291.37	2363.00
Manifest-A	0	Head end only (GP40s)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	768.82	895.00
Manifest-A	0	Head end only (GP40s)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2065.49	2149.00
Manifest-A	0	Head end only (GP40s)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	1856.18	1864.00
Manifest-A	0	Head end only (GP40s)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1312.47	1345.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-A	0	Head end only (GP40s)	30	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	2149.71	2252.00
Manifest-A	0	Head end only (GP40s)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	1597.75	1674.00
Manifest-A	0	Head end only (GP40s)	55	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5885.10	6264.00
Manifest-A	0	Head end only (GP40s)	55	1.00%	Crest	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	3565.19	3735.00
Manifest-A	0	Head end only (GP40s)	55	1.00%	Trough	> 75%	513.56	1356.00	< 0.1%	100.00%	3519.39	3530.00
Manifest-A	0	Head end only (GP40s)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6211.88	6220.00
Manifest-A	0	Head end only (GP40s)	60	0.50%	Incline	<0.1%	0.00	0.00	> 50%	0.00%	4663.53	4732.00
Manifest-A	0	Head end only (GP40s)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	5502.71	5619.00
Manifest-B	0	Head end only (SD70s)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	368.57	417.00
Manifest-B	0	Head end only (SD70s)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	330.31	350.00
Manifest-B	0	Head end only (SD70s)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	484.92	493.00
Manifest-B	0	Head end only (SD70s)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	326.81	352.00
Manifest-B	0	Head end only (SD70s)	20	2.20%	Decline	> 25%	815.32	5841.00	> 10%, < 25%	45.83%	1567.33	1636.00
Manifest-B	0	Head end only (SD70s)	20	2.80%	Decline	1	4940.78	27465.00	< 0.1%	100.00%	1369.64	1380.00
Manifest-B	0	Head end only (SD70s)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	769.36	876.00
Manifest-B	0	Head end only (SD70s)	25	1.70%	Decline	> 75%	408.19	1225.00	< 0.1%	100.00%	1362.91	1371.00
Manifest-B	0	Head end only (SD70s)	30	0.50%	Decline	> 25%	145.57	561.00	< 0.1%	36.00%	1855.68	1864.00
Manifest-B	0	Head end only (SD70s)	30	0.50%	Incline	> 1.0%	42.00	72.00	< 0.1%	3.00%	1295.46	1304.00
Manifest-B	0	Head end only (SD70s)	30	1.10%	Decline	> 1.0%	372.20	820.00	< 0.1%	10.00%	2312.80	2411.00
Manifest-B	0	Head end only (SD70s)	30	0.00%	Flat	> 1.0%	87.25	145.00	< 0.1%	4.00%	1578.41	1625.00
Manifest-B	0	Head end only (SD70s)	55	1.10%	Decline	> 25%	722.05	1805.00	> 10%, < 25%	47.00%	6275.70	6623.00
Manifest-B	0	Head end only (SD70s)	55	1.00%	Crest	> 25%	272.09	1151.00	< 0.1%	33.00%	3449.45	3595.00
Manifest-B	0	Head end only (SD70s)	55	1.00%	Trough	> 1.0%	197.20	538.00	> 50%	15.00%	7141.48	7401.00
Manifest-B	0	Head end only (SD70s)	60	0.50%	Decline	> 75%	1243.91	3660.00	< 0.1%	99.00%	6212.16	6220.00
Manifest-B	0	Head end only (SD70s)	60	0.50%	Incline	> 50%	192.11	730.00	< 0.1%	52.00%	4579.83	4651.00
Manifest-B	0	Head end only (SD70s)	60	0.00%	Flat	> 50%	387.48	975.00	< 0.1%	63.00%	5567.44	5711.00
Manifest-B	0	Head end only (GP40s)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	376.08	410.00
Manifest-B	0	Head end only (GP40s)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	279.43	304.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-B	0	Head end only (GP40s)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	484.65	491.00
Manifest-B	0	Head end only (GP40s)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	327.17	365.00
Manifest-B	0	Head end only (GP40s)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1566.30	1628.00
Manifest-B	0	Head end only (GP40s)	20	2.80%	Decline	> 50%	491.39	3541.00	< 10%	100.00%	1370.74	1380.00
Manifest-B	0	Head end only (GP40s)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	771.87	860.00
Manifest-B	0	Head end only (GP40s)	25	1.70%	Decline	> 1.0%	88.43	171.00	< 10%	100.00%	1363.68	1372.00
Manifest-B	0	Head end only (GP40s)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	1856.01	1864.00
Manifest-B	0	Head end only (GP40s)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1288.34	1305.00
Manifest-B	0	Head end only (GP40s)	30	1.10%	Decline	< 0.5%	70.00	70.00	< 0.1%	100.00%	1556.41	1567.00
Manifest-B	0	Head end only (GP40s)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	1546.20	1628.00
Manifest-B	0	Head end only (GP40s)	55	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5761.57	6322.00
Manifest-B	0	Head end only (GP40s)	55	1.00%	Crest	<0.1%	0.00	0.00	< 10%	0.00%	3370.90	3486.00
Manifest-B	0	Head end only (GP40s)	55	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	6832.34	7109.00
Manifest-B	0	Head end only (GP40s)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6211.70	6221.00
Manifest-B	0	Head end only (GP40s)	60	0.50%	Incline	<0.1%	0.00	0.00	> 50%	0.00%	4523.79	4567.00
Manifest-B	0	Head end only (GP40s)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	5329.94	5448.00
Manifest-A	3	Head end only (SD70s)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	398.06	431.00
Manifest-A	3	Head end only (SD70s)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	318.41	333.00
Manifest-A	3	Head end only (SD70s)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	455.62	589.00
Manifest-A	3	Head end only (SD70s)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	338.63	360.00
Manifest-A	3	Head end only (SD70s)	15	2.80%	Decline	> 75%	1359.87	10172.00	< 0.1%	100.00%	1377.05	1385.00
Manifest-A	3	Head end only (SD70s)	20	2.20%	Decline	> 1.0%	456.13	1650.00	> 50%	10.00%	1640.50	1736.00
Manifest-A	3	Head end only (SD70s)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	784.42	859.00
Manifest-A	3	Head end only (SD70s)	25	1.70%	Decline	> 1.0%	311.25	898.00	> 50%	5.00%	2281.12	2382.00
Manifest-A	3	Head end only (SD70s)	30	0.50%	Decline	> 1.0%	119.60	336.00	< 0.1%	8.00%	2072.21	2231.00
Manifest-A	3	Head end only (SD70s)	30	0.50%	Incline	> 1.0%	10.50	11.00	< 0.1%	2.00%	1456.66	1547.00
Manifest-A	3	Head end only (SD70s)	30	1.10%	Decline	> 1.0%	200.78	679.00	< 10%	19.00%	2462.77	2674.00
Manifest-A	3	Head end only (SD70s)	30	0.00%	Flat	> 1.0%	55.50	164.00	< 0.1%	4.00%	1725.26	1764.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-A	3	Head end only (SD70s)	45	1.10%	Decline	> 1.0%	291.00	791.00	> 25%, < 50%	52.00%	4943.05	5489.00
Manifest-A	3	Head end only (SD70s)	45	1.00%	Crest	> 1.0%	224.00	224.00	< 0.1%	1.00%	2641.23	2790.00
Manifest-A	3	Head end only (SD70s)	45	1.00%	Trough	> 1.0%	76.50	156.00	< 0.1%	68.00%	3851.35	4826.00
Manifest-A	3	Head end only (SD70s)	60	0.50%	Decline	> 25%	474.53	2200.00	< 10%	100.00%	6212.32	6224.00
Manifest-A	3	Head end only (SD70s)	60	0.50%	Incline	> 1.0%	295.75	330.00	< 10%	4.00%	5139.13	5253.00
Manifest-A	3	Head end only (SD70s)	60	0.00%	Flat	> 1.0%	222.00	501.00	< 10%	11.00%	6188.66	6321.00
Manifest-A	3	Head end only (GP40s)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	371.32	409.00
Manifest-A	3	Head end only (GP40s)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	307.30	322.00
Manifest-A	3	Head end only (GP40s)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	421.38	477.00
Manifest-A	3	Head end only (GP40s)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	335.90	366.00
Manifest-A	3	Head end only (GP40s)	15	2.80%	Decline	> 75%	1269.86	6559.00	< 10%	100.00%	1377.60	1385.00
Manifest-A	3	Head end only (GP40s)	20	2.20%	Decline	> 1.0%	184.33	450.00	> 50%	21.00%	1576.51	1759.00
Manifest-A	3	Head end only (GP40s)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	774.59	868.00
Manifest-A	3	Head end only (GP40s)	25	1.70%	Decline	> 1.0%	305.60	844.00	> 50%	5.00%	2327.19	2412.00
Manifest-A	3	Head end only (GP40s)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	2.00%	2186.30	2262.00
Manifest-A	3	Head end only (GP40s)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1466.63	1557.00
Manifest-A	3	Head end only (GP40s)	30	1.10%	Decline	> 1.0%	53.50	101.00	< 10%	10.00%	2433.11	2693.00
Manifest-A	3	Head end only (GP40s)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	1726.82	1765.00
Manifest-A	3	Head end only (GP40s)	45	1.10%	Decline	> 1.0%	527.00	1095.00	> 50%	5.00%	5295.32	5550.00
Manifest-A	3	Head end only (GP40s)	45	1.00%	Crest	> 1.0%	29.50	55.00	< 0.1%	2.00%	2606.07	2748.00
Manifest-A	3	Head end only (GP40s)	45	1.00%	Trough	> 1.0%	129.79	654.00	< 0.1%	73.00%	3785.86	4543.00
Manifest-A	3	Head end only (GP40s)	60	0.50%	Decline	> 1.0%	1235.50	1390.00	> 25%, < 50%	100.00%	6212.18	6221.00
Manifest-A	3	Head end only (GP40s)	60	0.50%	Incline	> 1.0%	82.50	132.00	> 10%, < 25%	2.00%	5141.46	5251.00
Manifest-A	3	Head end only (GP40s)	60	0.00%	Flat	> 1.0%	389.00	656.00	> 50%	4.00%	6176.13	6241.00
Manifest-B	3	Head end only (SD70s)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	312.89	358.00
Manifest-B	3	Head end only (SD70s)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	271.68	289.00
Manifest-B	3	Head end only (SD70s)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	335.46	409.00
Manifest-B	3	Head end only (SD70s)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	291.10	344.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-B	3	Head end only (SD70s)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1041.86	1340.00
Manifest-B	3	Head end only (SD70s)	20	2.20%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	1111.09	1160.00
Manifest-B	3	Head end only (SD70s)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	678.61	759.00
Manifest-B	3	Head end only (SD70s)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1527.79	1589.00
Manifest-B	3	Head end only (SD70s)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	1418.35	1503.00
Manifest-B	3	Head end only (SD70s)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1119.87	1206.00
Manifest-B	3	Head end only (SD70s)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	1558.06	1768.00
Manifest-B	3	Head end only (SD70s)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	1268.97	1329.00
Manifest-B	3	Head end only (SD70s)	45	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	3233.65	3241.00
Manifest-B	3	Head end only (SD70s)	45	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	2060.81	2209.00
Manifest-B	3	Head end only (SD70s)	45	1.00%	Trough	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	3358.91	3409.00
Manifest-B	3	Head end only (SD70s)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4764.02	4886.00
Manifest-B	3	Head end only (SD70s)	60	0.50%	Incline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	3826.84	3868.00
Manifest-B	3	Head end only (SD70s)	60	0.00%	Flat	< 0.5%	17.00	17.00	> 25%, < 50%	1.00%	4190.39	4303.00
Manifest-B	3	Head end only (GP40s)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	307.25	326.00
Manifest-B	3	Head end only (GP40s)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	270.73	282.00
Manifest-B	3	Head end only (GP40s)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	353.80	369.00
Manifest-B	3	Head end only (GP40s)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	279.46	300.00
Manifest-B	3	Head end only (GP40s)	15	2.80%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	574.23	624.00
Manifest-B	3	Head end only (GP40s)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1056.31	1088.00
Manifest-B	3	Head end only (GP40s)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	644.12	729.00
Manifest-B	3	Head end only (GP40s)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1362.97	1371.00
Manifest-B	3	Head end only (GP40s)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	1320.85	1407.00
Manifest-B	3	Head end only (GP40s)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1076.93	1123.00
Manifest-B	3	Head end only (GP40s)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	1552.38	1565.00
Manifest-B	3	Head end only (GP40s)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	1191.49	1239.00
Manifest-B	3	Head end only (GP40s)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3059.44	3110.00
Manifest-B	3	Head end only (GP40s)	45	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	1951.21	2053.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-B	3	Head end only (GP40s)	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	2984.39	3015.00
Manifest-B	3	Head end only (GP40s)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4366.19	4458.00
Manifest-B	3	Head end only (GP40s)	60	0.50%	Incline	<0.1%	0.00	0.00	> 50%	0.00%	3587.22	3682.00
Manifest-B	3	Head end only (GP40s)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	3912.70	3967.00
Manifest-C	3	Head end only (SD70s)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	391.54	430.00
Manifest-C	3	Head end only (SD70s)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	317.37	333.00
Manifest-C	3	Head end only (SD70s)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	474.39	570.00
Manifest-C	3	Head end only (SD70s)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	337.84	360.00
Manifest-C	3	Head end only (SD70s)	15	2.80%	Decline	> 75%	1056.96	7054.00	< 10%	100.00%	1377.70	1385.00
Manifest-C	3	Head end only (SD70s)	20	2.20%	Decline	> 1.0%	749.67	4734.00	> 50%	14.14%	1510.49	1661.00
Manifest-C	3	Head end only (SD70s)	25	1.50%	Incline	< 0.5%	14.00	14.00	< 0.1%	1.00%	776.85	882.00
Manifest-C	3	Head end only (SD70s)	25	1.70%	Decline	> 1.0%	116.00	405.00	> 50%	15.00%	2122.12	2305.00
Manifest-C	3	Head end only (SD70s)	30	0.50%	Decline	> 1.0%	43.67	108.00	< 0.1%	6.00%	2018.47	2183.00
Manifest-C	3	Head end only (SD70s)	30	0.50%	Incline	> 1.0%	72.00	136.00	< 0.1%	2.00%	1443.03	1557.00
Manifest-C	3	Head end only (SD70s)	30	1.10%	Decline	> 1.0%	175.71	660.00	< 10%	18.00%	2321.46	2617.00
Manifest-C	3	Head end only (SD70s)	30	0.00%	Flat	> 1.0%	45.86	89.00	< 0.1%	7.00%	1700.25	1724.00
Manifest-C	3	Head end only (SD70s)	45	1.10%	Decline	> 1.0%	414.69	1516.00	> 10%, < 25%	54.00%	4677.08	5286.00
Manifest-C	3	Head end only (SD70s)	45	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	2621.44	2752.00
Manifest-C	3	Head end only (SD70s)	45	1.00%	Trough	> 1.0%	57.67	80.00	< 10%	43.00%	3776.78	4316.00
Manifest-C	3	Head end only (SD70s)	60	0.50%	Decline	> 1.0%	615.82	2536.00	< 10%	100.00%	6212.50	6222.00
Manifest-C	3	Head end only (SD70s)	60	0.50%	Incline	> 1.0%	252.83	514.00	< 10%	7.00%	5041.88	5165.00
Manifest-C	3	Head end only (SD70s)	60	0.00%	Flat	> 1.0%	267.88	744.00	< 10%	8.00%	6104.66	6225.00
Manifest-C	3	Head end only (GP40s)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	368.38	401.00
Manifest-C	3	Head end only (GP40s)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	307.26	324.00
Manifest-C	3	Head end only (GP40s)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	420.38	489.00
Manifest-C	3	Head end only (GP40s)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	334.11	365.00
Manifest-C	3	Head end only (GP40s)	15	2.80%	Decline	> 25%	1116.00	6809.00	< 10%	100.00%	1378.04	1386.00
Manifest-C	3	Head end only (GP40s)	20	2.20%	Decline	> 1.0%	189.50	397.00	> 50%	8.00%	1551.18	1709.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-C	3	Head end only (GP40s)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	777.43	852.00
Manifest-C	3	Head end only (GP40s)	25	1.70%	Decline	> 1.0%	441.33	1176.00	> 50%	5.00%	2275.85	2351.00
Manifest-C	3	Head end only (GP40s)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2158.92	2218.00
Manifest-C	3	Head end only (GP40s)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1466.09	1561.00
Manifest-C	3	Head end only (GP40s)	30	1.10%	Decline	> 1.0%	281.33	421.00	< 10%	6.00%	2461.47	2626.00
Manifest-C	3	Head end only (GP40s)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	1702.46	1762.00
Manifest-C	3	Head end only (GP40s)	45	1.10%	Decline	> 1.0%	404.33	1114.00	> 50%	10.00%	5096.13	5434.00
Manifest-C	3	Head end only (GP40s)	45	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	2586.17	2746.00
Manifest-C	3	Head end only (GP40s)	45	1.00%	Trough	> 1.0%	70.25	336.00	< 10%	55.00%	3725.20	5814.00
Manifest-C	3	Head end only (GP40s)	60	0.50%	Decline	> 1.0%	101.50	146.00	> 50%	100.00%	6211.34	6221.00
Manifest-C	3	Head end only (GP40s)	60	0.50%	Incline	< 0.5%	16.00	16.00	> 25%, < 50%	1.00%	5043.96	5163.00
Manifest-C	3	Head end only (GP40s)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	6092.32	6228.00
Manifest-D	3	Head end only (SD70s)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	307.31	328.00
Manifest-D	3	Head end only (SD70s)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	262.67	278.00
Manifest-D	3	Head end only (SD70s)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	317.68	343.00
Manifest-D	3	Head end only (SD70s)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	286.13	328.00
Manifest-D	3	Head end only (SD70s)	15	2.80%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	522.59	669.00
Manifest-D	3	Head end only (SD70s)	20	2.20%	Decline	> 1.0%	19.00	34.00	< 10%	3.00%	1055.24	1119.00
Manifest-D	3	Head end only (SD70s)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	643.48	726.00
Manifest-D	3	Head end only (SD70s)	25	1.70%	Decline	< 0.5%	18.00	18.00	> 10%, < 25%	1.00%	1362.95	1373.00
Manifest-D	3	Head end only (SD70s)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	1352.63	1450.00
Manifest-D	3	Head end only (SD70s)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1070.75	1087.00
Manifest-D	3	Head end only (SD70s)	30	1.10%	Decline	> 1.0%	29.00	29.00	< 0.1%	1.00%	1512.96	1666.00
Manifest-D	3	Head end only (SD70s)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	1211.74	1250.00
Manifest-D	3	Head end only (SD70s)	45	1.10%	Decline	> 1.0%	23.00	27.00	< 10%	2.00%	3168.41	3235.00
Manifest-D	3	Head end only (SD70s)	45	1.00%	Crest	< 0.5%	6.00	6.00	< 0.1%	1.00%	1950.46	2048.00
Manifest-D	3	Head end only (SD70s)	45	1.00%	Trough	<0.1%	0.00	0.00	< 10%	0.00%	3117.76	3143.00
Manifest-D	3	Head end only (SD70s)	60	0.50%	Decline	> 1.0%	228.75	774.00	> 10%, < 25%	4.00%	4532.16	4551.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-D	3	Head end only (SD70s)	60	0.50%	Incline	> 1.0%	88.67	155.00	< 0.1%	3.00%	3645.03	3692.00
Manifest-D	3	Head end only (SD70s)	60	0.00%	Flat	> 1.0%	119.75	437.00	< 0.1%	8.00%	3969.24	4103.00
Manifest-D	3	Head end only (GP40s)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	295.91	317.00
Manifest-D	3	Head end only (GP40s)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	254.04	277.00
Manifest-D	3	Head end only (GP40s)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	333.76	354.00
Manifest-D	3	Head end only (GP40s)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	270.86	313.00
Manifest-D	3	Head end only (GP40s)	15	2.80%	Decline	> 1.0%	66.00	72.00	< 0.1%	2.00%	547.73	608.00
Manifest-D	3	Head end only (GP40s)	20	2.20%	Decline	< 0.5%	14.00	14.00	< 10%	1.00%	988.79	1046.00
Manifest-D	3	Head end only (GP40s)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	630.86	700.00
Manifest-D	3	Head end only (GP40s)	25	1.70%	Decline	< 0.5%	48.00	48.00	> 50%	1.00%	1292.15	1332.00
Manifest-D	3	Head end only (GP40s)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	1274.63	1293.00
Manifest-D	3	Head end only (GP40s)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1023.11	1071.00
Manifest-D	3	Head end only (GP40s)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	1460.32	1478.00
Manifest-D	3	Head end only (GP40s)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	1130.88	1157.00
Manifest-D	3	Head end only (GP40s)	45	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	2839.36	2906.00
Manifest-D	3	Head end only (GP40s)	45	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	1871.66	1955.00
Manifest-D	3	Head end only (GP40s)	45	1.00%	Trough	<0.1%	0.00	0.00	< 10%	0.00%	2774.38	2872.00
Manifest-D	3	Head end only (GP40s)	60	0.50%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	4141.74	4204.00
Manifest-D	3	Head end only (GP40s)	60	0.50%	Incline	<0.1%	0.00	0.00	< 10%	0.00%	3444.57	3510.00
Manifest-D	3	Head end only (GP40s)	60	0.00%	Flat	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	3683.64	3773.00
Manifest-E	3	Head end only (SD70s)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	391.39	429.00
Manifest-E	3	Head end only (SD70s)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	318.15	334.00
Manifest-E	3	Head end only (SD70s)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	477.91	575.00
Manifest-E	3	Head end only (SD70s)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	337.16	361.00
Manifest-E	3	Head end only (SD70s)	15	2.80%	Decline	> 50%	1051.07	17947.00	< 10%	100.00%	1377.64	1386.00
Manifest-E	3	Head end only (SD70s)	20	2.20%	Decline	< 0.5%	49.00	49.00	> 50%	1.00%	1562.05	1668.00
Manifest-E	3	Head end only (SD70s)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	777.74	856.00
Manifest-E	3	Head end only (SD70s)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2185.62	2313.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-E	3	Head end only (SD70s)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2057.88	2191.00
Manifest-E	3	Head end only (SD70s)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1447.25	1560.00
Manifest-E	3	Head end only (SD70s)	30	1.10%	Decline	> 1.0%	110.00	110.00	< 10%	5.00%	2482.18	2616.00
Manifest-E	3	Head end only (SD70s)	30	0.00%	Flat	< 0.5%	12.00	12.00	< 0.1%	1.00%	1699.02	1726.00
Manifest-E	3	Head end only (SD70s)	45	1.10%	Decline	> 1.0%	300.17	1139.00	> 25%, < 50%	14.00%	4732.89	5344.00
Manifest-E	3	Head end only (SD70s)	45	1.00%	Crest	< 0.5%	153.00	153.00	< 0.1%	1.00%	2620.13	2746.00
Manifest-E	3	Head end only (SD70s)	45	1.00%	Trough	> 1.0%	294.00	294.00	< 10%	23.00%	3742.11	4364.00
Manifest-E	3	Head end only (SD70s)	60	0.50%	Decline	> 1.0%	560.20	2080.00	> 25%, < 50%	100.00%	6211.37	6221.00
Manifest-E	3	Head end only (SD70s)	60	0.50%	Incline	> 1.0%	256.00	410.00	< 10%	2.00%	5038.65	5164.00
Manifest-E	3	Head end only (SD70s)	60	0.00%	Flat	> 1.0%	337.75	532.00	> 25%, < 50%	4.00%	6093.84	6225.00
Manifest-E	3	Head end only (GP40s)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	373.74	405.00
Manifest-E	3	Head end only (GP40s)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	308.69	326.00
Manifest-E	3	Head end only (GP40s)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	422.60	466.00
Manifest-E	3	Head end only (GP40s)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	334.34	366.00
Manifest-E	3	Head end only (GP40s)	15	2.80%	Decline	> 25%	450.50	1426.00	> 10%, < 25%	100.00%	1377.72	1384.00
Manifest-E	3	Head end only (GP40s)	20	2.20%	Decline	> 1.0%	269.00	571.00	> 50%	8.00%	1529.62	1705.00
Manifest-E	3	Head end only (GP40s)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	770.64	853.00
Manifest-E	3	Head end only (GP40s)	25	1.70%	Decline	> 1.0%	250.33	632.00	> 50%	3.00%	2252.25	2346.00
Manifest-E	3	Head end only (GP40s)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2148.99	2202.00
Manifest-E	3	Head end only (GP40s)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1460.01	1539.00
Manifest-E	3	Head end only (GP40s)	30	1.10%	Decline	<0.1%	0.00	0.00	< 10%	4.00%	2400.11	2613.00
Manifest-E	3	Head end only (GP40s)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	1706.03	1758.00
Manifest-E	3	Head end only (GP40s)	45	1.10%	Decline	> 1.0%	141.67	290.00	> 50%	6.00%	5036.49	5374.00
Manifest-E	3	Head end only (GP40s)	45	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	2583.35	2729.00
Manifest-E	3	Head end only (GP40s)	45	1.00%	Trough	> 1.0%	166.62	610.00	< 10%	35.00%	3763.18	5371.00
Manifest-E	3	Head end only (GP40s)	60	0.50%	Decline	> 1.0%	609.00	869.00	> 50%	100.00%	6212.18	6222.00
Manifest-E	3	Head end only (GP40s)	60	0.50%	Incline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	5038.06	5084.00
Manifest-E	3	Head end only (GP40s)	60	0.00%	Flat	> 1.0%	193.00	419.00	> 50%	4.00%	6075.47	6223.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-F	3	Head end only (SD70s)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	402.36	433.00
Manifest-F	3	Head end only (SD70s)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	316.03	334.00
Manifest-F	3	Head end only (SD70s)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	505.75	584.00
Manifest-F	3	Head end only (SD70s)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	337.03	363.00
Manifest-F	3	Head end only (SD70s)	15	2.80%	Decline	> 25%	1299.04	20823.00	< 10%	100.00%	1377.76	1388.00
Manifest-F	3	Head end only (SD70s)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1612.92	1675.00
Manifest-F	3	Head end only (SD70s)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	776.99	860.00
Manifest-F	3	Head end only (SD70s)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2171.21	2346.00
Manifest-F	3	Head end only (SD70s)	30	0.50%	Decline	<0.1%	0.00	0.00	< 10%	1.00%	2099.81	2235.00
Manifest-F	3	Head end only (SD70s)	30	0.50%	Incline	> 1.0%	26.00	26.00	< 0.1%	1.00%	1446.43	1555.00
Manifest-F	3	Head end only (SD70s)	30	1.10%	Decline	> 1.0%	191.00	191.00	> 10%, < 25%	8.00%	2371.65	2634.00
Manifest-F	3	Head end only (SD70s)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	1698.30	1764.00
Manifest-F	3	Head end only (SD70s)	45	1.10%	Decline	> 1.0%	172.56	1059.00	> 10%, < 25%	21.00%	4630.39	5288.00
Manifest-F	3	Head end only (SD70s)	45	1.00%	Crest	<0.1%	0.00	0.00	< 10%	0.00%	2619.33	2746.00
Manifest-F	3	Head end only (SD70s)	45	1.00%	Trough	<0.1%	0.00	0.00	< 10%	26.00%	3782.93	5720.00
Manifest-F	3	Head end only (SD70s)	60	0.50%	Decline	> 1.0%	1405.75	2558.00	> 25%, < 50%	100.00%	6213.20	6222.00
Manifest-F	3	Head end only (SD70s)	60	0.50%	Incline	> 1.0%	89.50	111.00	> 10%, < 25%	2.00%	5030.53	5164.00
Manifest-F	3	Head end only (SD70s)	60	0.00%	Flat	> 1.0%	362.50	946.00	> 25%, < 50%	6.00%	6095.87	6225.00
Manifest-F	3	Head end only (GP40s)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	372.39	422.00
Manifest-F	3	Head end only (GP40s)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	309.12	327.00
Manifest-F	3	Head end only (GP40s)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	411.55	561.00
Manifest-F	3	Head end only (GP40s)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	338.61	362.00
Manifest-F	3	Head end only (GP40s)	15	2.80%	Decline	> 25%	1214.29	14391.00	> 10%, < 25%	100.00%	1377.61	1389.00
Manifest-F	3	Head end only (GP40s)	20	2.20%	Decline	> 1.0%	106.00	131.00	> 50%	6.00%	1571.77	1711.00
Manifest-F	3	Head end only (GP40s)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	777.10	857.00
Manifest-F	3	Head end only (GP40s)	25	1.70%	Decline	> 1.0%	1176.00	1446.00	> 50%	4.00%	2230.27	2348.00
Manifest-F	3	Head end only (GP40s)	30	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	2148.91	2201.00
Manifest-F	3	Head end only (GP40s)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1454.89	1548.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-F	3	Head end only (GP40s)	30	1.10%	Decline	< 0.5%	36.00	36.00	> 10%, < 25%	3.00%	2479.59	2612.00
Manifest-F	3	Head end only (GP40s)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	1699.91	1762.00
Manifest-F	3	Head end only (GP40s)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	1.00%	5145.91	5407.00
Manifest-F	3	Head end only (GP40s)	45	1.00%	Crest	<0.1%	0.00	0.00	< 10%	0.00%	2574.47	2734.00
Manifest-F	3	Head end only (GP40s)	45	1.00%	Trough	> 1.0%	53.40	147.00	> 10%, < 25%	31.00%	3929.70	5849.00
Manifest-F	3	Head end only (GP40s)	60	0.50%	Decline	> 1.0%	380.33	771.00	> 50%	100.00%	6211.94	6221.00
Manifest-F	3	Head end only (GP40s)	60	0.50%	Incline	> 1.0%	76.50	152.00	> 25%, < 50%	2.00%	5028.49	5169.00
Manifest-F	3	Head end only (GP40s)	60	0.00%	Flat	> 1.0%	185.33	423.00	> 50%	3.00%	6078.65	6152.00
Manifest-G	3	Head end only (SD70s)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	379.75	415.00
Manifest-G	3	Head end only (SD70s)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	314.86	332.00
Manifest-G	3	Head end only (SD70s)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	455.16	556.00
Manifest-G	3	Head end only (SD70s)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	332.45	350.00
Manifest-G	3	Head end only (SD70s)	15	2.80%	Decline	> 50%	1071.50	7596.00	< 10%	100.00%	1377.10	1384.00
Manifest-G	3	Head end only (SD70s)	20	2.20%	Decline	> 1.0%	660.00	1811.00	> 50%	6.00%	1545.67	1640.00
Manifest-G	3	Head end only (SD70s)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	758.21	858.00
Manifest-G	3	Head end only (SD70s)	25	1.70%	Decline	> 1.0%	526.57	1369.00	> 50%	7.00%	2117.92	2240.00
Manifest-G	3	Head end only (SD70s)	30	0.50%	Decline	> 1.0%	33.00	33.00	< 0.1%	1.00%	1994.49	2103.00
Manifest-G	3	Head end only (SD70s)	30	0.50%	Incline	> 1.0%	105.00	105.00	< 0.1%	1.00%	1411.50	1505.00
Manifest-G	3	Head end only (SD70s)	30	1.10%	Decline	> 1.0%	320.80	874.00	< 0.1%	8.00%	2386.90	2542.00
Manifest-G	3	Head end only (SD70s)	30	0.00%	Flat	< 0.5%	8.00	8.00	< 0.1%	1.00%	1648.33	1716.00
Manifest-G	3	Head end only (SD70s)	45	1.10%	Decline	> 1.0%	489.93	2238.00	> 10%, < 25%	42.00%	4566.91	5152.00
Manifest-G	3	Head end only (SD70s)	45	1.00%	Crest	> 1.0%	371.00	371.00	< 0.1%	1.00%	2561.59	2698.00
Manifest-G	3	Head end only (SD70s)	45	1.00%	Trough	> 1.0%	146.50	286.00	< 10%	47.00%	3693.04	4166.00
Manifest-G	3	Head end only (SD70s)	60	0.50%	Decline	> 1.0%	618.68	3188.00	> 10%, < 25%	100.00%	6211.78	6222.00
Manifest-G	3	Head end only (SD70s)	60	0.50%	Incline	> 1.0%	193.67	234.00	< 10%	3.00%	4891.94	4989.00
Manifest-G	3	Head end only (SD70s)	60	0.00%	Flat	> 1.0%	345.91	946.00	> 10%, < 25%	11.00%	5948.59	6058.00
Manifest-G	3	Head end only (GP40s)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	362.27	396.00
Manifest-G	3	Head end only (GP40s)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	303.90	320.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-G	3	Head end only (GP40s)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	408.12	447.00
Manifest-G	3	Head end only (GP40s)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	327.00	350.00
Manifest-G	3	Head end only (GP40s)	15	2.80%	Decline	> 50%	1040.86	8105.00	> 10%, < 25%	100.00%	1378.33	1387.00
Manifest-G	3	Head end only (GP40s)	20	2.20%	Decline	> 1.0%	259.64	940.00	> 50%	12.00%	1558.34	1659.00
Manifest-G	3	Head end only (GP40s)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	771.22	827.00
Manifest-G	3	Head end only (GP40s)	25	1.70%	Decline	> 1.0%	514.25	988.00	> 50%	9.00%	2153.02	2258.00
Manifest-G	3	Head end only (GP40s)	30	0.50%	Decline	< 0.5%	79.00	79.00	< 0.1%	1.00%	2035.23	2129.00
Manifest-G	3	Head end only (GP40s)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1389.15	1461.00
Manifest-G	3	Head end only (GP40s)	30	1.10%	Decline	> 1.0%	387.00	605.00	< 0.1%	12.00%	2340.63	2526.00
Manifest-G	3	Head end only (GP40s)	30	0.00%	Flat	> 1.0%	6.00	6.00	< 0.1%	2.00%	1649.24	1718.00
Manifest-G	3	Head end only (GP40s)	45	1.10%	Decline	> 1.0%	242.20	521.00	> 50%	6.00%	4935.76	5165.00
Manifest-G	3	Head end only (GP40s)	45	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	2534.57	2696.00
Manifest-G	3	Head end only (GP40s)	45	1.00%	Trough	> 1.0%	140.19	404.00	< 0.1%	57.00%	3630.27	4170.00
Manifest-G	3	Head end only (GP40s)	60	0.50%	Decline	> 1.0%	357.89	1102.00	> 25%, < 50%	100.00%	6211.97	6221.00
Manifest-G	3	Head end only (GP40s)	60	0.50%	Incline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	4869.17	4912.00
Manifest-G	3	Head end only (GP40s)	60	0.00%	Flat	> 1.0%	386.67	967.00	> 25%, < 50%	3.00%	5896.92	5971.00
Manifest-H	3	Head end only (SD70s)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	362.08	380.00
Manifest-H	3	Head end only (SD70s)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	285.09	320.00
Manifest-H	3	Head end only (SD70s)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	448.98	496.00
Manifest-H	3	Head end only (SD70s)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	312.34	362.00
Manifest-H	3	Head end only (SD70s)	15	2.80%	Decline	> 1.0%	95.33	240.00	> 50%	96.00%	1377.62	1387.00
Manifest-H	3	Head end only (SD70s)	20	2.20%	Decline	> 1.0%	57.00	125.00	> 50%	4.00%	1334.69	1385.00
Manifest-H	3	Head end only (SD70s)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	721.34	788.00
Manifest-H	3	Head end only (SD70s)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	1.00%	1833.87	1883.00
Manifest-H	3	Head end only (SD70s)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	1749.03	1799.00
Manifest-H	3	Head end only (SD70s)	30	0.50%	Incline	< 0.5%	25.00	25.00	< 0.1%	1.00%	1279.74	1347.00
Manifest-H	3	Head end only (SD70s)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2066.77	2125.00
Manifest-H	3	Head end only (SD70s)	30	0.00%	Flat	> 1.0%	108.00	170.00	< 0.1%	2.00%	1474.78	1576.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-H	3	Head end only (SD70s)	45	1.10%	Decline	> 1.0%	305.33	720.00	> 50%	3.00%	4106.26	4243.00
Manifest-H	3	Head end only (SD70s)	45	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	2312.09	2414.00
Manifest-H	3	Head end only (SD70s)	45	1.00%	Trough	> 1.0%	262.40	436.00	< 0.1%	95.00%	3534.54	3544.00
Manifest-H	3	Head end only (SD70s)	60	0.50%	Decline	> 1.0%	358.75	1302.00	> 50%	4.00%	6009.07	6124.00
Manifest-H	3	Head end only (SD70s)	60	0.50%	Incline	> 1.0%	374.00	528.00	> 10%, < 25%	3.00%	4282.00	4307.00
Manifest-H	3	Head end only (SD70s)	60	0.00%	Flat	> 1.0%	144.33	313.00	> 25%, < 50%	3.00%	5115.69	5268.00
Manifest-H	3	Head end only (GP40s)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	339.00	375.00
Manifest-H	3	Head end only (GP40s)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	276.55	298.00
Manifest-H	3	Head end only (GP40s)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	450.97	464.00
Manifest-H	3	Head end only (GP40s)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	307.17	348.00
Manifest-H	3	Head end only (GP40s)	15	2.80%	Decline	> 1.0%	709.00	709.00	> 50%	37.00%	1377.90	1389.00
Manifest-H	3	Head end only (GP40s)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1264.61	1343.00
Manifest-H	3	Head end only (GP40s)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	724.75	815.00
Manifest-H	3	Head end only (GP40s)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	1.00%	1766.70	1832.00
Manifest-H	3	Head end only (GP40s)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	1715.75	1769.00
Manifest-H	3	Head end only (GP40s)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1267.78	1337.00
Manifest-H	3	Head end only (GP40s)	30	1.10%	Decline	> 1.0%	174.00	174.00	< 0.1%	1.00%	2002.69	2061.00
Manifest-H	3	Head end only (GP40s)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	1436.48	1494.00
Manifest-H	3	Head end only (GP40s)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4048.33	4151.00
Manifest-H	3	Head end only (GP40s)	45	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	2264.15	2369.00
Manifest-H	3	Head end only (GP40s)	45	1.00%	Trough	<0.1%	0.00	0.00	> 10%, < 25%	11.00%	3533.72	3541.00
Manifest-H	3	Head end only (GP40s)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5777.76	5866.00
Manifest-H	3	Head end only (GP40s)	60	0.50%	Incline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	4175.43	4225.00
Manifest-H	3	Head end only (GP40s)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	4927.52	5010.00
Manifest-I	3	Head end only (SD70s)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	316.51	343.00
Manifest-I	3	Head end only (SD70s)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	260.58	279.00
Manifest-I	3	Head end only (SD70s)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	335.82	409.00
Manifest-I	3	Head end only (SD70s)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	291.06	331.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-I	3	Head end only (SD70s)	15	2.80%	Decline	> 1.0%	1346.00	1346.00	> 50%	1.00%	1254.88	1333.00
Manifest-I	3	Head end only (SD70s)	20	2.20%	Decline	> 1.0%	108.50	212.00	< 10%	6.00%	961.74	1157.00
Manifest-I	3	Head end only (SD70s)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	680.94	741.00
Manifest-I	3	Head end only (SD70s)	25	1.70%	Decline	> 1.0%	44.50	60.00	> 10%, < 25%	4.00%	1364.44	1583.00
Manifest-I	3	Head end only (SD70s)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	1429.20	1499.00
Manifest-I	3	Head end only (SD70s)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1115.58	1193.00
Manifest-I	3	Head end only (SD70s)	30	1.10%	Decline	> 1.0%	83.50	148.00	< 0.1%	2.00%	1586.64	1758.00
Manifest-I	3	Head end only (SD70s)	30	0.00%	Flat	> 1.0%	75.00	75.00	< 0.1%	1.00%	1262.92	1361.00
Manifest-I	3	Head end only (SD70s)	45	1.10%	Decline	> 1.0%	214.71	625.00	< 0.1%	11.00%	3234.00	3245.00
Manifest-I	3	Head end only (SD70s)	45	1.00%	Crest	> 1.0%	13.33	21.00	< 0.1%	3.00%	2058.42	2183.00
Manifest-I	3	Head end only (SD70s)	45	1.00%	Trough	> 1.0%	140.00	422.00	< 0.1%	11.00%	3362.83	3409.00
Manifest-I	3	Head end only (SD70s)	60	0.50%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	4790.30	4897.00
Manifest-I	3	Head end only (SD70s)	60	0.50%	Incline	> 1.0%	151.33	196.00	< 0.1%	3.00%	3764.84	3857.00
Manifest-I	3	Head end only (SD70s)	60	0.00%	Flat	> 1.0%	220.38	651.00	< 0.1%	9.00%	4174.92	4268.00
Manifest-I	3	Head end only (GP40s)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	311.93	331.00
Manifest-I	3	Head end only (GP40s)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	253.98	280.00
Manifest-I	3	Head end only (GP40s)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	356.73	382.00
Manifest-I	3	Head end only (GP40s)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	277.10	315.00
Manifest-I	3	Head end only (GP40s)	15	2.80%	Decline	> 1.0%	164.50	190.00	< 10%	3.00%	603.06	1112.00
Manifest-I	3	Head end only (GP40s)	20	2.20%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	1060.79	1103.00
Manifest-I	3	Head end only (GP40s)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	646.67	719.00
Manifest-I	3	Head end only (GP40s)	25	1.70%	Decline	> 1.0%	199.00	199.00	> 25%, < 50%	1.00%	1363.39	1371.00
Manifest-I	3	Head end only (GP40s)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	1336.73	1381.00
Manifest-I	3	Head end only (GP40s)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1057.99	1084.00
Manifest-I	3	Head end only (GP40s)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	1555.76	1563.00
Manifest-I	3	Head end only (GP40s)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	1188.98	1236.00
Manifest-I	3	Head end only (GP40s)	45	1.10%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	3106.89	3172.00
Manifest-I	3	Head end only (GP40s)	45	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	1968.21	2084.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-I	3	Head end only (GP40s)	45	1.00%	Trough	1	294.15	1465.00	< 0.1%	100.00%	2098.53	2158.00
Manifest-I	3	Head end only (GP40s)	60	0.50%	Decline	< 0.5%	78.00	78.00	> 25%, < 50%	1.00%	4454.42	4549.00
Manifest-I	3	Head end only (GP40s)	60	0.50%	Incline	< 0.5%	89.00	89.00	< 10%	1.00%	3587.33	3688.00
Manifest-I	3	Head end only (GP40s)	60	0.00%	Flat	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	3893.91	3951.00
Manifest-J	3	Head end only (SD70s)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	282.93	316.00
Manifest-J	3	Head end only (SD70s)	10	0.50%	Incline	< 0.5%	4.00	4.00	< 0.1%	1.00%	250.43	271.00
Manifest-J	3	Head end only (SD70s)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	280.10	307.00
Manifest-J	3	Head end only (SD70s)	10	0.00%	Flat	< 0.5%	24.00	24.00	< 0.1%	1.00%	268.18	311.00
Manifest-J	3	Head end only (SD70s)	15	2.80%	Decline	> 1.0%	41.40	156.00	< 0.1%	17.00%	481.48	784.00
Manifest-J	3	Head end only (SD70s)	20	2.20%	Decline	> 75%	266.51	3081.00	< 0.1%	78.00%	907.02	962.00
Manifest-J	3	Head end only (SD70s)	25	1.50%	Incline	> 25%	30.98	106.00	< 0.1%	38.00%	597.29	662.00
Manifest-J	3	Head end only (SD70s)	25	1.70%	Decline	> 1.0%	134.57	396.00	< 0.1%	23.00%	1099.90	1215.00
Manifest-J	3	Head end only (SD70s)	30	0.50%	Decline	> 50%	156.22	2104.00	< 0.1%	67.00%	1157.45	1199.00
Manifest-J	3	Head end only (SD70s)	30	0.50%	Incline	> 75%	83.11	471.00	< 0.1%	76.00%	942.95	1033.00
Manifest-J	3	Head end only (SD70s)	30	1.10%	Decline	> 25%	128.29	626.00	< 0.1%	41.00%	1202.49	1381.00
Manifest-J	3	Head end only (SD70s)	30	0.00%	Flat	> 75%	111.29	693.00	< 0.1%	89.00%	1049.75	1096.00
Manifest-J	3	Head end only (SD70s)	45	1.10%	Decline	> 1.0%	168.50	692.00	< 0.1%	22.00%	2475.90	2521.00
Manifest-J	3	Head end only (SD70s)	45	1.00%	Crest	> 75%	284.36	1385.00	< 0.1%	89.00%	1745.46	1855.00
Manifest-J	3	Head end only (SD70s)	45	1.00%	Trough	> 75%	241.60	694.00	< 0.1%	78.00%	2369.24	2540.00
Manifest-J	3	Head end only (SD70s)	60	0.50%	Decline	> 75%	650.35	2003.00	< 0.1%	96.00%	3705.34	3766.00
Manifest-J	3	Head end only (SD70s)	60	0.50%	Incline	> 75%	429.79	1415.00	< 0.1%	94.00%	3141.50	3231.00
Manifest-J	3	Head end only (SD70s)	60	0.00%	Flat	> 75%	567.69	3143.00	< 0.1%	99.00%	3337.99	3418.00
Manifest-J	3	Head end only (GP40s)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	266.73	281.00
Manifest-J	3	Head end only (GP40s)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	240.64	255.00
Manifest-J	3	Head end only (GP40s)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	279.59	319.00
Manifest-J	3	Head end only (GP40s)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	249.36	275.00
Manifest-J	3	Head end only (GP40s)	15	2.80%	Decline	> 1.0%	80.33	115.00	< 0.1%	3.03%	443.91	495.00
Manifest-J	3	Head end only (GP40s)	20	2.20%	Decline	> 25%	89.29	983.00	< 0.1%	28.00%	744.50	877.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-J	3	Head end only (GP40s)	25	1.50%	Incline	> 1.0%	27.75	110.00	< 0.1%	17.00%	549.93	621.00
Manifest-J	3	Head end only (GP40s)	25	1.70%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	962.74	1004.00
Manifest-J	3	Head end only (GP40s)	30	0.50%	Decline	> 25%	79.44	523.00	< 0.1%	34.00%	1036.90	1080.00
Manifest-J	3	Head end only (GP40s)	30	0.50%	Incline	> 25%	47.47	215.00	< 0.1%	38.00%	905.09	944.00
Manifest-J	3	Head end only (GP40s)	30	1.10%	Decline	> 1.0%	114.27	276.00	< 0.1%	14.00%	1140.00	1204.00
Manifest-J	3	Head end only (GP40s)	30	0.00%	Flat	> 25%	64.96	302.00	< 0.1%	47.00%	947.11	981.00
Manifest-J	3	Head end only (GP40s)	45	1.10%	Decline	> 50%	218.30	1594.00	< 0.1%	61.00%	2186.99	2249.00
Manifest-J	3	Head end only (GP40s)	45	1.00%	Crest	> 50%	139.53	890.00	< 0.1%	66.00%	1574.85	1662.00
Manifest-J	3	Head end only (GP40s)	45	1.00%	Trough	> 50%	167.02	764.00	< 0.1%	54.00%	2163.64	2221.00
Manifest-J	3	Head end only (GP40s)	60	0.50%	Decline	> 50%	327.19	2513.00	< 0.1%	74.00%	3242.50	3313.00
Manifest-J	3	Head end only (GP40s)	60	0.50%	Incline	> 50%	254.18	2315.00	< 0.1%	69.00%	2756.87	2810.00
Manifest-J	3	Head end only (GP40s)	60	0.00%	Flat	> 75%	310.80	1502.00	< 0.1%	85.00%	2933.67	3005.00
Manifest-A	10	Head end only (SD70s)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	432.28	593.00
Manifest-A	10	Head end only (SD70s)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	296.89	341.00
Manifest-A	10	Head end only (SD70s)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	492.34	833.00
Manifest-A	10	Head end only (SD70s)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	360.12	464.00
Manifest-A	10	Head end only (SD70s)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	33.00%	2614.40	2944.00
Manifest-A	10	Head end only (SD70s)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	35.00%	2260.90	2905.00
Manifest-A	10	Head end only (SD70s)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	791.45	939.00
Manifest-A	10	Head end only (SD70s)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	45.00%	2995.38	4373.00
Manifest-A	10	Head end only (SD70s)	30	0.50%	Decline	<0.1%	0.00	0.00	< 10%	5.00%	2599.84	3495.00
Manifest-A	10	Head end only (SD70s)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1598.53	1863.00
Manifest-A	10	Head end only (SD70s)	30	1.10%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	25.00%	3067.91	4594.00
Manifest-A	10	Head end only (SD70s)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	1966.37	2427.00
Manifest-A	10	Head end only (SD70s)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	83.00%	5706.05	9838.00
Manifest-A	10	Head end only (SD70s)	45	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	2856.15	3351.00
Manifest-A	10	Head end only (SD70s)	45	1.00%	Trough	<0.1%	0.00	0.00	< 10%	80.00%	4509.56	13299.00
Manifest-A	10	Head end only (SD70s)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	44.00%	8651.71	11946.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-A	10	Head end only (SD70s)	60	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	5919.88	6774.00
Manifest-A	10	Head end only (SD70s)	60	0.00%	Flat	<0.1%	0.00	0.00	< 10%	0.00%	7292.35	9258.00
Manifest-A	10	Head end only (GP40s)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	386.80	495.00
Manifest-A	10	Head end only (GP40s)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	291.27	351.00
Manifest-A	10	Head end only (GP40s)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	452.70	647.00
Manifest-A	10	Head end only (GP40s)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	343.57	409.00
Manifest-A	10	Head end only (GP40s)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	87.00%	2249.12	2830.00
Manifest-A	10	Head end only (GP40s)	20	2.20%	Decline	> 1.0%	144.00	270.00	> 50%	80.00%	1840.20	2220.00
Manifest-A	10	Head end only (GP40s)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	785.35	918.00
Manifest-A	10	Head end only (GP40s)	25	1.70%	Decline	> 1.0%	347.00	347.00	> 50%	60.00%	2484.02	3357.00
Manifest-A	10	Head end only (GP40s)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	34.00%	2017.16	2860.00
Manifest-A	10	Head end only (GP40s)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1557.34	1896.00
Manifest-A	10	Head end only (GP40s)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	72.00%	2419.72	3648.00
Manifest-A	10	Head end only (GP40s)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	1896.45	2422.00
Manifest-A	10	Head end only (GP40s)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	31.00%	6113.63	8575.00
Manifest-A	10	Head end only (GP40s)	45	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	2777.32	3134.00
Manifest-A	10	Head end only (GP40s)	45	1.00%	Trough	> 1.0%	4.50	6.00	< 0.1%	92.00%	4218.36	5561.00
Manifest-A	10	Head end only (GP40s)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	8657.22	10352.00
Manifest-A	10	Head end only (GP40s)	60	0.50%	Incline	<0.1%	0.00	0.00	< 10%	0.00%	5683.53	7219.00
Manifest-A	10	Head end only (GP40s)	60	0.00%	Flat	< 0.5%	134.00	134.00	< 10%	1.00%	6886.20	8820.00
Manifest-B	10	Head end only (SD70s)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	294.76	361.00
Manifest-B	10	Head end only (SD70s)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	242.92	282.00
Manifest-B	10	Head end only (SD70s)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	342.19	426.00
Manifest-B	10	Head end only (SD70s)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	269.95	317.00
Manifest-B	10	Head end only (SD70s)	15	2.80%	Decline	<0.1%	0.00	0.00	< 0.1%	6.00%	557.52	774.00
Manifest-B	10	Head end only (SD70s)	20	2.20%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	7.00%	1081.02	1593.00
Manifest-B	10	Head end only (SD70s)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	627.66	754.00
Manifest-B	10	Head end only (SD70s)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1420.10	1888.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-B	10	Head end only (SD70s)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	1346.33	1661.00
Manifest-B	10	Head end only (SD70s)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1054.29	1224.00
Manifest-B	10	Head end only (SD70s)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	1545.31	1911.00
Manifest-B	10	Head end only (SD70s)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	1192.87	1446.00
Manifest-B	10	Head end only (SD70s)	45	1.10%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	1.00%	3084.64	3883.00
Manifest-B	10	Head end only (SD70s)	45	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	1958.16	2496.00
Manifest-B	10	Head end only (SD70s)	45	1.00%	Trough	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	3020.39	3894.00
Manifest-B	10	Head end only (SD70s)	60	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	4583.54	5534.00
Manifest-B	10	Head end only (SD70s)	60	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	3605.85	4102.00
Manifest-B	10	Head end only (SD70s)	60	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	4043.22	5143.00
Manifest-B	10	Head end only (GP40s)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	277.13	337.00
Manifest-B	10	Head end only (GP40s)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	234.27	279.00
Manifest-B	10	Head end only (GP40s)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	285.40	368.00
Manifest-B	10	Head end only (GP40s)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	253.11	320.00
Manifest-B	10	Head end only (GP40s)	15	2.80%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	475.26	577.00
Manifest-B	10	Head end only (GP40s)	20	2.20%	Decline	<0.1%	0.00	0.00	< 10%	1.00%	660.41	1349.00
Manifest-B	10	Head end only (GP40s)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	571.29	677.00
Manifest-B	10	Head end only (GP40s)	25	1.70%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	894.41	1397.00
Manifest-B	10	Head end only (GP40s)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	1195.23	1458.00
Manifest-B	10	Head end only (GP40s)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	956.03	1139.00
Manifest-B	10	Head end only (GP40s)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	1236.30	1663.00
Manifest-B	10	Head end only (GP40s)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	1061.77	1252.00
Manifest-B	10	Head end only (GP40s)	45	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2417.68	2993.00
Manifest-B	10	Head end only (GP40s)	45	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	1783.69	2060.00
Manifest-B	10	Head end only (GP40s)	45	1.00%	Trough	<0.1%	0.00	0.00	< 10%	0.00%	2651.45	3375.00
Manifest-B	10	Head end only (GP40s)	60	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	3951.06	4697.00
Manifest-B	10	Head end only (GP40s)	60	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	3205.12	3718.00
Manifest-B	10	Head end only (GP40s)	60	0.00%	Flat	<0.1%	0.00	0.00	< 10%	0.00%	3502.59	4180.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-C	10	Head end only (SD70s)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	343.79	421.00
Manifest-C	10	Head end only (SD70s)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	265.87	311.00
Manifest-C	10	Head end only (SD70s)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	419.87	592.00
Manifest-C	10	Head end only (SD70s)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	299.16	341.00
Manifest-C	10	Head end only (SD70s)	15	2.80%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	23.00%	1271.85	2491.00
Manifest-C	10	Head end only (SD70s)	20	2.20%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	26.00%	1517.99	1986.00
Manifest-C	10	Head end only (SD70s)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	708.79	815.00
Manifest-C	10	Head end only (SD70s)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	15.00%	1942.79	2835.00
Manifest-C	10	Head end only (SD70s)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	1734.45	2225.00
Manifest-C	10	Head end only (SD70s)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1253.84	1488.00
Manifest-C	10	Head end only (SD70s)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2136.24	2584.00
Manifest-C	10	Head end only (SD70s)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	1455.26	1895.00
Manifest-C	10	Head end only (SD70s)	45	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	7.00%	4212.28	5477.00
Manifest-C	10	Head end only (SD70s)	45	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	2306.33	2874.00
Manifest-C	10	Head end only (SD70s)	45	1.00%	Trough	<0.1%	0.00	0.00	< 10%	49.00%	3294.31	3945.00
Manifest-C	10	Head end only (SD70s)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5959.40	7847.00
Manifest-C	10	Head end only (SD70s)	60	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	4457.01	5035.00
Manifest-C	10	Head end only (SD70s)	60	0.00%	Flat	<0.1%	0.00	0.00	< 10%	0.00%	5065.04	6018.00
Manifest-C	10	Head end only (GP40s)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	303.27	364.00
Manifest-C	10	Head end only (GP40s)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	257.76	302.00
Manifest-C	10	Head end only (GP40s)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	333.39	406.00
Manifest-C	10	Head end only (GP40s)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	282.42	347.00
Manifest-C	10	Head end only (GP40s)	15	2.80%	Decline	<0.1%	0.00	0.00	< 10%	1.00%	674.85	2341.00
Manifest-C	10	Head end only (GP40s)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	8.00%	1227.74	1703.00
Manifest-C	10	Head end only (GP40s)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	678.48	767.00
Manifest-C	10	Head end only (GP40s)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	12.00%	1583.17	2200.00
Manifest-C	10	Head end only (GP40s)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	1545.74	1954.00
Manifest-C	10	Head end only (GP40s)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1166.53	1352.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-C	10	Head end only (GP40s)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	7.00%	1614.79	2295.00
Manifest-C	10	Head end only (GP40s)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	1319.49	1562.00
Manifest-C	10	Head end only (GP40s)	45	1.10%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	3.00%	3689.96	4512.00
Manifest-C	10	Head end only (GP40s)	45	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	2129.20	2629.00
Manifest-C	10	Head end only (GP40s)	45	1.00%	Trough	<0.1%	0.00	0.00	> 25%, < 50%	5.00%	3488.82	4822.00
Manifest-C	10	Head end only (GP40s)	60	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	5189.80	6431.00
Manifest-C	10	Head end only (GP40s)	60	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	4040.22	4675.00
Manifest-C	10	Head end only (GP40s)	60	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	4576.74	5709.00
Manifest-D	10	Head end only (SD70s)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	407.60	518.00
Manifest-D	10	Head end only (SD70s)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	288.94	353.00
Manifest-D	10	Head end only (SD70s)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	498.82	909.00
Manifest-D	10	Head end only (SD70s)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	334.78	406.00
Manifest-D	10	Head end only (SD70s)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	33.00%	2470.21	2839.00
Manifest-D	10	Head end only (SD70s)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	36.00%	2040.13	2700.00
Manifest-D	10	Head end only (SD70s)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	796.06	969.00
Manifest-D	10	Head end only (SD70s)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	44.00%	2627.44	3523.00
Manifest-D	10	Head end only (SD70s)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	9.00%	2202.48	3003.00
Manifest-D	10	Head end only (SD70s)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1483.92	1755.00
Manifest-D	10	Head end only (SD70s)	30	1.10%	Decline	<0.1%	0.00	0.00	< 10%	60.00%	2500.83	3382.00
Manifest-D	10	Head end only (SD70s)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	1798.04	2268.00
Manifest-D	10	Head end only (SD70s)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	24.00%	5765.99	8835.00
Manifest-D	10	Head end only (SD70s)	45	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	2683.56	3043.00
Manifest-D	10	Head end only (SD70s)	45	1.00%	Trough	<0.1%	0.00	0.00	< 10%	82.00%	3903.64	5893.00
Manifest-D	10	Head end only (SD70s)	60	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	5400.19	6357.00
Manifest-D	10	Head end only (SD70s)	60	0.00%	Flat	<0.1%	0.00	0.00	< 10%	0.00%	6621.23	8183.00
Manifest-D	10	Head end only (GP40s)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	359.56	445.00
Manifest-D	10	Head end only (GP40s)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	283.05	335.00
Manifest-D	10	Head end only (GP40s)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	410.06	584.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-D	10	Head end only (GP40s)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	327.71	412.00
Manifest-D	10	Head end only (GP40s)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	60.00%	1443.02	2573.00
Manifest-D	10	Head end only (GP40s)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	12.00%	1846.34	2528.00
Manifest-D	10	Head end only (GP40s)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	750.18	871.00
Manifest-D	10	Head end only (GP40s)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	26.00%	2304.89	3248.00
Manifest-D	10	Head end only (GP40s)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2102.14	2764.00
Manifest-D	10	Head end only (GP40s)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1427.33	1653.00
Manifest-D	10	Head end only (GP40s)	30	1.10%	Decline	<0.1%	0.00	0.00	< 10%	29.00%	2404.43	3383.00
Manifest-D	10	Head end only (GP40s)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	1697.19	1993.00
Manifest-D	10	Head end only (GP40s)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	17.00%	5278.37	7210.00
Manifest-D	10	Head end only (GP40s)	45	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	2577.06	2918.00
Manifest-D	10	Head end only (GP40s)	45	1.00%	Trough	<0.1%	0.00	0.00	< 10%	85.00%	3732.90	5268.00
Manifest-D	10	Head end only (GP40s)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	2.00%	7521.01	10034.00
Manifest-D	10	Head end only (GP40s)	60	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	5080.03	6254.00
Manifest-D	10	Head end only (GP40s)	60	0.00%	Flat	<0.1%	0.00	0.00	< 10%	0.00%	6073.46	7280.00
Manifest-E	10	Head end only (SD70s)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	410.02	528.00
Manifest-E	10	Head end only (SD70s)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	287.80	336.00
Manifest-E	10	Head end only (SD70s)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	438.51	616.00
Manifest-E	10	Head end only (SD70s)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	336.42	390.00
Manifest-E	10	Head end only (SD70s)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	28.00%	2594.29	2906.00
Manifest-E	10	Head end only (SD70s)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	41.00%	2181.23	2819.00
Manifest-E	10	Head end only (SD70s)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	790.52	936.00
Manifest-E	10	Head end only (SD70s)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	32.00%	2837.37	3778.00
Manifest-E	10	Head end only (SD70s)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2434.22	3136.00
Manifest-E	10	Head end only (SD70s)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1541.10	1826.00
Manifest-E	10	Head end only (SD70s)	30	1.10%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	14.00%	3087.50	4545.00
Manifest-E	10	Head end only (SD70s)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	1882.22	2396.00
Manifest-E	10	Head end only (SD70s)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	46.00%	5738.80	8451.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-E	10	Head end only (SD70s)	45	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	2709.03	3164.00
Manifest-E	10	Head end only (SD70s)	45	1.00%	Trough	<0.1%	0.00	0.00	> 25%, < 50%	93.00%	4427.60	13599.00
Manifest-E	10	Head end only (SD70s)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	33.00%	8092.56	13321.00
Manifest-E	10	Head end only (SD70s)	60	0.50%	Incline	<0.1%	0.00	0.00	< 10%	0.00%	5674.01	6905.00
Manifest-E	10	Head end only (SD70s)	60	0.00%	Flat	<0.1%	0.00	0.00	> 10%, < 25%	1.00%	6959.74	9102.00
Manifest-E	10	Head end only (GP40s)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	362.43	455.00
Manifest-E	10	Head end only (GP40s)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	285.62	329.00
Manifest-E	10	Head end only (GP40s)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	410.64	527.00
Manifest-E	10	Head end only (GP40s)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	324.98	417.00
Manifest-E	10	Head end only (GP40s)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	86.00%	1940.25	2762.00
Manifest-E	10	Head end only (GP40s)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	62.00%	1777.21	2669.00
Manifest-E	10	Head end only (GP40s)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	761.34	888.00
Manifest-E	10	Head end only (GP40s)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	14.00%	2484.67	3370.00
Manifest-E	10	Head end only (GP40s)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	14.00%	2044.34	3025.00
Manifest-E	10	Head end only (GP40s)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1465.06	1805.00
Manifest-E	10	Head end only (GP40s)	30	1.10%	Decline	<0.1%	0.00	0.00	< 10%	42.00%	2457.97	3936.00
Manifest-E	10	Head end only (GP40s)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	1771.20	2130.00
Manifest-E	10	Head end only (GP40s)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	15.00%	5744.00	8181.00
Manifest-E	10	Head end only (GP40s)	45	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	2665.13	3044.00
Manifest-E	10	Head end only (GP40s)	45	1.00%	Trough	<0.1%	0.00	0.00	< 10%	88.00%	3897.48	5701.00
Manifest-E	10	Head end only (GP40s)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	5.00%	7884.06	10497.00
Manifest-E	10	Head end only (GP40s)	60	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	5276.85	6234.00
Manifest-E	10	Head end only (GP40s)	60	0.00%	Flat	<0.1%	0.00	0.00	< 10%	0.00%	6429.86	8257.00
Manifest-F	10	Head end only (SD70s)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	363.47	490.00
Manifest-F	10	Head end only (SD70s)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	283.14	341.00
Manifest-F	10	Head end only (SD70s)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	400.10	527.00
Manifest-F	10	Head end only (SD70s)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	313.53	370.00
Manifest-F	10	Head end only (SD70s)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	58.00%	2208.22	2712.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-F	10	Head end only (SD70s)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	51.00%	1866.68	2601.00
Manifest-F	10	Head end only (SD70s)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	744.80	887.00
Manifest-F	10	Head end only (SD70s)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	39.00%	2433.47	3621.00
Manifest-F	10	Head end only (SD70s)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2028.73	2619.00
Manifest-F	10	Head end only (SD70s)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1415.63	1955.00
Manifest-F	10	Head end only (SD70s)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	8.00%	2540.54	3157.00
Manifest-F	10	Head end only (SD70s)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	1643.56	1930.00
Manifest-F	10	Head end only (SD70s)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	17.00%	5159.73	7334.00
Manifest-F	10	Head end only (SD70s)	45	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	2518.73	3056.00
Manifest-F	10	Head end only (SD70s)	45	1.00%	Trough	<0.1%	0.00	0.00	< 10%	91.00%	3644.58	5479.00
Manifest-F	10	Head end only (SD70s)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	16.00%	7027.51	9597.00
Manifest-F	10	Head end only (SD70s)	60	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	5067.60	5825.00
Manifest-F	10	Head end only (SD70s)	60	0.00%	Flat	<0.1%	0.00	0.00	< 10%	0.00%	6031.54	7194.00
Manifest-F	10	Head end only (GP40s)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	328.10	427.00
Manifest-F	10	Head end only (GP40s)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	267.04	314.00
Manifest-F	10	Head end only (GP40s)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	371.09	465.00
Manifest-F	10	Head end only (GP40s)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	298.99	371.00
Manifest-F	10	Head end only (GP40s)	15	2.80%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	29.00%	1122.00	2629.00
Manifest-F	10	Head end only (GP40s)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	22.00%	1705.57	2207.00
Manifest-F	10	Head end only (GP40s)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	728.42	821.00
Manifest-F	10	Head end only (GP40s)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	28.00%	2170.77	2769.00
Manifest-F	10	Head end only (GP40s)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	1886.00	2393.00
Manifest-F	10	Head end only (GP40s)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1310.37	1508.00
Manifest-F	10	Head end only (GP40s)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	27.00%	2093.53	2892.00
Manifest-F	10	Head end only (GP40s)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	1550.02	1883.00
Manifest-F	10	Head end only (GP40s)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	7.00%	4809.97	6405.00
Manifest-F	10	Head end only (GP40s)	45	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	2361.81	2764.00
Manifest-F	10	Head end only (GP40s)	45	1.00%	Trough	<0.1%	0.00	0.00	< 10%	70.00%	3537.69	5520.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-F	10	Head end only (GP40s)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6596.82	9531.00
Manifest-F	10	Head end only (GP40s)	60	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	4708.74	5716.00
Manifest-F	10	Head end only (GP40s)	60	0.00%	Flat	<0.1%	0.00	0.00	< 10%	0.00%	5479.75	7053.00
Manifest-G	10	Head end only (SD70s)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	358.22	454.00
Manifest-G	10	Head end only (SD70s)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	279.13	347.00
Manifest-G	10	Head end only (SD70s)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	445.69	672.00
Manifest-G	10	Head end only (SD70s)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	307.38	369.00
Manifest-G	10	Head end only (SD70s)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	70.00%	2024.48	2570.00
Manifest-G	10	Head end only (SD70s)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	59.00%	1752.83	2339.00
Manifest-G	10	Head end only (SD70s)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	747.28	876.00
Manifest-G	10	Head end only (SD70s)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	43.00%	2294.29	3126.00
Manifest-G	10	Head end only (SD70s)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	1927.17	2429.00
Manifest-G	10	Head end only (SD70s)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1366.37	1710.00
Manifest-G	10	Head end only (SD70s)	30	1.10%	Decline	<0.1%	0.00	0.00	< 10%	7.00%	2345.81	3019.00
Manifest-G	10	Head end only (SD70s)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	1592.29	1956.00
Manifest-G	10	Head end only (SD70s)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	4.00%	4884.07	6327.00
Manifest-G	10	Head end only (SD70s)	45	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	2474.17	2860.00
Manifest-G	10	Head end only (SD70s)	45	1.00%	Trough	<0.1%	0.00	0.00	< 10%	92.00%	3582.05	5389.00
Manifest-G	10	Head end only (SD70s)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6839.90	8496.00
Manifest-G	10	Head end only (SD70s)	60	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	4869.89	5952.00
Manifest-G	10	Head end only (SD70s)	60	0.00%	Flat	<0.1%	0.00	0.00	< 10%	0.00%	5703.36	7572.00
Manifest-G	10	Head end only (GP40s)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	320.56	385.00
Manifest-G	10	Head end only (GP40s)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	260.92	311.00
Manifest-G	10	Head end only (GP40s)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	356.69	507.00
Manifest-G	10	Head end only (GP40s)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	294.60	373.00
Manifest-G	10	Head end only (GP40s)	15	2.80%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	9.00%	1210.27	2598.00
Manifest-G	10	Head end only (GP40s)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	10.00%	1572.37	2030.00
Manifest-G	10	Head end only (GP40s)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	708.90	861.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-G	10	Head end only (GP40s)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	9.00%	1929.85	2559.00
Manifest-G	10	Head end only (GP40s)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	1.00%	1724.44	2210.00
Manifest-G	10	Head end only (GP40s)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1251.98	1491.00
Manifest-G	10	Head end only (GP40s)	30	1.10%	Decline	<0.1%	0.00	0.00	< 10%	13.00%	2086.08	3096.00
Manifest-G	10	Head end only (GP40s)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	1453.94	1682.00
Manifest-G	10	Head end only (GP40s)	45	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	8.00%	4344.32	5188.00
Manifest-G	10	Head end only (GP40s)	45	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	2301.29	2557.00
Manifest-G	10	Head end only (GP40s)	45	1.00%	Trough	<0.1%	0.00	0.00	> 10%, < 25%	44.00%	3459.32	5112.00
Manifest-G	10	Head end only (GP40s)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6128.48	7645.00
Manifest-G	10	Head end only (GP40s)	60	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	4450.37	5274.00
Manifest-G	10	Head end only (GP40s)	60	0.00%	Flat	<0.1%	0.00	0.00	< 10%	0.00%	5144.23	6027.00
Manifest-H	10	Head end only (SD70s)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	319.46	387.00
Manifest-H	10	Head end only (SD70s)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	256.42	299.00
Manifest-H	10	Head end only (SD70s)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	353.99	503.00
Manifest-H	10	Head end only (SD70s)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	287.09	339.00
Manifest-H	10	Head end only (SD70s)	15	2.80%	Decline	<0.1%	0.00	0.00	< 10%	24.00%	663.93	2137.00
Manifest-H	10	Head end only (SD70s)	20	2.20%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	19.00%	1218.68	1672.00
Manifest-H	10	Head end only (SD70s)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	671.52	815.00
Manifest-H	10	Head end only (SD70s)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	5.00%	1585.48	2459.00
Manifest-H	10	Head end only (SD70s)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	1518.60	1914.00
Manifest-H	10	Head end only (SD70s)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1153.16	1427.00
Manifest-H	10	Head end only (SD70s)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	1780.12	2214.00
Manifest-H	10	Head end only (SD70s)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	1310.88	1627.00
Manifest-H	10	Head end only (SD70s)	45	1.10%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	1.00%	3637.87	4968.00
Manifest-H	10	Head end only (SD70s)	45	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	2114.46	2429.00
Manifest-H	10	Head end only (SD70s)	45	1.00%	Trough	<0.1%	0.00	0.00	> 25%, < 50%	1.00%	3557.37	4808.00
Manifest-H	10	Head end only (SD70s)	60	0.50%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	5170.68	6695.00
Manifest-H	10	Head end only (SD70s)	60	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	3961.41	4884.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-H	10	Head end only (SD70s)	60	0.00%	Flat	<0.1%	0.00	0.00	< 10%	0.00%	4472.81	5649.00
Manifest-H	10	Head end only (GP40s)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	299.22	384.00
Manifest-H	10	Head end only (GP40s)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	252.25	326.00
Manifest-H	10	Head end only (GP40s)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	301.78	372.00
Manifest-H	10	Head end only (GP40s)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	266.63	318.00
Manifest-H	10	Head end only (GP40s)	15	2.80%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	531.01	727.00
Manifest-H	10	Head end only (GP40s)	20	2.20%	Decline	<0.1%	0.00	0.00	< 10%	4.00%	722.02	1543.00
Manifest-H	10	Head end only (GP40s)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	610.29	725.00
Manifest-H	10	Head end only (GP40s)	25	1.70%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	1075.35	1790.00
Manifest-H	10	Head end only (GP40s)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	1305.10	1604.00
Manifest-H	10	Head end only (GP40s)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1031.71	1162.00
Manifest-H	10	Head end only (GP40s)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	1497.81	1934.00
Manifest-H	10	Head end only (GP40s)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	1157.27	1476.00
Manifest-H	10	Head end only (GP40s)	45	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	3042.88	3862.00
Manifest-H	10	Head end only (GP40s)	45	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	1924.33	2206.00
Manifest-H	10	Head end only (GP40s)	45	1.00%	Trough	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	2996.51	3916.00
Manifest-H	10	Head end only (GP40s)	60	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	4369.97	5226.00
Manifest-H	10	Head end only (GP40s)	60	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	3550.44	4659.00
Manifest-H	10	Head end only (GP40s)	60	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	3841.90	4494.00
Manifest-I	10	Head end only (SD70s)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	438.27	606.00
Manifest-I	10	Head end only (SD70s)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	301.83	348.00
Manifest-I	10	Head end only (SD70s)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	496.66	718.00
Manifest-I	10	Head end only (SD70s)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	350.13	414.00
Manifest-I	10	Head end only (SD70s)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	23.00%	2634.01	3078.00
Manifest-I	10	Head end only (SD70s)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	24.00%	2297.38	2977.00
Manifest-I	10	Head end only (SD70s)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	787.71	901.00
Manifest-I	10	Head end only (SD70s)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	19.00%	2989.01	3827.00
Manifest-I	10	Head end only (SD70s)	30	0.50%	Decline	<0.1%	0.00	0.00	< 10%	13.00%	2507.23	3501.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-I	10	Head end only (SD70s)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1622.82	1957.00
Manifest-I	10	Head end only (SD70s)	30	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	15.00%	3227.70	4208.00
Manifest-I	10	Head end only (SD70s)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	1976.71	2494.00
Manifest-I	10	Head end only (SD70s)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	75.00%	5568.04	9441.00
Manifest-I	10	Head end only (SD70s)	45	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	2847.38	3337.00
Manifest-I	10	Head end only (SD70s)	45	1.00%	Trough	<0.1%	0.00	0.00	> 10%, < 25%	85.00%	4539.15	13168.00
Manifest-I	10	Head end only (SD70s)	60	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	5931.30	7321.00
Manifest-I	10	Head end only (SD70s)	60	0.00%	Flat	<0.1%	0.00	0.00	> 10%, < 25%	2.00%	7265.46	10090.00
Manifest-I	10	Head end only (GP40s)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	379.54	474.00
Manifest-I	10	Head end only (GP40s)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	288.35	339.00
Manifest-I	10	Head end only (GP40s)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	1.00%	446.34	725.00
Manifest-I	10	Head end only (GP40s)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	337.35	413.00
Manifest-I	10	Head end only (GP40s)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	85.00%	2172.84	2756.00
Manifest-I	10	Head end only (GP40s)	20	2.20%	Decline	> 1.0%	32.00	32.00	> 50%	85.00%	1839.70	2419.00
Manifest-I	10	Head end only (GP40s)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	781.90	877.00
Manifest-I	10	Head end only (GP40s)	25	1.70%	Decline	< 0.5%	16.00	16.00	> 50%	55.00%	2507.55	4377.00
Manifest-I	10	Head end only (GP40s)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	47.00%	1975.03	2944.00
Manifest-I	10	Head end only (GP40s)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1511.94	1830.00
Manifest-I	10	Head end only (GP40s)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	83.00%	2368.43	3421.00
Manifest-I	10	Head end only (GP40s)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	1850.18	2323.00
Manifest-I	10	Head end only (GP40s)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	35.00%	5774.05	9836.00
Manifest-I	10	Head end only (GP40s)	45	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	2786.27	3302.00
Manifest-I	10	Head end only (GP40s)	45	1.00%	Trough	< 0.5%	4.00	4.00	< 10%	91.00%	4413.22	13433.00
Manifest-I	10	Head end only (GP40s)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	19.00%	8332.87	11734.00
Manifest-I	10	Head end only (GP40s)	60	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	5628.60	6680.00
Manifest-I	10	Head end only (GP40s)	60	0.00%	Flat	<0.1%	0.00	0.00	< 10%	0.00%	6740.75	9982.00
Manifest-J	10	Head end only (SD70s)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	392.19	488.00
Manifest-J	10	Head end only (SD70s)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	286.19	341.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-J	10	Head end only (SD70s)	10	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	433.76	1128.00
Manifest-J	10	Head end only (SD70s)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	325.49	389.00
Manifest-J	10	Head end only (SD70s)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	43.00%	2427.17	2811.00
Manifest-J	10	Head end only (SD70s)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	35.00%	2027.20	2769.00
Manifest-J	10	Head end only (SD70s)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	790.94	903.00
Manifest-J	10	Head end only (SD70s)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	40.00%	2657.48	3538.00
Manifest-J	10	Head end only (SD70s)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	1.00%	2222.54	2914.00
Manifest-J	10	Head end only (SD70s)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1465.10	1806.00
Manifest-J	10	Head end only (SD70s)	30	1.10%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	13.00%	2820.86	3732.00
Manifest-J	10	Head end only (SD70s)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	1786.21	2205.00
Manifest-J	10	Head end only (SD70s)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	39.00%	5585.86	7859.00
Manifest-J	10	Head end only (SD70s)	45	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	2641.41	3017.00
Manifest-J	10	Head end only (SD70s)	45	1.00%	Trough	<0.1%	0.00	0.00	> 10%, < 25%	93.00%	4159.52	5998.00
Manifest-J	10	Head end only (SD70s)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	41.00%	7362.07	9540.00
Manifest-J	10	Head end only (SD70s)	60	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	5437.43	6539.00
Manifest-J	10	Head end only (SD70s)	60	0.00%	Flat	< 0.5%	1.00	1.00	< 10%	1.00%	6443.39	7959.00
Manifest-J	10	Head end only (GP40s)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	350.27	444.00
Manifest-J	10	Head end only (GP40s)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	281.66	330.00
Manifest-J	10	Head end only (GP40s)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	396.91	627.00
Manifest-J	10	Head end only (GP40s)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	314.83	356.00
Manifest-J	10	Head end only (GP40s)	15	2.80%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	66.00%	1524.60	2762.00
Manifest-J	10	Head end only (GP40s)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	37.00%	1733.22	2459.00
Manifest-J	10	Head end only (GP40s)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	740.45	870.00
Manifest-J	10	Head end only (GP40s)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	26.00%	2347.74	3368.00
Manifest-J	10	Head end only (GP40s)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	1.00%	2039.04	2636.00
Manifest-J	10	Head end only (GP40s)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1382.39	1651.00
Manifest-J	10	Head end only (GP40s)	30	1.10%	Decline	<0.1%	0.00	0.00	< 10%	23.00%	2463.40	3309.00
Manifest-J	10	Head end only (GP40s)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	1670.40	2156.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-J	10	Head end only (GP40s)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	12.00%	5359.72	7381.00
Manifest-J	10	Head end only (GP40s)	45	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	2537.61	3016.00
Manifest-J	10	Head end only (GP40s)	45	1.00%	Trough	<0.1%	0.00	0.00	< 10%	86.00%	3667.48	5324.00
Manifest-J	10	Head end only (GP40s)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	2.00%	7404.78	9149.00
Manifest-J	10	Head end only (GP40s)	60	0.50%	Incline	<0.1%	0.00	0.00	< 10%	0.00%	5079.15	6365.00
Manifest-J	10	Head end only (GP40s)	60	0.00%	Flat	<0.1%	0.00	0.00	< 10%	0.00%	6105.77	7625.00
Manifest-A	40	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	1.00%	647.81	833.00
Manifest-A	40	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	397.84	471.00
Manifest-A	40	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	585.88	782.00
Manifest-A	40	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	513.50	594.00
Manifest-A	40	Head end only	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	56.00%	3880.33	4981.00
Manifest-A	40	Head end only	20	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	672.94	756.00
Manifest-A	40	Head end only	20	2.20%	Decline	< 0.5%	13.00	13.00	> 50%	58.00%	3317.98	4324.00
Manifest-A	40	Head end only	25	1.70%	Decline	> 1.0%	38.50	54.00	> 50%	40.00%	3742.79	5280.00
Manifest-A	40	Head end only	28	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	24.00%	1569.56	1700.00
Manifest-A	40	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	< 10%	1.00%	2954.82	3961.00
Manifest-A	40	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1993.71	2244.00
Manifest-A	40	Head end only	30	1.10%	Decline	< 0.5%	2.00	2.00	> 10%, < 25%	6.00%	3471.51	5043.00
Manifest-A	40	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	5.00%	2450.06	2808.00
Manifest-A	40	Head end only	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	28.00%	7367.77	9570.00
Manifest-A	40	Head end only	45	1.00%	Trough	<0.1%	0.00	0.00	< 10%	1.00%	5063.36	6960.00
Manifest-A	40	Head end only	46	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	4024.57	4494.00
Manifest-A	40	Head end only	60	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	7.00%	8798.91	11438.00
Manifest-A	40	Head end only	60	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	3.00%	7727.46	8755.00
Manifest-B	40	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	347.59	454.00
Manifest-B	40	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	290.93	338.00
Manifest-B	40	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	254.09	324.00
Manifest-B	40	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	330.14	381.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-B	40	Head end only	15	2.80%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	644.31	849.00
Manifest-B	40	Head end only	20	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	541.10	617.00
Manifest-B	40	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	809.72	1015.00
Manifest-B	40	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	1048.93	1242.00
Manifest-B	40	Head end only	28	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	1210.03	1365.00
Manifest-B	40	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	1516.98	1773.00
Manifest-B	40	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1226.50	1396.00
Manifest-B	40	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	1239.37	1465.00
Manifest-B	40	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	1366.08	1552.00
Manifest-B	40	Head end only	45	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	2428.13	2732.00
Manifest-B	40	Head end only	45	1.00%	Trough	<0.1%	0.00	0.00	< 10%	0.00%	2727.03	3378.00
Manifest-B	40	Head end only	46	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	2321.40	2646.00
Manifest-B	40	Head end only	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4520.85	5031.00
Manifest-B	40	Head end only	60	0.00%	Flat	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	4024.35	4516.00
Manifest-C	40	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	522.82	659.00
Manifest-C	40	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	361.37	412.00
Manifest-C	40	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	454.79	604.00
Manifest-C	40	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	441.54	531.00
Manifest-C	40	Head end only	15	2.80%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	26.00%	1725.50	4779.00
Manifest-C	40	Head end only	20	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	1.00%	625.07	687.00
Manifest-C	40	Head end only	20	2.20%	Decline	< 0.5%	2.00	2.00	> 25%, < 50%	52.00%	1758.10	4103.00
Manifest-C	40	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	35.00%	1983.91	4793.00
Manifest-C	40	Head end only	28	1.00%	Crest	> 1.0%	3.50	5.00	< 0.1%	14.00%	1441.99	1573.00
Manifest-C	40	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	5.00%	2484.42	3187.00
Manifest-C	40	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1693.40	2115.00
Manifest-C	40	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	< 10%	8.00%	2488.64	3414.00
Manifest-C	40	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	1.00%	2062.89	2334.00
Manifest-C	40	Head end only	45	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	16.00%	4788.08	7280.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-C	40	Head end only	45	1.00%	Trough	<0.1%	0.00	0.00	< 10%	3.00%	4322.75	5786.00
Manifest-C	40	Head end only	46	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	3532.29	4143.00
Manifest-C	40	Head end only	60	0.50%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	2.00%	7415.41	9355.00
Manifest-C	40	Head end only	60	0.00%	Flat	<0.1%	0.00	0.00	< 10%	0.00%	6601.38	7268.00
Manifest-D	40	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	576.34	722.00
Manifest-D	40	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	378.30	450.00
Manifest-D	40	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	490.63	606.00
Manifest-D	40	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	481.93	545.00
Manifest-D	40	Head end only	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	43.00%	3841.54	5185.00
Manifest-D	40	Head end only	20	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	663.75	735.00
Manifest-D	40	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	72.00%	3342.96	4740.00
Manifest-D	40	Head end only	25	1.70%	Decline	> 1.0%	43.67	78.00	> 25%, < 50%	80.00%	2727.79	5966.00
Manifest-D	40	Head end only	28	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	3.00%	1554.14	1700.00
Manifest-D	40	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	9.00%	2636.89	3507.00
Manifest-D	40	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1889.25	2087.00
Manifest-D	40	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	< 10%	44.00%	2592.08	5536.00
Manifest-D	40	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	1.00%	2369.81	2630.00
Manifest-D	40	Head end only	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	62.00%	7366.00	11675.00
Manifest-D	40	Head end only	45	1.00%	Trough	<0.1%	0.00	0.00	< 10%	0.00%	4829.74	11440.00
Manifest-D	40	Head end only	46	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	3928.02	4325.00
Manifest-D	40	Head end only	60	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	1.00%	8637.90	11276.00
Manifest-D	40	Head end only	60	0.00%	Flat	<0.1%	0.00	0.00	< 10%	0.00%	7772.12	9213.00
Manifest-E	40	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	520.84	627.00
Manifest-E	40	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	366.11	436.00
Manifest-E	40	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	438.44	572.00
Manifest-E	40	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	450.68	510.00
Manifest-E	40	Head end only	15	2.80%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	13.00%	1264.05	4929.00
Manifest-E	40	Head end only	20	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	652.72	716.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-E	40	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	< 10%	37.00%	1194.28	4182.00
Manifest-E	40	Head end only	25	1.70%	Decline	< 0.5%	21.00	21.00	< 0.1%	46.00%	1487.60	2086.00
Manifest-E	40	Head end only	28	1.00%	Crest	> 1.0%	5.00	7.00	< 0.1%	10.00%	1450.60	1622.00
Manifest-E	40	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	2.00%	2266.14	2669.00
Manifest-E	40	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1776.53	2029.00
Manifest-E	40	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	21.00%	2172.78	2962.00
Manifest-E	40	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2088.09	2367.00
Manifest-E	40	Head end only	45	1.10%	Decline	<0.1%	0.00	0.00	< 10%	37.00%	4477.28	8073.00
Manifest-E	40	Head end only	45	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	0.00%	4160.04	5151.00
Manifest-E	40	Head end only	46	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	3538.74	4088.00
Manifest-E	40	Head end only	60	0.50%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	7351.90	9158.00
Manifest-E	40	Head end only	60	0.00%	Flat	<0.1%	0.00	0.00	< 10%	0.00%	6616.96	7841.00
Manifest-F	40	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	461.71	591.00
Manifest-F	40	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	339.02	389.00
Manifest-F	40	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	356.22	446.00
Manifest-F	40	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	411.31	481.00
Manifest-F	40	Head end only	15	2.80%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	693.19	1040.00
Manifest-F	40	Head end only	20	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	596.03	680.00
Manifest-F	40	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	< 0.1%	6.00%	908.16	1287.00
Manifest-F	40	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	< 10%	5.00%	1329.63	1852.00
Manifest-F	40	Head end only	28	1.00%	Crest	> 1.0%	5.17	10.00	< 0.1%	52.00%	1319.92	1454.00
Manifest-F	40	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	1916.69	2352.00
Manifest-F	40	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1528.83	1836.00
Manifest-F	40	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	1840.68	2288.00
Manifest-F	40	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	1783.17	2027.00
Manifest-F	40	Head end only	45	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	3636.14	4440.00
Manifest-F	40	Head end only	45	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	0.00%	3447.14	4354.00
Manifest-F	40	Head end only	46	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	3039.74	3360.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-F	40	Head end only	60	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	5868.94	7138.00
Manifest-F	40	Head end only	60	0.00%	Flat	<0.1%	0.00	0.00	< 10%	0.00%	5361.63	6200.00
Manifest-G	40	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	443.81	580.00
Manifest-G	40	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	334.33	385.00
Manifest-G	40	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	335.54	423.00
Manifest-G	40	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	390.43	441.00
Manifest-G	40	Head end only	15	2.80%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	662.36	930.00
Manifest-G	40	Head end only	20	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	586.98	656.00
Manifest-G	40	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	< 0.1%	4.00%	869.75	1266.00
Manifest-G	40	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	< 10%	5.00%	1279.79	1756.00
Manifest-G	40	Head end only	28	1.00%	Crest	> 1.0%	9.40	15.00	< 0.1%	70.00%	1307.92	1435.00
Manifest-G	40	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	1.00%	1822.08	2157.00
Manifest-G	40	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1477.00	1719.00
Manifest-G	40	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	1804.81	2161.00
Manifest-G	40	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	1721.63	2021.00
Manifest-G	40	Head end only	45	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	3520.26	4452.00
Manifest-G	40	Head end only	45	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	0.00%	3394.41	4001.00
Manifest-G	40	Head end only	46	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	2935.34	3349.00
Manifest-G	40	Head end only	60	0.50%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	5645.82	6540.00
Manifest-G	40	Head end only	60	0.00%	Flat	<0.1%	0.00	0.00	< 10%	0.00%	5263.12	5857.00
Manifest-H	40	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	560.81	684.00
Manifest-H	40	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	376.61	441.00
Manifest-H	40	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	1.00%	488.35	657.00
Manifest-H	40	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	467.41	558.00
Manifest-H	40	Head end only	15	2.80%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	21.00%	1904.05	4656.00
Manifest-H	40	Head end only	20	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	645.92	740.00
Manifest-H	40	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	26.00%	2094.91	4244.00
Manifest-H	40	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	32.00%	2019.94	4507.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-H	40	Head end only	28	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	16.00%	1482.00	1656.00
Manifest-H	40	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	10.00%	2374.23	3088.00
Manifest-H	40	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1816.77	2036.00
Manifest-H	40	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	9.00%	2447.22	3778.00
Manifest-H	40	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2162.21	2539.00
Manifest-H	40	Head end only	45	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	2.00%	5481.28	7803.00
Manifest-H	40	Head end only	45	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	2.00%	4286.06	5484.00
Manifest-H	40	Head end only	46	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	3641.01	4111.00
Manifest-H	40	Head end only	60	0.50%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	2.00%	7471.00	9380.00
Manifest-H	40	Head end only	60	0.00%	Flat	<0.1%	0.00	0.00	< 10%	0.00%	6817.50	8383.00
Manifest-I	40	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	466.34	573.00
Manifest-I	40	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	337.02	408.00
Manifest-I	40	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	332.52	445.00
Manifest-I	40	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	397.44	469.00
Manifest-I	40	Head end only	15	2.80%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	642.96	1168.00
Manifest-I	40	Head end only	20	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	591.18	686.00
Manifest-I	40	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	942.41	1801.00
Manifest-I	40	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	1416.52	1866.00
Manifest-I	40	Head end only	28	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	1338.26	1467.00
Manifest-I	40	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	1954.02	2405.00
Manifest-I	40	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1492.78	1722.00
Manifest-I	40	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	1661.60	1954.00
Manifest-I	40	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	1719.04	2013.00
Manifest-I	40	Head end only	45	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	3217.03	3865.00
Manifest-I	40	Head end only	45	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	0.00%	3349.78	4002.00
Manifest-I	40	Head end only	46	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	2896.84	3310.00
Manifest-I	40	Head end only	60	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	5534.12	6540.00
Manifest-I	40	Head end only	60	0.00%	Flat	<0.1%	0.00	0.00	< 10%	0.00%	5070.52	5860.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-J	40	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	466.11	564.00
Manifest-J	40	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	342.58	380.00
Manifest-J	40	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	362.03	452.00
Manifest-J	40	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	403.94	483.00
Manifest-J	40	Head end only	15	2.80%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	709.63	1052.00
Manifest-J	40	Head end only	20	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	597.72	677.00
Manifest-J	40	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	< 10%	7.00%	942.52	2857.00
Manifest-J	40	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	< 10%	10.00%	1309.94	2141.00
Manifest-J	40	Head end only	28	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	1338.59	1449.00
Manifest-J	40	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	4.00%	1928.38	2301.00
Manifest-J	40	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1553.58	1750.00
Manifest-J	40	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	1928.94	2495.00
Manifest-J	40	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	1779.42	2039.00
Manifest-J	40	Head end only	45	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	3775.91	4795.00
Manifest-J	40	Head end only	45	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	0.00%	3526.91	4387.00
Manifest-J	40	Head end only	46	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	3059.01	3627.00
Manifest-J	40	Head end only	60	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	5853.38	7667.00
Manifest-J	40	Head end only	60	0.00%	Flat	<0.1%	0.00	0.00	< 10%	0.00%	5551.30	6214.00
Manifest-A	100	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	612.37	792.00
Manifest-A	100	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	375.67	422.00
Manifest-A	100	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	554.63	700.00
Manifest-A	100	Distributed (Head and Rear)	10	0.00%	Flat	< 0.5%	4.00	4.00	< 0.1%	1.00%	485.86	578.00
Manifest-A	100	Distributed (Head and Rear)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	56.00%	2888.38	7811.00
Manifest-A	100	Distributed (Head and Rear)	18	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	585.54	630.00
Manifest-A	100	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	59.00%	1960.14	9777.00
Manifest-A	100	Distributed (Head and Rear)	25	1.70%	Decline	> 1.0%	57.00	77.00	< 10%	63.00%	1943.04	6293.00
Manifest-A	100	Distributed (Head and Rear)	26	1.00%	Crest	> 1.0%	13.67	21.00	< 0.1%	25.00%	1609.49	1806.00
Manifest-A	100	Distributed (Head and Rear)	30	0.50%	Decline	< 0.5%	7.00	7.00	< 0.1%	23.00%	2723.59	3319.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-A	100	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	4.00%	1908.51	2093.00
Manifest-A	100	Distributed (Head and Rear)	30	1.10%	Decline	> 1.0%	44.00	44.00	< 10%	54.00%	2574.80	4265.00
Manifest-A	100	Distributed (Head and Rear)	30	0.00%	Flat	< 0.5%	21.00	21.00	< 0.1%	6.00%	2302.53	2714.00
Manifest-A	100	Distributed (Head and Rear)	45	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	2.00%	3769.51	4098.00
Manifest-A	100	Distributed (Head and Rear)	45	1.10%	Decline	> 1.0%	148.50	156.00	> 25%, < 50%	55.00%	6007.00	12362.00
Manifest-A	100	Distributed (Head and Rear)	45	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	7.00%	3691.32	4609.00
Manifest-A	100	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	38.00%	8737.58	12110.00
Manifest-A	100	Distributed (Head and Rear)	60	0.00%	Flat	< 0.5%	3.00	3.00	< 10%	2.00%	7792.75	9250.00
Manifest-B	100	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	406.00	480.00
Manifest-B	100	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	304.59	343.00
Manifest-B	100	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	287.37	353.00
Manifest-B	100	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	332.05	395.00
Manifest-B	100	Distributed (Head and Rear)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	821.42	973.00
Manifest-B	100	Distributed (Head and Rear)	18	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	510.69	564.00
Manifest-B	100	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	992.06	1167.00
Manifest-B	100	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1184.90	1347.00
Manifest-B	100	Distributed (Head and Rear)	26	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	1208.26	1327.00
Manifest-B	100	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	1606.55	1845.00
Manifest-B	100	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1318.95	1473.00
Manifest-B	100	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	1295.55	1501.00
Manifest-B	100	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	1450.13	1647.00
Manifest-B	100	Distributed (Head and Rear)	45	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	2324.14	2509.00
Manifest-B	100	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	2463.14	2806.00
Manifest-B	100	Distributed (Head and Rear)	45	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	0.00%	2649.03	2949.00
Manifest-B	100	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4635.95	5040.00
Manifest-B	100	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 10%	0.00%	4174.66	4632.00
Manifest-C	100	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	520.18	666.00
Manifest-C	100	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	352.32	413.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-C	100	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	424.76	533.00
Manifest-C	100	Distributed (Head and Rear)	10	0.00%	Flat	> 1.0%	6.00	6.00	< 0.1%	1.00%	423.58	489.00
Manifest-C	100	Distributed (Head and Rear)	15	2.80%	Decline	<0.1%	0.00	0.00	< 10%	2.00%	966.65	1433.00
Manifest-C	100	Distributed (Head and Rear)	18	1.50%	Incline	> 1.0%	4.00	4.00	< 0.1%	3.00%	550.91	607.00
Manifest-C	100	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	18.00%	1293.97	2425.00
Manifest-C	100	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	6.00%	1653.62	2932.00
Manifest-C	100	Distributed (Head and Rear)	26	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	3.00%	1321.04	1559.00
Manifest-C	100	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	40.00%	2102.95	2582.00
Manifest-C	100	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	3.00%	1658.72	1860.00
Manifest-C	100	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	1.00%	2082.45	2617.00
Manifest-C	100	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	6.00%	1882.49	2119.00
Manifest-C	100	Distributed (Head and Rear)	45	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	2.00%	3077.59	3393.00
Manifest-C	100	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	4128.35	6008.00
Manifest-C	100	Distributed (Head and Rear)	45	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	17.00%	3467.00	4174.00
Manifest-C	100	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	7.00%	6164.11	7922.00
Manifest-C	100	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 10%	0.00%	5820.99	6484.00
Manifest-D	100	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	615.14	849.00
Manifest-D	100	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	374.60	440.00
Manifest-D	100	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	543.96	741.00
Manifest-D	100	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	479.49	550.00
Manifest-D	100	Distributed (Head and Rear)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	17.00%	1940.03	6981.00
Manifest-D	100	Distributed (Head and Rear)	18	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	574.51	632.00
Manifest-D	100	Distributed (Head and Rear)	20	2.20%	Decline	> 1.0%	18.00	18.00	< 10%	43.00%	1476.68	2219.00
Manifest-D	100	Distributed (Head and Rear)	25	1.70%	Decline	> 1.0%	46.00	115.00	< 10%	58.00%	1847.30	2873.00
Manifest-D	100	Distributed (Head and Rear)	26	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	1559.47	1730.00
Manifest-D	100	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	20.00%	2480.90	3303.00
Manifest-D	100	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	1.00%	1892.27	2118.00
Manifest-D	100	Distributed (Head and Rear)	30	1.10%	Decline	< 0.5%	2.00	2.00	< 10%	21.00%	2595.45	3750.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-D	100	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	15.00%	2219.78	2549.00
Manifest-D	100	Distributed (Head and Rear)	45	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	5.00%	3598.07	4034.00
Manifest-D	100	Distributed (Head and Rear)	45	1.10%	Decline	> 1.0%	103.00	140.00	> 25%, < 50%	40.00%	5485.01	9508.00
Manifest-D	100	Distributed (Head and Rear)	45	1.00%	Trough	<0.1%	0.00	0.00	> 25%, < 50%	34.00%	5093.92	7540.00
Manifest-D	100	Distributed (Head and Rear)	60	0.50%	Decline	> 1.0%	98.00	98.00	< 10%	23.00%	7837.90	10204.00
Manifest-D	100	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 10%	1.00%	7301.40	8147.00
Manifest-E	100	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	509.60	610.00
Manifest-E	100	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	348.17	389.00
Manifest-E	100	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	433.58	558.00
Manifest-E	100	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	423.18	470.00
Manifest-E	100	Distributed (Head and Rear)	15	2.80%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	949.99	1276.00
Manifest-E	100	Distributed (Head and Rear)	18	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	530.39	587.00
Manifest-E	100	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	< 0.1%	10.00%	1099.32	1595.00
Manifest-E	100	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	< 10%	23.00%	1562.48	3098.00
Manifest-E	100	Distributed (Head and Rear)	26	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	1425.80	1588.00
Manifest-E	100	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	18.00%	1985.39	2540.00
Manifest-E	100	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	2.00%	1653.51	1836.00
Manifest-E	100	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2221.16	2801.00
Manifest-E	100	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	3.00%	1912.06	2218.00
Manifest-E	100	Distributed (Head and Rear)	45	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	1.00%	3141.68	3597.00
Manifest-E	100	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	3.00%	4323.00	5876.00
Manifest-E	100	Distributed (Head and Rear)	45	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	6.00%	3356.10	4027.00
Manifest-E	100	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	6631.30	9085.00
Manifest-E	100	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	6040.96	6845.00
Manifest-F	100	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	1.00%	544.52	690.00
Manifest-F	100	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	358.40	440.00
Manifest-F	100	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	468.10	582.00
Manifest-F	100	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	439.98	533.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-F	100	Distributed (Head and Rear)	15	2.80%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	1278.82	4838.00
Manifest-F	100	Distributed (Head and Rear)	18	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	1.00%	561.02	611.00
Manifest-F	100	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	3.00%	1682.39	3602.00
Manifest-F	100	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	3.00%	2051.28	3162.00
Manifest-F	100	Distributed (Head and Rear)	26	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	1.00%	1425.54	1654.00
Manifest-F	100	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	13.00%	2078.80	2811.00
Manifest-F	100	Distributed (Head and Rear)	30	0.50%	Incline	> 1.0%	5.00	6.00	< 0.1%	3.00%	1725.82	1985.00
Manifest-F	100	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	1.00%	2262.32	2999.00
Manifest-F	100	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	1.00%	2003.55	2262.00
Manifest-F	100	Distributed (Head and Rear)	45	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	1.00%	3269.89	3657.00
Manifest-F	100	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	3.00%	4699.70	6228.00
Manifest-F	100	Distributed (Head and Rear)	45	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	13.00%	3629.77	4229.00
Manifest-F	100	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7233.42	8635.00
Manifest-F	100	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 10%	1.00%	6289.07	7288.00
Manifest-G	100	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	516.05	626.00
Manifest-G	100	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	362.68	409.00
Manifest-G	100	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	438.08	530.00
Manifest-G	100	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	434.54	494.00
Manifest-G	100	Distributed (Head and Rear)	15	2.80%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	944.77	1203.00
Manifest-G	100	Distributed (Head and Rear)	18	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	545.77	608.00
Manifest-G	100	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	< 0.1%	10.00%	1096.23	1565.00
Manifest-G	100	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	< 10%	24.00%	1528.34	2341.00
Manifest-G	100	Distributed (Head and Rear)	26	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	3.00%	1397.79	1638.00
Manifest-G	100	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	8.00%	2137.71	2749.00
Manifest-G	100	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	6.00%	1675.77	1895.00
Manifest-G	100	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	8.00%	2018.28	2758.00
Manifest-G	100	Distributed (Head and Rear)	30	0.00%	Flat	> 1.0%	1.00	1.00	< 0.1%	10.00%	1919.34	2157.00
Manifest-G	100	Distributed (Head and Rear)	45	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	3.00%	3182.83	3610.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-G	100	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	< 10%	12.00%	3958.31	5312.00
Manifest-G	100	Distributed (Head and Rear)	45	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	2.00%	3512.75	4314.00
Manifest-G	100	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	1.00%	6174.80	8994.00
Manifest-G	100	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	5971.42	6926.00
Manifest-H	100	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	529.34	667.00
Manifest-H	100	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	349.57	414.00
Manifest-H	100	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	469.24	596.00
Manifest-H	100	Distributed (Head and Rear)	10	0.00%	Flat	> 1.0%	4.50	8.00	< 0.1%	17.00%	446.61	550.00
Manifest-H	100	Distributed (Head and Rear)	15	2.80%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	1008.08	1366.00
Manifest-H	100	Distributed (Head and Rear)	18	1.50%	Incline	> 1.0%	6.00	9.00	< 0.1%	4.00%	547.58	626.00
Manifest-H	100	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	< 0.1%	12.00%	1160.50	1743.00
Manifest-H	100	Distributed (Head and Rear)	25	1.70%	Decline	< 0.5%	2.00	2.00	< 0.1%	41.00%	1468.36	1847.00
Manifest-H	100	Distributed (Head and Rear)	26	1.00%	Crest	> 1.0%	7.00	13.00	< 0.1%	46.00%	1466.69	1639.00
Manifest-H	100	Distributed (Head and Rear)	30	0.50%	Decline	> 1.0%	14.00	14.00	< 0.1%	38.00%	2221.93	2815.00
Manifest-H	100	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	23.00%	1727.66	1945.00
Manifest-H	100	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	14.00%	2174.71	2834.00
Manifest-H	100	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	15.00%	2002.72	2384.00
Manifest-H	100	Distributed (Head and Rear)	45	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	11.00%	3252.75	3651.00
Manifest-H	100	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	< 10%	35.00%	3927.29	5073.00
Manifest-H	100	Distributed (Head and Rear)	45	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	2.00%	3690.47	4177.00
Manifest-H	100	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	2.00%	7068.39	8803.00
Manifest-H	100	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	6285.91	7109.00
Manifest-I	100	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	524.71	664.00
Manifest-I	100	Distributed (Head and Rear)	10	0.50%	Incline	> 1.0%	3.00	5.00	< 0.1%	7.00%	364.35	454.00
Manifest-I	100	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	468.99	623.00
Manifest-I	100	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	412.42	485.00
Manifest-I	100	Distributed (Head and Rear)	15	2.80%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	1.00%	1060.84	1385.00
Manifest-I	100	Distributed (Head and Rear)	18	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	4.00%	541.62	595.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-I	100	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	< 0.1%	14.00%	1176.16	1364.00
Manifest-I	100	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	< 0.1%	33.00%	1492.21	1860.00
Manifest-I	100	Distributed (Head and Rear)	26	1.00%	Crest	> 25%	21.71	74.00	< 0.1%	98.00%	1520.26	1696.00
Manifest-I	100	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	14.00%	2153.57	2804.00
Manifest-I	100	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	3.00%	1764.40	2006.00
Manifest-I	100	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	20.00%	2118.28	2739.00
Manifest-I	100	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	1.00%	2039.26	2405.00
Manifest-I	100	Distributed (Head and Rear)	45	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	1.00%	3332.25	3732.00
Manifest-I	100	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	< 10%	19.00%	4310.89	7733.00
Manifest-I	100	Distributed (Head and Rear)	45	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	0.00%	3578.52	4437.00
Manifest-I	100	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	7010.14	9792.00
Manifest-I	100	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 10%	0.00%	6489.09	7467.00
Manifest-J	100	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	579.08	711.00
Manifest-J	100	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	380.43	441.00
Manifest-J	100	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	534.90	725.00
Manifest-J	100	Distributed (Head and Rear)	10	0.00%	Flat	> 1.0%	4.17	10.00	< 0.1%	16.00%	492.81	556.00
Manifest-J	100	Distributed (Head and Rear)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	11.00%	1517.32	6377.00
Manifest-J	100	Distributed (Head and Rear)	18	1.50%	Incline	> 1.0%	7.67	12.00	< 0.1%	8.00%	572.44	616.00
Manifest-J	100	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	< 10%	23.00%	1384.82	7859.00
Manifest-J	100	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	< 10%	52.00%	1812.36	4592.00
Manifest-J	100	Distributed (Head and Rear)	26	1.00%	Crest	> 1.0%	10.00	17.00	< 0.1%	25.00%	1565.12	1758.00
Manifest-J	100	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	9.00%	2392.79	2934.00
Manifest-J	100	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	22.00%	1873.43	2148.00
Manifest-J	100	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 10%	5.00%	2683.24	3817.00
Manifest-J	100	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	3.00%	2238.29	2630.00
Manifest-J	100	Distributed (Head and Rear)	45	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	2.00%	3609.57	4054.00
Manifest-J	100	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	18.00%	5391.90	9053.00
Manifest-J	100	Distributed (Head and Rear)	45	1.00%	Trough	<0.1%	0.00	0.00	> 10%, < 25%	1.00%	4571.89	7538.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-J	100	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	7583.37	10347.00
Manifest-J	100	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 10%	0.00%	7091.43	8336.00
Manifest-A	100	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	966.81	1159.00
Manifest-A	100	Head end only	10	0.50%	Incline	> 1.0%	2.33	5.00	< 0.1%	4.00%	469.87	544.00
Manifest-A	100	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	796.08	1067.00
Manifest-A	100	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	639.86	750.00
Manifest-A	100	Head end only	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	9.00%	13793.88	19419.00
Manifest-A	100	Head end only	18	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	641.59	711.00
Manifest-A	100	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	3.00%	5941.41	13340.00
Manifest-A	100	Head end only	25	1.70%	Decline	> 1.0%	58.00	81.00	> 50%	8.00%	3438.62	9633.00
Manifest-A	100	Head end only	26	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	2011.72	2264.00
Manifest-A	100	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	5.00%	3819.15	4986.00
Manifest-A	100	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	2378.22	2588.00
Manifest-A	100	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	16.00%	3402.05	6014.00
Manifest-A	100	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	4.00%	3013.11	3352.00
Manifest-A	100	Head end only	45	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	4588.46	4994.00
Manifest-A	100	Head end only	45	1.10%	Decline	> 1.0%	34.00	34.00	> 25%, < 50%	23.00%	7007.89	12207.00
Manifest-A	100	Head end only	45	1.00%	Trough	<0.1%	0.00	0.00	> 25%, < 50%	1.00%	6816.52	10838.00
Manifest-A	100	Head end only	60	0.50%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	20.00%	10518.01	13008.00
Manifest-A	100	Head end only	60	0.00%	Flat	<0.1%	0.00	0.00	< 10%	2.00%	8955.48	10224.00
Manifest-B	100	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	565.68	733.00
Manifest-B	100	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	378.43	458.00
Manifest-B	100	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	364.36	471.00
Manifest-B	100	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	474.27	536.00
Manifest-B	100	Head end only	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1274.96	1681.00
Manifest-B	100	Head end only	18	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	586.44	649.00
Manifest-B	100	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1464.59	1762.00
Manifest-B	100	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1684.75	1984.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-B	100	Head end only	26	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	1804.60	2044.00
Manifest-B	100	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2321.87	2652.00
Manifest-B	100	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1824.17	2026.00
Manifest-B	100	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	1818.75	2094.00
Manifest-B	100	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2052.49	2322.00
Manifest-B	100	Head end only	45	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	3186.56	3577.00
Manifest-B	100	Head end only	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3430.69	3920.00
Manifest-B	100	Head end only	45	1.00%	Trough	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	3960.16	5078.00
Manifest-B	100	Head end only	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6395.92	7330.00
Manifest-B	100	Head end only	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	5596.37	6361.00
Manifest-C	100	Head end only	10	0.50%	Decline	< 0.5%	1.00	1.00	< 10%	1.00%	822.75	988.00
Manifest-C	100	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	463.24	609.00
Manifest-C	100	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	598.28	773.00
Manifest-C	100	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	586.63	734.00
Manifest-C	100	Head end only	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	2.00%	1546.03	2683.00
Manifest-C	100	Head end only	18	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	609.58	680.00
Manifest-C	100	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	9.00%	1883.64	3374.00
Manifest-C	100	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	3.00%	2701.94	4217.00
Manifest-C	100	Head end only	26	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	1835.13	2110.00
Manifest-C	100	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	< 10%	4.00%	3289.49	3962.00
Manifest-C	100	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	2200.14	2439.00
Manifest-C	100	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	2899.64	3612.00
Manifest-C	100	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	1.00%	2641.32	2957.00
Manifest-C	100	Head end only	45	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	4108.96	4548.00
Manifest-C	100	Head end only	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	1.00%	5404.42	6354.00
Manifest-C	100	Head end only	45	1.00%	Trough	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	5480.80	6551.00
Manifest-C	100	Head end only	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	1.00%	8593.96	10312.00
Manifest-C	100	Head end only	60	0.00%	Flat	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	7428.29	8235.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-D	100	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	937.01	1135.00
Manifest-D	100	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	471.64	539.00
Manifest-D	100	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	821.61	1142.00
Manifest-D	100	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	650.05	746.00
Manifest-D	100	Head end only	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	8.00%	2794.82	19242.00
Manifest-D	100	Head end only	18	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	634.64	721.00
Manifest-D	100	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	17.00%	2195.01	8970.00
Manifest-D	100	Head end only	25	1.70%	Decline	< 0.5%	8.00	8.00	> 25%, < 50%	12.00%	2550.08	4472.00
Manifest-D	100	Head end only	26	1.00%	Crest	<0.1%	0.00	0.00	< 10%	0.00%	1992.21	2171.00
Manifest-D	100	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	3758.92	4413.00
Manifest-D	100	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	2384.81	2612.00
Manifest-D	100	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	2.00%	3454.92	4706.00
Manifest-D	100	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	3024.99	3500.00
Manifest-D	100	Head end only	45	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	4547.89	4983.00
Manifest-D	100	Head end only	45	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	8.00%	6148.37	10005.00
Manifest-D	100	Head end only	45	1.00%	Trough	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	6115.66	10838.00
Manifest-D	100	Head end only	60	0.50%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	9735.66	12911.00
Manifest-D	100	Head end only	60	0.00%	Flat	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	8702.06	9632.00
Manifest-E	100	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	728.15	901.00
Manifest-E	100	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	426.18	528.00
Manifest-E	100	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	612.13	769.00
Manifest-E	100	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	566.66	655.00
Manifest-E	100	Head end only	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1284.18	1915.00
Manifest-E	100	Head end only	18	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	591.27	654.00
Manifest-E	100	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	< 10%	8.00%	1445.40	2528.00
Manifest-E	100	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	2.00%	2001.34	3364.00
Manifest-E	100	Head end only	26	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	1828.66	1929.00
Manifest-E	100	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	2885.55	4067.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-E	100	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	2150.44	2366.00
Manifest-E	100	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	2927.82	3854.00
Manifest-E	100	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2600.30	3034.00
Manifest-E	100	Head end only	45	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	4000.11	4596.00
Manifest-E	100	Head end only	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5614.97	6952.00
Manifest-E	100	Head end only	45	1.00%	Trough	<0.1%	0.00	0.00	< 10%	0.00%	4754.85	5577.00
Manifest-E	100	Head end only	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	8123.55	10316.00
Manifest-E	100	Head end only	60	0.00%	Flat	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	7466.25	8156.00
Manifest-F	100	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	867.19	1057.00
Manifest-F	100	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	449.15	592.00
Manifest-F	100	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	669.13	926.00
Manifest-F	100	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	605.28	678.00
Manifest-F	100	Head end only	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2421.73	18356.00
Manifest-F	100	Head end only	18	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	607.13	701.00
Manifest-F	100	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	1.00%	2574.49	9633.00
Manifest-F	100	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2922.30	4645.00
Manifest-F	100	Head end only	26	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	1888.01	2112.00
Manifest-F	100	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	3330.31	4308.00
Manifest-F	100	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	2258.66	2466.00
Manifest-F	100	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	3124.58	4331.00
Manifest-F	100	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2766.60	3168.00
Manifest-F	100	Head end only	45	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	4222.04	4656.00
Manifest-F	100	Head end only	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5763.12	7793.00
Manifest-F	100	Head end only	45	1.00%	Trough	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	5588.96	7012.00
Manifest-F	100	Head end only	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	9369.96	11295.00
Manifest-F	100	Head end only	60	0.00%	Flat	<0.1%	0.00	0.00	> 10%, < 25%	1.00%	7763.45	8759.00
Manifest-G	100	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	799.06	1091.00
Manifest-G	100	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	443.87	521.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-G	100	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	663.83	889.00
Manifest-G	100	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	615.76	714.00
Manifest-G	100	Head end only	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1538.31	2316.00
Manifest-G	100	Head end only	18	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	609.24	691.00
Manifest-G	100	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	6.00%	1634.14	2306.00
Manifest-G	100	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	3.00%	2095.11	4795.00
Manifest-G	100	Head end only	26	1.00%	Crest	<0.1%	0.00	0.00	< 10%	0.00%	1902.96	2133.00
Manifest-G	100	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	3224.86	4209.00
Manifest-G	100	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	2292.95	2513.00
Manifest-G	100	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	3144.17	3959.00
Manifest-G	100	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2798.67	3112.00
Manifest-G	100	Head end only	45	0.50%	Incline	<0.1%	0.00	0.00	< 10%	0.00%	4274.32	4659.00
Manifest-G	100	Head end only	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	2.00%	5752.81	7945.00
Manifest-G	100	Head end only	45	1.00%	Trough	<0.1%	0.00	0.00	< 10%	0.00%	5270.87	6769.00
Manifest-G	100	Head end only	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	8616.52	11637.00
Manifest-G	100	Head end only	60	0.00%	Flat	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	7848.63	9110.00
Manifest-H	100	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	807.22	1017.00
Manifest-H	100	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	442.43	544.00
Manifest-H	100	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	703.25	970.00
Manifest-H	100	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	607.03	668.00
Manifest-H	100	Head end only	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	1.00%	1430.12	1934.00
Manifest-H	100	Head end only	18	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	646.46	689.00
Manifest-H	100	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	8.00%	1688.89	2221.00
Manifest-H	100	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	11.00%	2123.60	3031.00
Manifest-H	100	Head end only	26	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	1935.13	2120.00
Manifest-H	100	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	3306.98	3853.00
Manifest-H	100	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	2286.21	2501.00
Manifest-H	100	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	2.00%	3065.99	3996.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-H	100	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2821.19	3325.00
Manifest-H	100	Head end only	45	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	4254.40	4687.00
Manifest-H	100	Head end only	45	1.10%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	13.00%	5280.12	6616.00
Manifest-H	100	Head end only	45	1.00%	Trough	<0.1%	0.00	0.00	< 10%	0.00%	5061.88	6493.00
Manifest-H	100	Head end only	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	1.00%	9196.94	10591.00
Manifest-H	100	Head end only	60	0.00%	Flat	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	7894.30	8763.00
Manifest-I	100	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	759.08	1062.00
Manifest-I	100	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	438.69	518.00
Manifest-I	100	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	689.45	889.00
Manifest-I	100	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	592.06	678.00
Manifest-I	100	Head end only	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	2.00%	1509.19	3826.00
Manifest-I	100	Head end only	18	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	617.07	698.00
Manifest-I	100	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	< 10%	1.00%	1537.84	1928.00
Manifest-I	100	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	< 10%	16.00%	2002.28	2613.00
Manifest-I	100	Head end only	26	1.00%	Crest	> 1.0%	16.00	16.00	< 0.1%	69.00%	2017.04	2176.00
Manifest-I	100	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	3082.35	3873.00
Manifest-I	100	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	2256.76	2445.00
Manifest-I	100	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	< 10%	1.00%	2774.89	3741.00
Manifest-I	100	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2769.34	3144.00
Manifest-I	100	Head end only	45	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	4258.20	4889.00
Manifest-I	100	Head end only	45	1.10%	Decline	<0.1%	0.00	0.00	< 10%	10.00%	5120.22	6434.00
Manifest-I	100	Head end only	45	1.00%	Trough	<0.1%	0.00	0.00	< 10%	0.00%	5128.42	5832.00
Manifest-I	100	Head end only	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	8982.19	11197.00
Manifest-I	100	Head end only	60	0.00%	Flat	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	7972.96	8850.00
Manifest-J	100	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	961.10	1209.00
Manifest-J	100	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	473.28	549.00
Manifest-J	100	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	854.80	1157.00
Manifest-J	100	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	648.90	741.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-J	100	Head end only	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	11.00%	2886.57	17698.00
Manifest-J	100	Head end only	18	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	648.57	707.00
Manifest-J	100	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	5.00%	2919.98	7782.00
Manifest-J	100	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	10.00%	2550.99	4428.00
Manifest-J	100	Head end only	26	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	2027.93	2263.00
Manifest-J	100	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3723.47	4521.00
Manifest-J	100	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	2414.17	2671.00
Manifest-J	100	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	2.00%	3491.18	5002.00
Manifest-J	100	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	3029.01	3370.00
Manifest-J	100	Head end only	45	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	4579.14	4993.00
Manifest-J	100	Head end only	45	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	11.00%	6013.35	9459.00
Manifest-J	100	Head end only	45	1.00%	Trough	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	5938.70	10443.00
Manifest-J	100	Head end only	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	10317.57	12187.00
Manifest-J	100	Head end only	60	0.00%	Flat	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	8638.09	9643.00
Manifest-A	150	Distributed (Head and Rear)	10	0.50%	Decline	> 1.0%	13.00	30.00	< 10%	6.00%	794.99	1153.00
Manifest-A	150	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	425.59	492.00
Manifest-A	150	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	1313.90	60800.00
Manifest-A	150	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	583.36	699.00
Manifest-A	150	Distributed (Head and Rear)	15	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	468.99	524.00
Manifest-A	150	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	13.00%	1728.57	2414.00
Manifest-A	150	Distributed (Head and Rear)	23	1.00%	Crest	> 1.0%	7.75	25.00	< 0.1%	32.00%	1588.00	1999.00
Manifest-A	150	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	20.00%	2341.26	7602.00
Manifest-A	150	Distributed (Head and Rear)	30	0.50%	Decline	> 1.0%	54.00	105.00	< 10%	44.00%	2791.57	3464.00
Manifest-A	150	Distributed (Head and Rear)	30	0.50%	Incline	> 1.0%	13.50	25.00	< 0.1%	18.00%	2137.50	2527.00
Manifest-A	150	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 10%	27.00%	3043.04	5862.00
Manifest-A	150	Distributed (Head and Rear)	30	0.00%	Flat	> 1.0%	16.50	18.00	< 0.1%	33.00%	2643.82	3574.00
Manifest-A	150	Distributed (Head and Rear)	40	0.50%	Incline	> 1.0%	62.00	62.00	< 0.1%	25.00%	3361.49	3977.00
Manifest-A	150	Distributed (Head and Rear)	40	1.00%	Trough	<0.1%	0.00	0.00	> 10%, < 25%	3.00%	4116.21	7144.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-A	150	Distributed (Head and Rear)	45	1.10%	Decline	> 1.0%	212.00	212.00	< 10%	58.00%	5495.67	12373.00
Manifest-A	150	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	50.00%	9321.56	12846.00
Manifest-A	150	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 10%, < 25%	4.00%	8429.48	10172.00
Manifest-B	150	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	458.20	678.00
Manifest-B	150	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	334.14	419.00
Manifest-B	150	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	318.23	408.00
Manifest-B	150	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	391.69	485.00
Manifest-B	150	Distributed (Head and Rear)	15	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	433.04	494.00
Manifest-B	150	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1166.62	1464.00
Manifest-B	150	Distributed (Head and Rear)	23	1.00%	Crest	> 1.0%	39.00	39.00	< 0.1%	1.00%	1300.65	1638.00
Manifest-B	150	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1345.58	1663.00
Manifest-B	150	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	1861.66	2540.00
Manifest-B	150	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	1.00%	1470.72	1771.00
Manifest-B	150	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	1440.00	1736.00
Manifest-B	150	Distributed (Head and Rear)	30	0.00%	Flat	> 1.0%	21.00	21.00	< 0.1%	2.00%	1661.16	2084.00
Manifest-B	150	Distributed (Head and Rear)	40	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	2164.64	2542.00
Manifest-B	150	Distributed (Head and Rear)	40	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	2.00%	2793.62	3632.00
Manifest-B	150	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	2679.64	3164.00
Manifest-B	150	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	5213.38	6448.00
Manifest-B	150	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	4657.79	5850.00
Manifest-C	150	Distributed (Head and Rear)	10	0.50%	Decline	> 1.0%	10.83	28.00	< 0.1%	28.00%	639.49	999.00
Manifest-C	150	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	385.74	527.00
Manifest-C	150	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	556.94	756.00
Manifest-C	150	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	491.80	575.00
Manifest-C	150	Distributed (Head and Rear)	15	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	437.47	486.00
Manifest-C	150	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	< 10%	11.00%	1312.09	1831.00
Manifest-C	150	Distributed (Head and Rear)	23	1.00%	Crest	< 0.5%	2.00	2.00	< 0.1%	2.00%	1379.77	1636.00
Manifest-C	150	Distributed (Head and Rear)	25	1.70%	Decline	> 1.0%	12.00	20.00	< 10%	40.00%	1682.84	2341.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-C	150	Distributed (Head and Rear)	30	0.50%	Decline	> 1.0%	36.33	63.00	< 0.1%	28.00%	2532.34	3311.00
Manifest-C	150	Distributed (Head and Rear)	30	0.50%	Incline	> 1.0%	18.39	61.00	< 0.1%	22.00%	1846.78	2390.00
Manifest-C	150	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	14.00%	2459.18	3169.00
Manifest-C	150	Distributed (Head and Rear)	30	0.00%	Flat	> 1.0%	25.67	78.00	< 0.1%	40.00%	2203.89	2915.00
Manifest-C	150	Distributed (Head and Rear)	40	0.50%	Incline	> 1.0%	22.48	69.00	< 0.1%	41.00%	2929.95	3582.00
Manifest-C	150	Distributed (Head and Rear)	40	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	44.00%	3380.26	3862.00
Manifest-C	150	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	< 10%	34.00%	4417.17	5967.00
Manifest-C	150	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	32.00%	7607.21	10662.00
Manifest-C	150	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 10%	6.00%	6847.63	8121.00
Manifest-D	150	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	585.57	966.00
Manifest-D	150	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	378.65	471.00
Manifest-D	150	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	473.49	680.00
Manifest-D	150	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	481.95	604.00
Manifest-D	150	Distributed (Head and Rear)	15	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	442.09	518.00
Manifest-D	150	Distributed (Head and Rear)	20	2.20%	Decline	> 1.0%	15.67	42.00	< 10%	14.00%	1224.89	2297.00
Manifest-D	150	Distributed (Head and Rear)	23	1.00%	Crest	< 0.5%	0.00	0.00	< 0.1%	1.00%	1282.77	1598.00
Manifest-D	150	Distributed (Head and Rear)	25	1.70%	Decline	> 1.0%	13.25	33.00	> 10%, < 25%	25.00%	1631.34	3285.00
Manifest-D	150	Distributed (Head and Rear)	30	0.50%	Decline	> 1.0%	12.00	18.00	< 0.1%	21.00%	2246.51	3964.00
Manifest-D	150	Distributed (Head and Rear)	30	0.50%	Incline	> 1.0%	17.25	32.00	< 0.1%	11.00%	1779.07	2271.00
Manifest-D	150	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 10%	2.00%	2130.48	3054.00
Manifest-D	150	Distributed (Head and Rear)	30	0.00%	Flat	> 1.0%	17.90	85.00	< 0.1%	14.00%	2084.02	2558.00
Manifest-D	150	Distributed (Head and Rear)	40	0.50%	Incline	> 1.0%	13.64	43.00	< 0.1%	19.00%	2756.34	3440.00
Manifest-D	150	Distributed (Head and Rear)	40	1.00%	Trough	> 1.0%	44.73	90.00	< 0.1%	73.00%	3190.45	4144.00
Manifest-D	150	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	4192.57	7054.00
Manifest-D	150	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	5.00%	6652.89	9433.00
Manifest-D	150	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 10%	8.00%	6074.47	7778.00
Manifest-E	150	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	628.68	942.00
Manifest-E	150	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	377.88	475.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-E	150	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	478.89	618.00
Manifest-E	150	Distributed (Head and Rear)	10	0.00%	Flat	> 1.0%	7.00	12.00	< 0.1%	12.00%	479.65	690.00
Manifest-E	150	Distributed (Head and Rear)	15	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	432.68	517.00
Manifest-E	150	Distributed (Head and Rear)	20	2.20%	Decline	> 1.0%	61.00	61.00	> 25%, < 50%	12.00%	1664.37	3220.00
Manifest-E	150	Distributed (Head and Rear)	23	1.00%	Crest	< 0.5%	7.00	7.00	< 10%	2.00%	1194.71	1666.00
Manifest-E	150	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2035.63	2854.00
Manifest-E	150	Distributed (Head and Rear)	30	0.50%	Decline	> 1.0%	9.50	26.00	< 10%	14.00%	2255.93	3542.00
Manifest-E	150	Distributed (Head and Rear)	30	0.50%	Incline	> 1.0%	8.00	10.00	< 0.1%	8.00%	1740.53	2266.00
Manifest-E	150	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 10%	1.00%	2156.17	2978.00
Manifest-E	150	Distributed (Head and Rear)	30	0.00%	Flat	> 1.0%	8.00	17.00	< 0.1%	16.00%	2111.71	2661.00
Manifest-E	150	Distributed (Head and Rear)	40	0.50%	Incline	> 1.0%	22.00	45.00	< 0.1%	18.00%	2751.68	3399.00
Manifest-E	150	Distributed (Head and Rear)	40	1.00%	Trough	> 1.0%	24.83	39.00	< 0.1%	44.00%	3309.12	4174.00
Manifest-E	150	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	2.00%	4158.09	5732.00
Manifest-E	150	Distributed (Head and Rear)	60	0.50%	Decline	> 1.0%	115.00	125.00	> 10%, < 25%	100.00%	4712.54	4720.00
Manifest-E	150	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 10%	5.00%	6164.36	7427.00
Manifest-F	150	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	570.27	799.00
Manifest-F	150	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	367.87	437.00
Manifest-F	150	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	500.78	754.00
Manifest-F	150	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	483.37	601.00
Manifest-F	150	Distributed (Head and Rear)	15	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	429.65	495.00
Manifest-F	150	Distributed (Head and Rear)	20	2.20%	Decline	> 1.0%	43.00	45.00	< 10%	30.00%	1237.00	1738.00
Manifest-F	150	Distributed (Head and Rear)	23	1.00%	Crest	<0.1%	0.00	0.00	< 10%	0.00%	1325.45	1898.00
Manifest-F	150	Distributed (Head and Rear)	25	1.70%	Decline	> 1.0%	43.00	70.00	> 10%, < 25%	35.00%	1754.63	3137.00
Manifest-F	150	Distributed (Head and Rear)	30	0.50%	Decline	> 1.0%	16.20	38.00	< 0.1%	26.00%	2281.05	3881.00
Manifest-F	150	Distributed (Head and Rear)	30	0.50%	Incline	> 1.0%	13.11	42.00	< 0.1%	16.00%	1762.55	2367.00
Manifest-F	150	Distributed (Head and Rear)	30	1.10%	Decline	> 1.0%	43.00	43.00	< 10%	2.00%	2159.86	2938.00
Manifest-F	150	Distributed (Head and Rear)	30	0.00%	Flat	> 1.0%	23.79	61.00	< 0.1%	24.00%	2084.06	2521.00
Manifest-F	150	Distributed (Head and Rear)	40	0.50%	Incline	> 1.0%	19.43	36.00	< 0.1%	21.00%	2818.31	3457.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-F	150	Distributed (Head and Rear)	40	1.00%	Trough	> 1.0%	8.00	8.00	< 0.1%	17.00%	3194.17	4095.00
Manifest-F	150	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	1.00%	4438.45	5940.00
Manifest-F	150	Distributed (Head and Rear)	60	0.50%	Decline	> 1.0%	75.00	75.00	> 25%, < 50%	10.00%	6705.78	10045.00
Manifest-F	150	Distributed (Head and Rear)	60	0.00%	Flat	> 1.0%	119.00	119.00	< 10%	6.00%	6284.58	7765.00
Manifest-G	150	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	623.57	1005.00
Manifest-G	150	Distributed (Head and Rear)	10	0.50%	Incline	> 1.0%	7.33	12.00	< 0.1%	11.00%	411.03	630.00
Manifest-G	150	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	479.49	744.00
Manifest-G	150	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	2.00%	498.89	697.00
Manifest-G	150	Distributed (Head and Rear)	15	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	417.65	482.00
Manifest-G	150	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	21.00%	1342.71	3426.00
Manifest-G	150	Distributed (Head and Rear)	23	1.00%	Crest	> 1.0%	12.27	29.00	< 10%	31.00%	1371.91	1766.00
Manifest-G	150	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	13.00%	1744.22	3014.00
Manifest-G	150	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	32.00%	2283.48	3106.00
Manifest-G	150	Distributed (Head and Rear)	30	0.50%	Incline	> 1.0%	11.50	25.00	< 0.1%	21.00%	1813.30	2224.00
Manifest-G	150	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	2239.71	3134.00
Manifest-G	150	Distributed (Head and Rear)	30	0.00%	Flat	> 1.0%	14.57	30.00	< 0.1%	25.00%	2131.27	2833.00
Manifest-G	150	Distributed (Head and Rear)	40	0.50%	Incline	> 1.0%	12.40	34.00	< 0.1%	14.00%	2836.19	3568.00
Manifest-G	150	Distributed (Head and Rear)	40	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	19.00%	3142.74	4169.00
Manifest-G	150	Distributed (Head and Rear)	45	1.10%	Decline	< 0.5%	28.00	28.00	> 25%, < 50%	2.00%	4278.73	5831.00
Manifest-G	150	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	1.00%	6980.02	9061.00
Manifest-G	150	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 10%	8.00%	6245.58	7960.00
Manifest-H	150	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	702.19	937.00
Manifest-H	150	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	422.32	512.00
Manifest-H	150	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	632.31	846.00
Manifest-H	150	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	564.99	723.00
Manifest-H	150	Distributed (Head and Rear)	15	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	449.77	512.00
Manifest-H	150	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	5.00%	1494.96	1949.00
Manifest-H	150	Distributed (Head and Rear)	23	1.00%	Crest	< 0.5%	3.00	3.00	< 0.1%	5.00%	1523.32	1788.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-H	150	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	< 10%	21.00%	1899.30	3264.00
Manifest-H	150	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	13.00%	2762.57	3583.00
Manifest-H	150	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	2.00%	2059.09	2599.00
Manifest-H	150	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	11.00%	2754.71	4064.00
Manifest-H	150	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	13.00%	2513.61	3048.00
Manifest-H	150	Distributed (Head and Rear)	40	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	7.00%	3213.22	3733.00
Manifest-H	150	Distributed (Head and Rear)	40	1.00%	Trough	<0.1%	0.00	0.00	< 10%	10.00%	3782.35	6850.00
Manifest-H	150	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	28.00%	4908.77	9346.00
Manifest-H	150	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	4.00%	8570.22	11196.00
Manifest-H	150	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	7672.35	8738.00
Manifest-I	150	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	698.71	973.00
Manifest-I	150	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	387.94	484.00
Manifest-I	150	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	567.02	885.00
Manifest-I	150	Distributed (Head and Rear)	10	0.00%	Flat	> 1.0%	1.00	1.00	< 0.1%	2.00%	525.50	665.00
Manifest-I	150	Distributed (Head and Rear)	15	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	435.87	537.00
Manifest-I	150	Distributed (Head and Rear)	20	2.20%	Decline	< 0.5%	6.00	6.00	> 10%, < 25%	5.00%	1494.48	2478.00
Manifest-I	150	Distributed (Head and Rear)	23	1.00%	Crest	> 1.0%	20.13	93.00	< 0.1%	44.00%	1423.89	1732.00
Manifest-I	150	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	13.00%	1989.50	3425.00
Manifest-I	150	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	6.00%	2472.47	3703.00
Manifest-I	150	Distributed (Head and Rear)	30	0.50%	Incline	> 1.0%	24.00	44.00	< 0.1%	15.00%	1931.50	2407.00
Manifest-I	150	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 10%	4.00%	2519.58	3757.00
Manifest-I	150	Distributed (Head and Rear)	30	0.00%	Flat	> 1.0%	20.00	20.00	< 0.1%	26.00%	2307.20	3060.00
Manifest-I	150	Distributed (Head and Rear)	40	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	20.00%	3008.34	3597.00
Manifest-I	150	Distributed (Head and Rear)	40	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	14.00%	3449.40	4172.00
Manifest-I	150	Distributed (Head and Rear)	45	1.10%	Decline	< 0.5%	15.00	15.00	> 25%, < 50%	12.00%	4724.21	6825.00
Manifest-I	150	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	2.00%	7989.29	10563.00
Manifest-I	150	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 10%	5.00%	6889.26	8295.00
Manifest-J	150	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	625.62	961.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-J	150	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	401.46	500.00
Manifest-J	150	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	560.02	807.00
Manifest-J	150	Distributed (Head and Rear)	10	0.00%	Flat	> 1.0%	4.67	10.00	< 0.1%	21.00%	523.94	654.00
Manifest-J	150	Distributed (Head and Rear)	15	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	444.48	500.00
Manifest-J	150	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	< 10%	15.00%	1431.76	2062.00
Manifest-J	150	Distributed (Head and Rear)	23	1.00%	Crest	> 1.0%	13.63	29.00	< 0.1%	34.00%	1414.94	1671.00
Manifest-J	150	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	< 10%	27.00%	1727.66	2558.00
Manifest-J	150	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	30.00%	2394.14	4105.00
Manifest-J	150	Distributed (Head and Rear)	30	0.50%	Incline	> 1.0%	3.00	5.00	< 0.1%	21.00%	1881.69	2237.00
Manifest-J	150	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 10%	26.00%	2385.18	4081.00
Manifest-J	150	Distributed (Head and Rear)	30	0.00%	Flat	> 1.0%	6.50	9.00	< 0.1%	39.00%	2295.85	2810.00
Manifest-J	150	Distributed (Head and Rear)	40	0.50%	Incline	> 1.0%	8.50	12.00	< 0.1%	28.00%	3013.04	3682.00
Manifest-J	150	Distributed (Head and Rear)	40	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	12.00%	3591.80	4015.00
Manifest-J	150	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	< 10%	33.00%	4465.30	5728.00
Manifest-J	150	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	7507.21	11017.00
Manifest-J	150	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 10%	0.00%	7024.84	8205.00
Manifest-A	150	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	623.45	972.00
Manifest-A	150	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	401.77	479.00
Manifest-A	150	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	591.41	992.00
Manifest-A	150	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	505.07	699.00
Manifest-A	150	Distributed (Head, Mid, Rear)	15	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	442.09	511.00
Manifest-A	150	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	16.00%	1513.73	2171.00
Manifest-A	150	Distributed (Head, Mid, Rear)	23	1.00%	Crest	> 1.0%	14.00	41.00	< 0.1%	18.00%	1418.90	1794.00
Manifest-A	150	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	< 10%	49.00%	1939.71	9489.00
Manifest-A	150	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 10%	9.00%	2513.79	4052.00
Manifest-A	150	Distributed (Head, Mid, Rear)	30	0.50%	Incline	> 1.0%	14.00	33.00	< 0.1%	8.00%	1921.29	2346.00
Manifest-A	150	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 10%	32.00%	2513.07	4888.00
Manifest-A	150	Distributed (Head, Mid, Rear)	30	0.00%	Flat	> 1.0%	43.67	96.00	< 0.1%	20.00%	2318.03	2893.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-A	150	Distributed (Head, Mid, Rear)	40	0.50%	Incline	> 1.0%	92.00	92.00	< 0.1%	5.00%	3096.07	3606.00
Manifest-A	150	Distributed (Head, Mid, Rear)	40	1.00%	Trough	<0.1%	0.00	0.00	< 10%	47.00%	3735.36	7139.00
Manifest-A	150	Distributed (Head, Mid, Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	< 10%	59.00%	4882.28	6860.00
Manifest-A	150	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	2.00%	8395.31	12350.00
Manifest-A	150	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 10%, < 25%	3.00%	7727.66	9521.00
Manifest-B	150	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	387.75	500.00
Manifest-B	150	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	297.92	369.00
Manifest-B	150	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	270.39	374.00
Manifest-B	150	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	333.55	391.00
Manifest-B	150	Distributed (Head, Mid, Rear)	15	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	400.32	462.00
Manifest-B	150	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	942.60	1233.00
Manifest-B	150	Distributed (Head, Mid, Rear)	23	1.00%	Crest	> 1.0%	20.83	34.00	< 0.1%	7.00%	1071.76	1470.00
Manifest-B	150	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1103.98	1469.00
Manifest-B	150	Distributed (Head, Mid, Rear)	30	0.50%	Decline	> 1.0%	17.00	17.00	< 0.1%	2.00%	1524.85	1995.00
Manifest-B	150	Distributed (Head, Mid, Rear)	30	0.50%	Incline	> 1.0%	15.86	33.00	< 0.1%	7.00%	1278.96	1562.00
Manifest-B	150	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	1203.93	1508.00
Manifest-B	150	Distributed (Head, Mid, Rear)	30	0.00%	Flat	> 1.0%	20.00	41.00	< 0.1%	6.00%	1382.96	1645.00
Manifest-B	150	Distributed (Head, Mid, Rear)	40	0.50%	Incline	> 1.0%	15.20	29.00	< 0.1%	5.00%	1867.56	2261.00
Manifest-B	150	Distributed (Head, Mid, Rear)	40	1.00%	Trough	> 1.0%	8.00	19.00	< 0.1%	5.00%	2198.01	3051.00
Manifest-B	150	Distributed (Head, Mid, Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	2391.88	2913.00
Manifest-B	150	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	1.00%	4497.40	5272.00
Manifest-B	150	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 10%	1.00%	4027.20	4986.00
Manifest-C	150	Distributed (Head, Mid, Rear)	10	0.50%	Decline	> 1.0%	8.83	15.00	< 0.1%	17.00%	543.45	659.00
Manifest-C	150	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	336.67	407.00
Manifest-C	150	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	459.75	601.00
Manifest-C	150	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	433.45	529.00
Manifest-C	150	Distributed (Head, Mid, Rear)	15	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	401.54	457.00
Manifest-C	150	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	< 10%	1.00%	1163.27	1640.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-C	150	Distributed (Head, Mid, Rear)	23	1.00%	Crest	> 1.0%	12.00	12.00	< 10%	10.00%	1164.34	1690.00
Manifest-C	150	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	< 10%	34.00%	1453.91	2039.00
Manifest-C	150	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	34.00%	2007.62	2734.00
Manifest-C	150	Distributed (Head, Mid, Rear)	30	0.50%	Incline	> 1.0%	11.25	39.00	< 0.1%	20.00%	1640.12	1950.00
Manifest-C	150	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	6.00%	2208.21	3159.00
Manifest-C	150	Distributed (Head, Mid, Rear)	30	0.00%	Flat	> 1.0%	19.13	51.00	< 0.1%	29.00%	1889.68	2644.00
Manifest-C	150	Distributed (Head, Mid, Rear)	40	0.50%	Incline	> 1.0%	30.25	39.00	< 0.1%	18.00%	2637.45	3197.00
Manifest-C	150	Distributed (Head, Mid, Rear)	40	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	19.00%	2881.92	3662.00
Manifest-C	150	Distributed (Head, Mid, Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	< 10%	27.00%	4079.19	6201.00
Manifest-C	150	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	7.00%	6834.85	9873.00
Manifest-C	150	Distributed (Head, Mid, Rear)	60	0.00%	Flat	> 1.0%	11.00	11.00	< 10%	3.00%	6342.21	7508.00
Manifest-D	150	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	525.10	704.00
Manifest-D	150	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	346.80	414.00
Manifest-D	150	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	441.59	546.00
Manifest-D	150	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	423.12	489.00
Manifest-D	150	Distributed (Head, Mid, Rear)	15	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	402.64	469.00
Manifest-D	150	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	< 0.1%	1.00%	1083.85	1303.00
Manifest-D	150	Distributed (Head, Mid, Rear)	23	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	1189.81	1359.00
Manifest-D	150	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	< 10%	4.00%	1445.04	2257.00
Manifest-D	150	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	2.00%	2034.93	2685.00
Manifest-D	150	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1619.14	1829.00
Manifest-D	150	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	2071.52	2503.00
Manifest-D	150	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	1877.80	2204.00
Manifest-D	150	Distributed (Head, Mid, Rear)	40	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	1.00%	2546.09	2952.00
Manifest-D	150	Distributed (Head, Mid, Rear)	40	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	20.00%	2799.56	3704.00
Manifest-D	150	Distributed (Head, Mid, Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	1.00%	4081.30	5054.00
Manifest-D	150	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	1.00%	6667.30	7761.00
Manifest-D	150	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	6007.46	6870.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-E	150	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	497.11	650.00
Manifest-E	150	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	336.97	408.00
Manifest-E	150	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	417.19	521.00
Manifest-E	150	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	421.21	517.00
Manifest-E	150	Distributed (Head, Mid, Rear)	15	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	392.13	470.00
Manifest-E	150	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	13.00%	1311.01	2434.00
Manifest-E	150	Distributed (Head, Mid, Rear)	23	1.00%	Crest	< 0.5%	5.00	5.00	< 0.1%	1.00%	1096.29	1348.00
Manifest-E	150	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	9.00%	1609.43	2998.00
Manifest-E	150	Distributed (Head, Mid, Rear)	30	0.50%	Decline	> 1.0%	11.00	19.00	< 0.1%	9.00%	1994.26	2486.00
Manifest-E	150	Distributed (Head, Mid, Rear)	30	0.50%	Incline	> 1.0%	25.00	25.00	< 0.1%	4.00%	1589.65	1929.00
Manifest-E	150	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	1939.15	2615.00
Manifest-E	150	Distributed (Head, Mid, Rear)	30	0.00%	Flat	> 1.0%	41.00	46.00	< 0.1%	4.00%	1811.22	2138.00
Manifest-E	150	Distributed (Head, Mid, Rear)	40	0.50%	Incline	> 1.0%	23.00	32.00	< 0.1%	7.00%	2453.08	2951.00
Manifest-E	150	Distributed (Head, Mid, Rear)	40	1.00%	Trough	< 0.5%	5.00	5.00	< 0.1%	5.00%	2792.56	3800.00
Manifest-E	150	Distributed (Head, Mid, Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	3811.15	5620.00
Manifest-E	150	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	5.00%	5985.23	7856.00
Manifest-E	150	Distributed (Head, Mid, Rear)	60	0.00%	Flat	< 0.5%	11.00	11.00	< 10%	3.00%	5535.85	6533.00
Manifest-F	150	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	493.74	673.00
Manifest-F	150	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	341.24	411.00
Manifest-F	150	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	449.55	561.00
Manifest-F	150	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	421.69	546.00
Manifest-F	150	Distributed (Head, Mid, Rear)	15	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	403.32	465.00
Manifest-F	150	Distributed (Head, Mid, Rear)	20	2.20%	Decline	< 0.5%	2.00	2.00	< 0.1%	2.00%	1122.95	1554.00
Manifest-F	150	Distributed (Head, Mid, Rear)	23	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	1196.26	1520.00
Manifest-F	150	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	11.00%	1516.49	2543.00
Manifest-F	150	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	7.00%	2040.64	2737.00
Manifest-F	150	Distributed (Head, Mid, Rear)	30	0.50%	Incline	> 1.0%	17.00	34.00	< 0.1%	6.00%	1591.19	1873.00
Manifest-F	150	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2185.42	2858.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-F	150	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	2.00%	1900.15	2264.00
Manifest-F	150	Distributed (Head, Mid, Rear)	40	0.50%	Incline	> 1.0%	36.67	53.00	< 0.1%	7.00%	2527.17	3070.00
Manifest-F	150	Distributed (Head, Mid, Rear)	40	1.00%	Trough	> 1.0%	21.20	44.00	< 0.1%	11.00%	2866.48	3753.00
Manifest-F	150	Distributed (Head, Mid, Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	4.00%	4432.76	5616.00
Manifest-F	150	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	1.00%	6712.86	7932.00
Manifest-F	150	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 10%, < 25%	4.00%	6038.25	7251.00
Manifest-G	150	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	1.00%	510.60	640.00
Manifest-G	150	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	356.64	422.00
Manifest-G	150	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	413.73	547.00
Manifest-G	150	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	3.00%	422.35	510.00
Manifest-G	150	Distributed (Head, Mid, Rear)	15	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	403.95	459.00
Manifest-G	150	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	< 10%	2.00%	1072.02	1753.00
Manifest-G	150	Distributed (Head, Mid, Rear)	23	1.00%	Crest	> 1.0%	8.00	11.00	< 0.1%	11.00%	1197.60	1457.00
Manifest-G	150	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	< 10%	3.00%	1391.62	2187.00
Manifest-G	150	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	12.00%	1924.06	2642.00
Manifest-G	150	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	5.00%	1610.09	1897.00
Manifest-G	150	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2006.97	2470.00
Manifest-G	150	Distributed (Head, Mid, Rear)	30	0.00%	Flat	< 0.5%	1.00	1.00	< 0.1%	11.00%	1839.02	2222.00
Manifest-G	150	Distributed (Head, Mid, Rear)	40	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	4.00%	2490.86	2956.00
Manifest-G	150	Distributed (Head, Mid, Rear)	40	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	4.00%	2816.46	3676.00
Manifest-G	150	Distributed (Head, Mid, Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	4040.11	4721.00
Manifest-G	150	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	6520.39	7480.00
Manifest-G	150	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 10%, < 25%	1.00%	5783.35	6475.00
Manifest-H	150	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	567.99	868.00
Manifest-H	150	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	363.23	478.00
Manifest-H	150	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	504.96	713.00
Manifest-H	150	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	472.39	591.00
Manifest-H	150	Distributed (Head, Mid, Rear)	15	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	420.20	462.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-H	150	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	< 10%	1.00%	1260.58	1602.00
Manifest-H	150	Distributed (Head, Mid, Rear)	23	1.00%	Crest	> 1.0%	2.00	2.00	< 0.1%	10.00%	1305.47	1679.00
Manifest-H	150	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	< 10%	23.00%	1614.70	2197.00
Manifest-H	150	Distributed (Head, Mid, Rear)	30	0.50%	Decline	< 0.5%	12.00	12.00	< 0.1%	13.00%	2272.48	3226.00
Manifest-H	150	Distributed (Head, Mid, Rear)	30	0.50%	Incline	> 1.0%	28.00	28.00	< 0.1%	7.00%	1783.53	2064.00
Manifest-H	150	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 10%	19.00%	2226.62	3595.00
Manifest-H	150	Distributed (Head, Mid, Rear)	30	0.00%	Flat	> 1.0%	32.33	49.00	< 0.1%	14.00%	2101.48	2658.00
Manifest-H	150	Distributed (Head, Mid, Rear)	40	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	10.00%	2795.70	3418.00
Manifest-H	150	Distributed (Head, Mid, Rear)	40	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	14.00%	3128.32	3868.00
Manifest-H	150	Distributed (Head, Mid, Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	31.00%	4495.04	6492.00
Manifest-H	150	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	3.00%	7591.59	11014.00
Manifest-H	150	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 10%	1.00%	6838.79	9174.00
Manifest-I	150	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	541.70	843.00
Manifest-I	150	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	355.42	409.00
Manifest-I	150	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	482.73	701.00
Manifest-I	150	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	455.28	572.00
Manifest-I	150	Distributed (Head, Mid, Rear)	15	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	419.06	486.00
Manifest-I	150	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	3.00%	1361.71	2012.00
Manifest-I	150	Distributed (Head, Mid, Rear)	23	1.00%	Crest	> 1.0%	6.50	8.00	< 0.1%	21.00%	1278.27	1603.00
Manifest-I	150	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	15.00%	1735.52	3075.00
Manifest-I	150	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	7.00%	2292.81	2713.00
Manifest-I	150	Distributed (Head, Mid, Rear)	30	0.50%	Incline	> 1.0%	37.50	45.00	< 0.1%	12.00%	1699.85	1959.00
Manifest-I	150	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	2374.72	3262.00
Manifest-I	150	Distributed (Head, Mid, Rear)	30	0.00%	Flat	> 1.0%	112.00	112.00	< 0.1%	9.00%	2024.71	2393.00
Manifest-I	150	Distributed (Head, Mid, Rear)	40	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	7.00%	2747.52	3312.00
Manifest-I	150	Distributed (Head, Mid, Rear)	40	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	6.00%	3180.16	3864.00
Manifest-I	150	Distributed (Head, Mid, Rear)	45	1.10%	Decline	< 0.5%	3.00	3.00	> 25%, < 50%	8.00%	4394.16	5932.00
Manifest-I	150	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	2.00%	7005.30	9078.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-I	150	Distributed (Head, Mid, Rear)	60	0.00%	Flat	< 0.5%	92.00	92.00	> 25%, < 50%	1.00%	6551.78	7579.00
Manifest-J	150	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	524.68	836.00
Manifest-J	150	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	352.96	441.00
Manifest-J	150	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	477.82	720.00
Manifest-J	150	Distributed (Head, Mid, Rear)	10	0.00%	Flat	> 1.0%	2.00	2.00	< 0.1%	6.00%	443.93	524.00
Manifest-J	150	Distributed (Head, Mid, Rear)	15	1.50%	Incline	< 0.5%	4.00	4.00	< 0.1%	1.00%	398.72	434.00
Manifest-J	150	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	< 0.1%	4.00%	1172.37	1657.00
Manifest-J	150	Distributed (Head, Mid, Rear)	23	1.00%	Crest	> 1.0%	19.92	50.00	< 0.1%	41.00%	1243.12	1499.00
Manifest-J	150	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	< 10%	30.00%	1566.07	2619.00
Manifest-J	150	Distributed (Head, Mid, Rear)	30	0.50%	Decline	> 1.0%	19.00	19.00	< 0.1%	45.00%	2083.28	2718.00
Manifest-J	150	Distributed (Head, Mid, Rear)	30	0.50%	Incline	> 1.0%	24.25	44.00	< 0.1%	31.00%	1690.80	2175.00
Manifest-J	150	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	22.00%	2085.47	3045.00
Manifest-J	150	Distributed (Head, Mid, Rear)	30	0.00%	Flat	> 1.0%	27.22	90.00	< 0.1%	41.00%	1919.07	2621.00
Manifest-J	150	Distributed (Head, Mid, Rear)	40	0.50%	Incline	> 1.0%	24.00	24.00	< 0.1%	26.00%	2658.90	3397.00
Manifest-J	150	Distributed (Head, Mid, Rear)	40	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	11.00%	2964.01	3816.00
Manifest-J	150	Distributed (Head, Mid, Rear)	45	1.10%	Decline	< 0.5%	1.00	1.00	< 10%	45.00%	3988.46	5577.00
Manifest-J	150	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	1.00%	6898.81	10039.00
Manifest-J	150	Distributed (Head, Mid, Rear)	60	0.00%	Flat	> 1.0%	35.00	35.00	< 10%	9.00%	6394.78	7527.00
Manifest-A	200	Distributed (Head, Mid, Rear)	10	0.50%	Decline	< 0.5%	9.00	9.00	> 10%, < 25%	1.00%	929.52	1325.00
Manifest-A	200	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	5.00%	3373.92	4599.00
Manifest-A	200	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	6.00%	11828.49	14315.00
Manifest-A	200	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	509.15	668.00
Manifest-A	200	Distributed (Head, Mid, Rear)	30	0.50%	Incline	> 1.0%	52.00	100.00	< 0.1%	10.00%	2480.90	2904.00
Manifest-A	200	Distributed (Head, Mid, Rear)	38	0.50%	Incline	> 1.0%	68.50	108.00	< 0.1%	3.00%	3606.72	4292.00
Manifest-A	200	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	831.29	1267.00
Manifest-A	200	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	28.00%	3032.41	3811.00
Manifest-A	200	Distributed (Head, Mid, Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	12.00%	6791.57	14156.00
Manifest-A	200	Distributed (Head, Mid, Rear)	14	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	460.69	517.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-A	200	Distributed (Head, Mid, Rear)	25	1.70%	Decline	> 1.0%	98.00	98.00	> 25%, < 50%	27.00%	2421.30	3850.00
Manifest-A	200	Distributed (Head, Mid, Rear)	21	1.00%	Crest	> 1.0%	29.56	48.00	< 10%	19.00%	1486.50	2207.00
Manifest-A	200	Distributed (Head, Mid, Rear)	36	1.00%	Trough	< 0.5%	18.00	18.00	> 10%, < 25%	34.00%	3999.22	6953.00
Manifest-A	200	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	8.00%	2061.42	6323.00
Manifest-A	200	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	695.11	826.00
Manifest-A	200	Distributed (Head, Mid, Rear)	30	0.00%	Flat	> 1.0%	17.80	26.00	< 0.1%	22.00%	3106.87	3744.00
Manifest-A	200	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	3.00%	9576.18	11138.00
Manifest-B	200	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	598.23	791.00
Manifest-B	200	Distributed (Head, Mid, Rear)	30	0.50%	Decline	> 1.0%	13.00	28.00	< 0.1%	5.00%	2291.45	2872.00
Manifest-B	200	Distributed (Head, Mid, Rear)	60	0.50%	Decline	> 1.0%	82.00	82.00	> 50%	3.00%	6191.61	7947.00
Manifest-B	200	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	366.48	440.00
Manifest-B	200	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1738.46	2112.00
Manifest-B	200	Distributed (Head, Mid, Rear)	38	0.50%	Incline	> 1.0%	28.25	72.00	< 0.1%	8.00%	2288.70	2937.00
Manifest-B	200	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	386.08	539.00
Manifest-B	200	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	1769.04	2381.00
Manifest-B	200	Distributed (Head, Mid, Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3314.56	4531.00
Manifest-B	200	Distributed (Head, Mid, Rear)	14	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	404.73	493.00
Manifest-B	200	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1672.28	2094.00
Manifest-B	200	Distributed (Head, Mid, Rear)	21	1.00%	Crest	> 1.0%	25.00	25.00	< 10%	3.00%	1529.09	2060.00
Manifest-B	200	Distributed (Head, Mid, Rear)	36	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	2.00%	2713.35	3471.00
Manifest-B	200	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1515.57	2164.00
Manifest-B	200	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	470.13	621.00
Manifest-B	200	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	2.00%	1974.04	2514.00
Manifest-B	200	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	1.00%	5571.21	6830.00
Manifest-C	200	Distributed (Head, Mid, Rear)	10	0.50%	Decline	< 0.5%	1.00	1.00	< 10%	1.00%	814.19	1114.00
Manifest-C	200	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 10%	10.00%	2780.27	4577.00
Manifest-C	200	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	9686.80	11555.00
Manifest-C	200	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	442.44	548.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-C	200	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	3.00%	2129.13	2507.00
Manifest-C	200	Distributed (Head, Mid, Rear)	38	0.50%	Incline	> 1.0%	104.00	104.00	< 0.1%	7.00%	3139.69	3858.00
Manifest-C	200	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	708.51	1075.00
Manifest-C	200	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	1.00%	3088.27	3993.00
Manifest-C	200	Distributed (Head, Mid, Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	14.00%	5446.94	7049.00
Manifest-C	200	Distributed (Head, Mid, Rear)	14	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	416.37	464.00
Manifest-C	200	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	15.00%	2265.36	3887.00
Manifest-C	200	Distributed (Head, Mid, Rear)	21	1.00%	Crest	<0.1%	0.00	0.00	< 10%	0.00%	1569.45	2019.00
Manifest-C	200	Distributed (Head, Mid, Rear)	36	1.00%	Trough	< 0.5%	13.00	13.00	< 10%	9.00%	3359.24	4157.00
Manifest-C	200	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	7.00%	1766.10	4344.00
Manifest-C	200	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	595.51	720.00
Manifest-C	200	Distributed (Head, Mid, Rear)	30	0.00%	Flat	> 1.0%	33.00	33.00	< 0.1%	8.00%	2620.75	3200.00
Manifest-C	200	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	7966.44	9387.00
Manifest-D	200	Distributed (Head, Mid, Rear)	10	0.50%	Decline	< 0.5%	4.00	4.00	< 0.1%	0.00%	684.58	928.00
Manifest-D	200	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 10%	43.00%	2665.41	4503.00
Manifest-D	200	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	14.00%	7753.26	11116.00
Manifest-D	200	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	432.72	523.00
Manifest-D	200	Distributed (Head, Mid, Rear)	30	0.50%	Incline	> 1.0%	27.10	73.00	< 0.1%	14.00%	2034.07	2665.00
Manifest-D	200	Distributed (Head, Mid, Rear)	38	0.50%	Incline	> 1.0%	12.40	20.00	< 0.1%	18.00%	2925.99	3923.00
Manifest-D	200	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	574.03	770.00
Manifest-D	200	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 10%	2.00%	2574.19	4105.00
Manifest-D	200	Distributed (Head, Mid, Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	2.00%	5065.42	7107.00
Manifest-D	200	Distributed (Head, Mid, Rear)	14	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	413.55	490.00
Manifest-D	200	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	26.00%	1857.14	3917.00
Manifest-D	200	Distributed (Head, Mid, Rear)	21	1.00%	Crest	> 1.0%	44.00	83.00	< 10%	4.00%	1371.84	2272.00
Manifest-D	200	Distributed (Head, Mid, Rear)	36	1.00%	Trough	> 1.0%	18.75	59.00	< 10%	12.00%	3199.59	4808.00
Manifest-D	200	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	< 10%	5.00%	1382.89	2096.00
Manifest-D	200	Distributed (Head, Mid, Rear)	10	0.00%	Flat	< 0.5%	8.00	8.00	< 0.1%	1.00%	569.36	705.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-D	200	Distributed (Head, Mid, Rear)	30	0.00%	Flat	> 1.0%	4.25	10.00	< 0.1%	23.00%	2446.24	3102.00
Manifest-D	200	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 10%, < 25%	4.00%	7222.71	8862.00
Manifest-E	200	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	779.94	1078.00
Manifest-E	200	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 10%	1.00%	2994.92	4421.00
Manifest-E	200	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	1.00%	8997.33	10598.00
Manifest-E	200	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	432.87	505.00
Manifest-E	200	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	2122.95	2552.00
Manifest-E	200	Distributed (Head, Mid, Rear)	38	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	5.00%	3061.88	3520.00
Manifest-E	200	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	657.32	856.00
Manifest-E	200	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	2890.90	4232.00
Manifest-E	200	Distributed (Head, Mid, Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	7.00%	5307.92	6800.00
Manifest-E	200	Distributed (Head, Mid, Rear)	14	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	404.23	481.00
Manifest-E	200	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	13.00%	2323.18	4384.00
Manifest-E	200	Distributed (Head, Mid, Rear)	21	1.00%	Crest	< 0.5%	11.00	11.00	> 10%, < 25%	2.00%	1821.15	2403.00
Manifest-E	200	Distributed (Head, Mid, Rear)	36	1.00%	Trough	> 1.0%	62.00	62.00	< 10%	15.00%	3301.08	5037.00
Manifest-E	200	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	1.00%	1811.96	2782.00
Manifest-E	200	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	588.39	741.00
Manifest-E	200	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	6.00%	2566.99	3197.00
Manifest-E	200	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 25%, < 50%	1.00%	7706.82	9385.00
Manifest-F	200	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	779.13	1049.00
Manifest-F	200	Distributed (Head, Mid, Rear)	30	0.50%	Decline	> 1.0%	7.67	18.00	< 10%	22.00%	3141.12	4415.00
Manifest-F	200	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	2.00%	9295.26	14382.00
Manifest-F	200	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	453.69	539.00
Manifest-F	200	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	1.00%	2232.61	2663.00
Manifest-F	200	Distributed (Head, Mid, Rear)	38	0.50%	Incline	> 1.0%	10.00	10.00	< 0.1%	8.00%	3182.54	3754.00
Manifest-F	200	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	742.43	1508.00
Manifest-F	200	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	4.00%	2957.28	4905.00
Manifest-F	200	Distributed (Head, Mid, Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	4.00%	6049.60	12018.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-F	200	Distributed (Head, Mid, Rear)	14	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	428.76	500.00
Manifest-F	200	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	8.00%	2185.34	10389.00
Manifest-F	200	Distributed (Head, Mid, Rear)	21	1.00%	Crest	> 1.0%	8.00	11.00	< 10%	3.00%	1421.62	2004.00
Manifest-F	200	Distributed (Head, Mid, Rear)	36	1.00%	Trough	< 0.5%	2.00	2.00	< 0.1%	20.00%	3532.72	4377.00
Manifest-F	200	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	5.00%	1790.51	13370.00
Manifest-F	200	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	621.95	738.00
Manifest-F	200	Distributed (Head, Mid, Rear)	30	0.00%	Flat	> 1.0%	51.00	51.00	< 0.1%	7.00%	2798.28	3630.00
Manifest-F	200	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	1.00%	8127.57	9829.00
Manifest-G	200	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	1.00%	784.10	1021.00
Manifest-G	200	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	3026.88	4678.00
Manifest-G	200	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	1.00%	9505.76	11913.00
Manifest-G	200	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	458.11	564.00
Manifest-G	200	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	3.00%	2182.51	2522.00
Manifest-G	200	Distributed (Head, Mid, Rear)	38	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	2.00%	3185.65	3666.00
Manifest-G	200	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	715.27	943.00
Manifest-G	200	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 10%	4.00%	2820.95	4694.00
Manifest-G	200	Distributed (Head, Mid, Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	< 10%	9.00%	5008.40	6984.00
Manifest-G	200	Distributed (Head, Mid, Rear)	14	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	435.24	489.00
Manifest-G	200	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	9.00%	2050.52	2877.00
Manifest-G	200	Distributed (Head, Mid, Rear)	21	1.00%	Crest	> 1.0%	17.75	23.00	< 0.1%	15.00%	1593.10	1897.00
Manifest-G	200	Distributed (Head, Mid, Rear)	36	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	3.00%	3529.30	4112.00
Manifest-G	200	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	2.00%	1671.36	2209.00
Manifest-G	200	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	623.88	753.00
Manifest-G	200	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	6.00%	2716.48	3263.00
Manifest-G	200	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	8092.48	9306.00
Manifest-H	200	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	769.20	1027.00
Manifest-H	200	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	6.00%	3046.86	3924.00
Manifest-H	200	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	8599.93	12097.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-H	200	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	435.54	504.00
Manifest-H	200	Distributed (Head, Mid, Rear)	30	0.50%	Incline	< 0.5%	7.00	7.00	< 0.1%	2.00%	2155.38	2621.00
Manifest-H	200	Distributed (Head, Mid, Rear)	38	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	4.00%	3133.53	3585.00
Manifest-H	200	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	699.18	914.00
Manifest-H	200	Distributed (Head, Mid, Rear)	30	1.10%	Decline	< 0.5%	37.00	37.00	< 10%	9.00%	2916.80	4238.00
Manifest-H	200	Distributed (Head, Mid, Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	16.00%	5115.98	7570.00
Manifest-H	200	Distributed (Head, Mid, Rear)	14	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	433.08	525.00
Manifest-H	200	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	5.00%	1970.98	3183.00
Manifest-H	200	Distributed (Head, Mid, Rear)	21	1.00%	Crest	< 0.5%	1.00	1.00	< 10%	11.00%	1600.68	1911.00
Manifest-H	200	Distributed (Head, Mid, Rear)	36	1.00%	Trough	< 0.5%	8.00	8.00	< 10%	9.00%	3150.61	4419.00
Manifest-H	200	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	2.00%	1644.44	2313.00
Manifest-H	200	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	595.82	757.00
Manifest-H	200	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	4.00%	2635.67	3298.00
Manifest-H	200	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	7995.50	9035.00
Manifest-I	200	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	842.36	1158.00
Manifest-I	200	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	3258.82	4422.00
Manifest-I	200	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	9083.59	12167.00
Manifest-I	200	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	466.92	623.00
Manifest-I	200	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	2227.00	2583.00
Manifest-I	200	Distributed (Head, Mid, Rear)	38	0.50%	Incline	< 0.5%	11.00	11.00	< 0.1%	2.00%	3204.20	3864.00
Manifest-I	200	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	758.06	1126.00
Manifest-I	200	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	1.00%	3274.47	4720.00
Manifest-I	200	Distributed (Head, Mid, Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	12.00%	5609.04	7934.00
Manifest-I	200	Distributed (Head, Mid, Rear)	14	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	432.06	494.00
Manifest-I	200	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	5.00%	2850.11	5220.00
Manifest-I	200	Distributed (Head, Mid, Rear)	21	1.00%	Crest	< 0.5%	10.00	10.00	> 10%, < 25%	1.00%	1479.95	2081.00
Manifest-I	200	Distributed (Head, Mid, Rear)	36	1.00%	Trough	< 0.5%	11.00	11.00	> 25%, < 50%	9.00%	3498.17	5061.00
Manifest-I	200	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	1.00%	2189.20	3806.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-I	200	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	625.93	745.00
Manifest-I	200	Distributed (Head, Mid, Rear)	30	0.00%	Flat	< 0.5%	27.00	27.00	< 0.1%	1.00%	2750.54	3331.00
Manifest-I	200	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	8357.37	10084.00
Manifest-J	200	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	722.00	933.00
Manifest-J	200	Distributed (Head, Mid, Rear)	30	0.50%	Decline	< 0.5%	6.00	6.00	< 10%	16.00%	2786.55	3884.00
Manifest-J	200	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	2.00%	8630.71	11732.00
Manifest-J	200	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	430.96	523.00
Manifest-J	200	Distributed (Head, Mid, Rear)	30	0.50%	Incline	> 1.0%	31.33	72.00	< 0.1%	4.00%	2133.43	2644.00
Manifest-J	200	Distributed (Head, Mid, Rear)	38	0.50%	Incline	< 0.5%	6.00	6.00	< 0.1%	2.00%	3079.33	3705.00
Manifest-J	200	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	659.97	1075.00
Manifest-J	200	Distributed (Head, Mid, Rear)	30	1.10%	Decline	< 0.5%	24.00	24.00	> 10%, < 25%	4.00%	2792.48	3969.00
Manifest-J	200	Distributed (Head, Mid, Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	6.00%	5143.85	7490.00
Manifest-J	200	Distributed (Head, Mid, Rear)	14	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	405.90	470.00
Manifest-J	200	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	15.00%	1887.53	2381.00
Manifest-J	200	Distributed (Head, Mid, Rear)	21	1.00%	Crest	> 1.0%	54.00	54.00	< 10%	1.00%	1478.04	2156.00
Manifest-J	200	Distributed (Head, Mid, Rear)	36	1.00%	Trough	> 1.0%	40.92	83.00	> 10%, < 25%	41.00%	3262.78	4213.00
Manifest-J	200	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	6.00%	1462.38	1942.00
Manifest-J	200	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	582.68	720.00
Manifest-J	200	Distributed (Head, Mid, Rear)	30	0.00%	Flat	> 1.0%	10.50	17.00	< 0.1%	5.00%	2596.42	3381.00
Manifest-J	200	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	7621.07	9378.00
Manifest-A	200	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	726.72	954.00
Manifest-A	200	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	455.13	534.00
Manifest-A	200	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	639.58	806.00
Manifest-A	200	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	582.58	701.00
Manifest-A	200	Distributed (Head, Mid, Rear)	14	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	449.31	502.00
Manifest-A	200	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	5.00%	1642.34	2058.00
Manifest-A	200	Distributed (Head, Mid, Rear)	21	1.00%	Crest	> 1.0%	19.80	58.00	< 0.1%	26.00%	1420.91	1703.00
Manifest-A	200	Distributed (Head, Mid, Rear)	25	1.70%	Decline	> 1.0%	7.00	7.00	< 10%	51.00%	2008.42	2677.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-A	200	Distributed (Head, Mid, Rear)	30	0.50%	Decline	> 1.0%	36.33	54.00	< 0.1%	66.00%	2629.59	3308.00
Manifest-A	200	Distributed (Head, Mid, Rear)	30	0.50%	Incline	> 1.0%	20.60	49.00	< 0.1%	27.00%	2081.28	2550.00
Manifest-A	200	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	41.00%	2509.66	3432.00
Manifest-A	200	Distributed (Head, Mid, Rear)	30	0.00%	Flat	> 1.0%	39.33	82.00	< 0.1%	38.00%	2533.81	3133.00
Manifest-A	200	Distributed (Head, Mid, Rear)	36	1.00%	Trough	<0.1%	0.00	0.00	< 10%	0.00%	3381.19	4528.00
Manifest-A	200	Distributed (Head, Mid, Rear)	38	0.50%	Incline	> 1.0%	36.80	98.00	< 0.1%	29.00%	3049.59	3628.00
Manifest-A	200	Distributed (Head, Mid, Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	< 10%	50.00%	4937.66	6547.00
Manifest-A	200	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	1.00%	9075.90	12935.00
Manifest-A	200	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 25%, < 50%	2.00%	8359.69	10345.00
Manifest-B	200	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	471.15	577.00
Manifest-B	200	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	321.05	374.00
Manifest-B	200	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	322.26	417.00
Manifest-B	200	Distributed (Head, Mid, Rear)	10	0.00%	Flat	< 0.5%	1.00	1.00	< 0.1%	1.00%	379.29	480.00
Manifest-B	200	Distributed (Head, Mid, Rear)	14	1.50%	Incline	< 0.5%	9.00	9.00	< 0.1%	1.00%	398.82	460.00
Manifest-B	200	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1119.30	1632.00
Manifest-B	200	Distributed (Head, Mid, Rear)	21	1.00%	Crest	> 1.0%	14.50	41.00	< 10%	13.00%	1180.50	1595.00
Manifest-B	200	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1345.67	1727.00
Manifest-B	200	Distributed (Head, Mid, Rear)	30	0.50%	Decline	> 1.0%	6.00	7.00	< 0.1%	2.00%	1804.28	2183.00
Manifest-B	200	Distributed (Head, Mid, Rear)	30	0.50%	Incline	> 1.0%	17.36	51.00	< 0.1%	12.00%	1410.89	1755.00
Manifest-B	200	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	1454.19	1783.00
Manifest-B	200	Distributed (Head, Mid, Rear)	30	0.00%	Flat	> 1.0%	14.75	22.00	< 0.1%	4.00%	1613.15	1999.00
Manifest-B	200	Distributed (Head, Mid, Rear)	36	1.00%	Trough	> 1.0%	29.25	63.00	< 0.1%	11.00%	2145.45	2860.00
Manifest-B	200	Distributed (Head, Mid, Rear)	38	0.50%	Incline	> 1.0%	44.60	100.00	< 0.1%	5.00%	2002.29	2662.00
Manifest-B	200	Distributed (Head, Mid, Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2776.03	3348.00
Manifest-B	200	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	3.00%	5177.43	6483.00
Manifest-B	200	Distributed (Head, Mid, Rear)	60	0.00%	Flat	> 1.0%	83.80	203.00	> 10%, < 25%	6.00%	4529.57	5409.00
Manifest-C	200	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	669.03	932.00
Manifest-C	200	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	388.71	489.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-C	200	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	560.20	755.00
Manifest-C	200	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	505.72	637.00
Manifest-C	200	Distributed (Head, Mid, Rear)	14	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	384.32	433.00
Manifest-C	200	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	4.00%	1410.63	1969.00
Manifest-C	200	Distributed (Head, Mid, Rear)	21	1.00%	Crest	> 1.0%	11.50	18.00	< 0.1%	4.00%	1256.98	1536.00
Manifest-C	200	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	12.00%	1826.86	2985.00
Manifest-C	200	Distributed (Head, Mid, Rear)	30	0.50%	Decline	> 1.0%	31.00	36.00	< 0.1%	22.00%	2355.85	3305.00
Manifest-C	200	Distributed (Head, Mid, Rear)	30	0.50%	Incline	> 1.0%	49.80	63.00	< 0.1%	7.00%	1855.20	2187.00
Manifest-C	200	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	6.00%	2498.30	3158.00
Manifest-C	200	Distributed (Head, Mid, Rear)	30	0.00%	Flat	> 1.0%	54.25	98.00	< 0.1%	23.00%	2214.51	2689.00
Manifest-C	200	Distributed (Head, Mid, Rear)	36	1.00%	Trough	> 1.0%	92.00	92.00	< 0.1%	13.00%	2790.07	3745.00
Manifest-C	200	Distributed (Head, Mid, Rear)	38	0.50%	Incline	> 1.0%	24.00	44.00	< 0.1%	7.00%	2737.72	3230.00
Manifest-C	200	Distributed (Head, Mid, Rear)	45	1.10%	Decline	> 1.0%	39.00	39.00	> 10%, < 25%	13.00%	4764.61	7970.00
Manifest-C	200	Distributed (Head, Mid, Rear)	60	0.50%	Decline	> 1.0%	157.00	157.00	> 50%	6.00%	7616.14	11476.00
Manifest-C	200	Distributed (Head, Mid, Rear)	60	0.00%	Flat	> 1.0%	92.75	263.00	> 25%, < 50%	6.00%	6980.87	8258.00
Manifest-D	200	Distributed (Head, Mid, Rear)	10	0.50%	Decline	> 1.0%	3.00	5.00	< 0.1%	2.00%	542.57	756.00
Manifest-D	200	Distributed (Head, Mid, Rear)	10	0.50%	Incline	< 0.5%	0.00	0.00	< 0.1%	1.00%	366.48	478.00
Manifest-D	200	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	462.10	579.00
Manifest-D	200	Distributed (Head, Mid, Rear)	10	0.00%	Flat	> 1.0%	8.00	20.00	< 0.1%	9.00%	463.01	602.00
Manifest-D	200	Distributed (Head, Mid, Rear)	14	1.50%	Incline	> 1.0%	18.00	18.00	< 0.1%	3.00%	366.02	434.00
Manifest-D	200	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	< 0.1%	4.00%	1159.14	1550.00
Manifest-D	200	Distributed (Head, Mid, Rear)	21	1.00%	Crest	> 1.0%	19.74	71.00	< 0.1%	26.00%	1176.30	1547.00
Manifest-D	200	Distributed (Head, Mid, Rear)	25	1.70%	Decline	< 0.5%	13.00	13.00	< 10%	22.00%	1483.07	2498.00
Manifest-D	200	Distributed (Head, Mid, Rear)	30	0.50%	Decline	> 1.0%	31.00	59.00	< 0.1%	57.00%	2088.57	2702.00
Manifest-D	200	Distributed (Head, Mid, Rear)	30	0.50%	Incline	> 25%	20.79	88.00	< 0.1%	49.00%	1708.80	1972.00
Manifest-D	200	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2065.69	2711.00
Manifest-D	200	Distributed (Head, Mid, Rear)	30	0.00%	Flat	> 1.0%	40.96	108.00	< 0.1%	55.00%	1948.65	2478.00
Manifest-D	200	Distributed (Head, Mid, Rear)	36	1.00%	Trough	> 25%	66.75	134.00	< 10%	48.00%	2593.36	3381.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-D	200	Distributed (Head, Mid, Rear)	38	0.50%	Incline	> 1.0%	45.62	94.00	< 0.1%	49.00%	2407.05	3049.00
Manifest-D	200	Distributed (Head, Mid, Rear)	45	1.10%	Decline	> 1.0%	24.00	24.00	> 10%, < 25%	4.00%	4112.79	5969.00
Manifest-D	200	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	< 10%	4.00%	6458.60	8125.00
Manifest-D	200	Distributed (Head, Mid, Rear)	60	0.00%	Flat	> 1.0%	9.00	9.00	< 10%	10.00%	6104.67	7190.00
Manifest-E	200	Distributed (Head, Mid, Rear)	10	0.50%	Decline	> 1.0%	9.00	9.00	< 0.1%	3.00%	628.10	838.00
Manifest-E	200	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	384.79	452.00
Manifest-E	200	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	527.49	710.00
Manifest-E	200	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	499.30	616.00
Manifest-E	200	Distributed (Head, Mid, Rear)	14	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	396.73	444.00
Manifest-E	200	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	2.00%	1395.42	1978.00
Manifest-E	200	Distributed (Head, Mid, Rear)	21	1.00%	Crest	> 1.0%	20.00	24.00	< 10%	2.00%	1123.09	1509.00
Manifest-E	200	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	11.00%	1794.60	2821.00
Manifest-E	200	Distributed (Head, Mid, Rear)	30	0.50%	Decline	> 1.0%	38.00	65.00	< 0.1%	9.00%	2241.27	3298.00
Manifest-E	200	Distributed (Head, Mid, Rear)	30	0.50%	Incline	> 1.0%	9.00	9.00	< 0.1%	5.00%	1813.25	2160.00
Manifest-E	200	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 10%	1.00%	2499.32	3271.00
Manifest-E	200	Distributed (Head, Mid, Rear)	30	0.00%	Flat	> 1.0%	41.60	69.00	< 0.1%	15.00%	2132.84	2806.00
Manifest-E	200	Distributed (Head, Mid, Rear)	36	1.00%	Trough	> 1.0%	11.00	11.00	< 0.1%	29.00%	2983.43	3757.00
Manifest-E	200	Distributed (Head, Mid, Rear)	38	0.50%	Incline	> 1.0%	39.00	39.00	< 0.1%	5.00%	2621.01	3118.00
Manifest-E	200	Distributed (Head, Mid, Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	3.00%	4441.92	5649.00
Manifest-E	200	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7001.29	9346.00
Manifest-E	200	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 10%, < 25%	2.00%	6698.88	7704.00
Manifest-F	200	Distributed (Head, Mid, Rear)	10	0.50%	Decline	> 1.0%	3.50	4.00	< 0.1%	3.00%	622.13	943.00
Manifest-F	200	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	391.39	482.00
Manifest-F	200	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	569.99	1025.00
Manifest-F	200	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	508.71	639.00
Manifest-F	200	Distributed (Head, Mid, Rear)	14	1.50%	Incline	< 0.5%	2.00	2.00	< 0.1%	1.00%	378.91	459.00
Manifest-F	200	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	1.00%	1340.95	1855.00
Manifest-F	200	Distributed (Head, Mid, Rear)	21	1.00%	Crest	> 1.0%	7.33	12.00	< 10%	4.00%	1267.62	1692.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-F	200	Distributed (Head, Mid, Rear)	25	1.70%	Decline	< 0.5%	35.00	35.00	> 10%, < 25%	10.00%	1680.05	3017.00
Manifest-F	200	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	16.00%	2296.94	3397.00
Manifest-F	200	Distributed (Head, Mid, Rear)	30	0.50%	Incline	> 1.0%	30.13	88.00	< 0.1%	14.00%	1833.13	2253.00
Manifest-F	200	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	5.00%	2456.28	3472.00
Manifest-F	200	Distributed (Head, Mid, Rear)	30	0.00%	Flat	> 1.0%	34.00	59.00	< 0.1%	17.00%	2223.12	3033.00
Manifest-F	200	Distributed (Head, Mid, Rear)	36	1.00%	Trough	<0.1%	0.00	0.00	< 10%	38.00%	2701.81	4094.00
Manifest-F	200	Distributed (Head, Mid, Rear)	38	0.50%	Incline	> 1.0%	22.80	67.00	< 0.1%	18.00%	2685.21	3673.00
Manifest-F	200	Distributed (Head, Mid, Rear)	45	1.10%	Decline	< 0.5%	17.00	17.00	> 25%, < 50%	6.00%	4702.66	8427.00
Manifest-F	200	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	4.00%	7788.39	11734.00
Manifest-F	200	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	6912.66	10436.00
Manifest-G	200	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	628.46	898.00
Manifest-G	200	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	414.41	501.00
Manifest-G	200	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	567.05	745.00
Manifest-G	200	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	515.43	602.00
Manifest-G	200	Distributed (Head, Mid, Rear)	14	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	407.69	466.00
Manifest-G	200	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	< 10%	1.00%	1413.44	1878.00
Manifest-G	200	Distributed (Head, Mid, Rear)	21	1.00%	Crest	> 1.0%	15.56	57.00	< 0.1%	28.00%	1351.47	1663.00
Manifest-G	200	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	< 10%	8.00%	1744.71	2234.00
Manifest-G	200	Distributed (Head, Mid, Rear)	30	0.50%	Decline	< 0.5%	51.00	51.00	< 0.1%	19.00%	2417.72	3130.00
Manifest-G	200	Distributed (Head, Mid, Rear)	30	0.50%	Incline	> 1.0%	57.67	105.00	< 0.1%	14.00%	1868.62	2283.00
Manifest-G	200	Distributed (Head, Mid, Rear)	30	1.10%	Decline	< 0.5%	2.00	2.00	< 0.1%	7.00%	2349.63	3105.00
Manifest-G	200	Distributed (Head, Mid, Rear)	30	0.00%	Flat	> 1.0%	34.40	87.00	< 0.1%	11.00%	2288.20	2776.00
Manifest-G	200	Distributed (Head, Mid, Rear)	36	1.00%	Trough	<0.1%	0.00	0.00	< 10%	0.00%	3212.80	3819.00
Manifest-G	200	Distributed (Head, Mid, Rear)	38	0.50%	Incline	> 1.0%	15.00	22.00	< 0.1%	8.00%	2789.90	3275.00
Manifest-G	200	Distributed (Head, Mid, Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	< 10%	11.00%	4600.90	5837.00
Manifest-G	200	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7925.68	11027.00
Manifest-G	200	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	7224.41	8242.00
Manifest-H	200	Distributed (Head, Mid, Rear)	10	0.50%	Decline	> 1.0%	12.00	19.00	< 0.1%	3.00%	622.32	860.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-H	200	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	392.97	456.00
Manifest-H	200	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	556.04	738.00
Manifest-H	200	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	509.18	601.00
Manifest-H	200	Distributed (Head, Mid, Rear)	14	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	391.92	455.00
Manifest-H	200	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	< 10%	1.00%	1331.93	1728.00
Manifest-H	200	Distributed (Head, Mid, Rear)	21	1.00%	Crest	> 1.0%	13.00	13.00	< 0.1%	10.00%	1286.23	1560.00
Manifest-H	200	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	< 10%	12.00%	1716.68	2595.00
Manifest-H	200	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	51.00%	2411.40	3500.00
Manifest-H	200	Distributed (Head, Mid, Rear)	30	0.50%	Incline	> 1.0%	36.33	86.00	< 0.1%	10.00%	1820.56	2214.00
Manifest-H	200	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	15.00%	2261.41	2866.00
Manifest-H	200	Distributed (Head, Mid, Rear)	30	0.00%	Flat	> 1.0%	39.67	62.00	< 0.1%	10.00%	2195.97	2679.00
Manifest-H	200	Distributed (Head, Mid, Rear)	36	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	6.00%	2930.66	3695.00
Manifest-H	200	Distributed (Head, Mid, Rear)	38	0.50%	Incline	> 1.0%	10.00	14.00	< 0.1%	9.00%	2674.31	3388.00
Manifest-H	200	Distributed (Head, Mid, Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	< 10%	18.00%	4477.89	5923.00
Manifest-H	200	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	10.00%	7891.99	10411.00
Manifest-H	200	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	7114.07	8408.00
Manifest-I	200	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	648.53	941.00
Manifest-I	200	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	404.64	460.00
Manifest-I	200	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	646.91	869.00
Manifest-I	200	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	529.66	674.00
Manifest-I	200	Distributed (Head, Mid, Rear)	14	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	399.87	450.00
Manifest-I	200	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	2.00%	1558.69	2390.00
Manifest-I	200	Distributed (Head, Mid, Rear)	21	1.00%	Crest	<0.1%	0.00	0.00	< 10%	0.00%	1324.61	1595.00
Manifest-I	200	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	1.00%	1980.84	2634.00
Manifest-I	200	Distributed (Head, Mid, Rear)	30	0.50%	Decline	> 1.0%	86.00	86.00	< 10%	5.00%	2619.88	3745.00
Manifest-I	200	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	1.00%	1938.51	2266.00
Manifest-I	200	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	3.00%	2946.76	3629.00
Manifest-I	200	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2372.76	2813.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-I	200	Distributed (Head, Mid, Rear)	36	1.00%	Trough	< 0.5%	1.00	1.00	< 10%	6.00%	3078.30	3993.00
Manifest-I	200	Distributed (Head, Mid, Rear)	38	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	2.00%	2852.57	3436.00
Manifest-I	200	Distributed (Head, Mid, Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	10.00%	5258.65	6965.00
Manifest-I	200	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	3.00%	8467.02	10421.00
Manifest-I	200	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	7600.14	8339.00
Manifest-J	200	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	583.77	721.00
Manifest-J	200	Distributed (Head, Mid, Rear)	10	0.50%	Incline	< 0.5%	4.00	4.00	< 0.1%	1.00%	387.63	488.00
Manifest-J	200	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	549.47	726.00
Manifest-J	200	Distributed (Head, Mid, Rear)	10	0.00%	Flat	> 1.0%	16.00	20.00	< 0.1%	3.00%	490.03	595.00
Manifest-J	200	Distributed (Head, Mid, Rear)	14	1.50%	Incline	< 0.5%	5.00	5.00	< 0.1%	1.00%	385.77	458.00
Manifest-J	200	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	< 10%	2.00%	1313.82	1725.00
Manifest-J	200	Distributed (Head, Mid, Rear)	21	1.00%	Crest	< 0.5%	22.00	22.00	< 10%	1.00%	1269.10	1662.00
Manifest-J	200	Distributed (Head, Mid, Rear)	25	1.70%	Decline	> 1.0%	116.00	116.00	< 10%	17.00%	1651.31	2017.00
Manifest-J	200	Distributed (Head, Mid, Rear)	30	0.50%	Decline	< 0.5%	6.00	6.00	< 0.1%	23.00%	2349.46	3673.00
Manifest-J	200	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1812.20	2137.00
Manifest-J	200	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 10%	3.00%	2478.57	3262.00
Manifest-J	200	Distributed (Head, Mid, Rear)	30	0.00%	Flat	> 1.0%	13.00	13.00	< 0.1%	3.00%	2164.16	2628.00
Manifest-J	200	Distributed (Head, Mid, Rear)	36	1.00%	Trough	> 1.0%	39.08	124.00	< 0.1%	24.00%	2990.87	3492.00
Manifest-J	200	Distributed (Head, Mid, Rear)	38	0.50%	Incline	> 1.0%	18.50	26.00	< 0.1%	5.00%	2635.62	2901.00
Manifest-J	200	Distributed (Head, Mid, Rear)	45	1.10%	Decline	< 0.5%	48.00	48.00	> 25%, < 50%	6.00%	4435.97	6278.00
Manifest-J	200	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	2.00%	7206.93	9536.00
Manifest-J	200	Distributed (Head, Mid, Rear)	60	0.00%	Flat	< 0.5%	169.00	169.00	> 25%, < 50%	1.00%	6802.32	7705.00

Appendix K.
Detailed Simulation Results from Evaluation of Wabtec Enforcement
Algorithm with Brake Force Provided

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-A	Empty	5000	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	915.03	996.00
Intermodal-A	Empty	5000	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	26.00%	395.21	628.00
Intermodal-A	Empty	5000	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	842.08	1364.00
Intermodal-A	Empty	5000	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	2.00%	507.13	613.00
Intermodal-A	Empty	5000	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3051.45	3764.00
Intermodal-A	Empty	5000	Head end only	20	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4555.39	4968.00
Intermodal-A	Empty	5000	Head end only	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	21.00%	1071.56	1215.00
Intermodal-A	Empty	5000	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3002.16	3943.00
Intermodal-A	Empty	5000	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	2534.63	2880.00
Intermodal-A	Empty	5000	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	34.00%	1662.27	1951.00
Intermodal-A	Empty	5000	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	2924.13	3734.00
Intermodal-A	Empty	5000	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	25.00%	1931.48	2335.00
Intermodal-A	Empty	5000	Head end only	57	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	23.00%	4221.02	4429.00
Intermodal-A	Empty	5000	Head end only	60	0.50%	Decline	<0.1%	0.00	0.00	< 10%	5.00%	6058.36	6840.00
Intermodal-A	Empty	5000	Head end only	60	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	1.00%	4730.09	4910.00
Intermodal-A	Empty	5000	Head end only	60	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7283.96	7712.00
Intermodal-A	Empty	5000	Head end only	60	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	6601.26	6932.00
Intermodal-A	Empty	5000	Head end only	60	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	11.00%	5213.40	5431.00
Intermodal-B	Empty	5000	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	904.14	999.00
Intermodal-B	Empty	5000	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	22.00%	378.79	624.00
Intermodal-B	Empty	5000	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	810.05	1429.00
Intermodal-B	Empty	5000	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	502.73	630.00
Intermodal-B	Empty	5000	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2976.33	3248.00
Intermodal-B	Empty	5000	Head end only	20	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4408.05	4841.00
Intermodal-B	Empty	5000	Head end only	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	23.00%	1055.58	1212.00
Intermodal-B	Empty	5000	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2927.58	3094.00
Intermodal-B	Empty	5000	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2464.46	2809.00
Intermodal-B	Empty	5000	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	48.00%	1599.12	1691.00

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-B	Empty	5000	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	2833.57	3305.00
Intermodal-B	Empty	5000	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	31.00%	1876.56	2299.00
Intermodal-B	Empty	5000	Head end only	57	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	11.00%	4193.81	4332.00
Intermodal-B	Empty	5000	Head end only	60	0.50%	Decline	<0.1%	0.00	0.00	< 10%	9.00%	5929.27	6495.00
Intermodal-B	Empty	5000	Head end only	60	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	2.00%	4670.48	4821.00
Intermodal-B	Empty	5000	Head end only	60	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7138.36	7576.00
Intermodal-B	Empty	5000	Head end only	60	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	6452.10	6752.00
Intermodal-B	Empty	5000	Head end only	60	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	8.00%	5141.59	5359.00
Intermodal-C	Empty	5000	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	906.98	997.00
Intermodal-C	Empty	5000	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	32.00%	372.78	625.00
Intermodal-C	Empty	5000	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	800.75	1238.00
Intermodal-C	Empty	5000	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	500.34	622.00
Intermodal-C	Empty	5000	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2942.96	3195.00
Intermodal-C	Empty	5000	Head end only	20	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4294.57	4746.00
Intermodal-C	Empty	5000	Head end only	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	18.00%	1060.91	1205.00
Intermodal-C	Empty	5000	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2915.31	3913.00
Intermodal-C	Empty	5000	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2468.74	2807.00
Intermodal-C	Empty	5000	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	32.00%	1641.82	1850.00
Intermodal-C	Empty	5000	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	2797.99	3195.00
Intermodal-C	Empty	5000	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	22.00%	1893.43	2291.00
Intermodal-C	Empty	5000	Head end only	57	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	15.00%	4144.43	4358.00
Intermodal-C	Empty	5000	Head end only	60	0.50%	Decline	<0.1%	0.00	0.00	< 10%	5.00%	5914.41	6494.00
Intermodal-C	Empty	5000	Head end only	60	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	1.00%	4639.40	4759.00
Intermodal-C	Empty	5000	Head end only	60	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7088.92	7406.00
Intermodal-C	Empty	5000	Head end only	60	1.00%	Trough	<0.1%	0.00	0.00	> 50%	1.00%	6411.78	6671.00
Intermodal-C	Empty	5000	Head end only	60	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	10.00%	5118.85	5448.00
Intermodal-D	Empty	5000	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	908.76	1000.00
Intermodal-D	Empty	5000	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	31.00%	381.46	621.00

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-D	Empty	5000	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	828.14	1303.00
Intermodal-D	Empty	5000	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	1.00%	500.94	628.00
Intermodal-D	Empty	5000	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3051.32	3300.00
Intermodal-D	Empty	5000	Head end only	20	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4625.64	5237.00
Intermodal-D	Empty	5000	Head end only	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	17.00%	1082.87	1214.00
Intermodal-D	Empty	5000	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3018.43	3760.00
Intermodal-D	Empty	5000	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2458.23	2806.00
Intermodal-D	Empty	5000	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	49.00%	1613.31	1739.00
Intermodal-D	Empty	5000	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	2884.45	3388.00
Intermodal-D	Empty	5000	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	24.00%	1914.96	2295.00
Intermodal-D	Empty	5000	Head end only	57	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	23.00%	4215.52	4412.00
Intermodal-D	Empty	5000	Head end only	60	0.50%	Decline	<0.1%	0.00	0.00	< 10%	8.00%	6057.38	6674.00
Intermodal-D	Empty	5000	Head end only	60	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	4.00%	4720.44	4906.00
Intermodal-D	Empty	5000	Head end only	60	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7323.56	7753.00
Intermodal-D	Empty	5000	Head end only	60	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	6630.22	6944.00
Intermodal-D	Empty	5000	Head end only	60	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	6.00%	5231.38	5462.00
Intermodal-E	Empty	5000	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	895.05	1001.00
Intermodal-E	Empty	5000	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	30.00%	386.47	629.00
Intermodal-E	Empty	5000	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	837.85	1330.00
Intermodal-E	Empty	5000	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	2.00%	493.67	640.00
Intermodal-E	Empty	5000	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2913.53	3190.00
Intermodal-E	Empty	5000	Head end only	20	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4268.97	4522.00
Intermodal-E	Empty	5000	Head end only	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	17.00%	1065.50	1211.00
Intermodal-E	Empty	5000	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2896.18	3585.00
Intermodal-E	Empty	5000	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2474.81	2764.00
Intermodal-E	Empty	5000	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	31.00%	1599.72	1696.00
Intermodal-E	Empty	5000	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	2818.45	3542.00
Intermodal-E	Empty	5000	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	27.00%	1883.08	2119.00

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-E	Empty	5000	Head end only	57	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	12.00%	4123.55	4320.00
Intermodal-E	Empty	5000	Head end only	60	0.50%	Decline	<0.1%	0.00	0.00	< 10%	5.00%	5936.23	6496.00
Intermodal-E	Empty	5000	Head end only	60	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	1.00%	4605.32	4748.00
Intermodal-E	Empty	5000	Head end only	60	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7025.17	7686.00
Intermodal-E	Empty	5000	Head end only	60	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	6387.35	6677.00
Intermodal-E	Empty	5000	Head end only	60	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	8.00%	5125.59	5534.00
Intermodal-A	Loaded	5000	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	> 50%	1.00%	975.35	1093.00
Intermodal-A	Loaded	5000	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	6.00%	476.96	575.00
Intermodal-A	Loaded	5000	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1284.18	1369.00
Intermodal-A	Loaded	5000	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	61.00%	528.17	713.00
Intermodal-A	Loaded	5000	Head end only	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5644.78	6073.00
Intermodal-A	Loaded	5000	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6444.73	6797.00
Intermodal-A	Loaded	5000	Head end only	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	53.00%	970.69	1070.00
Intermodal-A	Loaded	5000	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5462.37	5728.00
Intermodal-A	Loaded	5000	Head end only	30	0.50%	Decline	< 0.5%	10.00	10.00	> 10%, < 25%	1.00%	3454.58	3701.00
Intermodal-A	Loaded	5000	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	21.00%	2072.08	2159.00
Intermodal-A	Loaded	5000	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4661.05	4935.00
Intermodal-A	Loaded	5000	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	39.00%	2496.01	2586.00
Intermodal-A	Loaded	5000	Head end only	35	1.00%	Crest	< 0.5%	10.00	10.00	< 0.1%	21.00%	2601.87	2714.00
Intermodal-A	Loaded	5000	Head end only	55	0.50%	Incline	> 1.0%	18.33	27.00	< 0.1%	15.00%	5437.48	5643.00
Intermodal-A	Loaded	5000	Head end only	70	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	12531.56	13481.00
Intermodal-A	Loaded	5000	Head end only	70	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	17942.55	18540.00
Intermodal-A	Loaded	5000	Head end only	70	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	15078.00	15348.00
Intermodal-A	Loaded	5000	Head end only	70	0.00%	Flat	> 1.0%	82.91	258.00	> 10%, < 25%	12.00%	10077.22	10317.00
Intermodal-B	Loaded	5000	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	1.00%	643.76	773.00
Intermodal-B	Loaded	5000	Head end only	10	0.50%	Incline	< 0.5%	4.00	4.00	< 0.1%	97.00%	297.61	436.00
Intermodal-B	Loaded	5000	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	996.64	1057.00
Intermodal-B	Loaded	5000	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	64.00%	450.03	546.00

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-B	Loaded	5000	Head end only	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2165.22	2537.00
Intermodal-B	Loaded	5000	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4399.57	4672.00
Intermodal-B	Loaded	5000	Head end only	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	66.00%	956.23	1055.00
Intermodal-B	Loaded	5000	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3910.93	4143.00
Intermodal-B	Loaded	5000	Head end only	30	0.50%	Decline	> 1.0%	41.00	41.00	< 0.1%	5.00%	2634.67	2784.00
Intermodal-B	Loaded	5000	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	19.00%	1879.91	1977.00
Intermodal-B	Loaded	5000	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3531.29	3718.00
Intermodal-B	Loaded	5000	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	32.00%	2125.27	2210.00
Intermodal-B	Loaded	5000	Head end only	35	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	33.00%	2362.10	2454.00
Intermodal-B	Loaded	5000	Head end only	55	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	14.00%	4584.23	4742.00
Intermodal-B	Loaded	5000	Head end only	70	0.50%	Decline	> 1.0%	102.50	127.00	> 50%	2.00%	9451.10	10028.00
Intermodal-B	Loaded	5000	Head end only	70	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	12014.44	12519.00
Intermodal-B	Loaded	5000	Head end only	70	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	10700.37	11138.00
Intermodal-B	Loaded	5000	Head end only	70	0.00%	Flat	> 1.0%	52.67	70.00	< 10%	3.00%	8080.69	8296.00
Intermodal-C	Loaded	5000	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	689.19	897.00
Intermodal-C	Loaded	5000	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	470.24	566.00
Intermodal-C	Loaded	5000	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	935.63	1019.00
Intermodal-C	Loaded	5000	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	52.00%	455.40	702.00
Intermodal-C	Loaded	5000	Head end only	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1722.37	1995.00
Intermodal-C	Loaded	5000	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4005.29	4489.00
Intermodal-C	Loaded	5000	Head end only	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	44.00%	920.68	994.00
Intermodal-C	Loaded	5000	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3657.61	3916.00
Intermodal-C	Loaded	5000	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	3.00%	2588.28	2856.00
Intermodal-C	Loaded	5000	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	34.00%	1726.27	1872.00
Intermodal-C	Loaded	5000	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3318.14	3467.00
Intermodal-C	Loaded	5000	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	28.00%	2067.53	2355.00
Intermodal-C	Loaded	5000	Head end only	35	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	27.00%	2306.73	2458.00
Intermodal-C	Loaded	5000	Head end only	55	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	4.00%	4537.45	4722.00

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-C	Loaded	5000	Head end only	70	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	8902.67	9409.00
Intermodal-C	Loaded	5000	Head end only	70	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	11130.52	11785.00
Intermodal-C	Loaded	5000	Head end only	70	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	10008.36	10634.00
Intermodal-C	Loaded	5000	Head end only	70	0.00%	Flat	> 1.0%	95.50	111.00	< 10%	2.00%	7615.58	8092.00
Intermodal-D	Loaded	5000	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	< 10%	1.00%	734.18	973.00
Intermodal-D	Loaded	5000	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	38.00%	400.13	533.00
Intermodal-D	Loaded	5000	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1037.31	1099.00
Intermodal-D	Loaded	5000	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	51.00%	477.01	709.00
Intermodal-D	Loaded	5000	Head end only	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2341.70	2696.00
Intermodal-D	Loaded	5000	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4691.38	5157.00
Intermodal-D	Loaded	5000	Head end only	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	47.00%	920.60	1042.00
Intermodal-D	Loaded	5000	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4127.72	4332.00
Intermodal-D	Loaded	5000	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	3.00%	2724.65	2857.00
Intermodal-D	Loaded	5000	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	6.00%	1920.23	2018.00
Intermodal-D	Loaded	5000	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3686.46	3921.00
Intermodal-D	Loaded	5000	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	21.00%	2191.51	2288.00
Intermodal-D	Loaded	5000	Head end only	35	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	28.00%	2400.42	2500.00
Intermodal-D	Loaded	5000	Head end only	55	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	3.00%	4749.33	4898.00
Intermodal-D	Loaded	5000	Head end only	70	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	9814.38	10194.00
Intermodal-D	Loaded	5000	Head end only	70	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	12828.63	13599.00
Intermodal-D	Loaded	5000	Head end only	70	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	11441.11	11961.00
Intermodal-D	Loaded	5000	Head end only	70	0.00%	Flat	> 1.0%	27.00	52.00	< 10%	4.00%	8376.11	8683.00
Intermodal-E	Loaded	5000	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	707.60	952.00
Intermodal-E	Loaded	5000	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	19.00%	438.25	527.00
Intermodal-E	Loaded	5000	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	990.92	1050.00
Intermodal-E	Loaded	5000	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	44.00%	469.47	697.00
Intermodal-E	Loaded	5000	Head end only	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1949.18	2365.00
Intermodal-E	Loaded	5000	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4310.86	4596.00

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-E	Loaded	5000	Head end only	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	45.00%	934.02	1035.00
Intermodal-E	Loaded	5000	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3883.01	4076.00
Intermodal-E	Loaded	5000	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	4.00%	2660.23	3019.00
Intermodal-E	Loaded	5000	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	6.00%	1895.56	2004.00
Intermodal-E	Loaded	5000	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3508.00	3705.00
Intermodal-E	Loaded	5000	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	25.00%	2143.57	2231.00
Intermodal-E	Loaded	5000	Head end only	35	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	26.00%	2348.78	2448.00
Intermodal-E	Loaded	5000	Head end only	55	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	3.00%	4660.21	4745.00
Intermodal-E	Loaded	5000	Head end only	70	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	9377.66	10021.00
Intermodal-E	Loaded	5000	Head end only	70	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	11840.99	12220.00
Intermodal-E	Loaded	5000	Head end only	70	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	10642.26	11249.00
Intermodal-E	Loaded	5000	Head end only	70	0.00%	Flat	> 1.0%	82.00	82.00	> 10%, < 25%	2.00%	8020.76	8282.00
Intermodal-A	Empty	5000	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	547.26	647.00
Intermodal-A	Empty	5000	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	38.00%	275.74	330.00
Intermodal-A	Empty	5000	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	662.47	1106.00
Intermodal-A	Empty	5000	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	2.00%	392.06	516.00
Intermodal-A	Empty	5000	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2331.13	2998.00
Intermodal-A	Empty	5000	Distributed (Head and Rear)	20	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4351.71	4530.00
Intermodal-A	Empty	5000	Distributed (Head and Rear)	25	1.50%	Incline	> 1.0%	15.77	39.00	< 0.1%	100.00%	654.42	720.00
Intermodal-A	Empty	5000	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2255.11	3171.00
Intermodal-A	Empty	5000	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	7.00%	1870.50	2320.00
Intermodal-A	Empty	5000	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	80.00%	1341.72	1429.00
Intermodal-A	Empty	5000	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 10%	1.00%	2313.48	2869.00
Intermodal-A	Empty	5000	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	64.00%	1531.17	1875.00
Intermodal-A	Empty	5000	Distributed (Head and Rear)	57	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	55.00%	3586.70	3750.00
Intermodal-A	Empty	5000	Distributed (Head and Rear)	60	0.50%	Decline	> 1.0%	47.00	47.00	< 10%	47.00%	5043.82	5709.00
Intermodal-A	Empty	5000	Distributed (Head and Rear)	60	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	56.00%	3912.27	4102.00
Intermodal-A	Empty	5000	Distributed (Head and Rear)	60	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	1.00%	6041.14	6360.00

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-A	Empty	5000	Distributed (Head and Rear)	60	1.00%	Trough	<0.1%	0.00	0.00	< 10%	2.00%	5408.14	6100.00
Intermodal-A	Empty	5000	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	49.00%	4386.97	4573.00
Intermodal-B	Empty	5000	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	552.15	643.00
Intermodal-B	Empty	5000	Distributed (Head and Rear)	10	0.50%	Incline	> 1.0%	19.00	52.00	< 0.1%	34.00%	300.23	431.00
Intermodal-B	Empty	5000	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	644.11	1095.00
Intermodal-B	Empty	5000	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	2.00%	397.46	517.00
Intermodal-B	Empty	5000	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2267.55	2780.00
Intermodal-B	Empty	5000	Distributed (Head and Rear)	20	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4245.54	4526.00
Intermodal-B	Empty	5000	Distributed (Head and Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	92.00%	756.62	985.00
Intermodal-B	Empty	5000	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2162.34	2827.00
Intermodal-B	Empty	5000	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	11.00%	1824.81	2230.00
Intermodal-B	Empty	5000	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	77.00%	1319.29	1467.00
Intermodal-B	Empty	5000	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	2256.89	2839.00
Intermodal-B	Empty	5000	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	69.00%	1505.55	1874.00
Intermodal-B	Empty	5000	Distributed (Head and Rear)	57	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	55.00%	3545.01	3767.00
Intermodal-B	Empty	5000	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	56.00%	4927.69	5702.00
Intermodal-B	Empty	5000	Distributed (Head and Rear)	60	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	51.00%	3858.97	4042.00
Intermodal-B	Empty	5000	Distributed (Head and Rear)	60	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5924.23	6265.00
Intermodal-B	Empty	5000	Distributed (Head and Rear)	60	1.00%	Trough	<0.1%	0.00	0.00	< 10%	8.00%	5288.64	5737.00
Intermodal-B	Empty	5000	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	58.00%	4334.99	4584.00
Intermodal-C	Empty	5000	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	548.08	626.00
Intermodal-C	Empty	5000	Distributed (Head and Rear)	10	0.50%	Incline	> 1.0%	16.76	38.00	< 0.1%	42.00%	290.97	414.00
Intermodal-C	Empty	5000	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	631.37	1072.00
Intermodal-C	Empty	5000	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	5.00%	396.30	519.00
Intermodal-C	Empty	5000	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2256.89	2758.00
Intermodal-C	Empty	5000	Distributed (Head and Rear)	20	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4192.35	4509.00
Intermodal-C	Empty	5000	Distributed (Head and Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	92.00%	754.70	964.00
Intermodal-C	Empty	5000	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2156.79	2334.00

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-C	Empty	5000	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	10.00%	1838.23	2235.00
Intermodal-C	Empty	5000	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	83.00%	1311.70	1503.00
Intermodal-C	Empty	5000	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	2229.48	2855.00
Intermodal-C	Empty	5000	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	75.00%	1496.83	1786.00
Intermodal-C	Empty	5000	Distributed (Head and Rear)	57	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	58.00%	3539.05	3752.00
Intermodal-C	Empty	5000	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	59.00%	4916.86	5535.00
Intermodal-C	Empty	5000	Distributed (Head and Rear)	60	0.50%	Incline	> 1.0%	46.00	46.00	< 0.1%	58.00%	3842.92	4040.00
Intermodal-C	Empty	5000	Distributed (Head and Rear)	60	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	1.00%	5910.80	6265.00
Intermodal-C	Empty	5000	Distributed (Head and Rear)	60	1.00%	Trough	<0.1%	0.00	0.00	< 10%	4.00%	5307.71	5922.00
Intermodal-C	Empty	5000	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	52.00%	4312.46	4557.00
Intermodal-D	Empty	5000	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	1.00%	548.92	632.00
Intermodal-D	Empty	5000	Distributed (Head and Rear)	10	0.50%	Incline	> 1.0%	18.35	40.00	< 0.1%	40.00%	295.34	393.00
Intermodal-D	Empty	5000	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	627.10	1040.00
Intermodal-D	Empty	5000	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	11.00%	393.90	516.00
Intermodal-D	Empty	5000	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2362.53	2986.00
Intermodal-D	Empty	5000	Distributed (Head and Rear)	20	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4414.81	4586.00
Intermodal-D	Empty	5000	Distributed (Head and Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	89.00%	771.59	1022.00
Intermodal-D	Empty	5000	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2240.20	2973.00
Intermodal-D	Empty	5000	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	7.00%	1873.76	2319.00
Intermodal-D	Empty	5000	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	75.00%	1341.46	1502.00
Intermodal-D	Empty	5000	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	2325.68	2893.00
Intermodal-D	Empty	5000	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	70.00%	1530.72	1872.00
Intermodal-D	Empty	5000	Distributed (Head and Rear)	57	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	58.00%	3607.69	3753.00
Intermodal-D	Empty	5000	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	< 10%	62.00%	5060.44	5708.00
Intermodal-D	Empty	5000	Distributed (Head and Rear)	60	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	65.00%	3944.57	4137.00
Intermodal-D	Empty	5000	Distributed (Head and Rear)	60	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	6159.20	7299.00
Intermodal-D	Empty	5000	Distributed (Head and Rear)	60	1.00%	Trough	<0.1%	0.00	0.00	< 10%	3.00%	5478.36	5765.00
Intermodal-D	Empty	5000	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	57.00%	4419.38	4649.00

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-E	Empty	5000	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	544.23	639.00
Intermodal-E	Empty	5000	Distributed (Head and Rear)	10	0.50%	Incline	> 1.0%	14.83	41.00	< 0.1%	39.00%	297.93	412.00
Intermodal-E	Empty	5000	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	620.23	1007.00
Intermodal-E	Empty	5000	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	6.00%	393.85	516.00
Intermodal-E	Empty	5000	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2228.77	2465.00
Intermodal-E	Empty	5000	Distributed (Head and Rear)	20	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4170.89	4435.00
Intermodal-E	Empty	5000	Distributed (Head and Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	84.00%	764.11	1022.00
Intermodal-E	Empty	5000	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2130.68	2711.00
Intermodal-E	Empty	5000	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	8.00%	1804.05	2229.00
Intermodal-E	Empty	5000	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	87.00%	1310.10	1391.00
Intermodal-E	Empty	5000	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	2160.54	2770.00
Intermodal-E	Empty	5000	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	76.00%	1488.37	1915.00
Intermodal-E	Empty	5000	Distributed (Head and Rear)	57	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	53.00%	3511.17	3677.00
Intermodal-E	Empty	5000	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	< 10%	42.00%	4978.74	5631.00
Intermodal-E	Empty	5000	Distributed (Head and Rear)	60	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	48.00%	3822.37	3943.00
Intermodal-E	Empty	5000	Distributed (Head and Rear)	60	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	4.00%	5857.12	6092.00
Intermodal-E	Empty	5000	Distributed (Head and Rear)	60	1.00%	Trough	<0.1%	0.00	0.00	> 10%, < 25%	8.00%	5300.34	5934.00
Intermodal-E	Empty	5000	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	57.00%	4293.77	4565.00
Intermodal-A	Loaded	5000	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	6.00%	535.81	785.00
Intermodal-A	Loaded	5000	Distributed (Head and Rear)	10	0.50%	Incline	> 1.0%	14.50	21.00	< 0.1%	100.00%	297.57	346.00
Intermodal-A	Loaded	5000	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	844.62	910.00
Intermodal-A	Loaded	5000	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	59.00%	423.65	613.00
Intermodal-A	Loaded	5000	Distributed (Head and Rear)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5031.08	5549.00
Intermodal-A	Loaded	5000	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4720.20	5031.00
Intermodal-A	Loaded	5000	Distributed (Head and Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	61.00%	872.53	929.00
Intermodal-A	Loaded	5000	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4120.64	4727.00
Intermodal-A	Loaded	5000	Distributed (Head and Rear)	30	0.50%	Decline	> 1.0%	33.00	33.00	< 0.1%	2.00%	2533.60	2842.00
Intermodal-A	Loaded	5000	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	25.00%	1761.72	1866.00

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-A	Loaded	5000	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3592.76	3768.00
Intermodal-A	Loaded	5000	Distributed (Head and Rear)	30	0.00%	Flat	> 1.0%	65.00	65.00	< 0.1%	61.00%	2014.32	2312.00
Intermodal-A	Loaded	5000	Distributed (Head and Rear)	35	1.00%	Crest	> 1.0%	57.50	59.00	< 0.1%	38.00%	2152.96	2267.00
Intermodal-A	Loaded	5000	Distributed (Head and Rear)	55	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	17.00%	4614.89	4795.00
Intermodal-A	Loaded	5000	Distributed (Head and Rear)	70	0.50%	Decline	> 1.0%	195.40	385.00	> 50%	9.00%	10608.29	10959.00
Intermodal-A	Loaded	5000	Distributed (Head and Rear)	70	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	15445.03	16734.00
Intermodal-A	Loaded	5000	Distributed (Head and Rear)	70	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	13374.32	14129.00
Intermodal-A	Loaded	5000	Distributed (Head and Rear)	70	0.00%	Flat	> 1.0%	144.80	350.00	< 0.1%	19.00%	8638.77	9007.00
Intermodal-B	Loaded	5000	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	7.00%	563.77	643.00
Intermodal-B	Loaded	5000	Distributed (Head and Rear)	10	0.50%	Incline	> 1.0%	17.67	27.00	< 0.1%	97.00%	260.97	295.00
Intermodal-B	Loaded	5000	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	653.46	699.00
Intermodal-B	Loaded	5000	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	50.00%	372.12	482.00
Intermodal-B	Loaded	5000	Distributed (Head and Rear)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2516.58	2846.00
Intermodal-B	Loaded	5000	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3074.23	3271.00
Intermodal-B	Loaded	5000	Distributed (Head and Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	86.00%	832.54	908.00
Intermodal-B	Loaded	5000	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2792.08	2940.00
Intermodal-B	Loaded	5000	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	4.00%	1977.43	2068.00
Intermodal-B	Loaded	5000	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	87.00%	1405.56	1506.00
Intermodal-B	Loaded	5000	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	2594.59	2735.00
Intermodal-B	Loaded	5000	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	75.00%	1670.68	1757.00
Intermodal-B	Loaded	5000	Distributed (Head and Rear)	35	1.00%	Crest	> 1.0%	6.00	6.00	< 0.1%	47.00%	1946.90	2057.00
Intermodal-B	Loaded	5000	Distributed (Head and Rear)	55	0.50%	Incline	> 1.0%	17.00	27.00	< 0.1%	19.00%	3843.18	3999.00
Intermodal-B	Loaded	5000	Distributed (Head and Rear)	70	0.50%	Decline	> 1.0%	169.00	324.00	> 25%, < 50%	5.00%	7814.92	8289.00
Intermodal-B	Loaded	5000	Distributed (Head and Rear)	70	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	10147.05	10603.00
Intermodal-B	Loaded	5000	Distributed (Head and Rear)	70	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	8906.25	9332.00
Intermodal-B	Loaded	5000	Distributed (Head and Rear)	70	0.00%	Flat	> 1.0%	43.60	75.00	< 0.1%	15.00%	6756.88	7007.00
Intermodal-C	Loaded	5000	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	1.00%	581.83	667.00
Intermodal-C	Loaded	5000	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	99.00%	298.42	330.00

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-C	Loaded	5000	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	624.17	687.00
Intermodal-C	Loaded	5000	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	31.00%	385.63	489.00
Intermodal-C	Loaded	5000	Distributed (Head and Rear)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2197.46	2341.00
Intermodal-C	Loaded	5000	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2860.64	3123.00
Intermodal-C	Loaded	5000	Distributed (Head and Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	61.00%	809.57	871.00
Intermodal-C	Loaded	5000	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2625.64	2834.00
Intermodal-C	Loaded	5000	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	5.00%	1948.68	2151.00
Intermodal-C	Loaded	5000	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	93.00%	1340.94	1431.00
Intermodal-C	Loaded	5000	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	2486.03	2673.00
Intermodal-C	Loaded	5000	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	61.00%	1621.48	1788.00
Intermodal-C	Loaded	5000	Distributed (Head and Rear)	35	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	16.00%	1889.14	1976.00
Intermodal-C	Loaded	5000	Distributed (Head and Rear)	55	0.50%	Incline	< 0.5%	7.00	7.00	< 0.1%	9.00%	3809.75	3978.00
Intermodal-C	Loaded	5000	Distributed (Head and Rear)	70	0.50%	Decline	> 1.0%	15.50	20.00	> 25%, < 50%	3.00%	7466.46	7993.00
Intermodal-C	Loaded	5000	Distributed (Head and Rear)	70	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	9479.23	10010.00
Intermodal-C	Loaded	5000	Distributed (Head and Rear)	70	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	8435.36	9002.00
Intermodal-C	Loaded	5000	Distributed (Head and Rear)	70	0.00%	Flat	> 1.0%	44.00	69.00	< 10%	7.00%	6433.62	6772.00
Intermodal-D	Loaded	5000	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	1.00%	599.05	675.00
Intermodal-D	Loaded	5000	Distributed (Head and Rear)	10	0.50%	Incline	> 1.0%	22.00	23.00	< 0.1%	99.00%	267.44	310.00
Intermodal-D	Loaded	5000	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	687.74	748.00
Intermodal-D	Loaded	5000	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	48.00%	379.16	468.00
Intermodal-D	Loaded	5000	Distributed (Head and Rear)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2695.65	3210.00
Intermodal-D	Loaded	5000	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3287.90	3614.00
Intermodal-D	Loaded	5000	Distributed (Head and Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	48.00%	825.79	900.00
Intermodal-D	Loaded	5000	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2981.46	3157.00
Intermodal-D	Loaded	5000	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	1.00%	2083.02	2207.00
Intermodal-D	Loaded	5000	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	89.00%	1436.45	1590.00
Intermodal-D	Loaded	5000	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	2751.97	2909.00
Intermodal-D	Loaded	5000	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	70.00%	1735.42	1876.00

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-D	Loaded	5000	Distributed (Head and Rear)	35	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	61.00%	1966.93	2077.00
Intermodal-D	Loaded	5000	Distributed (Head and Rear)	55	0.50%	Incline	> 1.0%	27.00	27.00	< 0.1%	20.00%	4011.40	4146.00
Intermodal-D	Loaded	5000	Distributed (Head and Rear)	70	0.50%	Decline	<0.1%	0.00	0.00	> 50%	2.00%	8273.71	8818.00
Intermodal-D	Loaded	5000	Distributed (Head and Rear)	70	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	10889.13	11495.00
Intermodal-D	Loaded	5000	Distributed (Head and Rear)	70	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	9545.22	10029.00
Intermodal-D	Loaded	5000	Distributed (Head and Rear)	70	0.00%	Flat	> 1.0%	161.00	285.00	< 10%	10.00%	7076.76	7304.00
Intermodal-E	Loaded	5000	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	3.00%	585.02	670.00
Intermodal-E	Loaded	5000	Distributed (Head and Rear)	10	0.50%	Incline	> 1.0%	6.00	6.00	< 0.1%	100.00%	280.18	328.00
Intermodal-E	Loaded	5000	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	655.34	703.00
Intermodal-E	Loaded	5000	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	46.00%	372.26	494.00
Intermodal-E	Loaded	5000	Distributed (Head and Rear)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2383.76	2683.00
Intermodal-E	Loaded	5000	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3040.39	3264.00
Intermodal-E	Loaded	5000	Distributed (Head and Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	66.00%	821.25	903.00
Intermodal-E	Loaded	5000	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2794.00	2963.00
Intermodal-E	Loaded	5000	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	6.00%	2001.13	2274.00
Intermodal-E	Loaded	5000	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	88.00%	1389.94	1474.00
Intermodal-E	Loaded	5000	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	2613.32	2769.00
Intermodal-E	Loaded	5000	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	73.00%	1682.16	1752.00
Intermodal-E	Loaded	5000	Distributed (Head and Rear)	35	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	27.00%	1937.81	2022.00
Intermodal-E	Loaded	5000	Distributed (Head and Rear)	55	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	14.00%	3900.08	4072.00
Intermodal-E	Loaded	5000	Distributed (Head and Rear)	70	0.50%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	7839.60	8305.00
Intermodal-E	Loaded	5000	Distributed (Head and Rear)	70	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	10107.29	10521.00
Intermodal-E	Loaded	5000	Distributed (Head and Rear)	70	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	8912.84	9308.00
Intermodal-E	Loaded	5000	Distributed (Head and Rear)	70	0.00%	Flat	> 1.0%	20.25	49.00	< 0.1%	6.00%	6756.70	6982.00
Intermodal-A	Empty	7500	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	873.05	975.00
Intermodal-A	Empty	7500	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	7.00%	448.56	669.00
Intermodal-A	Empty	7500	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1116.09	1206.00
Intermodal-A	Empty	7500	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	586.11	714.00

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-A	Empty	7500	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4222.64	4505.00
Intermodal-A	Empty	7500	Head end only	20	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6296.62	7049.00
Intermodal-A	Empty	7500	Head end only	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1149.49	1255.00
Intermodal-A	Empty	7500	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3963.38	4268.00
Intermodal-A	Empty	7500	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3108.80	3487.00
Intermodal-A	Empty	7500	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	1.00%	1854.55	1942.00
Intermodal-A	Empty	7500	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3614.91	3809.00
Intermodal-A	Empty	7500	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2249.09	2416.00
Intermodal-A	Empty	7500	Head end only	52	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	4324.54	4529.00
Intermodal-A	Empty	7500	Head end only	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7025.57	7797.00
Intermodal-A	Empty	7500	Head end only	60	0.50%	Incline	<0.1%	0.00	0.00	< 10%	0.00%	5241.62	5444.00
Intermodal-A	Empty	7500	Head end only	60	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	8383.31	8662.00
Intermodal-A	Empty	7500	Head end only	60	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	7504.24	7830.00
Intermodal-A	Empty	7500	Head end only	60	0.00%	Flat	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	6084.80	6335.00
Intermodal-B	Empty	7500	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	894.05	988.00
Intermodal-B	Empty	7500	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	3.00%	456.25	656.00
Intermodal-B	Empty	7500	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1133.77	1221.00
Intermodal-B	Empty	7500	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	577.44	711.00
Intermodal-B	Empty	7500	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4392.40	4816.00
Intermodal-B	Empty	7500	Head end only	20	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6696.76	7396.00
Intermodal-B	Empty	7500	Head end only	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1144.02	1226.00
Intermodal-B	Empty	7500	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4094.05	4327.00
Intermodal-B	Empty	7500	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3147.15	3484.00
Intermodal-B	Empty	7500	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	4.00%	1873.12	1989.00
Intermodal-B	Empty	7500	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3701.42	3915.00
Intermodal-B	Empty	7500	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2278.99	2454.00
Intermodal-B	Empty	7500	Head end only	52	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	2.00%	4380.00	4639.00
Intermodal-B	Empty	7500	Head end only	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7144.62	7805.00

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-B	Empty	7500	Head end only	60	0.50%	Incline	<0.1%	0.00	0.00	< 10%	0.00%	5337.97	5448.00
Intermodal-B	Empty	7500	Head end only	60	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	8664.21	8929.00
Intermodal-B	Empty	7500	Head end only	60	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	7710.65	8426.00
Intermodal-B	Empty	7500	Head end only	60	0.00%	Flat	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	6164.05	6487.00
Intermodal-C	Empty	7500	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	885.42	995.00
Intermodal-C	Empty	7500	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	1.00%	470.85	668.00
Intermodal-C	Empty	7500	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1134.71	1251.00
Intermodal-C	Empty	7500	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	585.63	708.00
Intermodal-C	Empty	7500	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4333.41	4597.00
Intermodal-C	Empty	7500	Head end only	20	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6538.80	7451.00
Intermodal-C	Empty	7500	Head end only	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1168.24	1253.00
Intermodal-C	Empty	7500	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4023.96	4253.00
Intermodal-C	Empty	7500	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	3064.15	3402.00
Intermodal-C	Empty	7500	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	1.00%	1866.34	1943.00
Intermodal-C	Empty	7500	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3657.47	3855.00
Intermodal-C	Empty	7500	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2266.60	2418.00
Intermodal-C	Empty	7500	Head end only	52	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	4386.10	4550.00
Intermodal-C	Empty	7500	Head end only	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7096.32	7803.00
Intermodal-C	Empty	7500	Head end only	60	0.50%	Incline	<0.1%	0.00	0.00	< 10%	0.00%	5314.70	5440.00
Intermodal-C	Empty	7500	Head end only	60	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	8528.79	8823.00
Intermodal-C	Empty	7500	Head end only	60	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	7622.21	8261.00
Intermodal-C	Empty	7500	Head end only	60	0.00%	Flat	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	6103.67	6485.00
Intermodal-D	Empty	7500	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	884.39	989.00
Intermodal-D	Empty	7500	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	3.00%	450.91	659.00
Intermodal-D	Empty	7500	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1119.66	1194.00
Intermodal-D	Empty	7500	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	577.22	710.00
Intermodal-D	Empty	7500	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4302.76	4554.00
Intermodal-D	Empty	7500	Head end only	20	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6473.33	7292.00

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-D	Empty	7500	Head end only	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	1.00%	1157.03	1228.00
Intermodal-D	Empty	7500	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3993.43	4328.00
Intermodal-D	Empty	7500	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3112.49	3485.00
Intermodal-D	Empty	7500	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	2.00%	1856.63	1980.00
Intermodal-D	Empty	7500	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3645.87	3838.00
Intermodal-D	Empty	7500	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2271.01	2701.00
Intermodal-D	Empty	7500	Head end only	52	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	2.00%	4360.20	4554.00
Intermodal-D	Empty	7500	Head end only	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7074.95	7635.00
Intermodal-D	Empty	7500	Head end only	60	0.50%	Incline	<0.1%	0.00	0.00	< 10%	0.00%	5285.20	5454.00
Intermodal-D	Empty	7500	Head end only	60	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	8514.47	8837.00
Intermodal-D	Empty	7500	Head end only	60	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	7568.61	7832.00
Intermodal-D	Empty	7500	Head end only	60	0.00%	Flat	<0.1%	0.00	0.00	> 25%, < 50%	2.00%	6130.00	6495.00
Intermodal-E	Empty	7500	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	890.32	991.00
Intermodal-E	Empty	7500	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	2.00%	461.95	664.00
Intermodal-E	Empty	7500	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1132.46	1271.00
Intermodal-E	Empty	7500	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	583.01	709.00
Intermodal-E	Empty	7500	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4324.06	4639.00
Intermodal-E	Empty	7500	Head end only	20	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6576.19	7584.00
Intermodal-E	Empty	7500	Head end only	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	1.00%	1161.98	1256.00
Intermodal-E	Empty	7500	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4046.62	4242.00
Intermodal-E	Empty	7500	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	3084.54	3485.00
Intermodal-E	Empty	7500	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	4.00%	1862.80	1988.00
Intermodal-E	Empty	7500	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3666.48	3859.00
Intermodal-E	Empty	7500	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	1.00%	2265.38	2464.00
Intermodal-E	Empty	7500	Head end only	52	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	4381.21	4607.00
Intermodal-E	Empty	7500	Head end only	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7089.93	7710.00
Intermodal-E	Empty	7500	Head end only	60	0.50%	Incline	<0.1%	0.00	0.00	< 10%	0.00%	5309.51	5450.00
Intermodal-E	Empty	7500	Head end only	60	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	8568.67	8916.00

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-E	Empty	7500	Head end only	60	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	7641.33	8081.00
Intermodal-E	Empty	7500	Head end only	60	0.00%	Flat	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	6133.25	6485.00
Intermodal-A	Loaded	7500	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	1121.90	1178.00
Intermodal-A	Loaded	7500	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	629.64	687.00
Intermodal-A	Loaded	7500	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1926.07	2073.00
Intermodal-A	Loaded	7500	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	42.00%	619.72	712.00
Intermodal-A	Loaded	7500	Head end only	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	9750.14	10153.00
Intermodal-A	Loaded	7500	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	11535.61	12477.00
Intermodal-A	Loaded	7500	Head end only	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	33.00%	1089.49	1173.00
Intermodal-A	Loaded	7500	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	9500.75	10258.00
Intermodal-A	Loaded	7500	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	4263.36	4476.00
Intermodal-A	Loaded	7500	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	2421.95	2542.00
Intermodal-A	Loaded	7500	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6500.24	6888.00
Intermodal-A	Loaded	7500	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	3040.38	3441.00
Intermodal-A	Loaded	7500	Head end only	33	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	2.00%	3001.15	3169.00
Intermodal-A	Loaded	7500	Head end only	50	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	5304.53	5480.00
Intermodal-A	Loaded	7500	Head end only	70	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	14782.90	15863.00
Intermodal-A	Loaded	7500	Head end only	70	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	21984.51	22598.00
Intermodal-A	Loaded	7500	Head end only	70	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	14454.64	14988.00
Intermodal-A	Loaded	7500	Head end only	70	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	11613.77	11908.00
Intermodal-B	Loaded	7500	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1028.94	1098.00
Intermodal-B	Loaded	7500	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	49.00%	363.90	557.00
Intermodal-B	Loaded	7500	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1430.33	1536.00
Intermodal-B	Loaded	7500	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	14.00%	548.43	782.00
Intermodal-B	Loaded	7500	Head end only	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3175.90	3647.00
Intermodal-B	Loaded	7500	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6949.22	7682.00
Intermodal-B	Loaded	7500	Head end only	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	17.00%	1080.76	1134.00
Intermodal-B	Loaded	7500	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5611.23	5877.00

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-B	Loaded	7500	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	3345.34	3753.00
Intermodal-B	Loaded	7500	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	2211.57	2317.00
Intermodal-B	Loaded	7500	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4716.04	4937.00
Intermodal-B	Loaded	7500	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	1.00%	2585.05	2685.00
Intermodal-B	Loaded	7500	Head end only	33	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	2.00%	2671.53	2812.00
Intermodal-B	Loaded	7500	Head end only	50	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	4614.46	4715.00
Intermodal-B	Loaded	7500	Head end only	70	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	11192.37	11581.00
Intermodal-B	Loaded	7500	Head end only	70	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	14677.17	15299.00
Intermodal-B	Loaded	7500	Head end only	70	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	11408.22	11730.00
Intermodal-B	Loaded	7500	Head end only	70	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	9382.03	9679.00
Intermodal-C	Loaded	7500	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	986.57	1097.00
Intermodal-C	Loaded	7500	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	50.00%	410.43	557.00
Intermodal-C	Loaded	7500	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1426.51	1511.00
Intermodal-C	Loaded	7500	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	6.00%	553.42	787.00
Intermodal-C	Loaded	7500	Head end only	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2999.34	3335.00
Intermodal-C	Loaded	7500	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6804.41	7263.00
Intermodal-C	Loaded	7500	Head end only	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	23.00%	1049.45	1166.00
Intermodal-C	Loaded	7500	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5623.78	6051.00
Intermodal-C	Loaded	7500	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	3365.43	3770.00
Intermodal-C	Loaded	7500	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	2217.18	2324.00
Intermodal-C	Loaded	7500	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4690.21	4937.00
Intermodal-C	Loaded	7500	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	1.00%	2587.45	2682.00
Intermodal-C	Loaded	7500	Head end only	33	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	2.00%	2669.83	2813.00
Intermodal-C	Loaded	7500	Head end only	50	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	4642.74	4764.00
Intermodal-C	Loaded	7500	Head end only	70	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	10995.51	11466.00
Intermodal-C	Loaded	7500	Head end only	70	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	14257.34	14594.00
Intermodal-C	Loaded	7500	Head end only	70	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	11428.96	11806.00
Intermodal-C	Loaded	7500	Head end only	70	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	9359.04	9663.00

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-D	Loaded	7500	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1010.74	1104.00
Intermodal-D	Loaded	7500	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	62.00%	377.36	603.00
Intermodal-D	Loaded	7500	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1395.06	1507.00
Intermodal-D	Loaded	7500	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	6.00%	544.93	812.00
Intermodal-D	Loaded	7500	Head end only	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2708.31	3288.00
Intermodal-D	Loaded	7500	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6294.14	6569.00
Intermodal-D	Loaded	7500	Head end only	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	11.00%	1007.41	1163.00
Intermodal-D	Loaded	7500	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5351.46	5577.00
Intermodal-D	Loaded	7500	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	3321.65	3759.00
Intermodal-D	Loaded	7500	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	2070.76	2177.00
Intermodal-D	Loaded	7500	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4553.55	4792.00
Intermodal-D	Loaded	7500	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2552.71	2658.00
Intermodal-D	Loaded	7500	Head end only	33	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	2661.88	2803.00
Intermodal-D	Loaded	7500	Head end only	50	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	4616.71	4769.00
Intermodal-D	Loaded	7500	Head end only	70	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	10767.80	11370.00
Intermodal-D	Loaded	7500	Head end only	70	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	13873.22	14193.00
Intermodal-D	Loaded	7500	Head end only	70	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	11177.02	11538.00
Intermodal-D	Loaded	7500	Head end only	70	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	9153.08	9661.00
Intermodal-E	Loaded	7500	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1024.62	1106.00
Intermodal-E	Loaded	7500	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	30.00%	429.73	569.00
Intermodal-E	Loaded	7500	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1399.97	1559.00
Intermodal-E	Loaded	7500	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	3.00%	554.72	799.00
Intermodal-E	Loaded	7500	Head end only	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2925.89	3291.00
Intermodal-E	Loaded	7500	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6569.07	7172.00
Intermodal-E	Loaded	7500	Head end only	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	14.00%	1046.48	1161.00
Intermodal-E	Loaded	7500	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5545.13	5907.00
Intermodal-E	Loaded	7500	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	3289.97	3719.00
Intermodal-E	Loaded	7500	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	2194.84	2308.00

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-E	Loaded	7500	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4622.40	4857.00
Intermodal-E	Loaded	7500	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2561.57	2837.00
Intermodal-E	Loaded	7500	Head end only	33	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	2669.44	2812.00
Intermodal-E	Loaded	7500	Head end only	50	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	4606.66	4707.00
Intermodal-E	Loaded	7500	Head end only	70	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	10850.80	11100.00
Intermodal-E	Loaded	7500	Head end only	70	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	14289.49	14901.00
Intermodal-E	Loaded	7500	Head end only	70	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	11234.08	11593.00
Intermodal-E	Loaded	7500	Head end only	70	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	9216.63	9676.00
Intermodal-A	Empty	7500	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	817.92	907.00
Intermodal-A	Empty	7500	Distributed (Head and Rear)	10	0.50%	Incline	< 0.5%	2.00	2.00	< 0.1%	28.00%	335.33	431.00
Intermodal-A	Empty	7500	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	739.90	805.00
Intermodal-A	Empty	7500	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	1.00%	471.78	599.00
Intermodal-A	Empty	7500	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2973.28	3243.00
Intermodal-A	Empty	7500	Distributed (Head and Rear)	20	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5372.40	5694.00
Intermodal-A	Empty	7500	Distributed (Head and Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	15.00%	960.05	1097.00
Intermodal-A	Empty	7500	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2772.97	2928.00
Intermodal-A	Empty	7500	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2376.10	2660.00
Intermodal-A	Empty	7500	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	10.00%	1543.63	1687.00
Intermodal-A	Empty	7500	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	2659.90	3156.00
Intermodal-A	Empty	7500	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	11.00%	1776.02	1952.00
Intermodal-A	Empty	7500	Distributed (Head and Rear)	52	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	19.00%	3579.44	3719.00
Intermodal-A	Empty	7500	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	< 10%	7.00%	5612.47	6206.00
Intermodal-A	Empty	7500	Distributed (Head and Rear)	60	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	3.00%	4333.31	4473.00
Intermodal-A	Empty	7500	Distributed (Head and Rear)	60	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6679.60	6981.00
Intermodal-A	Empty	7500	Distributed (Head and Rear)	60	1.00%	Trough	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	5888.34	6766.00
Intermodal-A	Empty	7500	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	5.00%	4932.52	5176.00
Intermodal-B	Empty	7500	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	809.69	929.00
Intermodal-B	Empty	7500	Distributed (Head and Rear)	10	0.50%	Incline	> 1.0%	21.33	42.00	< 0.1%	31.00%	333.84	427.00

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v≥30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-B	Empty	7500	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	763.72	827.00
Intermodal-B	Empty	7500	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	476.64	615.00
Intermodal-B	Empty	7500	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3093.53	3286.00
Intermodal-B	Empty	7500	Distributed (Head and Rear)	20	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5639.57	6205.00
Intermodal-B	Empty	7500	Distributed (Head and Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	10.00%	972.33	1082.00
Intermodal-B	Empty	7500	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2863.33	3073.00
Intermodal-B	Empty	7500	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2379.25	2627.00
Intermodal-B	Empty	7500	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	17.00%	1554.80	1695.00
Intermodal-B	Empty	7500	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 10%	1.00%	2708.62	3077.00
Intermodal-B	Empty	7500	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	19.00%	1798.71	1969.00
Intermodal-B	Empty	7500	Distributed (Head and Rear)	52	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	16.00%	3614.31	3801.00
Intermodal-B	Empty	7500	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	< 10%	9.00%	5737.83	6305.00
Intermodal-B	Empty	7500	Distributed (Head and Rear)	60	0.50%	Incline	< 0.5%	4.00	4.00	< 0.1%	4.00%	4410.25	4549.00
Intermodal-B	Empty	7500	Distributed (Head and Rear)	60	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6920.51	7243.00
Intermodal-B	Empty	7500	Distributed (Head and Rear)	60	1.00%	Trough	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	6048.44	6268.00
Intermodal-B	Empty	7500	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	13.00%	5028.81	5275.00
Intermodal-C	Empty	7500	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	817.52	907.00
Intermodal-C	Empty	7500	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	28.00%	330.87	426.00
Intermodal-C	Empty	7500	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	751.19	807.00
Intermodal-C	Empty	7500	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	482.12	613.00
Intermodal-C	Empty	7500	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3024.23	3235.00
Intermodal-C	Empty	7500	Distributed (Head and Rear)	20	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5495.40	5834.00
Intermodal-C	Empty	7500	Distributed (Head and Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	15.00%	961.67	1110.00
Intermodal-C	Empty	7500	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2805.54	2998.00
Intermodal-C	Empty	7500	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2356.29	2625.00
Intermodal-C	Empty	7500	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	7.00%	1549.91	1688.00
Intermodal-C	Empty	7500	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2681.05	3168.00
Intermodal-C	Empty	7500	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	6.00%	1780.33	1910.00

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-C	Empty	7500	Distributed (Head and Rear)	52	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	12.00%	3631.96	3811.00
Intermodal-C	Empty	7500	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	5.00%	5664.33	6310.00
Intermodal-C	Empty	7500	Distributed (Head and Rear)	60	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	4.00%	4384.57	4477.00
Intermodal-C	Empty	7500	Distributed (Head and Rear)	60	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6806.59	7082.00
Intermodal-C	Empty	7500	Distributed (Head and Rear)	60	1.00%	Trough	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	5978.21	6760.00
Intermodal-C	Empty	7500	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	8.00%	4978.90	5262.00
Intermodal-D	Empty	7500	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	804.81	901.00
Intermodal-D	Empty	7500	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	28.00%	290.38	333.00
Intermodal-D	Empty	7500	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	744.73	816.00
Intermodal-D	Empty	7500	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	1.00%	470.53	611.00
Intermodal-D	Empty	7500	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3003.06	3277.00
Intermodal-D	Empty	7500	Distributed (Head and Rear)	20	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5497.88	5787.00
Intermodal-D	Empty	7500	Distributed (Head and Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	11.00%	965.79	1078.00
Intermodal-D	Empty	7500	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2799.95	2992.00
Intermodal-D	Empty	7500	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2363.27	2626.00
Intermodal-D	Empty	7500	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	24.00%	1536.74	1691.00
Intermodal-D	Empty	7500	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	2666.32	3053.00
Intermodal-D	Empty	7500	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	16.00%	1787.33	1951.00
Intermodal-D	Empty	7500	Distributed (Head and Rear)	52	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	21.00%	3606.98	3763.00
Intermodal-D	Empty	7500	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	< 10%	9.00%	5667.51	6212.00
Intermodal-D	Empty	7500	Distributed (Head and Rear)	60	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	7.00%	4359.56	4545.00
Intermodal-D	Empty	7500	Distributed (Head and Rear)	60	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6807.89	7075.00
Intermodal-D	Empty	7500	Distributed (Head and Rear)	60	1.00%	Trough	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	5954.87	6431.00
Intermodal-D	Empty	7500	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	8.00%	4979.90	5252.00
Intermodal-E	Empty	7500	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	802.16	906.00
Intermodal-E	Empty	7500	Distributed (Head and Rear)	10	0.50%	Incline	< 0.5%	0.00	0.00	< 0.1%	27.00%	327.50	436.00
Intermodal-E	Empty	7500	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	751.68	799.00
Intermodal-E	Empty	7500	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	478.59	615.00

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-E	Empty	7500	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2638.99	2689.00
Intermodal-E	Empty	7500	Distributed (Head and Rear)	20	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5549.78	5996.00
Intermodal-E	Empty	7500	Distributed (Head and Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	10.00%	980.79	1136.00
Intermodal-E	Empty	7500	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2817.08	2999.00
Intermodal-E	Empty	7500	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	2384.66	2663.00
Intermodal-E	Empty	7500	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	21.00%	1549.55	1655.00
Intermodal-E	Empty	7500	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	2692.80	3408.00
Intermodal-E	Empty	7500	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	13.00%	1805.33	2202.00
Intermodal-E	Empty	7500	Distributed (Head and Rear)	52	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	14.00%	3634.26	3819.00
Intermodal-E	Empty	7500	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	11.00%	5676.78	6197.00
Intermodal-E	Empty	7500	Distributed (Head and Rear)	60	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	7.00%	4378.33	4541.00
Intermodal-E	Empty	7500	Distributed (Head and Rear)	60	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6820.51	7162.00
Intermodal-E	Empty	7500	Distributed (Head and Rear)	60	1.00%	Trough	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	6000.60	6678.00
Intermodal-E	Empty	7500	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	5.00%	4972.10	5203.00
Intermodal-A	Loaded	7500	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	895.83	968.00
Intermodal-A	Loaded	7500	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	48.00%	417.99	603.00
Intermodal-A	Loaded	7500	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1210.11	1335.00
Intermodal-A	Loaded	7500	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	48.00%	509.16	712.00
Intermodal-A	Loaded	7500	Distributed (Head and Rear)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6450.43	7177.00
Intermodal-A	Loaded	7500	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6705.52	7043.00
Intermodal-A	Loaded	7500	Distributed (Head and Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	23.00%	971.80	1072.00
Intermodal-A	Loaded	7500	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5446.94	5787.00
Intermodal-A	Loaded	7500	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	3261.20	3779.00
Intermodal-A	Loaded	7500	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	2065.44	2164.00
Intermodal-A	Loaded	7500	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4551.20	4754.00
Intermodal-A	Loaded	7500	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	6.00%	2427.56	2658.00
Intermodal-A	Loaded	7500	Distributed (Head and Rear)	33	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	1.00%	2516.23	2620.00
Intermodal-A	Loaded	7500	Distributed (Head and Rear)	50	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	1.00%	4455.81	4692.00

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-A	Loaded	7500	Distributed (Head and Rear)	70	0.50%	Decline	> 1.0%	92.00	146.00	> 50%	2.00%	11961.93	12248.00
Intermodal-A	Loaded	7500	Distributed (Head and Rear)	70	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	17653.43	18151.00
Intermodal-A	Loaded	7500	Distributed (Head and Rear)	70	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	13286.94	13792.00
Intermodal-A	Loaded	7500	Distributed (Head and Rear)	70	0.00%	Flat	> 1.0%	189.50	199.00	> 25%, < 50%	2.00%	9691.68	9913.00
Intermodal-B	Loaded	7500	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	752.90	862.00
Intermodal-B	Loaded	7500	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	76.00%	321.92	397.00
Intermodal-B	Loaded	7500	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	917.15	977.00
Intermodal-B	Loaded	7500	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	60.00%	421.23	562.00
Intermodal-B	Loaded	7500	Distributed (Head and Rear)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3125.69	3433.00
Intermodal-B	Loaded	7500	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4314.27	4546.00
Intermodal-B	Loaded	7500	Distributed (Head and Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	26.00%	962.87	1027.00
Intermodal-B	Loaded	7500	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3674.96	3866.00
Intermodal-B	Loaded	7500	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2462.60	2578.00
Intermodal-B	Loaded	7500	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	21.00%	1689.27	1836.00
Intermodal-B	Loaded	7500	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3285.47	3401.00
Intermodal-B	Loaded	7500	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	8.00%	2026.75	2124.00
Intermodal-B	Loaded	7500	Distributed (Head and Rear)	33	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	4.00%	2214.67	2329.00
Intermodal-B	Loaded	7500	Distributed (Head and Rear)	50	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	2.00%	3784.69	3908.00
Intermodal-B	Loaded	7500	Distributed (Head and Rear)	70	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	8879.10	9290.00
Intermodal-B	Loaded	7500	Distributed (Head and Rear)	70	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	11573.89	11995.00
Intermodal-B	Loaded	7500	Distributed (Head and Rear)	70	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	9988.59	10250.00
Intermodal-B	Loaded	7500	Distributed (Head and Rear)	70	0.00%	Flat	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	7604.55	7856.00
Intermodal-C	Loaded	7500	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	765.12	887.00
Intermodal-C	Loaded	7500	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	73.00%	309.45	360.00
Intermodal-C	Loaded	7500	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	911.21	995.00
Intermodal-C	Loaded	7500	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	44.00%	444.14	596.00
Intermodal-C	Loaded	7500	Distributed (Head and Rear)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3034.70	3399.00
Intermodal-C	Loaded	7500	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4285.76	4566.00

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-C	Loaded	7500	Distributed (Head and Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	36.00%	930.58	1018.00
Intermodal-C	Loaded	7500	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3676.75	3927.00
Intermodal-C	Loaded	7500	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2489.11	2710.00
Intermodal-C	Loaded	7500	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	12.00%	1671.23	1796.00
Intermodal-C	Loaded	7500	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3289.02	3416.00
Intermodal-C	Loaded	7500	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	5.00%	2028.99	2237.00
Intermodal-C	Loaded	7500	Distributed (Head and Rear)	33	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	2.00%	2231.86	2328.00
Intermodal-C	Loaded	7500	Distributed (Head and Rear)	50	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	2.00%	3824.25	3912.00
Intermodal-C	Loaded	7500	Distributed (Head and Rear)	70	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	8878.13	9396.00
Intermodal-C	Loaded	7500	Distributed (Head and Rear)	70	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	11551.13	11922.00
Intermodal-C	Loaded	7500	Distributed (Head and Rear)	70	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	9992.47	10245.00
Intermodal-C	Loaded	7500	Distributed (Head and Rear)	70	0.00%	Flat	< 0.5%	0.00	0.00	> 10%, < 25%	2.00%	7625.87	7882.00
Intermodal-D	Loaded	7500	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	735.88	870.00
Intermodal-D	Loaded	7500	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	78.00%	300.62	335.00
Intermodal-D	Loaded	7500	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	890.86	949.00
Intermodal-D	Loaded	7500	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	48.00%	422.67	517.00
Intermodal-D	Loaded	7500	Distributed (Head and Rear)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2846.75	3159.00
Intermodal-D	Loaded	7500	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4130.07	4359.00
Intermodal-D	Loaded	7500	Distributed (Head and Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	40.00%	884.33	999.00
Intermodal-D	Loaded	7500	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3552.28	3719.00
Intermodal-D	Loaded	7500	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2564.72	2738.00
Intermodal-D	Loaded	7500	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	9.00%	1634.49	1753.00
Intermodal-D	Loaded	7500	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3208.32	3343.00
Intermodal-D	Loaded	7500	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	5.00%	2002.02	2076.00
Intermodal-D	Loaded	7500	Distributed (Head and Rear)	33	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	2.00%	2204.69	2322.00
Intermodal-D	Loaded	7500	Distributed (Head and Rear)	50	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	3779.42	3901.00
Intermodal-D	Loaded	7500	Distributed (Head and Rear)	70	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	8656.78	9185.00
Intermodal-D	Loaded	7500	Distributed (Head and Rear)	70	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	11230.97	11610.00

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-D	Loaded	7500	Distributed (Head and Rear)	70	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	8714.11	9071.00
Intermodal-D	Loaded	7500	Distributed (Head and Rear)	70	0.00%	Flat	< 0.5%	247.00	247.00	> 10%, < 25%	1.00%	7450.89	7780.00
Intermodal-E	Loaded	7500	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	1.00%	733.61	865.00
Intermodal-E	Loaded	7500	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	86.00%	300.48	351.00
Intermodal-E	Loaded	7500	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	899.91	956.00
Intermodal-E	Loaded	7500	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	41.00%	439.16	571.00
Intermodal-E	Loaded	7500	Distributed (Head and Rear)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2964.29	3248.00
Intermodal-E	Loaded	7500	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4172.22	4396.00
Intermodal-E	Loaded	7500	Distributed (Head and Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	33.00%	940.37	1020.00
Intermodal-E	Loaded	7500	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3585.59	3749.00
Intermodal-E	Loaded	7500	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2468.92	2774.00
Intermodal-E	Loaded	7500	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	11.00%	1658.20	1847.00
Intermodal-E	Loaded	7500	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3219.12	3381.00
Intermodal-E	Loaded	7500	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	4.00%	2001.74	2155.00
Intermodal-E	Loaded	7500	Distributed (Head and Rear)	33	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	3.00%	2210.03	2332.00
Intermodal-E	Loaded	7500	Distributed (Head and Rear)	50	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	3.00%	3779.00	3909.00
Intermodal-E	Loaded	7500	Distributed (Head and Rear)	70	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	8720.52	9170.00
Intermodal-E	Loaded	7500	Distributed (Head and Rear)	70	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	11332.19	11711.00
Intermodal-E	Loaded	7500	Distributed (Head and Rear)	70	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	9792.00	10136.00
Intermodal-E	Loaded	7500	Distributed (Head and Rear)	70	0.00%	Flat	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	7489.68	7693.00
Intermodal-A	Empty	10000	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	967.91	1078.00
Intermodal-A	Empty	10000	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	383.26	437.00
Intermodal-A	Empty	10000	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1017.96	1777.00
Intermodal-A	Empty	10000	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	1.00%	503.03	574.00
Intermodal-A	Empty	10000	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3973.44	4179.00
Intermodal-A	Empty	10000	Distributed (Head and Rear)	20	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7158.02	7521.00
Intermodal-A	Empty	10000	Distributed (Head and Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1157.52	1233.00
Intermodal-A	Empty	10000	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3591.68	3791.00

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-A	Empty	10000	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	2864.03	3170.00
Intermodal-A	Empty	10000	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	3.00%	1760.27	1851.00
Intermodal-A	Empty	10000	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3361.59	4122.00
Intermodal-A	Empty	10000	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2116.57	2350.00
Intermodal-A	Empty	10000	Distributed (Head and Rear)	53	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	4189.76	4255.00
Intermodal-A	Empty	10000	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6546.81	6741.00
Intermodal-A	Empty	10000	Distributed (Head and Rear)	60	0.50%	Incline	<0.1%	0.00	0.00	< 10%	0.00%	5025.80	5130.00
Intermodal-A	Empty	10000	Distributed (Head and Rear)	60	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	8066.36	8602.00
Intermodal-A	Empty	10000	Distributed (Head and Rear)	60	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	6912.34	7759.00
Intermodal-A	Empty	10000	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	5714.63	5953.00
Intermodal-B	Empty	10000	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	964.28	1076.00
Intermodal-B	Empty	10000	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	383.47	431.00
Intermodal-B	Empty	10000	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	992.44	1301.00
Intermodal-B	Empty	10000	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	500.18	572.00
Intermodal-B	Empty	10000	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3989.98	4238.00
Intermodal-B	Empty	10000	Distributed (Head and Rear)	20	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5475.94	5490.00
Intermodal-B	Empty	10000	Distributed (Head and Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1134.24	1205.00
Intermodal-B	Empty	10000	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3610.99	3839.00
Intermodal-B	Empty	10000	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	2760.71	3159.00
Intermodal-B	Empty	10000	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1771.51	1852.00
Intermodal-B	Empty	10000	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3357.69	4027.00
Intermodal-B	Empty	10000	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2101.82	2436.00
Intermodal-B	Empty	10000	Distributed (Head and Rear)	53	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	4152.07	4259.00
Intermodal-B	Empty	10000	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6554.95	6902.00
Intermodal-B	Empty	10000	Distributed (Head and Rear)	60	0.50%	Incline	<0.1%	0.00	0.00	< 10%	0.00%	4996.99	5123.00
Intermodal-B	Empty	10000	Distributed (Head and Rear)	60	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	8088.74	8949.00
Intermodal-B	Empty	10000	Distributed (Head and Rear)	60	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	6913.78	7158.00
Intermodal-B	Empty	10000	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	5725.77	6029.00

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-C	Empty	10000	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	970.05	1077.00
Intermodal-C	Empty	10000	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	1.00%	380.31	430.00
Intermodal-C	Empty	10000	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1036.11	1515.00
Intermodal-C	Empty	10000	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	501.51	573.00
Intermodal-C	Empty	10000	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4164.35	4369.00
Intermodal-C	Empty	10000	Distributed (Head and Rear)	20	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5478.16	5491.00
Intermodal-C	Empty	10000	Distributed (Head and Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1142.58	1207.00
Intermodal-C	Empty	10000	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3759.28	4424.00
Intermodal-C	Empty	10000	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	2951.21	3424.00
Intermodal-C	Empty	10000	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1810.45	1939.00
Intermodal-C	Empty	10000	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3459.73	4164.00
Intermodal-C	Empty	10000	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2166.78	2338.00
Intermodal-C	Empty	10000	Distributed (Head and Rear)	53	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	4227.28	4383.00
Intermodal-C	Empty	10000	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6767.97	7087.00
Intermodal-C	Empty	10000	Distributed (Head and Rear)	60	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	5102.00	5212.00
Intermodal-C	Empty	10000	Distributed (Head and Rear)	60	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	8411.95	8774.00
Intermodal-C	Empty	10000	Distributed (Head and Rear)	60	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	7172.85	7345.00
Intermodal-C	Empty	10000	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	5943.90	6279.00
Intermodal-D	Empty	10000	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	600.84	629.00
Intermodal-D	Empty	10000	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	382.88	434.00
Intermodal-D	Empty	10000	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	977.07	1428.00
Intermodal-D	Empty	10000	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	492.14	570.00
Intermodal-D	Empty	10000	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3874.84	4054.00
Intermodal-D	Empty	10000	Distributed (Head and Rear)	20	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5477.69	5492.00
Intermodal-D	Empty	10000	Distributed (Head and Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	3.00%	1029.74	1123.00
Intermodal-D	Empty	10000	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3536.44	4423.00
Intermodal-D	Empty	10000	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	2737.95	3089.00
Intermodal-D	Empty	10000	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1762.00	1897.00

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-D	Empty	10000	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3278.00	3959.00
Intermodal-D	Empty	10000	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2097.45	2345.00
Intermodal-D	Empty	10000	Distributed (Head and Rear)	53	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	4094.67	4236.00
Intermodal-D	Empty	10000	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6470.31	6737.00
Intermodal-D	Empty	10000	Distributed (Head and Rear)	60	0.50%	Incline	<0.1%	0.00	0.00	< 10%	0.00%	4936.50	5047.00
Intermodal-D	Empty	10000	Distributed (Head and Rear)	60	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7901.16	8593.00
Intermodal-D	Empty	10000	Distributed (Head and Rear)	60	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	6806.42	7340.00
Intermodal-D	Empty	10000	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	5671.22	5937.00
Intermodal-E	Empty	10000	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	605.01	643.00
Intermodal-E	Empty	10000	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	1.00%	387.43	432.00
Intermodal-E	Empty	10000	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1013.14	1606.00
Intermodal-E	Empty	10000	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	494.72	569.00
Intermodal-E	Empty	10000	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3979.30	4272.00
Intermodal-E	Empty	10000	Distributed (Head and Rear)	20	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5476.49	5492.00
Intermodal-E	Empty	10000	Distributed (Head and Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1051.48	1128.00
Intermodal-E	Empty	10000	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3610.17	3781.00
Intermodal-E	Empty	10000	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2584.61	2682.00
Intermodal-E	Empty	10000	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1767.50	1855.00
Intermodal-E	Empty	10000	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3366.41	3946.00
Intermodal-E	Empty	10000	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2113.10	2348.00
Intermodal-E	Empty	10000	Distributed (Head and Rear)	53	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	4146.03	4267.00
Intermodal-E	Empty	10000	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6560.02	6906.00
Intermodal-E	Empty	10000	Distributed (Head and Rear)	60	0.50%	Incline	<0.1%	0.00	0.00	< 10%	0.00%	4979.92	5123.00
Intermodal-E	Empty	10000	Distributed (Head and Rear)	60	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	8080.68	8589.00
Intermodal-E	Empty	10000	Distributed (Head and Rear)	60	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	6935.62	7427.00
Intermodal-E	Empty	10000	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	5743.85	6029.00
Intermodal-A	Loaded	10000	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	943.35	1332.00
Intermodal-A	Loaded	10000	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	23.00%	433.25	535.00

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-A	Loaded	10000	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1617.50	1734.00
Intermodal-A	Loaded	10000	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	9.00%	567.99	619.00
Intermodal-A	Loaded	10000	Distributed (Head and Rear)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	8064.92	8504.00
Intermodal-A	Loaded	10000	Distributed (Head and Rear)	20	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	22.00%	748.37	821.00
Intermodal-A	Loaded	10000	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	8821.32	9131.00
Intermodal-A	Loaded	10000	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6974.29	7285.00
Intermodal-A	Loaded	10000	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3626.18	3780.00
Intermodal-A	Loaded	10000	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	2.00%	2229.50	2463.00
Intermodal-A	Loaded	10000	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5395.13	5629.00
Intermodal-A	Loaded	10000	Distributed (Head and Rear)	30	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	1.00%	2526.68	2643.00
Intermodal-A	Loaded	10000	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2778.05	3048.00
Intermodal-A	Loaded	10000	Distributed (Head and Rear)	48	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	4549.15	4689.00
Intermodal-A	Loaded	10000	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	10259.23	10432.00
Intermodal-A	Loaded	10000	Distributed (Head and Rear)	60	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	15253.31	15708.00
Intermodal-A	Loaded	10000	Distributed (Head and Rear)	60	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	12088.49	12363.00
Intermodal-A	Loaded	10000	Distributed (Head and Rear)	60	0.00%	Flat	> 1.0%	302.00	302.00	> 25%, < 50%	1.00%	8187.04	8390.00
Intermodal-B	Loaded	10000	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	809.97	942.00
Intermodal-B	Loaded	10000	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	50.00%	346.40	408.00
Intermodal-B	Loaded	10000	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1190.76	1269.00
Intermodal-B	Loaded	10000	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	23.00%	480.56	575.00
Intermodal-B	Loaded	10000	Distributed (Head and Rear)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4069.98	4398.00
Intermodal-B	Loaded	10000	Distributed (Head and Rear)	20	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	21.00%	700.22	830.00
Intermodal-B	Loaded	10000	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5706.09	6052.00
Intermodal-B	Loaded	10000	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4703.72	4930.00
Intermodal-B	Loaded	10000	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	2979.19	3333.00
Intermodal-B	Loaded	10000	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1936.51	2069.00
Intermodal-B	Loaded	10000	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3983.89	4138.00
Intermodal-B	Loaded	10000	Distributed (Head and Rear)	30	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	2279.20	2419.00

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-B	Loaded	10000	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2348.73	2430.00
Intermodal-B	Loaded	10000	Distributed (Head and Rear)	48	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	4007.55	4130.00
Intermodal-B	Loaded	10000	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	8047.16	8433.00
Intermodal-B	Loaded	10000	Distributed (Head and Rear)	60	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	10442.78	10776.00
Intermodal-B	Loaded	10000	Distributed (Head and Rear)	60	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	8536.48	8745.00
Intermodal-B	Loaded	10000	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	6711.74	6926.00
Intermodal-C	Loaded	10000	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	3.00%	699.09	738.00
Intermodal-C	Loaded	10000	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	68.00%	351.89	434.00
Intermodal-C	Loaded	10000	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1228.16	1298.00
Intermodal-C	Loaded	10000	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	22.00%	499.12	699.00
Intermodal-C	Loaded	10000	Distributed (Head and Rear)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4441.87	4819.00
Intermodal-C	Loaded	10000	Distributed (Head and Rear)	20	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	35.00%	692.22	749.00
Intermodal-C	Loaded	10000	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5934.05	6188.00
Intermodal-C	Loaded	10000	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4849.44	5060.00
Intermodal-C	Loaded	10000	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	2981.42	3074.00
Intermodal-C	Loaded	10000	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1976.02	2042.00
Intermodal-C	Loaded	10000	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4068.67	4198.00
Intermodal-C	Loaded	10000	Distributed (Head and Rear)	30	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	10.00%	2250.24	2419.00
Intermodal-C	Loaded	10000	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2379.47	2469.00
Intermodal-C	Loaded	10000	Distributed (Head and Rear)	48	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	4047.64	4135.00
Intermodal-C	Loaded	10000	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	8188.94	8609.00
Intermodal-C	Loaded	10000	Distributed (Head and Rear)	60	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	10739.89	11100.00
Intermodal-C	Loaded	10000	Distributed (Head and Rear)	60	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	8772.73	8959.00
Intermodal-C	Loaded	10000	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	6843.37	7012.00
Intermodal-D	Loaded	10000	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	790.65	947.00
Intermodal-D	Loaded	10000	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	54.00%	347.31	441.00
Intermodal-D	Loaded	10000	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1252.20	1326.00
Intermodal-D	Loaded	10000	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	35.00%	496.77	705.00

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-D	Loaded	10000	Distributed (Head and Rear)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4269.77	4604.00
Intermodal-D	Loaded	10000	Distributed (Head and Rear)	20	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	30.00%	700.77	827.00
Intermodal-D	Loaded	10000	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6018.10	6434.00
Intermodal-D	Loaded	10000	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4914.13	5146.00
Intermodal-D	Loaded	10000	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	3028.22	3398.00
Intermodal-D	Loaded	10000	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1979.83	2075.00
Intermodal-D	Loaded	10000	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4140.51	4357.00
Intermodal-D	Loaded	10000	Distributed (Head and Rear)	30	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	2319.93	2464.00
Intermodal-D	Loaded	10000	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2390.54	2481.00
Intermodal-D	Loaded	10000	Distributed (Head and Rear)	48	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	4081.80	4200.00
Intermodal-D	Loaded	10000	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	8282.88	8690.00
Intermodal-D	Loaded	10000	Distributed (Head and Rear)	60	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	10958.05	11394.00
Intermodal-D	Loaded	10000	Distributed (Head and Rear)	60	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	8899.03	9267.00
Intermodal-D	Loaded	10000	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	6923.20	7094.00
Intermodal-E	Loaded	10000	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	1.00%	703.00	739.00
Intermodal-E	Loaded	10000	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	58.00%	351.73	422.00
Intermodal-E	Loaded	10000	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1230.50	1318.00
Intermodal-E	Loaded	10000	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	13.00%	491.46	565.00
Intermodal-E	Loaded	10000	Distributed (Head and Rear)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4396.10	4695.00
Intermodal-E	Loaded	10000	Distributed (Head and Rear)	20	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	24.00%	689.58	778.00
Intermodal-E	Loaded	10000	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6012.36	6364.00
Intermodal-E	Loaded	10000	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4883.83	5157.00
Intermodal-E	Loaded	10000	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	3033.70	3428.00
Intermodal-E	Loaded	10000	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1973.78	2040.00
Intermodal-E	Loaded	10000	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4098.42	4272.00
Intermodal-E	Loaded	10000	Distributed (Head and Rear)	30	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	2338.54	2427.00
Intermodal-E	Loaded	10000	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2382.46	2551.00
Intermodal-E	Loaded	10000	Distributed (Head and Rear)	48	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	4073.89	4194.00

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-E	Loaded	10000	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	8220.09	8521.00
Intermodal-E	Loaded	10000	Distributed (Head and Rear)	60	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	10886.60	11216.00
Intermodal-E	Loaded	10000	Distributed (Head and Rear)	60	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	8827.67	9021.00
Intermodal-E	Loaded	10000	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	6872.94	7008.00
Intermodal-A	Empty	10000	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	901.94	1019.00
Intermodal-A	Empty	10000	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	25.00%	345.99	423.00
Intermodal-A	Empty	10000	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	782.17	1142.00
Intermodal-A	Empty	10000	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	486.90	584.00
Intermodal-A	Empty	10000	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3204.59	3457.00
Intermodal-A	Empty	10000	Distributed (Head, Mid, Rear)	20	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5433.40	5491.00
Intermodal-A	Empty	10000	Distributed (Head, Mid, Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	1.00%	1043.93	1131.00
Intermodal-A	Empty	10000	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2913.65	3138.00
Intermodal-A	Empty	10000	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2307.44	2767.00
Intermodal-A	Empty	10000	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	2.00%	1577.22	1749.00
Intermodal-A	Empty	10000	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	2778.52	3248.00
Intermodal-A	Empty	10000	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	1.00%	1849.73	2257.00
Intermodal-A	Empty	10000	Distributed (Head, Mid, Rear)	53	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	1.00%	3808.90	3941.00
Intermodal-A	Empty	10000	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	< 10%	2.00%	5815.11	6110.00
Intermodal-A	Empty	10000	Distributed (Head, Mid, Rear)	60	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	4499.01	4691.00

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-A	Empty	10000	Distributed (Head, Mid, Rear)	60	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7047.79	7305.00
Intermodal-A	Empty	10000	Distributed (Head, Mid, Rear)	60	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	5932.23	6178.00
Intermodal-A	Empty	10000	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	1.00%	5037.63	5303.00
Intermodal-B	Empty	10000	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	574.82	643.00
Intermodal-B	Empty	10000	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	15.00%	356.05	406.00
Intermodal-B	Empty	10000	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	777.38	847.00
Intermodal-B	Empty	10000	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	476.21	613.00
Intermodal-B	Empty	10000	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3219.85	3423.00
Intermodal-B	Empty	10000	Distributed (Head, Mid, Rear)	20	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5432.45	5491.00
Intermodal-B	Empty	10000	Distributed (Head, Mid, Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1044.93	1132.00
Intermodal-B	Empty	10000	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2935.95	3094.00
Intermodal-B	Empty	10000	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2355.30	2764.00
Intermodal-B	Empty	10000	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	1.00%	1580.84	1805.00
Intermodal-B	Empty	10000	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	2768.30	2921.00
Intermodal-B	Empty	10000	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	1.00%	1825.10	1973.00
Intermodal-B	Empty	10000	Distributed (Head, Mid, Rear)	53	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	1.00%	3789.86	3941.00
Intermodal-B	Empty	10000	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	< 10%	4.00%	5800.65	6286.00
Intermodal-B	Empty	10000	Distributed (Head, Mid, Rear)	60	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	4498.75	4681.00

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-B	Empty	10000	Distributed (Head, Mid, Rear)	60	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7074.52	7296.00
Intermodal-B	Empty	10000	Distributed (Head, Mid, Rear)	60	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	5953.55	6197.00
Intermodal-B	Empty	10000	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	1.00%	5057.31	5310.00
Intermodal-C	Empty	10000	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	578.69	622.00
Intermodal-C	Empty	10000	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	7.00%	367.28	410.00
Intermodal-C	Empty	10000	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	815.41	897.00
Intermodal-C	Empty	10000	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	480.59	552.00
Intermodal-C	Empty	10000	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3384.66	3670.00
Intermodal-C	Empty	10000	Distributed (Head, Mid, Rear)	20	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5476.14	5493.00
Intermodal-C	Empty	10000	Distributed (Head, Mid, Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	1.00%	1044.70	1132.00
Intermodal-C	Empty	10000	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3061.00	3228.00
Intermodal-C	Empty	10000	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2402.21	2645.00
Intermodal-C	Empty	10000	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	1.00%	1633.15	1800.00
Intermodal-C	Empty	10000	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	2885.35	3022.00
Intermodal-C	Empty	10000	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	1893.57	2257.00
Intermodal-C	Empty	10000	Distributed (Head, Mid, Rear)	53	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	1.00%	3860.70	4016.00
Intermodal-C	Empty	10000	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	5991.90	6458.00
Intermodal-C	Empty	10000	Distributed (Head, Mid, Rear)	60	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	4631.51	4766.00

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-C	Empty	10000	Distributed (Head, Mid, Rear)	60	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7390.14	7638.00
Intermodal-C	Empty	10000	Distributed (Head, Mid, Rear)	60	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	6234.90	6462.00
Intermodal-C	Empty	10000	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	5181.21	5397.00
Intermodal-D	Empty	10000	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	571.91	631.00
Intermodal-D	Empty	10000	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	17.00%	354.83	408.00
Intermodal-D	Empty	10000	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	767.27	1302.00
Intermodal-D	Empty	10000	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	483.30	610.00
Intermodal-D	Empty	10000	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3128.84	3392.00
Intermodal-D	Empty	10000	Distributed (Head, Mid, Rear)	20	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5410.82	5487.00
Intermodal-D	Empty	10000	Distributed (Head, Mid, Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1032.38	1130.00
Intermodal-D	Empty	10000	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2860.78	3037.00
Intermodal-D	Empty	10000	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2296.84	2559.00
Intermodal-D	Empty	10000	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1577.95	1753.00
Intermodal-D	Empty	10000	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	2710.65	2865.00
Intermodal-D	Empty	10000	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	1797.92	1965.00
Intermodal-D	Empty	10000	Distributed (Head, Mid, Rear)	53	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	3748.33	3883.00
Intermodal-D	Empty	10000	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	< 10%	3.00%	5750.70	6111.00
Intermodal-D	Empty	10000	Distributed (Head, Mid, Rear)	60	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	4437.63	4605.00

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-D	Empty	10000	Distributed (Head, Mid, Rear)	60	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6889.57	7194.00
Intermodal-D	Empty	10000	Distributed (Head, Mid, Rear)	60	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	5833.69	6375.00
Intermodal-D	Empty	10000	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	1.00%	4991.94	5307.00
Intermodal-E	Empty	10000	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	574.65	617.00
Intermodal-E	Empty	10000	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	8.00%	365.28	410.00
Intermodal-E	Empty	10000	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	787.79	849.00
Intermodal-E	Empty	10000	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	477.01	611.00
Intermodal-E	Empty	10000	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3233.16	3422.00
Intermodal-E	Empty	10000	Distributed (Head, Mid, Rear)	20	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5449.52	5491.00
Intermodal-E	Empty	10000	Distributed (Head, Mid, Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1037.16	1130.00
Intermodal-E	Empty	10000	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2944.15	3163.00
Intermodal-E	Empty	10000	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2331.47	2640.00
Intermodal-E	Empty	10000	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1587.90	1755.00
Intermodal-E	Empty	10000	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	2789.57	2938.00
Intermodal-E	Empty	10000	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	1.00%	1842.69	2090.00
Intermodal-E	Empty	10000	Distributed (Head, Mid, Rear)	53	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	3792.73	3940.00
Intermodal-E	Empty	10000	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	< 10%	2.00%	5805.10	6029.00
Intermodal-E	Empty	10000	Distributed (Head, Mid, Rear)	60	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	1.00%	4508.92	4686.00

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-E	Empty	10000	Distributed (Head, Mid, Rear)	60	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7089.37	7301.00
Intermodal-E	Empty	10000	Distributed (Head, Mid, Rear)	60	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	5986.51	6193.00
Intermodal-E	Empty	10000	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	2.00%	5070.52	5322.00
Intermodal-A	Loaded	10000	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	769.74	1097.00
Intermodal-A	Loaded	10000	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	64.00%	368.66	427.00
Intermodal-A	Loaded	10000	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1249.80	1336.00
Intermodal-A	Loaded	10000	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	20.00%	509.56	704.00
Intermodal-A	Loaded	10000	Distributed (Head, Mid, Rear)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7808.24	8112.00
Intermodal-A	Loaded	10000	Distributed (Head, Mid, Rear)	20	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	39.00%	661.09	744.00
Intermodal-A	Loaded	10000	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7869.29	8269.00
Intermodal-A	Loaded	10000	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6025.60	6418.00
Intermodal-A	Loaded	10000	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	3130.46	3405.00
Intermodal-A	Loaded	10000	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1965.41	2038.00
Intermodal-A	Loaded	10000	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4613.16	4903.00
Intermodal-A	Loaded	10000	Distributed (Head, Mid, Rear)	30	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	1.00%	2173.08	2266.00
Intermodal-A	Loaded	10000	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2407.90	2485.00
Intermodal-A	Loaded	10000	Distributed (Head, Mid, Rear)	48	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	1.00%	4158.83	4273.00
Intermodal-A	Loaded	10000	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	9244.77	10059.00

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-A	Loaded	10000	Distributed (Head, Mid, Rear)	60	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	13877.34	14365.00
Intermodal-A	Loaded	10000	Distributed (Head, Mid, Rear)	60	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	10672.01	11027.00
Intermodal-A	Loaded	10000	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 10%, < 25%	1.00%	7508.77	7767.00
Intermodal-B	Loaded	10000	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	681.33	745.00
Intermodal-B	Loaded	10000	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	44.00%	334.73	409.00
Intermodal-B	Loaded	10000	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	938.02	1004.00
Intermodal-B	Loaded	10000	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	28.00%	429.61	526.00
Intermodal-B	Loaded	10000	Distributed (Head, Mid, Rear)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3864.53	4200.00
Intermodal-B	Loaded	10000	Distributed (Head, Mid, Rear)	20	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	11.00%	632.37	691.00
Intermodal-B	Loaded	10000	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4710.46	5014.00
Intermodal-B	Loaded	10000	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3854.38	4140.00
Intermodal-B	Loaded	10000	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2645.83	2806.00
Intermodal-B	Loaded	10000	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1675.64	1806.00
Intermodal-B	Loaded	10000	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3346.54	3502.00
Intermodal-B	Loaded	10000	Distributed (Head, Mid, Rear)	30	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	1.00%	1946.05	2052.00
Intermodal-B	Loaded	10000	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2043.82	2242.00
Intermodal-B	Loaded	10000	Distributed (Head, Mid, Rear)	48	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	3632.95	3708.00
Intermodal-B	Loaded	10000	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7116.47	7636.00

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-B	Loaded	10000	Distributed (Head, Mid, Rear)	60	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	9162.52	9465.00
Intermodal-B	Loaded	10000	Distributed (Head, Mid, Rear)	60	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	7402.75	7604.00
Intermodal-B	Loaded	10000	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 10%	0.00%	5927.74	6225.00
Intermodal-C	Loaded	10000	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	680.79	737.00
Intermodal-C	Loaded	10000	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	88.00%	296.41	408.00
Intermodal-C	Loaded	10000	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	948.00	1019.00
Intermodal-C	Loaded	10000	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	18.00%	439.45	553.00
Intermodal-C	Loaded	10000	Distributed (Head, Mid, Rear)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4160.45	4398.00
Intermodal-C	Loaded	10000	Distributed (Head, Mid, Rear)	20	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	17.00%	625.94	678.00
Intermodal-C	Loaded	10000	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4918.89	5115.00
Intermodal-C	Loaded	10000	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3973.20	4177.00
Intermodal-C	Loaded	10000	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2677.82	2850.00
Intermodal-C	Loaded	10000	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	2.00%	1713.74	1860.00
Intermodal-C	Loaded	10000	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3411.68	3560.00
Intermodal-C	Loaded	10000	Distributed (Head, Mid, Rear)	30	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	10.00%	1938.16	2018.00
Intermodal-C	Loaded	10000	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2075.55	2234.00
Intermodal-C	Loaded	10000	Distributed (Head, Mid, Rear)	48	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	3630.93	3724.00
Intermodal-C	Loaded	10000	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7212.20	7721.00

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-C	Loaded	10000	Distributed (Head, Mid, Rear)	60	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	9457.37	9808.00
Intermodal-C	Loaded	10000	Distributed (Head, Mid, Rear)	60	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	7608.80	7888.00
Intermodal-C	Loaded	10000	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 10%	0.00%	6043.76	6308.00
Intermodal-D	Loaded	10000	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	678.31	741.00
Intermodal-D	Loaded	10000	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	57.00%	323.62	389.00
Intermodal-D	Loaded	10000	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	977.67	1035.00
Intermodal-D	Loaded	10000	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	22.00%	429.77	527.00
Intermodal-D	Loaded	10000	Distributed (Head, Mid, Rear)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4013.18	4402.00
Intermodal-D	Loaded	10000	Distributed (Head, Mid, Rear)	20	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	9.00%	634.21	690.00
Intermodal-D	Loaded	10000	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3781.65	3794.00
Intermodal-D	Loaded	10000	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4062.18	4257.00
Intermodal-D	Loaded	10000	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2693.11	2854.00
Intermodal-D	Loaded	10000	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1717.05	1850.00
Intermodal-D	Loaded	10000	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3462.65	3606.00
Intermodal-D	Loaded	10000	Distributed (Head, Mid, Rear)	30	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	1975.10	2057.00
Intermodal-D	Loaded	10000	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2084.14	2244.00
Intermodal-D	Loaded	10000	Distributed (Head, Mid, Rear)	48	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	3700.63	3788.00
Intermodal-D	Loaded	10000	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7476.43	7820.00

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-D	Loaded	10000	Distributed (Head, Mid, Rear)	60	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	9586.67	10063.00
Intermodal-D	Loaded	10000	Distributed (Head, Mid, Rear)	60	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	7728.67	8058.00
Intermodal-D	Loaded	10000	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 10%	0.00%	6094.77	6305.00
Intermodal-E	Loaded	10000	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	675.42	748.00
Intermodal-E	Loaded	10000	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	56.00%	324.42	402.00
Intermodal-E	Loaded	10000	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	960.22	1020.00
Intermodal-E	Loaded	10000	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	15.00%	428.26	537.00
Intermodal-E	Loaded	10000	Distributed (Head, Mid, Rear)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4139.61	4495.00
Intermodal-E	Loaded	10000	Distributed (Head, Mid, Rear)	20	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	12.00%	635.03	682.00
Intermodal-E	Loaded	10000	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3777.36	3793.00
Intermodal-E	Loaded	10000	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4020.86	4188.00
Intermodal-E	Loaded	10000	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2690.63	2857.00
Intermodal-E	Loaded	10000	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	1.00%	1717.49	1851.00
Intermodal-E	Loaded	10000	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3451.00	3598.00
Intermodal-E	Loaded	10000	Distributed (Head, Mid, Rear)	30	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	1939.16	2043.00
Intermodal-E	Loaded	10000	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	1.00%	2072.57	2131.00
Intermodal-E	Loaded	10000	Distributed (Head, Mid, Rear)	48	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	3658.61	3778.00
Intermodal-E	Loaded	10000	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7364.11	7726.00

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-E	Loaded	10000	Distributed (Head, Mid, Rear)	60	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	9526.29	9892.00
Intermodal-E	Loaded	10000	Distributed (Head, Mid, Rear)	60	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	7678.72	7890.00
Intermodal-E	Loaded	10000	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	6050.43	6307.00
Intermodal-A	Empty	15000	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	926.64	1024.00
Intermodal-A	Empty	15000	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	391.46	427.00
Intermodal-A	Empty	15000	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1138.71	1817.00
Intermodal-A	Empty	15000	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	588.67	659.00
Intermodal-A	Empty	15000	Distributed (Head, Mid, Rear)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5901.60	6185.00
Intermodal-A	Empty	15000	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4581.57	4800.00
Intermodal-A	Empty	15000	Distributed (Head, Mid, Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1170.49	1238.00
Intermodal-A	Empty	15000	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4006.60	4218.00
Intermodal-A	Empty	15000	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3092.54	3531.00
Intermodal-A	Empty	15000	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1868.79	2102.00
Intermodal-A	Empty	15000	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3640.95	3747.00
Intermodal-A	Empty	15000	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2257.37	2773.00
Intermodal-A	Empty	15000	Distributed (Head, Mid, Rear)	52	1.00%	Crest	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	4559.69	4767.00
Intermodal-A	Empty	15000	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6993.00	7303.00
Intermodal-A	Empty	15000	Distributed (Head, Mid, Rear)	60	0.50%	Incline	<0.1%	0.00	0.00	> 50%	0.00%	5209.99	5366.00

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-A	Empty	15000	Distributed (Head, Mid, Rear)	60	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	8598.15	8892.00
Intermodal-A	Empty	15000	Distributed (Head, Mid, Rear)	60	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	6873.58	7163.00
Intermodal-A	Empty	15000	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	6067.34	6331.00
Intermodal-B	Empty	15000	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	935.58	1042.00
Intermodal-B	Empty	15000	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	393.76	423.00
Intermodal-B	Empty	15000	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1127.82	1438.00
Intermodal-B	Empty	15000	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	571.92	679.00
Intermodal-B	Empty	15000	Distributed (Head, Mid, Rear)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5960.75	6241.00
Intermodal-B	Empty	15000	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4627.45	4955.00
Intermodal-B	Empty	15000	Distributed (Head, Mid, Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1153.18	1212.00
Intermodal-B	Empty	15000	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4053.16	4233.00
Intermodal-B	Empty	15000	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	3009.33	3445.00
Intermodal-B	Empty	15000	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1849.82	1937.00
Intermodal-B	Empty	15000	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3649.88	3796.00
Intermodal-B	Empty	15000	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2263.62	2433.00
Intermodal-B	Empty	15000	Distributed (Head, Mid, Rear)	52	1.00%	Crest	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	4513.67	4651.00
Intermodal-B	Empty	15000	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6989.86	7156.00
Intermodal-B	Empty	15000	Distributed (Head, Mid, Rear)	60	0.50%	Incline	<0.1%	0.00	0.00	> 50%	0.00%	5206.39	5361.00

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-B	Empty	15000	Distributed (Head, Mid, Rear)	60	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	8613.87	8751.00
Intermodal-B	Empty	15000	Distributed (Head, Mid, Rear)	60	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	6897.42	7082.00
Intermodal-B	Empty	15000	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	6111.15	6323.00
Intermodal-C	Empty	15000	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	926.71	1045.00
Intermodal-C	Empty	15000	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	394.77	424.00
Intermodal-C	Empty	15000	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1140.31	1204.00
Intermodal-C	Empty	15000	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	580.74	651.00
Intermodal-C	Empty	15000	Distributed (Head, Mid, Rear)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6097.19	6463.00
Intermodal-C	Empty	15000	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4731.67	4975.00
Intermodal-C	Empty	15000	Distributed (Head, Mid, Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1157.60	1215.00
Intermodal-C	Empty	15000	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4102.15	4287.00
Intermodal-C	Empty	15000	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2796.45	2923.00
Intermodal-C	Empty	15000	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1856.56	1906.00
Intermodal-C	Empty	15000	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3720.45	4498.00
Intermodal-C	Empty	15000	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 10%	0.00%	2294.45	2804.00
Intermodal-C	Empty	15000	Distributed (Head, Mid, Rear)	52	1.00%	Crest	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	4535.27	4651.00
Intermodal-C	Empty	15000	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7081.85	7387.00
Intermodal-C	Empty	15000	Distributed (Head, Mid, Rear)	60	0.50%	Incline	<0.1%	0.00	0.00	> 50%	0.00%	5244.85	5366.00

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-C	Empty	15000	Distributed (Head, Mid, Rear)	60	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	8766.70	9092.00
Intermodal-C	Empty	15000	Distributed (Head, Mid, Rear)	60	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	7004.64	7316.00
Intermodal-C	Empty	15000	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	6187.56	6400.00
Intermodal-D	Empty	15000	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	944.28	1028.00
Intermodal-D	Empty	15000	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	391.18	427.00
Intermodal-D	Empty	15000	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1132.95	1221.00
Intermodal-D	Empty	15000	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	571.97	696.00
Intermodal-D	Empty	15000	Distributed (Head, Mid, Rear)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6015.09	6443.00
Intermodal-D	Empty	15000	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4658.14	4872.00
Intermodal-D	Empty	15000	Distributed (Head, Mid, Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1143.28	1212.00
Intermodal-D	Empty	15000	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4077.17	4283.00
Intermodal-D	Empty	15000	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3075.03	3446.00
Intermodal-D	Empty	15000	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1852.90	1981.00
Intermodal-D	Empty	15000	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3675.86	3816.00
Intermodal-D	Empty	15000	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 10%	0.00%	2274.64	2806.00
Intermodal-D	Empty	15000	Distributed (Head, Mid, Rear)	52	1.00%	Crest	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	4518.69	4650.00
Intermodal-D	Empty	15000	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7116.34	7730.00
Intermodal-D	Empty	15000	Distributed (Head, Mid, Rear)	60	0.50%	Incline	<0.1%	0.00	0.00	> 50%	0.00%	5212.41	5365.00

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-D	Empty	15000	Distributed (Head, Mid, Rear)	60	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	8670.28	8994.00
Intermodal-D	Empty	15000	Distributed (Head, Mid, Rear)	60	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	6956.88	7315.00
Intermodal-D	Empty	15000	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	6151.07	6317.00
Intermodal-E	Empty	15000	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	943.88	1051.00
Intermodal-E	Empty	15000	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	390.24	424.00
Intermodal-E	Empty	15000	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1134.87	1437.00
Intermodal-E	Empty	15000	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	587.47	678.00
Intermodal-E	Empty	15000	Distributed (Head, Mid, Rear)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6026.85	6319.00
Intermodal-E	Empty	15000	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4679.55	4972.00
Intermodal-E	Empty	15000	Distributed (Head, Mid, Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1154.02	1229.00
Intermodal-E	Empty	15000	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4084.83	4306.00
Intermodal-E	Empty	15000	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3131.81	3454.00
Intermodal-E	Empty	15000	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1853.10	1934.00
Intermodal-E	Empty	15000	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3681.35	3828.00
Intermodal-E	Empty	15000	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 10%	0.00%	2287.85	2806.00
Intermodal-E	Empty	15000	Distributed (Head, Mid, Rear)	52	1.00%	Crest	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	4541.12	4648.00
Intermodal-E	Empty	15000	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7041.27	7392.00
Intermodal-E	Empty	15000	Distributed (Head, Mid, Rear)	60	0.50%	Incline	<0.1%	0.00	0.00	> 50%	0.00%	5248.44	5366.00

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-E	Empty	15000	Distributed (Head, Mid, Rear)	60	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	8703.55	8917.00
Intermodal-E	Empty	15000	Distributed (Head, Mid, Rear)	60	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	6952.23	7334.00
Intermodal-E	Empty	15000	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	6136.97	6332.00
Intermodal-A	Loaded	15000	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	1082.81	1138.00
Intermodal-A	Loaded	15000	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	40.00%	398.49	442.00
Intermodal-A	Loaded	15000	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1984.98	2062.00
Intermodal-A	Loaded	15000	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	634.23	883.00
Intermodal-A	Loaded	15000	Distributed (Head, Mid, Rear)	15	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	9505.03	9758.00
Intermodal-A	Loaded	15000	Distributed (Head, Mid, Rear)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	16831.93	17639.00
Intermodal-A	Loaded	15000	Distributed (Head, Mid, Rear)	21	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	2.00%	794.40	875.00
Intermodal-A	Loaded	15000	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	8692.05	9068.00
Intermodal-A	Loaded	15000	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	3999.23	4126.00
Intermodal-A	Loaded	15000	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	2422.15	2506.00
Intermodal-A	Loaded	15000	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6381.76	6595.00
Intermodal-A	Loaded	15000	Distributed (Head, Mid, Rear)	30	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	2940.64	3060.00
Intermodal-A	Loaded	15000	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2992.66	3092.00
Intermodal-A	Loaded	15000	Distributed (Head, Mid, Rear)	50	0.50%	Incline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	5348.54	5496.00
Intermodal-A	Loaded	15000	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	11762.12	12166.00

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-A	Loaded	15000	Distributed (Head, Mid, Rear)	60	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	17540.94	18234.00
Intermodal-A	Loaded	15000	Distributed (Head, Mid, Rear)	60	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	10687.58	10758.00
Intermodal-A	Loaded	15000	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	8808.06	9021.00
Intermodal-B	Loaded	15000	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1002.65	1066.00
Intermodal-B	Loaded	15000	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	28.00%	366.64	480.00
Intermodal-B	Loaded	15000	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1383.64	1455.00
Intermodal-B	Loaded	15000	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	525.00	572.00
Intermodal-B	Loaded	15000	Distributed (Head, Mid, Rear)	15	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5526.31	5816.00
Intermodal-B	Loaded	15000	Distributed (Head, Mid, Rear)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5475.60	5865.00
Intermodal-B	Loaded	15000	Distributed (Head, Mid, Rear)	21	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	2.00%	765.96	818.00
Intermodal-B	Loaded	15000	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5447.03	5754.00
Intermodal-B	Loaded	15000	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3528.56	3727.00
Intermodal-B	Loaded	15000	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	2034.22	2179.00
Intermodal-B	Loaded	15000	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4451.13	4588.00
Intermodal-B	Loaded	15000	Distributed (Head, Mid, Rear)	30	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	2432.86	2512.00
Intermodal-B	Loaded	15000	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2519.36	2632.00
Intermodal-B	Loaded	15000	Distributed (Head, Mid, Rear)	50	0.50%	Incline	<0.1%	0.00	0.00	< 10%	0.00%	4539.42	4692.00
Intermodal-B	Loaded	15000	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	8434.01	8576.00

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-B	Loaded	15000	Distributed (Head, Mid, Rear)	60	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	11238.41	11488.00
Intermodal-B	Loaded	15000	Distributed (Head, Mid, Rear)	60	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	8621.65	8819.00
Intermodal-B	Loaded	15000	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	7094.46	7269.00
Intermodal-C	Loaded	15000	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1001.99	1081.00
Intermodal-C	Loaded	15000	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	24.00%	370.74	422.00
Intermodal-C	Loaded	15000	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1394.11	1484.00
Intermodal-C	Loaded	15000	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	524.93	672.00
Intermodal-C	Loaded	15000	Distributed (Head, Mid, Rear)	15	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5727.90	5927.00
Intermodal-C	Loaded	15000	Distributed (Head, Mid, Rear)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6066.47	6447.00
Intermodal-C	Loaded	15000	Distributed (Head, Mid, Rear)	21	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	2.00%	762.71	849.00
Intermodal-C	Loaded	15000	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5560.20	5765.00
Intermodal-C	Loaded	15000	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3573.31	3721.00
Intermodal-C	Loaded	15000	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	2065.83	2182.00
Intermodal-C	Loaded	15000	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4501.87	4656.00
Intermodal-C	Loaded	15000	Distributed (Head, Mid, Rear)	30	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	2428.27	2511.00
Intermodal-C	Loaded	15000	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2543.17	2624.00
Intermodal-C	Loaded	15000	Distributed (Head, Mid, Rear)	50	0.50%	Incline	<0.1%	0.00	0.00	< 10%	0.00%	4545.77	4629.00
Intermodal-C	Loaded	15000	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	8540.82	8752.00

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-C	Loaded	15000	Distributed (Head, Mid, Rear)	60	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	11469.74	11667.00
Intermodal-C	Loaded	15000	Distributed (Head, Mid, Rear)	60	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	8764.62	8990.00
Intermodal-C	Loaded	15000	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	7182.42	7413.00
Intermodal-D	Loaded	15000	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	991.29	1083.00
Intermodal-D	Loaded	15000	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	4.00%	394.16	436.00
Intermodal-D	Loaded	15000	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1418.10	1513.00
Intermodal-D	Loaded	15000	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	528.71	602.00
Intermodal-D	Loaded	15000	Distributed (Head, Mid, Rear)	15	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5859.70	6155.00
Intermodal-D	Loaded	15000	Distributed (Head, Mid, Rear)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6272.24	6481.00
Intermodal-D	Loaded	15000	Distributed (Head, Mid, Rear)	21	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	2.00%	759.93	826.00
Intermodal-D	Loaded	15000	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5686.95	5986.00
Intermodal-D	Loaded	15000	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3523.08	3773.00
Intermodal-D	Loaded	15000	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	2077.03	2182.00
Intermodal-D	Loaded	15000	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4590.36	4746.00
Intermodal-D	Loaded	15000	Distributed (Head, Mid, Rear)	30	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	2440.95	2544.00
Intermodal-D	Loaded	15000	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2557.59	2727.00
Intermodal-D	Loaded	15000	Distributed (Head, Mid, Rear)	50	0.50%	Incline	<0.1%	0.00	0.00	< 10%	0.00%	4558.04	4688.00
Intermodal-D	Loaded	15000	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	8661.34	8839.00

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-D	Loaded	15000	Distributed (Head, Mid, Rear)	60	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	11772.12	12148.00
Intermodal-D	Loaded	15000	Distributed (Head, Mid, Rear)	60	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	8894.18	9091.00
Intermodal-D	Loaded	15000	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	7284.03	7503.00
Intermodal-E	Loaded	15000	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	988.24	1069.00
Intermodal-E	Loaded	15000	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	12.00%	370.16	597.00
Intermodal-E	Loaded	15000	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1371.47	1452.00
Intermodal-E	Loaded	15000	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	524.63	588.00
Intermodal-E	Loaded	15000	Distributed (Head, Mid, Rear)	15	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5480.67	5739.00
Intermodal-E	Loaded	15000	Distributed (Head, Mid, Rear)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5423.13	5993.00
Intermodal-E	Loaded	15000	Distributed (Head, Mid, Rear)	21	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	1.00%	757.73	820.00
Intermodal-E	Loaded	15000	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5401.29	5602.00
Intermodal-E	Loaded	15000	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3505.68	3762.00
Intermodal-E	Loaded	15000	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	2021.15	2177.00
Intermodal-E	Loaded	15000	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4431.15	4580.00
Intermodal-E	Loaded	15000	Distributed (Head, Mid, Rear)	30	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	2421.04	2513.00
Intermodal-E	Loaded	15000	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2519.46	2607.00
Intermodal-E	Loaded	15000	Distributed (Head, Mid, Rear)	50	0.50%	Incline	<0.1%	0.00	0.00	< 10%	0.00%	4517.92	4626.00
Intermodal-E	Loaded	15000	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	8404.25	8576.00

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-E	Loaded	15000	Distributed (Head, Mid, Rear)	60	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	11155.08	11401.00
Intermodal-E	Loaded	15000	Distributed (Head, Mid, Rear)	60	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	8598.76	8816.00
Intermodal-E	Loaded	15000	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	7061.21	7248.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-A	0	Head end only (SD70s)	10	0.50%	Decline	< 0.5%	7.00	7.00	< 0.1%	0.00%	227.50	325.00
Manifest-A	0	Head end only (SD70s)	10	0.50%	Incline	> 1.0%	14.00	14.00	< 0.1%	0.00%	143.47	183.00
Manifest-A	0	Head end only (SD70s)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	328.09	393.00
Manifest-A	0	Head end only (SD70s)	10	0.00%	Flat	> 1.0%	4.00	4.00	< 0.1%	2.00%	141.33	287.00
Manifest-A	0	Head end only (SD70s)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1026.18	1540.00
Manifest-A	0	Head end only (SD70s)	20	2.80%	Decline	<0.1%	0.00	0.00	> 50%	2.00%	740.36	958.00
Manifest-A	0	Head end only (SD70s)	25	1.50%	Incline	> 1.0%	71.20	127.00	< 0.1%	24.00%	405.50	620.00
Manifest-A	0	Head end only (SD70s)	25	1.70%	Decline	<0.1%	0.00	0.00	< 10%	11.00%	768.90	853.00
Manifest-A	0	Head end only (SD70s)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	1057.89	1428.00
Manifest-A	0	Head end only (SD70s)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	7.00%	774.56	890.00
Manifest-A	0	Head end only (SD70s)	30	1.10%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	1433.99	2024.00
Manifest-A	0	Head end only (SD70s)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	4.00%	879.89	1310.00
Manifest-A	0	Head end only (SD70s)	55	1.10%	Decline	<0.1%	0.00	0.00	> 50%	2.00%	3584.02	4838.00
Manifest-A	0	Head end only (SD70s)	55	1.00%	Crest	<0.1%	0.00	0.00	< 10%	3.00%	2106.29	2466.00
Manifest-A	0	Head end only (SD70s)	55	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	4288.67	4994.00
Manifest-A	0	Head end only (SD70s)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	10.00%	4608.44	5418.00
Manifest-A	0	Head end only (SD70s)	60	0.50%	Incline	<0.1%	0.00	0.00	< 10%	2.00%	2520.22	2697.00
Manifest-A	0	Head end only (SD70s)	60	0.00%	Flat	<0.1%	0.00	0.00	> 25%, < 50%	1.00%	2966.10	4818.00
Manifest-A	0	Head end only (GP40s)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	312.36	427.00
Manifest-A	0	Head end only (GP40s)	10	0.50%	Incline	> 1.0%	36.00	50.00	< 0.1%	0.00%	113.35	213.00
Manifest-A	0	Head end only (GP40s)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	640.19	938.00
Manifest-A	0	Head end only (GP40s)	10	0.00%	Flat	> 1.0%	29.86	47.00	< 0.1%	0.00%	125.81	263.00
Manifest-A	0	Head end only (GP40s)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1193.79	1683.00
Manifest-A	0	Head end only (GP40s)	20	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1620.61	2096.00
Manifest-A	0	Head end only (GP40s)	25	1.50%	Incline	> 1.0%	46.33	90.00	< 0.1%	2.00%	402.40	569.00
Manifest-A	0	Head end only (GP40s)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1366.28	1929.00
Manifest-A	0	Head end only (GP40s)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	1119.99	1428.00
Manifest-A	0	Head end only (GP40s)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	2.00%	672.73	835.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-A	0	Head end only (GP40s)	30	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	1268.45	1926.00
Manifest-A	0	Head end only (GP40s)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	2.00%	790.00	1315.00
Manifest-A	0	Head end only (GP40s)	55	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3344.34	4439.00
Manifest-A	0	Head end only (GP40s)	55	1.00%	Crest	<0.1%	0.00	0.00	> 50%	0.00%	2214.89	2570.00
Manifest-A	0	Head end only (GP40s)	55	1.00%	Trough	<0.1%	0.00	0.00	> 50%	85.00%	2927.67	3124.00
Manifest-A	0	Head end only (GP40s)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	1.00%	3807.71	5174.00
Manifest-A	0	Head end only (GP40s)	60	0.50%	Incline	<0.1%	0.00	0.00	> 50%	0.00%	2525.20	2782.00
Manifest-A	0	Head end only (GP40s)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	1.00%	2712.78	3036.00
Manifest-B	0	Head end only (SD70s)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	226.48	356.00
Manifest-B	0	Head end only (SD70s)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	145.83	198.00
Manifest-B	0	Head end only (SD70s)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	334.73	395.00
Manifest-B	0	Head end only (SD70s)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	1.00%	149.46	276.00
Manifest-B	0	Head end only (SD70s)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1011.12	1460.00
Manifest-B	0	Head end only (SD70s)	20	2.80%	Decline	<0.1%	0.00	0.00	> 50%	2.00%	828.84	964.00
Manifest-B	0	Head end only (SD70s)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	12.00%	442.51	600.00
Manifest-B	0	Head end only (SD70s)	25	1.70%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	4.00%	777.80	847.00
Manifest-B	0	Head end only (SD70s)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	1064.12	1419.00
Manifest-B	0	Head end only (SD70s)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	2.00%	803.75	888.00
Manifest-B	0	Head end only (SD70s)	30	1.10%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	1440.88	2005.00
Manifest-B	0	Head end only (SD70s)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	890.52	1318.00
Manifest-B	0	Head end only (SD70s)	55	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3779.35	4896.00
Manifest-B	0	Head end only (SD70s)	55	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	2148.42	2453.00
Manifest-B	0	Head end only (SD70s)	55	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	4504.66	5469.00
Manifest-B	0	Head end only (SD70s)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	6.00%	4568.09	5339.00
Manifest-B	0	Head end only (SD70s)	60	0.50%	Incline	<0.1%	0.00	0.00	< 10%	2.00%	2604.05	2791.00
Manifest-B	0	Head end only (SD70s)	60	0.00%	Flat	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	3016.51	4559.00
Manifest-B	0	Head end only (GP40s)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	314.07	417.00
Manifest-B	0	Head end only (GP40s)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	120.36	235.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-B	0	Head end only (GP40s)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	270.41	445.00
Manifest-B	0	Head end only (GP40s)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	141.27	269.00
Manifest-B	0	Head end only (GP40s)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1259.07	1592.00
Manifest-B	0	Head end only (GP40s)	20	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	795.64	869.00
Manifest-B	0	Head end only (GP40s)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	439.37	637.00
Manifest-B	0	Head end only (GP40s)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	782.14	1105.00
Manifest-B	0	Head end only (GP40s)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	1107.13	1426.00
Manifest-B	0	Head end only (GP40s)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	708.28	892.00
Manifest-B	0	Head end only (GP40s)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	3.00%	1127.79	1339.00
Manifest-B	0	Head end only (GP40s)	30	0.00%	Flat	<0.1%	0.00	0.00	< 10%	0.00%	800.85	1518.00
Manifest-B	0	Head end only (GP40s)	55	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3303.48	4429.00
Manifest-B	0	Head end only (GP40s)	55	1.00%	Crest	<0.1%	0.00	0.00	> 50%	0.00%	2181.03	2560.00
Manifest-B	0	Head end only (GP40s)	55	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	3998.22	5154.00
Manifest-B	0	Head end only (GP40s)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3799.84	5341.00
Manifest-B	0	Head end only (GP40s)	60	0.50%	Incline	<0.1%	0.00	0.00	> 50%	0.00%	2584.64	2955.00
Manifest-B	0	Head end only (GP40s)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	2801.29	2991.00
Manifest-A	3	Head end only (SD70s)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	313.18	505.00
Manifest-A	3	Head end only (SD70s)	10	0.50%	Incline	> 1.0%	12.00	18.00	< 0.1%	26.00%	163.48	209.00
Manifest-A	3	Head end only (SD70s)	10	1.10%	Decline	<0.1%	0.00	0.00	< 10%	2.00%	313.62	629.00
Manifest-A	3	Head end only (SD70s)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	3.00%	254.02	357.00
Manifest-A	3	Head end only (SD70s)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	71.00%	1218.75	1285.00
Manifest-A	3	Head end only (SD70s)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1333.34	1677.00
Manifest-A	3	Head end only (SD70s)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	19.00%	565.12	760.00
Manifest-A	3	Head end only (SD70s)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1840.45	2140.00
Manifest-A	3	Head end only (SD70s)	30	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	1532.48	1995.00
Manifest-A	3	Head end only (SD70s)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	16.00%	1006.04	1187.00
Manifest-A	3	Head end only (SD70s)	30	1.10%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	1936.77	2488.00
Manifest-A	3	Head end only (SD70s)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	25.00%	1157.69	1276.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-A	3	Head end only (SD70s)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4089.48	4939.00
Manifest-A	3	Head end only (SD70s)	45	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	2050.25	2336.00
Manifest-A	3	Head end only (SD70s)	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	3954.04	4239.00
Manifest-A	3	Head end only (SD70s)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	98.00%	5657.82	5948.00
Manifest-A	3	Head end only (SD70s)	60	0.50%	Incline	<0.1%	0.00	0.00	> 50%	56.00%	4070.21	4302.00
Manifest-A	3	Head end only (SD70s)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	13.00%	5019.78	5448.00
Manifest-A	3	Head end only (GP40s)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	4.00%	177.60	207.00
Manifest-A	3	Head end only (GP40s)	10	0.50%	Incline	< 0.5%	7.00	7.00	< 0.1%	11.00%	134.65	191.00
Manifest-A	3	Head end only (GP40s)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	236.63	276.00
Manifest-A	3	Head end only (GP40s)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	11.00%	161.93	316.00
Manifest-A	3	Head end only (GP40s)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	69.00%	1007.91	1311.00
Manifest-A	3	Head end only (GP40s)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1287.87	1608.00
Manifest-A	3	Head end only (GP40s)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	1.00%	649.78	852.00
Manifest-A	3	Head end only (GP40s)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1913.91	2180.00
Manifest-A	3	Head end only (GP40s)	30	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	1805.93	2089.00
Manifest-A	3	Head end only (GP40s)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1075.70	1315.00
Manifest-A	3	Head end only (GP40s)	30	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	2055.33	2446.00
Manifest-A	3	Head end only (GP40s)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	39.00%	1275.20	1596.00
Manifest-A	3	Head end only (GP40s)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4766.95	5357.00
Manifest-A	3	Head end only (GP40s)	45	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	2262.50	2480.00
Manifest-A	3	Head end only (GP40s)	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	4650.57	5055.00
Manifest-A	3	Head end only (GP40s)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	100.00%	5855.89	5957.00
Manifest-A	3	Head end only (GP40s)	60	0.50%	Incline	<0.1%	0.00	0.00	> 50%	74.00%	4465.01	4900.00
Manifest-A	3	Head end only (GP40s)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	29.00%	5640.01	6317.00
Manifest-B	3	Head end only (SD70s)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	291.69	501.00
Manifest-B	3	Head end only (SD70s)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	151.42	212.00
Manifest-B	3	Head end only (SD70s)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	305.11	381.00
Manifest-B	3	Head end only (SD70s)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	5.00%	137.12	242.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-B	3	Head end only (SD70s)	15	2.80%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	531.24	1175.00
Manifest-B	3	Head end only (SD70s)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	888.22	1259.00
Manifest-B	3	Head end only (SD70s)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	15.00%	431.03	578.00
Manifest-B	3	Head end only (SD70s)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1213.96	1524.00
Manifest-B	3	Head end only (SD70s)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	1008.08	1337.00
Manifest-B	3	Head end only (SD70s)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	7.00%	801.27	1156.00
Manifest-B	3	Head end only (SD70s)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	1147.86	1636.00
Manifest-B	3	Head end only (SD70s)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	9.00%	799.15	1276.00
Manifest-B	3	Head end only (SD70s)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	24.00%	2334.79	2769.00
Manifest-B	3	Head end only (SD70s)	45	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	1.00%	1419.57	1732.00
Manifest-B	3	Head end only (SD70s)	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	14.00%	2813.96	3204.00
Manifest-B	3	Head end only (SD70s)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3723.59	4807.00
Manifest-B	3	Head end only (SD70s)	60	0.50%	Incline	<0.1%	0.00	0.00	> 10%, < 25%	3.00%	2732.21	3326.00
Manifest-B	3	Head end only (SD70s)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	2987.82	3758.00
Manifest-B	3	Head end only (GP40s)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	269.83	366.00
Manifest-B	3	Head end only (GP40s)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	114.43	145.00
Manifest-B	3	Head end only (GP40s)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	152.99	184.00
Manifest-B	3	Head end only (GP40s)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	145.32	300.00
Manifest-B	3	Head end only (GP40s)	15	2.80%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	471.99	559.00
Manifest-B	3	Head end only (GP40s)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	887.34	1215.00
Manifest-B	3	Head end only (GP40s)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	3.00%	451.61	607.00
Manifest-B	3	Head end only (GP40s)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	1.00%	806.56	1076.00
Manifest-B	3	Head end only (GP40s)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	995.09	1339.00
Manifest-B	3	Head end only (GP40s)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	775.07	857.00
Manifest-B	3	Head end only (GP40s)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	4.00%	1121.29	1294.00
Manifest-B	3	Head end only (GP40s)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	738.03	1317.00
Manifest-B	3	Head end only (GP40s)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	11.00%	2508.93	2766.00
Manifest-B	3	Head end only (GP40s)	45	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	1431.36	1730.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-B	3	Head end only (GP40s)	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	3.00%	2435.52	2877.00
Manifest-B	3	Head end only (GP40s)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3296.56	4549.00
Manifest-B	3	Head end only (GP40s)	60	0.50%	Incline	<0.1%	0.00	0.00	> 50%	0.00%	2578.68	2986.00
Manifest-B	3	Head end only (GP40s)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	2811.45	3253.00
Manifest-C	3	Head end only (SD70s)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	5.00%	281.45	448.00
Manifest-C	3	Head end only (SD70s)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	25.00%	166.54	213.00
Manifest-C	3	Head end only (SD70s)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	4.00%	310.88	522.00
Manifest-C	3	Head end only (SD70s)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	6.00%	252.82	370.00
Manifest-C	3	Head end only (SD70s)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	73.00%	1216.98	1282.00
Manifest-C	3	Head end only (SD70s)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1161.49	1580.00
Manifest-C	3	Head end only (SD70s)	25	1.50%	Incline	< 0.5%	9.00	9.00	< 0.1%	18.00%	560.89	761.00
Manifest-C	3	Head end only (SD70s)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1669.79	2082.00
Manifest-C	3	Head end only (SD70s)	30	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	1504.92	2063.00
Manifest-C	3	Head end only (SD70s)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	11.00%	1008.44	1246.00
Manifest-C	3	Head end only (SD70s)	30	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	1741.39	2349.00
Manifest-C	3	Head end only (SD70s)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	59.00%	1152.32	1305.00
Manifest-C	3	Head end only (SD70s)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3912.47	4926.00
Manifest-C	3	Head end only (SD70s)	45	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	2039.94	2387.00
Manifest-C	3	Head end only (SD70s)	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	3875.96	4126.00
Manifest-C	3	Head end only (SD70s)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	100.00%	5598.22	5856.00
Manifest-C	3	Head end only (SD70s)	60	0.50%	Incline	<0.1%	0.00	0.00	> 50%	90.00%	4070.55	4289.00
Manifest-C	3	Head end only (SD70s)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	5.00%	4978.67	5432.00
Manifest-C	3	Head end only (GP40s)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	1.00%	182.31	207.00
Manifest-C	3	Head end only (GP40s)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	3.00%	142.06	204.00
Manifest-C	3	Head end only (GP40s)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	231.64	272.00
Manifest-C	3	Head end only (GP40s)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	9.00%	164.67	314.00
Manifest-C	3	Head end only (GP40s)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	94.00%	981.93	1285.00
Manifest-C	3	Head end only (GP40s)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1232.05	1573.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-C	3	Head end only (GP40s)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	3.00%	648.53	849.00
Manifest-C	3	Head end only (GP40s)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1888.83	2134.00
Manifest-C	3	Head end only (GP40s)	30	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	1832.01	2176.00
Manifest-C	3	Head end only (GP40s)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	1.00%	1057.96	1320.00
Manifest-C	3	Head end only (GP40s)	30	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	2048.29	2402.00
Manifest-C	3	Head end only (GP40s)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	27.00%	1266.56	1465.00
Manifest-C	3	Head end only (GP40s)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4633.81	5272.00
Manifest-C	3	Head end only (GP40s)	45	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	2236.82	2605.00
Manifest-C	3	Head end only (GP40s)	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	4523.23	5490.00
Manifest-C	3	Head end only (GP40s)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	100.00%	5841.90	5953.00
Manifest-C	3	Head end only (GP40s)	60	0.50%	Incline	<0.1%	0.00	0.00	> 50%	92.00%	4359.32	4639.00
Manifest-C	3	Head end only (GP40s)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	20.00%	5621.21	6143.00
Manifest-D	3	Head end only (SD70s)	10	0.50%	Decline	< 0.5%	11.00	11.00	< 0.1%	3.00%	224.06	483.00
Manifest-D	3	Head end only (SD70s)	10	0.50%	Incline	> 1.0%	12.67	21.00	< 0.1%	2.00%	121.72	209.00
Manifest-D	3	Head end only (SD70s)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	203.36	272.00
Manifest-D	3	Head end only (SD70s)	10	0.00%	Flat	> 1.0%	2.33	4.00	< 0.1%	11.00%	137.36	254.00
Manifest-D	3	Head end only (SD70s)	15	2.80%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	439.96	555.00
Manifest-D	3	Head end only (SD70s)	20	2.20%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	786.92	1152.00
Manifest-D	3	Head end only (SD70s)	25	1.50%	Incline	> 1.0%	23.50	26.00	< 0.1%	18.00%	445.72	584.00
Manifest-D	3	Head end only (SD70s)	25	1.70%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	26.00%	838.51	1110.00
Manifest-D	3	Head end only (SD70s)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	5.00%	987.12	1425.00
Manifest-D	3	Head end only (SD70s)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	31.00%	766.90	849.00
Manifest-D	3	Head end only (SD70s)	30	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	1212.95	1863.00
Manifest-D	3	Head end only (SD70s)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	14.00%	790.67	1097.00
Manifest-D	3	Head end only (SD70s)	45	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	55.00%	2259.40	2639.00
Manifest-D	3	Head end only (SD70s)	45	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	1.00%	1421.95	1721.00
Manifest-D	3	Head end only (SD70s)	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	23.00%	2836.65	3141.00
Manifest-D	3	Head end only (SD70s)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	6.00%	3894.94	4901.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-D	3	Head end only (SD70s)	60	0.50%	Incline	<0.1%	0.00	0.00	> 10%, < 25%	2.00%	2840.83	3159.00
Manifest-D	3	Head end only (SD70s)	60	0.00%	Flat	<0.1%	0.00	0.00	< 10%	0.00%	2910.18	3395.00
Manifest-D	3	Head end only (GP40s)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	268.95	364.00
Manifest-D	3	Head end only (GP40s)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	107.15	138.00
Manifest-D	3	Head end only (GP40s)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	145.97	179.00
Manifest-D	3	Head end only (GP40s)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	137.44	279.00
Manifest-D	3	Head end only (GP40s)	15	2.80%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	469.78	533.00
Manifest-D	3	Head end only (GP40s)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	931.73	1128.00
Manifest-D	3	Head end only (GP40s)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	3.00%	438.69	688.00
Manifest-D	3	Head end only (GP40s)	25	1.70%	Decline	<0.1%	0.00	0.00	< 10%	13.00%	795.44	875.00
Manifest-D	3	Head end only (GP40s)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	962.11	1426.00
Manifest-D	3	Head end only (GP40s)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	1.00%	782.84	854.00
Manifest-D	3	Head end only (GP40s)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	23.00%	983.26	1204.00
Manifest-D	3	Head end only (GP40s)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	1.00%	759.75	1184.00
Manifest-D	3	Head end only (GP40s)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	25.00%	2264.97	2768.00
Manifest-D	3	Head end only (GP40s)	45	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	1482.71	1698.00
Manifest-D	3	Head end only (GP40s)	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	14.00%	2701.85	3074.00
Manifest-D	3	Head end only (GP40s)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3342.61	4367.00
Manifest-D	3	Head end only (GP40s)	60	0.50%	Incline	<0.1%	0.00	0.00	> 50%	0.00%	2780.81	3239.00
Manifest-D	3	Head end only (GP40s)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	2863.19	3171.00
Manifest-E	3	Head end only (SD70s)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	2.00%	335.04	487.00
Manifest-E	3	Head end only (SD70s)	10	0.50%	Incline	> 1.0%	3.33	6.00	< 0.1%	22.00%	170.51	214.00
Manifest-E	3	Head end only (SD70s)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	3.00%	338.72	617.00
Manifest-E	3	Head end only (SD70s)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	2.00%	271.64	396.00
Manifest-E	3	Head end only (SD70s)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	62.00%	1216.64	1261.00
Manifest-E	3	Head end only (SD70s)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1281.75	1530.00
Manifest-E	3	Head end only (SD70s)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	24.00%	550.55	739.00
Manifest-E	3	Head end only (SD70s)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1795.75	2156.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-E	3	Head end only (SD70s)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	1618.87	2039.00
Manifest-E	3	Head end only (SD70s)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	9.00%	987.38	1218.00
Manifest-E	3	Head end only (SD70s)	30	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	1960.56	2450.00
Manifest-E	3	Head end only (SD70s)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	48.00%	1161.72	1644.00
Manifest-E	3	Head end only (SD70s)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3919.64	4669.00
Manifest-E	3	Head end only (SD70s)	45	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	2034.82	2272.00
Manifest-E	3	Head end only (SD70s)	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	3865.39	4127.00
Manifest-E	3	Head end only (SD70s)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	98.00%	5622.16	5782.00
Manifest-E	3	Head end only (SD70s)	60	0.50%	Incline	<0.1%	0.00	0.00	> 50%	89.00%	4077.02	4305.00
Manifest-E	3	Head end only (SD70s)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	3.00%	4955.33	5430.00
Manifest-E	3	Head end only (GP40s)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	3.00%	183.60	212.00
Manifest-E	3	Head end only (GP40s)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	3.00%	142.31	207.00
Manifest-E	3	Head end only (GP40s)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	232.61	266.00
Manifest-E	3	Head end only (GP40s)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	8.00%	160.10	224.00
Manifest-E	3	Head end only (GP40s)	15	2.80%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	98.00%	925.16	1283.00
Manifest-E	3	Head end only (GP40s)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1252.23	1532.00
Manifest-E	3	Head end only (GP40s)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	5.00%	646.77	855.00
Manifest-E	3	Head end only (GP40s)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1858.09	2207.00
Manifest-E	3	Head end only (GP40s)	30	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	1725.18	2176.00
Manifest-E	3	Head end only (GP40s)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1082.30	1287.00
Manifest-E	3	Head end only (GP40s)	30	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	2019.40	2444.00
Manifest-E	3	Head end only (GP40s)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	34.00%	1264.65	1601.00
Manifest-E	3	Head end only (GP40s)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4630.14	5112.00
Manifest-E	3	Head end only (GP40s)	45	1.00%	Crest	<0.1%	0.00	0.00	< 10%	0.00%	2207.96	2525.00
Manifest-E	3	Head end only (GP40s)	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	4531.60	5385.00
Manifest-E	3	Head end only (GP40s)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	100.00%	5833.97	5954.00
Manifest-E	3	Head end only (GP40s)	60	0.50%	Incline	<0.1%	0.00	0.00	> 50%	97.00%	4386.13	4646.00
Manifest-E	3	Head end only (GP40s)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	15.00%	5614.15	5961.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-F	3	Head end only (SD70s)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	1.00%	291.59	438.00
Manifest-F	3	Head end only (SD70s)	10	0.50%	Incline	> 1.0%	4.50	5.00	< 0.1%	27.00%	165.31	223.00
Manifest-F	3	Head end only (SD70s)	10	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	386.83	606.00
Manifest-F	3	Head end only (SD70s)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	6.00%	259.49	393.00
Manifest-F	3	Head end only (SD70s)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	62.00%	1212.42	1264.00
Manifest-F	3	Head end only (SD70s)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1232.07	1591.00
Manifest-F	3	Head end only (SD70s)	25	1.50%	Incline	< 0.5%	6.00	6.00	< 0.1%	21.00%	554.96	783.00
Manifest-F	3	Head end only (SD70s)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1691.53	2118.00
Manifest-F	3	Head end only (SD70s)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	1535.00	1910.00
Manifest-F	3	Head end only (SD70s)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	7.00%	981.45	1207.00
Manifest-F	3	Head end only (SD70s)	30	1.10%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	1892.26	2278.00
Manifest-F	3	Head end only (SD70s)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	41.00%	1149.27	1726.00
Manifest-F	3	Head end only (SD70s)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3917.76	4747.00
Manifest-F	3	Head end only (SD70s)	45	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	2028.59	2261.00
Manifest-F	3	Head end only (SD70s)	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	3834.19	4808.00
Manifest-F	3	Head end only (SD70s)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	99.00%	5597.74	5861.00
Manifest-F	3	Head end only (SD70s)	60	0.50%	Incline	<0.1%	0.00	0.00	> 50%	74.00%	4060.75	4217.00
Manifest-F	3	Head end only (SD70s)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	6.00%	4889.47	5437.00
Manifest-F	3	Head end only (GP40s)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	1.00%	189.22	337.00
Manifest-F	3	Head end only (GP40s)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	3.00%	139.91	198.00
Manifest-F	3	Head end only (GP40s)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	231.87	287.00
Manifest-F	3	Head end only (GP40s)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	1.00%	191.85	338.00
Manifest-F	3	Head end only (GP40s)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	90.00%	1045.46	1276.00
Manifest-F	3	Head end only (GP40s)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1266.07	1566.00
Manifest-F	3	Head end only (GP40s)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	660.36	835.00
Manifest-F	3	Head end only (GP40s)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1830.49	2143.00
Manifest-F	3	Head end only (GP40s)	30	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	1790.46	2071.00
Manifest-F	3	Head end only (GP40s)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1060.49	1280.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-F	3	Head end only (GP40s)	30	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	2025.84	2425.00
Manifest-F	3	Head end only (GP40s)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	31.00%	1240.33	1403.00
Manifest-F	3	Head end only (GP40s)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4591.74	5236.00
Manifest-F	3	Head end only (GP40s)	45	1.00%	Crest	<0.1%	0.00	0.00	< 10%	0.00%	2213.51	2475.00
Manifest-F	3	Head end only (GP40s)	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	4510.06	5261.00
Manifest-F	3	Head end only (GP40s)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	100.00%	5810.27	5955.00
Manifest-F	3	Head end only (GP40s)	60	0.50%	Incline	<0.1%	0.00	0.00	> 50%	80.00%	4309.74	4476.00
Manifest-F	3	Head end only (GP40s)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	9.00%	5546.18	5963.00
Manifest-G	3	Head end only (SD70s)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	1.00%	313.46	474.00
Manifest-G	3	Head end only (SD70s)	10	0.50%	Incline	> 1.0%	4.33	5.00	< 0.1%	18.00%	172.43	214.00
Manifest-G	3	Head end only (SD70s)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	1.00%	304.12	588.00
Manifest-G	3	Head end only (SD70s)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	1.00%	257.97	362.00
Manifest-G	3	Head end only (SD70s)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	57.00%	1209.15	1261.00
Manifest-G	3	Head end only (SD70s)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1269.93	1528.00
Manifest-G	3	Head end only (SD70s)	25	1.50%	Incline	> 1.0%	36.00	36.00	< 0.1%	33.00%	524.17	753.00
Manifest-G	3	Head end only (SD70s)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1766.90	2087.00
Manifest-G	3	Head end only (SD70s)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	1592.14	2002.00
Manifest-G	3	Head end only (SD70s)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	13.00%	936.12	1176.00
Manifest-G	3	Head end only (SD70s)	30	1.10%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	1865.60	2396.00
Manifest-G	3	Head end only (SD70s)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	49.00%	1115.91	1589.00
Manifest-G	3	Head end only (SD70s)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3806.42	4613.00
Manifest-G	3	Head end only (SD70s)	45	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	1.00%	1981.94	2207.00
Manifest-G	3	Head end only (SD70s)	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	3642.84	3891.00
Manifest-G	3	Head end only (SD70s)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	99.00%	5603.20	5866.00
Manifest-G	3	Head end only (SD70s)	60	0.50%	Incline	<0.1%	0.00	0.00	> 50%	97.00%	4005.36	4214.00
Manifest-G	3	Head end only (SD70s)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	5.00%	4783.97	5092.00
Manifest-G	3	Head end only (GP40s)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	2.00%	170.63	199.00
Manifest-G	3	Head end only (GP40s)	10	0.50%	Incline	> 1.0%	5.50	6.00	< 0.1%	12.00%	133.04	191.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-G	3	Head end only (GP40s)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	219.00	256.00
Manifest-G	3	Head end only (GP40s)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	5.00%	156.84	288.00
Manifest-G	3	Head end only (GP40s)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	47.00%	1137.49	1258.00
Manifest-G	3	Head end only (GP40s)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1271.25	1573.00
Manifest-G	3	Head end only (GP40s)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	2.00%	637.07	789.00
Manifest-G	3	Head end only (GP40s)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1794.62	2101.00
Manifest-G	3	Head end only (GP40s)	30	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	1773.38	2051.00
Manifest-G	3	Head end only (GP40s)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	1.00%	1073.75	1262.00
Manifest-G	3	Head end only (GP40s)	30	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	1945.19	2277.00
Manifest-G	3	Head end only (GP40s)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	34.00%	1226.34	1639.00
Manifest-G	3	Head end only (GP40s)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4447.99	5061.00
Manifest-G	3	Head end only (GP40s)	45	1.00%	Crest	<0.1%	0.00	0.00	< 10%	0.00%	2137.44	2399.00
Manifest-G	3	Head end only (GP40s)	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	4203.58	4482.00
Manifest-G	3	Head end only (GP40s)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	99.00%	5735.87	5956.00
Manifest-G	3	Head end only (GP40s)	60	0.50%	Incline	<0.1%	0.00	0.00	> 50%	92.00%	4267.94	4476.00
Manifest-G	3	Head end only (GP40s)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	10.00%	5414.49	5877.00
Manifest-H	3	Head end only (SD70s)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	206.83	403.00
Manifest-H	3	Head end only (SD70s)	10	0.50%	Incline	> 1.0%	2.50	3.00	< 0.1%	10.00%	153.84	229.00
Manifest-H	3	Head end only (SD70s)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	442.22	570.00
Manifest-H	3	Head end only (SD70s)	10	0.00%	Flat	> 1.0%	2.00	2.00	< 0.1%	8.00%	148.29	217.00
Manifest-H	3	Head end only (SD70s)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	855.66	1115.00
Manifest-H	3	Head end only (SD70s)	20	2.20%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	911.64	1343.00
Manifest-H	3	Head end only (SD70s)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	23.00%	498.41	717.00
Manifest-H	3	Head end only (SD70s)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1314.28	1641.00
Manifest-H	3	Head end only (SD70s)	30	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	1202.09	1862.00
Manifest-H	3	Head end only (SD70s)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	9.00%	858.83	1038.00
Manifest-H	3	Head end only (SD70s)	30	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	1491.20	1921.00
Manifest-H	3	Head end only (SD70s)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	15.00%	971.35	1177.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-H	3	Head end only (SD70s)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3393.57	4098.00
Manifest-H	3	Head end only (SD70s)	45	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	1.00%	1738.40	2004.00
Manifest-H	3	Head end only (SD70s)	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	76.00%	3095.16	3269.00
Manifest-H	3	Head end only (SD70s)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	85.00%	5330.26	5775.00
Manifest-H	3	Head end only (SD70s)	60	0.50%	Incline	<0.1%	0.00	0.00	> 50%	10.00%	3585.99	3778.00
Manifest-H	3	Head end only (SD70s)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	3763.27	4017.00
Manifest-H	3	Head end only (GP40s)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	235.75	407.00
Manifest-H	3	Head end only (GP40s)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	1.00%	120.13	184.00
Manifest-H	3	Head end only (GP40s)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	193.74	216.00
Manifest-H	3	Head end only (GP40s)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	145.47	319.00
Manifest-H	3	Head end only (GP40s)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	15.00%	1095.90	1214.00
Manifest-H	3	Head end only (GP40s)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1037.10	1312.00
Manifest-H	3	Head end only (GP40s)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	3.00%	552.56	749.00
Manifest-H	3	Head end only (GP40s)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1533.30	1804.00
Manifest-H	3	Head end only (GP40s)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	15.00%	1388.82	1640.00
Manifest-H	3	Head end only (GP40s)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	912.87	1095.00
Manifest-H	3	Head end only (GP40s)	30	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	1734.46	2053.00
Manifest-H	3	Head end only (GP40s)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	2.00%	1007.34	1139.00
Manifest-H	3	Head end only (GP40s)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3627.63	4252.00
Manifest-H	3	Head end only (GP40s)	45	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	1833.32	2149.00
Manifest-H	3	Head end only (GP40s)	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	86.00%	3081.00	3210.00
Manifest-H	3	Head end only (GP40s)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	62.00%	5216.80	5773.00
Manifest-H	3	Head end only (GP40s)	60	0.50%	Incline	<0.1%	0.00	0.00	> 50%	5.00%	3711.60	3873.00
Manifest-H	3	Head end only (GP40s)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	3973.41	4220.00
Manifest-I	3	Head end only (SD70s)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	3.00%	241.79	554.00
Manifest-I	3	Head end only (SD70s)	10	0.50%	Incline	> 1.0%	8.57	20.00	< 0.1%	11.00%	110.39	202.00
Manifest-I	3	Head end only (SD70s)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	235.25	335.00
Manifest-I	3	Head end only (SD70s)	10	0.00%	Flat	> 1.0%	3.00	3.00	< 0.1%	16.00%	129.95	303.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-I	3	Head end only (SD70s)	15	2.80%	Decline	<0.1%	0.00	0.00	< 10%	1.00%	496.00	648.00
Manifest-I	3	Head end only (SD70s)	20	2.20%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	794.53	1188.00
Manifest-I	3	Head end only (SD70s)	25	1.50%	Incline	> 1.0%	10.25	33.00	< 0.1%	25.00%	480.83	646.00
Manifest-I	3	Head end only (SD70s)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1129.09	1608.00
Manifest-I	3	Head end only (SD70s)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	20.00%	998.28	1464.00
Manifest-I	3	Head end only (SD70s)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	16.00%	725.74	1039.00
Manifest-I	3	Head end only (SD70s)	30	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	1266.99	1928.00
Manifest-I	3	Head end only (SD70s)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	13.00%	844.58	1180.00
Manifest-I	3	Head end only (SD70s)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	81.00%	2431.82	2763.00
Manifest-I	3	Head end only (SD70s)	45	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	3.00%	1518.47	1922.00
Manifest-I	3	Head end only (SD70s)	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	67.00%	2956.96	3205.00
Manifest-I	3	Head end only (SD70s)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	11.00%	4525.17	5336.00
Manifest-I	3	Head end only (SD70s)	60	0.50%	Incline	<0.1%	0.00	0.00	> 25%, < 50%	6.00%	3114.51	3426.00
Manifest-I	3	Head end only (SD70s)	60	0.00%	Flat	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	3169.79	4211.00
Manifest-I	3	Head end only (GP40s)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	268.24	356.00
Manifest-I	3	Head end only (GP40s)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	109.52	162.00
Manifest-I	3	Head end only (GP40s)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	161.10	183.00
Manifest-I	3	Head end only (GP40s)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	131.66	323.00
Manifest-I	3	Head end only (GP40s)	15	2.80%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	534.56	617.00
Manifest-I	3	Head end only (GP40s)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	933.37	1196.00
Manifest-I	3	Head end only (GP40s)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	1.00%	473.06	680.00
Manifest-I	3	Head end only (GP40s)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	27.00%	914.42	1069.00
Manifest-I	3	Head end only (GP40s)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	4.00%	1133.44	1464.00
Manifest-I	3	Head end only (GP40s)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	5.00%	819.05	905.00
Manifest-I	3	Head end only (GP40s)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	39.00%	1070.79	1255.00
Manifest-I	3	Head end only (GP40s)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	2.00%	826.33	1181.00
Manifest-I	3	Head end only (GP40s)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	58.00%	2522.71	2841.00
Manifest-I	3	Head end only (GP40s)	45	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	1593.06	1908.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-I	3	Head end only (GP40s)	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	39.00%	2863.43	3201.00
Manifest-I	3	Head end only (GP40s)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	1.00%	3832.13	5158.00
Manifest-I	3	Head end only (GP40s)	60	0.50%	Incline	<0.1%	0.00	0.00	> 50%	0.00%	3170.94	3596.00
Manifest-I	3	Head end only (GP40s)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	3136.04	3595.00
Manifest-J	3	Head end only (SD70s)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	273.55	504.00
Manifest-J	3	Head end only (SD70s)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	1.00%	148.84	213.00
Manifest-J	3	Head end only (SD70s)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	280.32	380.00
Manifest-J	3	Head end only (SD70s)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	3.00%	142.43	233.00
Manifest-J	3	Head end only (SD70s)	15	2.80%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	510.02	983.00
Manifest-J	3	Head end only (SD70s)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	907.50	1205.00
Manifest-J	3	Head end only (SD70s)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	12.00%	452.93	601.00
Manifest-J	3	Head end only (SD70s)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1211.40	1454.00
Manifest-J	3	Head end only (SD70s)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	1.00%	999.02	1340.00
Manifest-J	3	Head end only (SD70s)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	3.00%	878.41	1179.00
Manifest-J	3	Head end only (SD70s)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	1182.50	1564.00
Manifest-J	3	Head end only (SD70s)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	6.00%	800.90	1131.00
Manifest-J	3	Head end only (SD70s)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	35.00%	2377.62	2777.00
Manifest-J	3	Head end only (SD70s)	45	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	1471.54	1778.00
Manifest-J	3	Head end only (SD70s)	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	19.00%	2890.96	3205.00
Manifest-J	3	Head end only (SD70s)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	3.00%	4008.75	5075.00
Manifest-J	3	Head end only (SD70s)	60	0.50%	Incline	<0.1%	0.00	0.00	> 50%	0.00%	2935.35	3249.00
Manifest-J	3	Head end only (SD70s)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	3012.03	3397.00
Manifest-J	3	Head end only (GP40s)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	260.99	359.00
Manifest-J	3	Head end only (GP40s)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	115.96	137.00
Manifest-J	3	Head end only (GP40s)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	157.07	182.00
Manifest-J	3	Head end only (GP40s)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	152.54	249.00
Manifest-J	3	Head end only (GP40s)	15	2.80%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	534.16	651.00
Manifest-J	3	Head end only (GP40s)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	916.06	1237.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-J	3	Head end only (GP40s)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	4.00%	442.72	660.00
Manifest-J	3	Head end only (GP40s)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	2.00%	845.94	930.00
Manifest-J	3	Head end only (GP40s)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	1033.53	1341.00
Manifest-J	3	Head end only (GP40s)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	800.03	898.00
Manifest-J	3	Head end only (GP40s)	30	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	1241.16	1699.00
Manifest-J	3	Head end only (GP40s)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	758.44	881.00
Manifest-J	3	Head end only (GP40s)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	17.00%	2561.78	2778.00
Manifest-J	3	Head end only (GP40s)	45	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	1476.58	1721.00
Manifest-J	3	Head end only (GP40s)	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	3.00%	2653.12	3075.00
Manifest-J	3	Head end only (GP40s)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3566.47	4550.00
Manifest-J	3	Head end only (GP40s)	60	0.50%	Incline	<0.1%	0.00	0.00	> 50%	0.00%	2909.54	3411.00
Manifest-J	3	Head end only (GP40s)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	2978.95	3334.00
Manifest-A	10	Head end only (SD70s)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	4.00%	338.90	473.00
Manifest-A	10	Head end only (SD70s)	10	0.50%	Incline	> 1.0%	13.00	22.00	< 0.1%	29.00%	198.81	288.00
Manifest-A	10	Head end only (SD70s)	10	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	334.93	678.00
Manifest-A	10	Head end only (SD70s)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	7.00%	291.85	397.00
Manifest-A	10	Head end only (SD70s)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2120.45	2302.00
Manifest-A	10	Head end only (SD70s)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1757.56	2012.00
Manifest-A	10	Head end only (SD70s)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	14.00%	673.12	786.00
Manifest-A	10	Head end only (SD70s)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2269.65	2594.00
Manifest-A	10	Head end only (SD70s)	30	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	1961.48	2313.00
Manifest-A	10	Head end only (SD70s)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	3.00%	1226.50	1431.00
Manifest-A	10	Head end only (SD70s)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2414.23	2827.00
Manifest-A	10	Head end only (SD70s)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	1473.01	1869.00
Manifest-A	10	Head end only (SD70s)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5043.19	5908.00
Manifest-A	10	Head end only (SD70s)	45	1.00%	Crest	<0.1%	0.00	0.00	< 10%	0.00%	2409.11	2581.00
Manifest-A	10	Head end only (SD70s)	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	5251.00	5573.00
Manifest-A	10	Head end only (SD70s)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7324.39	7584.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-A	10	Head end only (SD70s)	60	0.50%	Incline	<0.1%	0.00	0.00	> 50%	0.00%	4818.45	5133.00
Manifest-A	10	Head end only (SD70s)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	5766.59	6317.00
Manifest-A	10	Head end only (GP40s)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	1.00%	251.89	290.00
Manifest-A	10	Head end only (GP40s)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	17.00%	189.93	258.00
Manifest-A	10	Head end only (GP40s)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	354.54	418.00
Manifest-A	10	Head end only (GP40s)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	3.00%	214.68	347.00
Manifest-A	10	Head end only (GP40s)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2114.39	2191.00
Manifest-A	10	Head end only (GP40s)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1701.31	1791.00
Manifest-A	10	Head end only (GP40s)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	719.69	858.00
Manifest-A	10	Head end only (GP40s)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2344.09	2686.00
Manifest-A	10	Head end only (GP40s)	30	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	1902.96	2334.00
Manifest-A	10	Head end only (GP40s)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1309.61	1513.00
Manifest-A	10	Head end only (GP40s)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2464.88	2821.00
Manifest-A	10	Head end only (GP40s)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	1512.31	1848.00
Manifest-A	10	Head end only (GP40s)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5864.81	6346.00
Manifest-A	10	Head end only (GP40s)	45	1.00%	Crest	<0.1%	0.00	0.00	< 10%	0.00%	2598.64	2797.00
Manifest-A	10	Head end only (GP40s)	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	6091.18	6533.00
Manifest-A	10	Head end only (GP40s)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	8510.77	9450.00
Manifest-A	10	Head end only (GP40s)	60	0.50%	Incline	<0.1%	0.00	0.00	> 50%	0.00%	5237.75	5484.00
Manifest-A	10	Head end only (GP40s)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	6351.83	6736.00
Manifest-B	10	Head end only (SD70s)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	341.48	517.00
Manifest-B	10	Head end only (SD70s)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	2.00%	181.37	344.00
Manifest-B	10	Head end only (SD70s)	10	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	422.75	616.00
Manifest-B	10	Head end only (SD70s)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	357.67	453.00
Manifest-B	10	Head end only (SD70s)	15	2.80%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	585.99	676.00
Manifest-B	10	Head end only (SD70s)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1117.03	1383.00
Manifest-B	10	Head end only (SD70s)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	25.00%	473.42	638.00
Manifest-B	10	Head end only (SD70s)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1290.36	1722.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-B	10	Head end only (SD70s)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	1138.03	1594.00
Manifest-B	10	Head end only (SD70s)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	5.00%	763.57	889.00
Manifest-B	10	Head end only (SD70s)	30	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	1390.96	1757.00
Manifest-B	10	Head end only (SD70s)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	1.00%	871.21	1330.00
Manifest-B	10	Head end only (SD70s)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2854.89	3296.00
Manifest-B	10	Head end only (SD70s)	45	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	1537.41	1809.00
Manifest-B	10	Head end only (SD70s)	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	2727.62	3210.00
Manifest-B	10	Head end only (SD70s)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3562.00	4532.00
Manifest-B	10	Head end only (SD70s)	60	0.50%	Incline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	2798.77	3077.00
Manifest-B	10	Head end only (SD70s)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	3029.49	3264.00
Manifest-B	10	Head end only (GP40s)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	307.75	446.00
Manifest-B	10	Head end only (GP40s)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	140.30	344.00
Manifest-B	10	Head end only (GP40s)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	220.83	453.00
Manifest-B	10	Head end only (GP40s)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	231.41	391.00
Manifest-B	10	Head end only (GP40s)	15	2.80%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	572.75	667.00
Manifest-B	10	Head end only (GP40s)	20	2.20%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	849.28	1269.00
Manifest-B	10	Head end only (GP40s)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	2.00%	492.35	717.00
Manifest-B	10	Head end only (GP40s)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1014.99	1520.00
Manifest-B	10	Head end only (GP40s)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	1143.25	1411.00
Manifest-B	10	Head end only (GP40s)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	774.94	949.00
Manifest-B	10	Head end only (GP40s)	30	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	1209.10	1626.00
Manifest-B	10	Head end only (GP40s)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	808.82	1179.00
Manifest-B	10	Head end only (GP40s)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2537.94	3193.00
Manifest-B	10	Head end only (GP40s)	45	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	1575.55	1837.00
Manifest-B	10	Head end only (GP40s)	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	2366.18	2901.00
Manifest-B	10	Head end only (GP40s)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3362.21	4090.00
Manifest-B	10	Head end only (GP40s)	60	0.50%	Incline	<0.1%	0.00	0.00	> 50%	0.00%	2824.69	3250.00
Manifest-B	10	Head end only (GP40s)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	3034.57	3306.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-C	10	Head end only (SD70s)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	345.63	496.00
Manifest-C	10	Head end only (SD70s)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	26.00%	150.43	289.00
Manifest-C	10	Head end only (SD70s)	10	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	500.13	643.00
Manifest-C	10	Head end only (SD70s)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	316.24	422.00
Manifest-C	10	Head end only (SD70s)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	939.65	1741.00
Manifest-C	10	Head end only (SD70s)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1238.81	1552.00
Manifest-C	10	Head end only (SD70s)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	26.00%	564.32	768.00
Manifest-C	10	Head end only (SD70s)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1595.04	1857.00
Manifest-C	10	Head end only (SD70s)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	1276.17	1669.00
Manifest-C	10	Head end only (SD70s)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	8.00%	876.34	1081.00
Manifest-C	10	Head end only (SD70s)	30	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	1632.47	2045.00
Manifest-C	10	Head end only (SD70s)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	1046.82	1435.00
Manifest-C	10	Head end only (SD70s)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3357.49	3913.00
Manifest-C	10	Head end only (SD70s)	45	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	1800.91	2077.00
Manifest-C	10	Head end only (SD70s)	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	2740.53	3551.00
Manifest-C	10	Head end only (SD70s)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4572.92	5345.00
Manifest-C	10	Head end only (SD70s)	60	0.50%	Incline	<0.1%	0.00	0.00	> 50%	0.00%	3319.09	3622.00
Manifest-C	10	Head end only (SD70s)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	3726.07	4046.00
Manifest-C	10	Head end only (GP40s)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	236.29	419.00
Manifest-C	10	Head end only (GP40s)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	3.00%	142.71	213.00
Manifest-C	10	Head end only (GP40s)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	233.91	280.00
Manifest-C	10	Head end only (GP40s)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	224.92	371.00
Manifest-C	10	Head end only (GP40s)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	861.22	989.00
Manifest-C	10	Head end only (GP40s)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1270.02	1428.00
Manifest-C	10	Head end only (GP40s)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	3.00%	605.08	839.00
Manifest-C	10	Head end only (GP40s)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1603.84	1913.00
Manifest-C	10	Head end only (GP40s)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	1287.40	1628.00
Manifest-C	10	Head end only (GP40s)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	928.58	1071.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-C	10	Head end only (GP40s)	30	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	1651.46	2051.00
Manifest-C	10	Head end only (GP40s)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	987.62	1101.00
Manifest-C	10	Head end only (GP40s)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3292.29	3901.00
Manifest-C	10	Head end only (GP40s)	45	1.00%	Crest	<0.1%	0.00	0.00	< 10%	0.00%	1871.35	2135.00
Manifest-C	10	Head end only (GP40s)	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	3208.24	3710.00
Manifest-C	10	Head end only (GP40s)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4627.90	5346.00
Manifest-C	10	Head end only (GP40s)	60	0.50%	Incline	<0.1%	0.00	0.00	> 50%	0.00%	3483.74	3745.00
Manifest-C	10	Head end only (GP40s)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	3818.43	4156.00
Manifest-D	10	Head end only (SD70s)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	342.15	470.00
Manifest-D	10	Head end only (SD70s)	10	0.50%	Incline	> 1.0%	5.00	5.00	< 0.1%	34.00%	162.42	304.00
Manifest-D	10	Head end only (SD70s)	10	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	352.88	599.00
Manifest-D	10	Head end only (SD70s)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	2.00%	296.94	406.00
Manifest-D	10	Head end only (SD70s)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1714.37	2010.00
Manifest-D	10	Head end only (SD70s)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1453.66	1731.00
Manifest-D	10	Head end only (SD70s)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	19.00%	623.37	798.00
Manifest-D	10	Head end only (SD70s)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1883.51	2179.00
Manifest-D	10	Head end only (SD70s)	30	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	1548.62	1944.00
Manifest-D	10	Head end only (SD70s)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	4.00%	1052.68	1259.00
Manifest-D	10	Head end only (SD70s)	30	1.10%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	1838.96	2347.00
Manifest-D	10	Head end only (SD70s)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	1199.77	1614.00
Manifest-D	10	Head end only (SD70s)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4285.33	4893.00
Manifest-D	10	Head end only (SD70s)	45	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	2075.99	2262.00
Manifest-D	10	Head end only (SD70s)	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	3790.94	4097.00
Manifest-D	10	Head end only (SD70s)	60	0.50%	Incline	<0.1%	0.00	0.00	> 50%	0.00%	4109.12	4502.00
Manifest-D	10	Head end only (SD70s)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	4668.12	5389.00
Manifest-D	10	Head end only (GP40s)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	228.66	418.00
Manifest-D	10	Head end only (GP40s)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	10.00%	169.53	259.00
Manifest-D	10	Head end only (GP40s)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	284.63	325.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-D	10	Head end only (GP40s)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	200.61	339.00
Manifest-D	10	Head end only (GP40s)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1605.72	1978.00
Manifest-D	10	Head end only (GP40s)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1567.00	1751.00
Manifest-D	10	Head end only (GP40s)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	2.00%	655.43	830.00
Manifest-D	10	Head end only (GP40s)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1891.06	2242.00
Manifest-D	10	Head end only (GP40s)	30	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	1688.08	1959.00
Manifest-D	10	Head end only (GP40s)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1110.18	1380.00
Manifest-D	10	Head end only (GP40s)	30	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	2054.69	2433.00
Manifest-D	10	Head end only (GP40s)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	1240.12	1610.00
Manifest-D	10	Head end only (GP40s)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4434.23	4964.00
Manifest-D	10	Head end only (GP40s)	45	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	2226.10	2441.00
Manifest-D	10	Head end only (GP40s)	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	4145.65	4839.00
Manifest-D	10	Head end only (GP40s)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6358.48	7040.00
Manifest-D	10	Head end only (GP40s)	60	0.50%	Incline	<0.1%	0.00	0.00	> 50%	0.00%	4381.67	4785.00
Manifest-D	10	Head end only (GP40s)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	4921.78	5454.00
Manifest-E	10	Head end only (SD70s)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	337.92	475.00
Manifest-E	10	Head end only (SD70s)	10	0.50%	Incline	> 1.0%	10.00	18.00	< 0.1%	42.00%	175.95	292.00
Manifest-E	10	Head end only (SD70s)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	2.00%	283.17	550.00
Manifest-E	10	Head end only (SD70s)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	5.00%	277.61	372.00
Manifest-E	10	Head end only (SD70s)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1883.17	2155.00
Manifest-E	10	Head end only (SD70s)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1573.60	1840.00
Manifest-E	10	Head end only (SD70s)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	22.00%	636.04	775.00
Manifest-E	10	Head end only (SD70s)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1965.36	2266.00
Manifest-E	10	Head end only (SD70s)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	1712.61	2003.00
Manifest-E	10	Head end only (SD70s)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	3.00%	1110.94	1344.00
Manifest-E	10	Head end only (SD70s)	30	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	2175.72	2541.00
Manifest-E	10	Head end only (SD70s)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	1.00%	1253.76	1625.00
Manifest-E	10	Head end only (SD70s)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4374.70	5003.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-E	10	Head end only (SD70s)	45	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	2178.72	2363.00
Manifest-E	10	Head end only (SD70s)	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	4171.30	4511.00
Manifest-E	10	Head end only (SD70s)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6142.42	6516.00
Manifest-E	10	Head end only (SD70s)	60	0.50%	Incline	<0.1%	0.00	0.00	> 50%	0.00%	4306.87	4635.00
Manifest-E	10	Head end only (SD70s)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	4978.41	5829.00
Manifest-E	10	Head end only (GP40s)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	221.60	256.00
Manifest-E	10	Head end only (GP40s)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	17.00%	168.38	255.00
Manifest-E	10	Head end only (GP40s)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	295.87	352.00
Manifest-E	10	Head end only (GP40s)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	9.00%	195.96	316.00
Manifest-E	10	Head end only (GP40s)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1825.27	2013.00
Manifest-E	10	Head end only (GP40s)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1507.96	1804.00
Manifest-E	10	Head end only (GP40s)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	2.00%	698.10	848.00
Manifest-E	10	Head end only (GP40s)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2110.16	2362.00
Manifest-E	10	Head end only (GP40s)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	1687.04	2064.00
Manifest-E	10	Head end only (GP40s)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1169.85	1429.00
Manifest-E	10	Head end only (GP40s)	30	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	2187.78	2638.00
Manifest-E	10	Head end only (GP40s)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	1310.61	1641.00
Manifest-E	10	Head end only (GP40s)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4923.46	5420.00
Manifest-E	10	Head end only (GP40s)	45	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	2347.56	2537.00
Manifest-E	10	Head end only (GP40s)	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	4649.91	5073.00
Manifest-E	10	Head end only (GP40s)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6995.97	7674.00
Manifest-E	10	Head end only (GP40s)	60	0.50%	Incline	<0.1%	0.00	0.00	> 50%	0.00%	4610.58	4981.00
Manifest-E	10	Head end only (GP40s)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	5440.55	5909.00
Manifest-F	10	Head end only (SD70s)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	3.00%	301.41	533.00
Manifest-F	10	Head end only (SD70s)	10	0.50%	Incline	> 1.0%	9.33	22.00	< 0.1%	36.00%	169.90	283.00
Manifest-F	10	Head end only (SD70s)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	1.00%	269.29	575.00
Manifest-F	10	Head end only (SD70s)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	8.00%	281.37	402.00
Manifest-F	10	Head end only (SD70s)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1071.20	1917.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-F	10	Head end only (SD70s)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1347.97	1582.00
Manifest-F	10	Head end only (SD70s)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	18.00%	598.31	762.00
Manifest-F	10	Head end only (SD70s)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1789.82	2071.00
Manifest-F	10	Head end only (SD70s)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	1451.51	1866.00
Manifest-F	10	Head end only (SD70s)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	11.00%	966.82	1108.00
Manifest-F	10	Head end only (SD70s)	30	1.10%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	1834.29	2214.00
Manifest-F	10	Head end only (SD70s)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	4.00%	1091.29	1386.00
Manifest-F	10	Head end only (SD70s)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3845.36	4440.00
Manifest-F	10	Head end only (SD70s)	45	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	1972.61	2204.00
Manifest-F	10	Head end only (SD70s)	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	3274.52	3516.00
Manifest-F	10	Head end only (SD70s)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5262.67	6170.00
Manifest-F	10	Head end only (SD70s)	60	0.50%	Incline	<0.1%	0.00	0.00	> 50%	0.00%	3810.59	4075.00
Manifest-F	10	Head end only (SD70s)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	4228.21	4523.00
Manifest-F	10	Head end only (GP40s)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	198.26	228.00
Manifest-F	10	Head end only (GP40s)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	12.00%	150.81	206.00
Manifest-F	10	Head end only (GP40s)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	248.56	286.00
Manifest-F	10	Head end only (GP40s)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	4.00%	192.37	326.00
Manifest-F	10	Head end only (GP40s)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1238.93	1948.00
Manifest-F	10	Head end only (GP40s)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1381.37	1630.00
Manifest-F	10	Head end only (GP40s)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	2.00%	664.81	822.00
Manifest-F	10	Head end only (GP40s)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1828.53	2038.00
Manifest-F	10	Head end only (GP40s)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	1484.76	1716.00
Manifest-F	10	Head end only (GP40s)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	1.00%	1012.23	1194.00
Manifest-F	10	Head end only (GP40s)	30	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	1865.03	2226.00
Manifest-F	10	Head end only (GP40s)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	1179.95	1443.00
Manifest-F	10	Head end only (GP40s)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3995.51	4571.00
Manifest-F	10	Head end only (GP40s)	45	1.00%	Crest	<0.1%	0.00	0.00	< 10%	0.00%	2090.91	2348.00
Manifest-F	10	Head end only (GP40s)	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	3556.23	4071.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-F	10	Head end only (GP40s)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5676.56	6487.00
Manifest-F	10	Head end only (GP40s)	60	0.50%	Incline	<0.1%	0.00	0.00	> 50%	0.00%	4018.81	4410.00
Manifest-F	10	Head end only (GP40s)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	4488.22	4872.00
Manifest-G	10	Head end only (SD70s)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	299.71	490.00
Manifest-G	10	Head end only (SD70s)	10	0.50%	Incline	< 0.5%	1.00	1.00	< 0.1%	29.00%	175.23	349.00
Manifest-G	10	Head end only (SD70s)	10	1.10%	Decline	<0.1%	0.00	0.00	< 10%	1.00%	455.82	668.00
Manifest-G	10	Head end only (SD70s)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	1.00%	308.53	413.00
Manifest-G	10	Head end only (SD70s)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	990.81	1922.00
Manifest-G	10	Head end only (SD70s)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1339.12	1570.00
Manifest-G	10	Head end only (SD70s)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	19.00%	583.38	746.00
Manifest-G	10	Head end only (SD70s)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1696.02	1954.00
Manifest-G	10	Head end only (SD70s)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	1407.13	1799.00
Manifest-G	10	Head end only (SD70s)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	9.00%	942.47	1123.00
Manifest-G	10	Head end only (SD70s)	30	1.10%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	1799.80	2161.00
Manifest-G	10	Head end only (SD70s)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	1.00%	1078.83	1497.00
Manifest-G	10	Head end only (SD70s)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3724.55	4318.00
Manifest-G	10	Head end only (SD70s)	45	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	1943.10	2195.00
Manifest-G	10	Head end only (SD70s)	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	3093.99	3313.00
Manifest-G	10	Head end only (SD70s)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5216.86	5991.00
Manifest-G	10	Head end only (SD70s)	60	0.50%	Incline	<0.1%	0.00	0.00	> 50%	0.00%	3597.23	3823.00
Manifest-G	10	Head end only (SD70s)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	4087.22	4441.00
Manifest-G	10	Head end only (GP40s)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	201.13	403.00
Manifest-G	10	Head end only (GP40s)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	6.00%	150.34	199.00
Manifest-G	10	Head end only (GP40s)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	247.84	281.00
Manifest-G	10	Head end only (GP40s)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	197.38	361.00
Manifest-G	10	Head end only (GP40s)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1073.40	1328.00
Manifest-G	10	Head end only (GP40s)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1354.37	1620.00
Manifest-G	10	Head end only (GP40s)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	1.00%	640.27	845.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-G	10	Head end only (GP40s)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1750.42	1981.00
Manifest-G	10	Head end only (GP40s)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	1443.11	1715.00
Manifest-G	10	Head end only (GP40s)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	977.17	1165.00
Manifest-G	10	Head end only (GP40s)	30	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	1865.21	2170.00
Manifest-G	10	Head end only (GP40s)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	1095.12	1457.00
Manifest-G	10	Head end only (GP40s)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3847.70	4361.00
Manifest-G	10	Head end only (GP40s)	45	1.00%	Crest	<0.1%	0.00	0.00	< 10%	0.00%	2029.37	2273.00
Manifest-G	10	Head end only (GP40s)	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	3441.90	4157.00
Manifest-G	10	Head end only (GP40s)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5296.97	5960.00
Manifest-G	10	Head end only (GP40s)	60	0.50%	Incline	<0.1%	0.00	0.00	> 50%	0.00%	3787.40	4124.00
Manifest-G	10	Head end only (GP40s)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	4370.71	4791.00
Manifest-H	10	Head end only (SD70s)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	1.00%	306.23	500.00
Manifest-H	10	Head end only (SD70s)	10	0.50%	Incline	< 0.5%	0.00	0.00	< 0.1%	15.00%	148.34	342.00
Manifest-H	10	Head end only (SD70s)	10	1.10%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	482.86	639.00
Manifest-H	10	Head end only (SD70s)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	349.23	435.00
Manifest-H	10	Head end only (SD70s)	15	2.80%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	631.57	769.00
Manifest-H	10	Head end only (SD70s)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1205.18	1437.00
Manifest-H	10	Head end only (SD70s)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	22.00%	487.36	667.00
Manifest-H	10	Head end only (SD70s)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1465.56	1823.00
Manifest-H	10	Head end only (SD70s)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	1106.67	1576.00
Manifest-H	10	Head end only (SD70s)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	9.00%	797.34	956.00
Manifest-H	10	Head end only (SD70s)	30	1.10%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	1571.51	1969.00
Manifest-H	10	Head end only (SD70s)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	1.00%	973.28	1403.00
Manifest-H	10	Head end only (SD70s)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3038.59	3558.00
Manifest-H	10	Head end only (SD70s)	45	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	1647.81	1917.00
Manifest-H	10	Head end only (SD70s)	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	2924.79	3391.00
Manifest-H	10	Head end only (SD70s)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4022.67	4715.00
Manifest-H	10	Head end only (SD70s)	60	0.50%	Incline	<0.1%	0.00	0.00	> 50%	0.00%	2959.14	3234.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-H	10	Head end only (SD70s)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	3262.02	3484.00
Manifest-H	10	Head end only (GP40s)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	307.83	440.00
Manifest-H	10	Head end only (GP40s)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	171.72	296.00
Manifest-H	10	Head end only (GP40s)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	205.42	234.00
Manifest-H	10	Head end only (GP40s)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	266.61	390.00
Manifest-H	10	Head end only (GP40s)	15	2.80%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	656.93	772.00
Manifest-H	10	Head end only (GP40s)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	967.77	1328.00
Manifest-H	10	Head end only (GP40s)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	7.00%	521.02	705.00
Manifest-H	10	Head end only (GP40s)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1257.73	1627.00
Manifest-H	10	Head end only (GP40s)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	1088.13	1410.00
Manifest-H	10	Head end only (GP40s)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	821.35	1000.00
Manifest-H	10	Head end only (GP40s)	30	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	1415.10	1784.00
Manifest-H	10	Head end only (GP40s)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	896.57	1229.00
Manifest-H	10	Head end only (GP40s)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2963.43	3196.00
Manifest-H	10	Head end only (GP40s)	45	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	1685.42	1939.00
Manifest-H	10	Head end only (GP40s)	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	2730.76	3156.00
Manifest-H	10	Head end only (GP40s)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3806.89	4562.00
Manifest-H	10	Head end only (GP40s)	60	0.50%	Incline	<0.1%	0.00	0.00	> 50%	0.00%	3022.62	3382.00
Manifest-H	10	Head end only (GP40s)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	3270.38	3643.00
Manifest-I	10	Head end only (SD70s)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	357.00	487.00
Manifest-I	10	Head end only (SD70s)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	29.00%	190.48	288.00
Manifest-I	10	Head end only (SD70s)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	326.15	609.00
Manifest-I	10	Head end only (SD70s)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	6.00%	262.84	377.00
Manifest-I	10	Head end only (SD70s)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2151.76	2295.00
Manifest-I	10	Head end only (SD70s)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1751.19	1957.00
Manifest-I	10	Head end only (SD70s)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	5.00%	682.78	794.00
Manifest-I	10	Head end only (SD70s)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2323.37	2612.00
Manifest-I	10	Head end only (SD70s)	30	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	1916.82	2222.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-I	10	Head end only (SD70s)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	3.00%	1241.01	1426.00
Manifest-I	10	Head end only (SD70s)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2468.62	2778.00
Manifest-I	10	Head end only (SD70s)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	1393.56	1735.00
Manifest-I	10	Head end only (SD70s)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5016.89	5343.00
Manifest-I	10	Head end only (SD70s)	45	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	2385.83	2610.00
Manifest-I	10	Head end only (SD70s)	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	5240.59	5583.00
Manifest-I	10	Head end only (SD70s)	60	0.50%	Incline	<0.1%	0.00	0.00	> 50%	0.00%	4803.66	5148.00
Manifest-I	10	Head end only (SD70s)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	5726.31	6120.00
Manifest-I	10	Head end only (GP40s)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	1.00%	253.33	285.00
Manifest-I	10	Head end only (GP40s)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	18.00%	190.98	259.00
Manifest-I	10	Head end only (GP40s)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	350.43	401.00
Manifest-I	10	Head end only (GP40s)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	4.00%	207.48	275.00
Manifest-I	10	Head end only (GP40s)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2109.55	2292.00
Manifest-I	10	Head end only (GP40s)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1696.13	1980.00
Manifest-I	10	Head end only (GP40s)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	1.00%	718.17	842.00
Manifest-I	10	Head end only (GP40s)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2355.45	2641.00
Manifest-I	10	Head end only (GP40s)	30	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	1878.05	2225.00
Manifest-I	10	Head end only (GP40s)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1296.60	1491.00
Manifest-I	10	Head end only (GP40s)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2453.99	2720.00
Manifest-I	10	Head end only (GP40s)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	1476.50	1679.00
Manifest-I	10	Head end only (GP40s)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5705.21	6156.00
Manifest-I	10	Head end only (GP40s)	45	1.00%	Crest	<0.1%	0.00	0.00	< 10%	0.00%	2572.61	2796.00
Manifest-I	10	Head end only (GP40s)	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	6021.20	6467.00
Manifest-I	10	Head end only (GP40s)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	8319.80	8920.00
Manifest-I	10	Head end only (GP40s)	60	0.50%	Incline	<0.1%	0.00	0.00	> 50%	0.00%	5237.64	5490.00
Manifest-I	10	Head end only (GP40s)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	6317.99	6858.00
Manifest-J	10	Head end only (SD70s)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	319.79	466.00
Manifest-J	10	Head end only (SD70s)	10	0.50%	Incline	> 1.0%	18.60	30.00	< 0.1%	35.00%	172.38	295.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-J	10	Head end only (SD70s)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	3.00%	286.77	563.00
Manifest-J	10	Head end only (SD70s)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	290.85	380.00
Manifest-J	10	Head end only (SD70s)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1838.83	2082.00
Manifest-J	10	Head end only (SD70s)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1480.66	1757.00
Manifest-J	10	Head end only (SD70s)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	16.00%	643.39	795.00
Manifest-J	10	Head end only (SD70s)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1949.86	2291.00
Manifest-J	10	Head end only (SD70s)	30	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	1641.73	2001.00
Manifest-J	10	Head end only (SD70s)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	2.00%	1069.54	1254.00
Manifest-J	10	Head end only (SD70s)	30	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	2107.69	2516.00
Manifest-J	10	Head end only (SD70s)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	1238.83	1727.00
Manifest-J	10	Head end only (SD70s)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4309.74	4873.00
Manifest-J	10	Head end only (SD70s)	45	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	2131.55	2370.00
Manifest-J	10	Head end only (SD70s)	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	3982.65	4217.00
Manifest-J	10	Head end only (SD70s)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5919.61	6584.00
Manifest-J	10	Head end only (SD70s)	60	0.50%	Incline	<0.1%	0.00	0.00	> 50%	0.00%	4215.77	4557.00
Manifest-J	10	Head end only (SD70s)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	4823.60	5470.00
Manifest-J	10	Head end only (GP40s)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	217.62	245.00
Manifest-J	10	Head end only (GP40s)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	14.00%	169.56	256.00
Manifest-J	10	Head end only (GP40s)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	287.86	333.00
Manifest-J	10	Head end only (GP40s)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	7.00%	195.23	333.00
Manifest-J	10	Head end only (GP40s)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1716.44	1993.00
Manifest-J	10	Head end only (GP40s)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1560.69	1774.00
Manifest-J	10	Head end only (GP40s)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	7.00%	672.17	807.00
Manifest-J	10	Head end only (GP40s)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2043.75	2293.00
Manifest-J	10	Head end only (GP40s)	30	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	1732.49	1998.00
Manifest-J	10	Head end only (GP40s)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1110.60	1357.00
Manifest-J	10	Head end only (GP40s)	30	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	2134.65	2523.00
Manifest-J	10	Head end only (GP40s)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	1285.75	1583.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-J	10	Head end only (GP40s)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4696.35	5288.00
Manifest-J	10	Head end only (GP40s)	45	1.00%	Crest	<0.1%	0.00	0.00	< 10%	0.00%	2296.53	2515.00
Manifest-J	10	Head end only (GP40s)	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	4403.93	5090.00
Manifest-J	10	Head end only (GP40s)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6640.40	7392.00
Manifest-J	10	Head end only (GP40s)	60	0.50%	Incline	<0.1%	0.00	0.00	> 50%	0.00%	4467.82	4871.00
Manifest-J	10	Head end only (GP40s)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	5142.81	5610.00
Manifest-A	40	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	17.00%	621.00	855.00
Manifest-A	40	Head end only	10	0.50%	Incline	> 1.0%	7.53	18.00	< 0.1%	100.00%	305.20	381.00
Manifest-A	40	Head end only	10	1.10%	Decline	< 0.5%	2.00	2.00	< 0.1%	5.00%	536.84	739.00
Manifest-A	40	Head end only	10	0.00%	Flat	> 1.0%	1.00	1.00	< 0.1%	61.00%	454.85	576.00
Manifest-A	40	Head end only	15	2.80%	Decline	> 50%	868.93	3269.00	> 25%, < 50%	9.00%	1784.11	4514.00
Manifest-A	40	Head end only	20	1.50%	Incline	> 1.0%	5.00	5.00	< 0.1%	100.00%	617.48	722.00
Manifest-A	40	Head end only	20	2.20%	Decline	> 1.0%	28.00	48.00	> 50%	38.00%	3410.18	3702.00
Manifest-A	40	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	22.00%	4026.31	4575.00
Manifest-A	40	Head end only	28	1.00%	Crest	> 1.0%	6.67	12.00	< 0.1%	95.00%	1478.59	1582.00
Manifest-A	40	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	5.00%	2862.52	3272.00
Manifest-A	40	Head end only	30	0.50%	Incline	> 1.0%	17.60	31.00	< 0.1%	99.00%	1706.46	1953.00
Manifest-A	40	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	17.00%	3270.30	3717.00
Manifest-A	40	Head end only	30	0.00%	Flat	> 1.0%	69.50	139.00	< 0.1%	95.00%	2138.78	2426.00
Manifest-A	40	Head end only	45	1.10%	Decline	< 0.5%	45.00	45.00	> 25%, < 50%	45.00%	7029.76	7462.00
Manifest-A	40	Head end only	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	7332.84	7793.00
Manifest-A	40	Head end only	46	0.50%	Incline	> 1.0%	32.75	57.00	< 0.1%	92.00%	3606.26	3831.00
Manifest-A	40	Head end only	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	5.00%	9352.28	9845.00
Manifest-A	40	Head end only	60	0.00%	Flat	> 1.0%	84.00	229.00	< 0.1%	58.00%	7203.01	7578.00
Manifest-B	40	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	13.00%	377.35	505.00
Manifest-B	40	Head end only	10	0.50%	Incline	> 50%	20.15	62.00	< 0.1%	98.00%	182.70	271.00
Manifest-B	40	Head end only	10	1.10%	Decline	> 25%	18.75	61.00	< 0.1%	69.00%	135.44	213.00
Manifest-B	40	Head end only	10	0.00%	Flat	> 1.0%	7.40	15.00	< 0.1%	39.00%	285.61	373.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-B	40	Head end only	15	2.80%	Decline	<0.1%	0.00	0.00	< 0.1%	2.00%	477.25	634.00
Manifest-B	40	Head end only	20	1.50%	Incline	> 25%	14.52	44.00	< 0.1%	100.00%	417.72	527.00
Manifest-B	40	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	< 0.1%	45.00%	535.98	694.00
Manifest-B	40	Head end only	25	1.70%	Decline	> 1.0%	24.10	86.00	< 0.1%	70.00%	656.19	876.00
Manifest-B	40	Head end only	28	1.00%	Crest	< 0.5%	2.00	2.00	< 0.1%	100.00%	947.94	1032.00
Manifest-B	40	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	59.00%	1208.09	1374.00
Manifest-B	40	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	100.00%	946.75	1074.00
Manifest-B	40	Head end only	30	1.10%	Decline	> 1.0%	20.67	43.00	< 0.1%	73.00%	793.40	992.00
Manifest-B	40	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	100.00%	1011.03	1098.00
Manifest-B	40	Head end only	45	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	64.00%	1591.74	1764.00
Manifest-B	40	Head end only	45	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	47.00%	2101.60	2476.00
Manifest-B	40	Head end only	46	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	100.00%	1815.03	1929.00
Manifest-B	40	Head end only	60	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	90.00%	3275.87	3718.00
Manifest-B	40	Head end only	60	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	99.00%	2974.00	3134.00
Manifest-C	40	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	37.00%	467.12	671.00
Manifest-C	40	Head end only	10	0.50%	Incline	> 1.0%	10.41	44.00	< 0.1%	94.00%	272.70	390.00
Manifest-C	40	Head end only	10	1.10%	Decline	> 1.0%	6.00	17.00	< 0.1%	34.00%	359.58	505.00
Manifest-C	40	Head end only	10	0.00%	Flat	> 1.0%	5.33	11.00	< 0.1%	56.00%	381.43	480.00
Manifest-C	40	Head end only	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2860.65	3920.00
Manifest-C	40	Head end only	20	1.50%	Incline	> 1.0%	6.29	14.00	< 0.1%	97.00%	559.47	662.00
Manifest-C	40	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	1.00%	2242.44	2850.00
Manifest-C	40	Head end only	25	1.70%	Decline	> 1.0%	109.00	109.00	> 50%	6.00%	2180.63	2645.00
Manifest-C	40	Head end only	28	1.00%	Crest	> 1.0%	24.62	79.00	< 0.1%	93.00%	1346.92	1418.00
Manifest-C	40	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	18.00%	2220.33	2731.00
Manifest-C	40	Head end only	30	0.50%	Incline	> 1.0%	24.00	98.00	< 0.1%	100.00%	1411.75	1600.00
Manifest-C	40	Head end only	30	1.10%	Decline	> 1.0%	52.33	91.00	< 0.1%	43.00%	2111.53	2516.00
Manifest-C	40	Head end only	30	0.00%	Flat	> 1.0%	26.27	52.00	< 0.1%	98.00%	1750.51	1940.00
Manifest-C	40	Head end only	45	1.10%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	21.00%	4439.66	5042.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-C	40	Head end only	45	1.00%	Trough	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	4842.70	5288.00
Manifest-C	40	Head end only	46	0.50%	Incline	> 1.0%	88.82	187.00	< 0.1%	100.00%	3002.39	3166.00
Manifest-C	40	Head end only	60	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	12.00%	6979.05	7519.00
Manifest-C	40	Head end only	60	0.00%	Flat	> 1.0%	121.86	198.00	< 0.1%	78.00%	5776.55	6012.00
Manifest-D	40	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	15.00%	520.57	653.00
Manifest-D	40	Head end only	10	0.50%	Incline	> 1.0%	14.32	32.00	< 0.1%	94.00%	279.01	390.00
Manifest-D	40	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	5.00%	427.56	588.00
Manifest-D	40	Head end only	10	0.00%	Flat	> 1.0%	7.17	15.00	< 0.1%	78.00%	387.19	538.00
Manifest-D	40	Head end only	15	2.80%	Decline	> 1.0%	771.25	1001.00	> 50%	1.00%	3945.58	4498.00
Manifest-D	40	Head end only	20	1.50%	Incline	> 1.0%	3.00	3.00	< 0.1%	99.00%	593.34	686.00
Manifest-D	40	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3410.33	3887.00
Manifest-D	40	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3592.49	4193.00
Manifest-D	40	Head end only	28	1.00%	Crest	> 1.0%	10.00	18.00	< 0.1%	81.00%	1455.71	1539.00
Manifest-D	40	Head end only	30	0.50%	Decline	> 1.0%	21.00	21.00	< 0.1%	13.00%	2594.63	2713.00
Manifest-D	40	Head end only	30	0.50%	Incline	> 1.0%	34.71	95.00	< 0.1%	100.00%	1595.48	1782.00
Manifest-D	40	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	< 10%	5.00%	2881.74	3363.00
Manifest-D	40	Head end only	30	0.00%	Flat	> 25%	51.88	173.00	< 0.1%	95.00%	2006.37	2255.00
Manifest-D	40	Head end only	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	7.00%	6699.54	7349.00
Manifest-D	40	Head end only	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	6568.74	6861.00
Manifest-D	40	Head end only	46	0.50%	Incline	> 1.0%	96.07	239.00	< 0.1%	94.00%	3429.87	3679.00
Manifest-D	40	Head end only	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	8795.04	9115.00
Manifest-D	40	Head end only	60	0.00%	Flat	> 1.0%	184.32	711.00	< 0.1%	81.00%	6786.23	7135.00
Manifest-E	40	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	36.00%	456.51	505.00
Manifest-E	40	Head end only	10	0.50%	Incline	> 1.0%	10.71	28.00	< 0.1%	93.00%	269.16	376.00
Manifest-E	40	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	31.00%	361.23	500.00
Manifest-E	40	Head end only	10	0.00%	Flat	> 1.0%	2.50	6.00	< 0.1%	96.00%	341.10	467.00
Manifest-E	40	Head end only	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3154.88	3533.00
Manifest-E	40	Head end only	20	1.50%	Incline	< 0.5%	1.00	1.00	< 0.1%	100.00%	576.28	636.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-E	40	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2414.83	2988.00
Manifest-E	40	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2350.13	2584.00
Manifest-E	40	Head end only	28	1.00%	Crest	> 1.0%	31.27	70.00	< 0.1%	98.00%	1359.80	1432.00
Manifest-E	40	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	7.00%	2232.48	2338.00
Manifest-E	40	Head end only	30	0.50%	Incline	> 1.0%	5.67	8.00	< 0.1%	100.00%	1493.17	1672.00
Manifest-E	40	Head end only	30	1.10%	Decline	> 1.0%	67.00	67.00	< 0.1%	22.00%	2179.87	2491.00
Manifest-E	40	Head end only	30	0.00%	Flat	> 1.0%	45.25	125.00	< 0.1%	97.00%	1779.46	1963.00
Manifest-E	40	Head end only	45	1.10%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	11.00%	4773.69	5018.00
Manifest-E	40	Head end only	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	5154.56	5475.00
Manifest-E	40	Head end only	46	0.50%	Incline	> 1.0%	87.33	206.00	< 0.1%	89.00%	3110.19	3275.00
Manifest-E	40	Head end only	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	2.00%	7281.94	7594.00
Manifest-E	40	Head end only	60	0.00%	Flat	> 1.0%	122.10	253.00	< 0.1%	60.00%	5841.53	6062.00
Manifest-F	40	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	32.00%	398.59	508.00
Manifest-F	40	Head end only	10	0.50%	Incline	> 1.0%	7.88	26.00	< 0.1%	99.00%	247.05	330.00
Manifest-F	40	Head end only	10	1.10%	Decline	> 1.0%	8.00	10.00	< 0.1%	42.00%	253.79	327.00
Manifest-F	40	Head end only	10	0.00%	Flat	> 1.0%	4.67	6.00	< 0.1%	96.00%	307.99	396.00
Manifest-F	40	Head end only	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1266.22	1541.00
Manifest-F	40	Head end only	20	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	100.00%	523.49	629.00
Manifest-F	40	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1333.11	1667.00
Manifest-F	40	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	1442.06	1721.00
Manifest-F	40	Head end only	28	1.00%	Crest	> 1.0%	13.50	32.00	< 0.1%	100.00%	1235.27	1334.00
Manifest-F	40	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	44.00%	1802.49	1981.00
Manifest-F	40	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	100.00%	1305.50	1438.00
Manifest-F	40	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	30.00%	1529.04	1698.00
Manifest-F	40	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	99.00%	1506.08	1594.00
Manifest-F	40	Head end only	45	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	24.00%	3199.33	3439.00
Manifest-F	40	Head end only	45	1.00%	Trough	<0.1%	0.00	0.00	< 10%	0.00%	3828.97	4024.00
Manifest-F	40	Head end only	46	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	93.00%	2656.49	2809.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-F	40	Head end only	60	0.50%	Decline	<0.1%	0.00	0.00	< 10%	2.00%	5588.77	5875.00
Manifest-F	40	Head end only	60	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	31.00%	4891.39	5078.00
Manifest-G	40	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	75.00%	371.81	515.00
Manifest-G	40	Head end only	10	0.50%	Incline	> 25%	13.97	39.00	< 0.1%	99.00%	228.20	318.00
Manifest-G	40	Head end only	10	1.10%	Decline	> 1.0%	17.92	44.00	< 0.1%	63.00%	226.66	299.00
Manifest-G	40	Head end only	10	0.00%	Flat	> 1.0%	6.00	6.00	< 0.1%	92.00%	286.76	403.00
Manifest-G	40	Head end only	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	981.03	1097.00
Manifest-G	40	Head end only	20	1.50%	Incline	> 1.0%	20.00	20.00	< 0.1%	100.00%	499.38	576.00
Manifest-G	40	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	1067.27	1210.00
Manifest-G	40	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	< 10%	9.00%	1221.44	1511.00
Manifest-G	40	Head end only	28	1.00%	Crest	> 25%	54.18	173.00	< 0.1%	100.00%	1193.72	1258.00
Manifest-G	40	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	79.00%	1634.87	1880.00
Manifest-G	40	Head end only	30	0.50%	Incline	< 0.5%	6.00	6.00	< 0.1%	100.00%	1210.67	1388.00
Manifest-G	40	Head end only	30	1.10%	Decline	> 1.0%	25.00	35.00	< 0.1%	67.00%	1343.15	1539.00
Manifest-G	40	Head end only	30	0.00%	Flat	> 1.0%	32.33	45.00	< 0.1%	100.00%	1406.73	1523.00
Manifest-G	40	Head end only	45	1.10%	Decline	> 1.0%	48.00	82.00	< 0.1%	61.00%	2822.06	3065.00
Manifest-G	40	Head end only	45	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	6.00%	3371.30	3580.00
Manifest-G	40	Head end only	46	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	99.00%	2477.91	2602.00
Manifest-G	40	Head end only	60	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	18.00%	4985.51	5202.00
Manifest-G	40	Head end only	60	0.00%	Flat	> 1.0%	51.33	120.00	< 0.1%	88.00%	4384.18	4554.00
Manifest-H	40	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	14.00%	490.90	676.00
Manifest-H	40	Head end only	10	0.50%	Incline	> 1.0%	4.77	13.00	< 0.1%	95.00%	280.99	401.00
Manifest-H	40	Head end only	10	1.10%	Decline	> 1.0%	15.83	34.00	< 0.1%	30.00%	394.90	538.00
Manifest-H	40	Head end only	10	0.00%	Flat	> 1.0%	4.50	7.00	< 0.1%	75.00%	384.05	506.00
Manifest-H	40	Head end only	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3006.50	3334.00
Manifest-H	40	Head end only	20	1.50%	Incline	> 1.0%	11.17	38.00	< 0.1%	97.00%	570.31	686.00
Manifest-H	40	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2374.58	2956.00
Manifest-H	40	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	6.00%	2382.94	2932.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-H	40	Head end only	28	1.00%	Crest	> 1.0%	33.73	90.00	< 0.1%	100.00%	1374.19	1462.00
Manifest-H	40	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	23.00%	2308.92	2643.00
Manifest-H	40	Head end only	30	0.50%	Incline	> 1.0%	30.14	88.00	< 0.1%	99.00%	1570.29	1730.00
Manifest-H	40	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	18.00%	2233.15	2660.00
Manifest-H	40	Head end only	30	0.00%	Flat	> 1.0%	40.75	94.00	< 0.1%	98.00%	1825.78	2005.00
Manifest-H	40	Head end only	45	1.10%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	15.00%	4908.41	5514.00
Manifest-H	40	Head end only	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	5324.45	5612.00
Manifest-H	40	Head end only	46	0.50%	Incline	> 1.0%	78.10	335.00	< 0.1%	96.00%	3172.19	3362.00
Manifest-H	40	Head end only	60	0.50%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	3.00%	7371.81	7743.00
Manifest-H	40	Head end only	60	0.00%	Flat	> 1.0%	172.64	513.00	< 10%	72.00%	5937.76	6369.00
Manifest-I	40	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	41.00%	414.89	566.00
Manifest-I	40	Head end only	10	0.50%	Incline	> 1.0%	9.40	21.00	< 0.1%	96.00%	240.01	335.00
Manifest-I	40	Head end only	10	1.10%	Decline	> 1.0%	13.58	37.00	< 0.1%	74.00%	196.17	288.00
Manifest-I	40	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	79.00%	310.88	424.00
Manifest-I	40	Head end only	15	2.80%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	830.66	966.00
Manifest-I	40	Head end only	20	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	99.00%	507.21	647.00
Manifest-I	40	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	< 10%	1.00%	950.81	1127.00
Manifest-I	40	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	< 0.1%	23.00%	1125.19	1356.00
Manifest-I	40	Head end only	28	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	100.00%	1183.62	1243.00
Manifest-I	40	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	33.00%	1688.75	1860.00
Manifest-I	40	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	100.00%	1236.99	1410.00
Manifest-I	40	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	53.00%	1226.60	1384.00
Manifest-I	40	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	100.00%	1407.26	1484.00
Manifest-I	40	Head end only	45	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	38.00%	2546.25	2830.00
Manifest-I	40	Head end only	45	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	1.00%	3284.42	3443.00
Manifest-I	40	Head end only	46	0.50%	Incline	< 0.5%	18.00	18.00	< 0.1%	99.00%	2428.20	2629.00
Manifest-I	40	Head end only	60	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	33.00%	4741.50	4962.00
Manifest-I	40	Head end only	60	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	99.00%	4189.57	4375.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-J	40	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	27.00%	409.57	529.00
Manifest-J	40	Head end only	10	0.50%	Incline	> 1.0%	8.47	22.00	< 0.1%	100.00%	247.65	344.00
Manifest-J	40	Head end only	10	1.10%	Decline	> 1.0%	14.18	36.00	< 0.1%	64.00%	249.72	340.00
Manifest-J	40	Head end only	10	0.00%	Flat	> 1.0%	3.50	6.00	< 0.1%	97.00%	298.97	421.00
Manifest-J	40	Head end only	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1262.11	1453.00
Manifest-J	40	Head end only	20	1.50%	Incline	> 1.0%	1.00	1.00	< 0.1%	100.00%	512.76	600.00
Manifest-J	40	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1301.52	1513.00
Manifest-J	40	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	< 10%	4.00%	1439.80	1646.00
Manifest-J	40	Head end only	28	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	84.00%	1231.80	1307.00
Manifest-J	40	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	48.00%	1781.61	1891.00
Manifest-J	40	Head end only	30	0.50%	Incline	> 1.0%	41.00	41.00	< 0.1%	99.00%	1311.59	1461.00
Manifest-J	40	Head end only	30	1.10%	Decline	> 1.0%	18.25	39.00	< 0.1%	71.00%	1508.57	1698.00
Manifest-J	40	Head end only	30	0.00%	Flat	> 1.0%	27.67	52.00	< 0.1%	100.00%	1486.12	1587.00
Manifest-J	40	Head end only	45	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	49.00%	3171.54	3461.00
Manifest-J	40	Head end only	45	1.00%	Trough	<0.1%	0.00	0.00	< 10%	1.00%	3743.47	3955.00
Manifest-J	40	Head end only	46	0.50%	Incline	> 1.0%	18.33	41.00	< 0.1%	99.00%	2633.24	2768.00
Manifest-J	40	Head end only	60	0.50%	Decline	<0.1%	0.00	0.00	< 10%	11.00%	5508.76	5745.00
Manifest-J	40	Head end only	60	0.00%	Flat	< 0.5%	9.00	9.00	< 0.1%	64.00%	4820.79	5072.00
Manifest-A	100	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	938.05	1179.00
Manifest-A	100	Head end only	10	0.50%	Incline	> 1.0%	13.29	44.00	< 0.1%	51.00%	435.13	587.00
Manifest-A	100	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	1835.76	57800.00
Manifest-A	100	Head end only	10	0.00%	Flat	< 0.5%	0.00	0.00	< 0.1%	47.00%	588.51	761.00
Manifest-A	100	Head end only	15	2.80%	Decline	1	998.13	2426.00	< 0.1%	0.00%	-71.01	-45.00
Manifest-A	100	Head end only	18	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	58.00%	629.13	702.00
Manifest-A	100	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	9929.38	10410.00
Manifest-A	100	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6092.53	6581.00
Manifest-A	100	Head end only	26	1.00%	Crest	> 1.0%	19.00	19.00	< 0.1%	35.00%	1929.80	2162.00
Manifest-A	100	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3705.13	4427.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-A	100	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	85.00%	2202.73	2326.00
Manifest-A	100	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3888.31	4289.00
Manifest-A	100	Head end only	30	0.00%	Flat	> 1.0%	25.71	53.00	< 0.1%	98.00%	2688.30	2784.00
Manifest-A	100	Head end only	45	0.50%	Incline	< 0.5%	26.00	26.00	< 0.1%	85.00%	4142.89	4313.00
Manifest-A	100	Head end only	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	8404.54	9322.00
Manifest-A	100	Head end only	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	8233.70	8581.00
Manifest-A	100	Head end only	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	11515.86	12074.00
Manifest-A	100	Head end only	60	0.00%	Flat	> 1.0%	245.33	395.00	< 10%	24.00%	8499.14	8890.00
Manifest-B	100	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	< 10%	1.00%	572.49	831.00
Manifest-B	100	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	63.00%	287.38	359.00
Manifest-B	100	Head end only	10	1.10%	Decline	> 1.0%	13.00	13.00	< 0.1%	7.00%	210.65	336.00
Manifest-B	100	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	19.00%	458.58	602.00
Manifest-B	100	Head end only	15	2.80%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	933.55	1233.00
Manifest-B	100	Head end only	18	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	98.00%	483.33	572.00
Manifest-B	100	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	1109.05	16141.00
Manifest-B	100	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	1054.01	1295.00
Manifest-B	100	Head end only	26	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	95.00%	1513.97	1572.00
Manifest-B	100	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2116.07	2446.00
Manifest-B	100	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	30.00%	1606.93	1811.00
Manifest-B	100	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	1126.82	1405.00
Manifest-B	100	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	37.00%	1717.67	1821.00
Manifest-B	100	Head end only	45	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	10.00%	2729.68	2864.00
Manifest-B	100	Head end only	45	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2185.25	2497.00
Manifest-B	100	Head end only	45	1.00%	Trough	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	3629.33	4066.00
Manifest-B	100	Head end only	60	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	5251.40	5470.00
Manifest-B	100	Head end only	60	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	3.00%	4672.25	4827.00
Manifest-C	100	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	6.00%	796.35	1030.00
Manifest-C	100	Head end only	10	0.50%	Incline	< 0.5%	0.00	0.00	< 0.1%	15.00%	414.13	595.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-C	100	Head end only	10	1.10%	Decline	> 1.0%	11.60	26.00	< 0.1%	22.00%	374.35	541.00
Manifest-C	100	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	23.00%	517.55	672.00
Manifest-C	100	Head end only	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3045.15	3794.00
Manifest-C	100	Head end only	18	1.50%	Incline	> 1.0%	12.50	18.00	< 0.1%	25.00%	560.09	683.00
Manifest-C	100	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2435.12	2730.00
Manifest-C	100	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	1.00%	2266.31	2693.00
Manifest-C	100	Head end only	26	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	68.00%	1617.13	1769.00
Manifest-C	100	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	9.00%	2926.87	3359.00
Manifest-C	100	Head end only	30	0.50%	Incline	< 0.5%	10.00	10.00	< 0.1%	81.00%	1986.56	2116.00
Manifest-C	100	Head end only	30	1.10%	Decline	> 25%	40.60	126.00	< 0.1%	63.00%	2033.09	2293.00
Manifest-C	100	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	82.00%	2308.95	2429.00
Manifest-C	100	Head end only	45	0.50%	Incline	> 1.0%	28.00	28.00	< 0.1%	88.00%	3571.70	3691.00
Manifest-C	100	Head end only	45	1.10%	Decline	> 1.0%	67.33	124.00	< 0.1%	48.00%	4018.41	4545.00
Manifest-C	100	Head end only	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	5643.04	5953.00
Manifest-C	100	Head end only	60	0.50%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	6.00%	7797.54	8458.00
Manifest-C	100	Head end only	60	0.00%	Flat	> 1.0%	13.00	23.00	< 0.1%	56.00%	6636.50	6834.00
Manifest-D	100	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	921.78	1171.00
Manifest-D	100	Head end only	10	0.50%	Incline	> 1.0%	3.00	5.00	< 0.1%	72.00%	386.18	509.00
Manifest-D	100	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	2.00%	624.42	810.00
Manifest-D	100	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	76.00%	568.50	765.00
Manifest-D	100	Head end only	15	2.80%	Decline	> 50%	1263.02	2423.00	> 25%, < 50%	0.00%	4091.46	16008.00
Manifest-D	100	Head end only	18	1.50%	Incline	> 1.0%	11.00	19.00	< 0.1%	57.00%	604.51	700.00
Manifest-D	100	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6748.39	7986.00
Manifest-D	100	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4652.03	5527.00
Manifest-D	100	Head end only	26	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	10.00%	1876.78	1956.00
Manifest-D	100	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	< 10%	1.00%	3688.38	3930.00
Manifest-D	100	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	74.00%	2162.19	2295.00
Manifest-D	100	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	< 10%	2.00%	3375.41	3969.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-D	100	Head end only	30	0.00%	Flat	< 0.5%	7.00	7.00	< 0.1%	74.00%	2673.49	2763.00
Manifest-D	100	Head end only	45	0.50%	Incline	> 1.0%	34.67	90.00	< 0.1%	59.00%	4098.63	4255.00
Manifest-D	100	Head end only	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7013.54	7510.00
Manifest-D	100	Head end only	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	7699.91	8221.00
Manifest-D	100	Head end only	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	10721.03	11484.00
Manifest-D	100	Head end only	60	0.00%	Flat	> 1.0%	81.67	133.00	< 10%	24.00%	8114.18	8314.00
Manifest-E	100	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	723.31	918.00
Manifest-E	100	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	64.00%	331.15	438.00
Manifest-E	100	Head end only	10	1.10%	Decline	> 1.0%	10.33	20.00	< 0.1%	13.00%	430.67	611.00
Manifest-E	100	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	71.00%	483.54	617.00
Manifest-E	100	Head end only	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4447.59	7791.00
Manifest-E	100	Head end only	18	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	82.00%	541.21	642.00
Manifest-E	100	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3124.61	3655.00
Manifest-E	100	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2712.94	3030.00
Manifest-E	100	Head end only	26	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	1.00%	1741.40	1804.00
Manifest-E	100	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	< 10%	1.00%	2879.18	3341.00
Manifest-E	100	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	60.00%	1927.62	2059.00
Manifest-E	100	Head end only	30	1.10%	Decline	> 1.0%	97.00	97.00	< 0.1%	10.00%	2351.82	2651.00
Manifest-E	100	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	65.00%	2294.44	2383.00
Manifest-E	100	Head end only	45	0.50%	Incline	< 0.5%	8.00	8.00	< 0.1%	48.00%	3587.38	3722.00
Manifest-E	100	Head end only	45	1.10%	Decline	<0.1%	0.00	0.00	< 10%	4.00%	4734.44	5144.00
Manifest-E	100	Head end only	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	5650.29	6013.00
Manifest-E	100	Head end only	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	8227.59	8465.00
Manifest-E	100	Head end only	60	0.00%	Flat	> 1.0%	51.00	51.00	< 0.1%	21.00%	6856.19	7005.00
Manifest-F	100	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	2.00%	877.44	1006.00
Manifest-F	100	Head end only	10	0.50%	Incline	< 0.5%	1.00	1.00	< 0.1%	22.00%	399.78	557.00
Manifest-F	100	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	2.00%	461.41	587.00
Manifest-F	100	Head end only	10	0.00%	Flat	> 1.0%	5.50	6.00	< 0.1%	27.00%	522.78	667.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-F	100	Head end only	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5574.58	6849.00
Manifest-F	100	Head end only	18	1.50%	Incline	> 1.0%	8.00	8.00	< 0.1%	68.00%	548.07	697.00
Manifest-F	100	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3656.90	4442.00
Manifest-F	100	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3078.83	3518.00
Manifest-F	100	Head end only	26	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	25.00%	1783.99	1898.00
Manifest-F	100	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	3217.47	3417.00
Manifest-F	100	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	63.00%	2073.69	2177.00
Manifest-F	100	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	4.00%	2481.31	2913.00
Manifest-F	100	Head end only	30	0.00%	Flat	> 1.0%	29.00	29.00	< 0.1%	66.00%	2471.81	2588.00
Manifest-F	100	Head end only	45	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	47.00%	3799.73	3924.00
Manifest-F	100	Head end only	45	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	2.00%	5002.93	5671.00
Manifest-F	100	Head end only	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	6428.93	6823.00
Manifest-F	100	Head end only	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	9043.36	9528.00
Manifest-F	100	Head end only	60	0.00%	Flat	<0.1%	0.00	0.00	< 10%	8.00%	7286.95	7524.00
Manifest-G	100	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	821.42	1055.00
Manifest-G	100	Head end only	10	0.50%	Incline	> 1.0%	3.00	4.00	< 0.1%	72.00%	344.06	417.00
Manifest-G	100	Head end only	10	1.10%	Decline	> 1.0%	22.33	49.00	< 0.1%	8.00%	449.92	600.00
Manifest-G	100	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	76.00%	520.08	680.00
Manifest-G	100	Head end only	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5339.39	6630.00
Manifest-G	100	Head end only	18	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	45.00%	562.97	669.00
Manifest-G	100	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3557.43	3995.00
Manifest-G	100	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2993.92	3580.00
Manifest-G	100	Head end only	26	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	23.00%	1781.23	1868.00
Manifest-G	100	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	3207.37	3624.00
Manifest-G	100	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	40.00%	2070.83	2183.00
Manifest-G	100	Head end only	30	1.10%	Decline	< 0.5%	1.00	1.00	< 0.1%	7.00%	2518.87	2880.00
Manifest-G	100	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	36.00%	2486.06	2564.00
Manifest-G	100	Head end only	45	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	41.00%	3809.70	3929.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-G	100	Head end only	45	1.10%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	5134.42	5573.00
Manifest-G	100	Head end only	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	6509.00	6743.00
Manifest-G	100	Head end only	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	8973.64	9606.00
Manifest-G	100	Head end only	60	0.00%	Flat	<0.1%	0.00	0.00	< 10%	9.00%	7313.34	7520.00
Manifest-H	100	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	828.45	1056.00
Manifest-H	100	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	49.00%	367.64	442.00
Manifest-H	100	Head end only	10	1.10%	Decline	> 1.0%	9.33	13.00	< 0.1%	12.00%	478.29	599.00
Manifest-H	100	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	51.00%	528.26	657.00
Manifest-H	100	Head end only	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5567.17	7360.00
Manifest-H	100	Head end only	18	1.50%	Incline	< 0.5%	1.00	1.00	< 0.1%	48.00%	599.19	669.00
Manifest-H	100	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3730.01	4182.00
Manifest-H	100	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3080.96	3417.00
Manifest-H	100	Head end only	26	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	70.00%	1835.96	1958.00
Manifest-H	100	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	14.00%	3232.55	3438.00
Manifest-H	100	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	72.00%	2064.00	2173.00
Manifest-H	100	Head end only	30	1.10%	Decline	< 0.5%	14.00	14.00	< 0.1%	6.00%	2604.21	2891.00
Manifest-H	100	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	78.00%	2484.34	2626.00
Manifest-H	100	Head end only	45	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	70.00%	3801.93	3948.00
Manifest-H	100	Head end only	45	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	5239.55	5618.00
Manifest-H	100	Head end only	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	6535.08	6867.00
Manifest-H	100	Head end only	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	9102.13	9502.00
Manifest-H	100	Head end only	60	0.00%	Flat	<0.1%	0.00	0.00	< 10%	21.00%	7334.53	7527.00
Manifest-I	100	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	1.00%	766.20	994.00
Manifest-I	100	Head end only	10	0.50%	Incline	> 1.0%	4.00	4.00	< 0.1%	69.00%	353.27	483.00
Manifest-I	100	Head end only	10	1.10%	Decline	> 1.0%	4.00	5.00	< 0.1%	5.00%	515.48	670.00
Manifest-I	100	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	60.00%	506.39	659.00
Manifest-I	100	Head end only	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7241.86	8709.00
Manifest-I	100	Head end only	18	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	66.00%	560.50	647.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-I	100	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4343.86	4705.00
Manifest-I	100	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3430.74	3819.00
Manifest-I	100	Head end only	26	1.00%	Crest	> 1.0%	25.75	95.00	< 0.1%	100.00%	1856.80	1976.00
Manifest-I	100	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	3133.12	3270.00
Manifest-I	100	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	65.00%	2028.15	2155.00
Manifest-I	100	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2742.17	3105.00
Manifest-I	100	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	71.00%	2427.94	2533.00
Manifest-I	100	Head end only	45	0.50%	Incline	> 1.0%	85.00	137.00	< 0.1%	64.00%	3770.03	3880.00
Manifest-I	100	Head end only	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5649.89	6003.00
Manifest-I	100	Head end only	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	6423.38	6720.00
Manifest-I	100	Head end only	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	9296.09	9533.00
Manifest-I	100	Head end only	60	0.00%	Flat	> 1.0%	20.00	34.00	< 0.1%	26.00%	7362.65	7612.00
Manifest-J	100	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	1.00%	910.97	1059.00
Manifest-J	100	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	44.00%	377.65	506.00
Manifest-J	100	Head end only	10	1.10%	Decline	> 1.0%	11.00	18.00	< 0.1%	5.00%	580.86	798.00
Manifest-J	100	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	48.00%	556.95	738.00
Manifest-J	100	Head end only	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	12350.92	15389.00
Manifest-J	100	Head end only	18	1.50%	Incline	> 1.0%	2.50	4.00	< 0.1%	14.00%	609.62	677.00
Manifest-J	100	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5514.79	7564.00
Manifest-J	100	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4010.81	4737.00
Manifest-J	100	Head end only	26	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	54.00%	1911.26	1994.00
Manifest-J	100	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	3534.77	3776.00
Manifest-J	100	Head end only	30	0.50%	Incline	< 0.5%	0.00	0.00	< 0.1%	63.00%	2178.91	2267.00
Manifest-J	100	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	< 10%	2.00%	3097.36	3584.00
Manifest-J	100	Head end only	30	0.00%	Flat	> 1.0%	14.60	29.00	< 0.1%	86.00%	2639.92	2740.00
Manifest-J	100	Head end only	45	0.50%	Incline	> 1.0%	48.00	79.00	< 0.1%	82.00%	4032.02	4138.00
Manifest-J	100	Head end only	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6293.56	6883.00
Manifest-J	100	Head end only	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	7317.06	7619.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-J	100	Head end only	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	10254.50	10671.00
Manifest-J	100	Head end only	60	0.00%	Flat	> 1.0%	288.00	288.00	< 0.1%	41.00%	7903.83	8057.00
Manifest-A	100	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	4.00%	665.22	879.00
Manifest-A	100	Distributed (Head and Rear)	10	0.50%	Incline	> 1.0%	3.00	3.00	< 0.1%	84.00%	309.90	379.00
Manifest-A	100	Distributed (Head and Rear)	10	1.10%	Decline	> 1.0%	25.40	95.00	< 0.1%	73.00%	394.64	537.00
Manifest-A	100	Distributed (Head and Rear)	10	0.00%	Flat	< 0.5%	0.00	0.00	< 0.1%	64.00%	470.65	605.00
Manifest-A	100	Distributed (Head and Rear)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6785.90	7283.00
Manifest-A	100	Distributed (Head and Rear)	18	1.50%	Incline	> 1.0%	5.00	5.00	< 0.1%	51.00%	560.94	620.00
Manifest-A	100	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6105.08	6598.00
Manifest-A	100	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3867.78	4663.00
Manifest-A	100	Distributed (Head and Rear)	26	1.00%	Crest	> 1.0%	25.00	25.00	< 0.1%	29.00%	1625.92	1715.00
Manifest-A	100	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	5.00%	2876.98	3183.00
Manifest-A	100	Distributed (Head and Rear)	30	0.50%	Incline	> 1.0%	48.00	48.00	< 0.1%	93.00%	1826.05	1982.00
Manifest-A	100	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	8.00%	2801.10	3447.00
Manifest-A	100	Distributed (Head and Rear)	30	0.00%	Flat	> 1.0%	88.50	165.00	< 0.1%	87.00%	2183.60	2309.00
Manifest-A	100	Distributed (Head and Rear)	45	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	80.00%	3567.68	3752.00
Manifest-A	100	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	5.00%	6553.51	7029.00
Manifest-A	100	Distributed (Head and Rear)	45	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	19.00%	3480.42	3857.00
Manifest-A	100	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	1.00%	9280.17	9651.00
Manifest-A	100	Distributed (Head and Rear)	60	0.00%	Flat	> 1.0%	137.67	151.00	< 0.1%	46.00%	7224.06	7489.00
Manifest-B	100	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	11.00%	444.15	593.00
Manifest-B	100	Distributed (Head and Rear)	10	0.50%	Incline	> 1.0%	12.53	40.00	< 0.1%	100.00%	211.57	253.00
Manifest-B	100	Distributed (Head and Rear)	10	1.10%	Decline	> 50%	24.50	68.00	< 0.1%	56.00%	110.94	200.00
Manifest-B	100	Distributed (Head and Rear)	10	0.00%	Flat	< 0.5%	1.00	1.00	< 0.1%	71.00%	302.37	554.00
Manifest-B	100	Distributed (Head and Rear)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1535.68	1705.00
Manifest-B	100	Distributed (Head and Rear)	18	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	100.00%	444.97	485.00
Manifest-B	100	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	754.41	929.00
Manifest-B	100	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	< 0.1%	30.00%	727.24	921.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-B	100	Distributed (Head and Rear)	26	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	83.00%	1103.21	1169.00
Manifest-B	100	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	9.00%	1551.93	1828.00
Manifest-B	100	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	74.00%	1273.03	1410.00
Manifest-B	100	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	63.00%	812.76	956.00
Manifest-B	100	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	78.00%	1334.42	1441.00
Manifest-B	100	Distributed (Head and Rear)	45	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	58.00%	2171.86	2333.00
Manifest-B	100	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	26.00%	1653.33	1879.00
Manifest-B	100	Distributed (Head and Rear)	45	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	6.00%	2617.82	2746.00
Manifest-B	100	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	2.00%	4062.41	4240.00
Manifest-B	100	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	3.00%	3646.37	3803.00
Manifest-C	100	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	23.00%	539.08	748.00
Manifest-C	100	Distributed (Head and Rear)	10	0.50%	Incline	> 1.0%	2.00	2.00	< 0.1%	81.00%	296.51	423.00
Manifest-C	100	Distributed (Head and Rear)	10	1.10%	Decline	> 75%	43.79	109.00	< 0.1%	95.00%	198.37	329.00
Manifest-C	100	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	54.00%	410.78	516.00
Manifest-C	100	Distributed (Head and Rear)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3038.69	3643.00
Manifest-C	100	Distributed (Head and Rear)	18	1.50%	Incline	> 1.0%	7.00	8.00	< 0.1%	84.00%	528.37	612.00
Manifest-C	100	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1648.29	2084.00
Manifest-C	100	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	< 10%	23.00%	1425.09	1792.00
Manifest-C	100	Distributed (Head and Rear)	26	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	77.00%	1252.60	1333.00
Manifest-C	100	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	67.00%	2123.73	2321.00
Manifest-C	100	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	84.00%	1621.45	1725.00
Manifest-C	100	Distributed (Head and Rear)	30	1.10%	Decline	> 1.0%	47.57	99.00	< 0.1%	97.00%	1449.64	1668.00
Manifest-C	100	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	93.00%	1782.57	1863.00
Manifest-C	100	Distributed (Head and Rear)	45	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	86.00%	2922.08	3062.00
Manifest-C	100	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	85.00%	3067.42	3365.00
Manifest-C	100	Distributed (Head and Rear)	45	1.00%	Trough	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	4152.93	4369.00
Manifest-C	100	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	1.00%	6127.82	6512.00
Manifest-C	100	Distributed (Head and Rear)	60	0.00%	Flat	< 0.5%	3.00	3.00	< 0.1%	26.00%	5381.52	5545.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-D	100	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	7.00%	657.79	872.00
Manifest-D	100	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	67.00%	334.73	436.00
Manifest-D	100	Distributed (Head and Rear)	10	1.10%	Decline	> 25%	23.20	54.00	< 0.1%	77.00%	342.82	529.00
Manifest-D	100	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	76.00%	431.24	557.00
Manifest-D	100	Distributed (Head and Rear)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5544.56	5811.00
Manifest-D	100	Distributed (Head and Rear)	18	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	58.00%	556.50	630.00
Manifest-D	100	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4220.14	4695.00
Manifest-D	100	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2905.14	3311.00
Manifest-D	100	Distributed (Head and Rear)	26	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	5.00%	1567.76	1645.00
Manifest-D	100	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2831.23	3096.00
Manifest-D	100	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	46.00%	1857.42	1954.00
Manifest-D	100	Distributed (Head and Rear)	30	1.10%	Decline	> 1.0%	64.00	86.00	< 0.1%	29.00%	2405.00	2888.00
Manifest-D	100	Distributed (Head and Rear)	30	0.00%	Flat	> 1.0%	8.00	8.00	< 0.1%	75.00%	2134.53	2215.00
Manifest-D	100	Distributed (Head and Rear)	45	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	50.00%	3483.50	3620.00
Manifest-D	100	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	21.00%	5340.34	5767.00
Manifest-D	100	Distributed (Head and Rear)	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	6115.54	6225.00
Manifest-D	100	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	8567.36	8945.00
Manifest-D	100	Distributed (Head and Rear)	60	0.00%	Flat	> 1.0%	65.71	214.00	< 0.1%	27.00%	6880.38	7108.00
Manifest-E	100	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	5.00%	523.12	693.00
Manifest-E	100	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	86.00%	282.05	376.00
Manifest-E	100	Distributed (Head and Rear)	10	1.10%	Decline	> 50%	33.13	79.00	< 0.1%	97.00%	227.20	331.00
Manifest-E	100	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	83.00%	368.80	482.00
Manifest-E	100	Distributed (Head and Rear)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3744.68	4514.00
Manifest-E	100	Distributed (Head and Rear)	18	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	88.00%	500.53	568.00
Manifest-E	100	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2023.65	2360.00
Manifest-E	100	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	6.00%	1706.81	2014.00
Manifest-E	100	Distributed (Head and Rear)	26	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	33.00%	1391.26	1457.00
Manifest-E	100	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	1.00%	2172.34	2360.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-E	100	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	74.00%	1594.64	1676.00
Manifest-E	100	Distributed (Head and Rear)	30	1.10%	Decline	> 1.0%	39.40	85.00	< 0.1%	87.00%	1652.87	1883.00
Manifest-E	100	Distributed (Head and Rear)	30	0.00%	Flat	> 1.0%	6.50	12.00	< 0.1%	87.00%	1795.12	1868.00
Manifest-E	100	Distributed (Head and Rear)	45	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	66.00%	2989.40	3118.00
Manifest-E	100	Distributed (Head and Rear)	45	1.10%	Decline	> 1.0%	61.00	120.00	< 0.1%	82.00%	3575.05	4052.00
Manifest-E	100	Distributed (Head and Rear)	45	1.00%	Trough	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	4294.18	4452.00
Manifest-E	100	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	6601.58	6795.00
Manifest-E	100	Distributed (Head and Rear)	60	0.00%	Flat	> 1.0%	95.00	95.00	< 0.1%	29.00%	5613.16	5796.00
Manifest-F	100	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	14.00%	579.35	714.00
Manifest-F	100	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	53.00%	282.56	407.00
Manifest-F	100	Distributed (Head and Rear)	10	1.10%	Decline	> 25%	19.18	49.00	< 0.1%	79.00%	249.42	362.00
Manifest-F	100	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	45.00%	399.77	516.00
Manifest-F	100	Distributed (Head and Rear)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4281.55	4675.00
Manifest-F	100	Distributed (Head and Rear)	18	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	31.00%	525.15	585.00
Manifest-F	100	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2469.80	3122.00
Manifest-F	100	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	1.00%	1966.91	2363.00
Manifest-F	100	Distributed (Head and Rear)	26	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	48.00%	1395.78	1490.00
Manifest-F	100	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2401.67	2653.00
Manifest-F	100	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	36.00%	1692.16	1793.00
Manifest-F	100	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	26.00%	1780.95	2168.00
Manifest-F	100	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	44.00%	1936.14	2060.00
Manifest-F	100	Distributed (Head and Rear)	45	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	44.00%	3156.12	3269.00
Manifest-F	100	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	< 10%	11.00%	3962.34	4605.00
Manifest-F	100	Distributed (Head and Rear)	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	4892.61	5083.00
Manifest-F	100	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7248.63	7671.00
Manifest-F	100	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	10.00%	5969.67	6068.00
Manifest-G	100	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	4.00%	550.29	692.00
Manifest-G	100	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	65.00%	312.18	382.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-G	100	Distributed (Head and Rear)	10	1.10%	Decline	> 25%	23.65	55.00	< 0.1%	87.00%	249.12	337.00
Manifest-G	100	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	60.00%	421.33	529.00
Manifest-G	100	Distributed (Head and Rear)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3918.76	4227.00
Manifest-G	100	Distributed (Head and Rear)	18	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	76.00%	513.74	598.00
Manifest-G	100	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2248.56	2612.00
Manifest-G	100	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1889.28	2167.00
Manifest-G	100	Distributed (Head and Rear)	26	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	46.00%	1418.52	1475.00
Manifest-G	100	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	4.00%	2447.90	2674.00
Manifest-G	100	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	36.00%	1716.85	1803.00
Manifest-G	100	Distributed (Head and Rear)	30	1.10%	Decline	> 1.0%	44.50	60.00	< 0.1%	68.00%	1760.41	2057.00
Manifest-G	100	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	41.00%	1945.59	2007.00
Manifest-G	100	Distributed (Head and Rear)	45	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	38.00%	3173.66	3266.00
Manifest-G	100	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	< 10%	12.00%	3866.92	4292.00
Manifest-G	100	Distributed (Head and Rear)	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	4903.26	5160.00
Manifest-G	100	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7131.54	7319.00
Manifest-G	100	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 10%	10.00%	5981.83	6136.00
Manifest-H	100	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	8.00%	583.64	770.00
Manifest-H	100	Distributed (Head and Rear)	10	0.50%	Incline	> 1.0%	7.22	19.00	< 0.1%	79.00%	303.36	407.00
Manifest-H	100	Distributed (Head and Rear)	10	1.10%	Decline	> 25%	30.76	94.00	< 0.1%	84.00%	272.58	404.00
Manifest-H	100	Distributed (Head and Rear)	10	0.00%	Flat	> 1.0%	8.00	8.00	< 0.1%	59.00%	425.35	530.00
Manifest-H	100	Distributed (Head and Rear)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4076.87	4373.00
Manifest-H	100	Distributed (Head and Rear)	18	1.50%	Incline	> 1.0%	4.50	7.00	< 0.1%	98.00%	521.40	593.00
Manifest-H	100	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2371.27	2723.00
Manifest-H	100	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1925.16	2112.00
Manifest-H	100	Distributed (Head and Rear)	26	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	93.00%	1481.92	1580.00
Manifest-H	100	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	6.00%	2427.05	2686.00
Manifest-H	100	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	99.00%	1706.30	1809.00
Manifest-H	100	Distributed (Head and Rear)	30	1.10%	Decline	> 1.0%	40.00	40.00	< 0.1%	80.00%	1825.83	2146.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-H	100	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	93.00%	1949.09	2047.00
Manifest-H	100	Distributed (Head and Rear)	45	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	91.00%	3194.52	3316.00
Manifest-H	100	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	24.00%	3951.63	4193.00
Manifest-H	100	Distributed (Head and Rear)	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	4955.61	5110.00
Manifest-H	100	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7306.83	7667.00
Manifest-H	100	Distributed (Head and Rear)	60	0.00%	Flat	> 1.0%	61.00	61.00	< 0.1%	51.00%	5980.68	6136.00
Manifest-I	100	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	19.00%	528.71	681.00
Manifest-I	100	Distributed (Head and Rear)	10	0.50%	Incline	> 1.0%	10.71	27.00	< 0.1%	94.00%	336.36	430.00
Manifest-I	100	Distributed (Head and Rear)	10	1.10%	Decline	> 50%	26.84	63.00	< 0.1%	85.00%	278.62	380.00
Manifest-I	100	Distributed (Head and Rear)	10	0.00%	Flat	> 1.0%	8.00	11.00	< 0.1%	71.00%	367.14	525.00
Manifest-I	100	Distributed (Head and Rear)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4741.59	5018.00
Manifest-I	100	Distributed (Head and Rear)	18	1.50%	Incline	> 1.0%	4.00	6.00	< 0.1%	98.00%	511.17	565.00
Manifest-I	100	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2693.37	3037.00
Manifest-I	100	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2131.32	2355.00
Manifest-I	100	Distributed (Head and Rear)	26	1.00%	Crest	> 1.0%	49.24	109.00	< 0.1%	100.00%	1472.63	1528.00
Manifest-I	100	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	2.00%	2391.01	2496.00
Manifest-I	100	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	96.00%	1678.23	1802.00
Manifest-I	100	Distributed (Head and Rear)	30	1.10%	Decline	> 1.0%	79.00	79.00	< 0.1%	67.00%	1914.37	2312.00
Manifest-I	100	Distributed (Head and Rear)	30	0.00%	Flat	> 1.0%	24.00	37.00	< 0.1%	86.00%	1913.65	2044.00
Manifest-I	100	Distributed (Head and Rear)	45	0.50%	Incline	< 0.5%	29.00	29.00	< 0.1%	77.00%	3181.12	3313.00
Manifest-I	100	Distributed (Head and Rear)	45	1.10%	Decline	> 1.0%	111.00	111.00	< 10%	33.00%	4295.69	4562.00
Manifest-I	100	Distributed (Head and Rear)	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	4890.15	5045.00
Manifest-I	100	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7332.89	7507.00
Manifest-I	100	Distributed (Head and Rear)	60	0.00%	Flat	> 1.0%	18.00	18.00	< 0.1%	38.00%	6051.88	6233.00
Manifest-J	100	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	2.00%	599.27	761.00
Manifest-J	100	Distributed (Head and Rear)	10	0.50%	Incline	> 1.0%	3.38	8.00	< 0.1%	97.00%	308.27	439.00
Manifest-J	100	Distributed (Head and Rear)	10	1.10%	Decline	> 25%	21.75	61.00	< 0.1%	78.00%	316.38	471.00
Manifest-J	100	Distributed (Head and Rear)	10	0.00%	Flat	> 1.0%	9.64	17.00	< 0.1%	98.00%	438.21	633.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-J	100	Distributed (Head and Rear)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5008.17	5523.00
Manifest-J	100	Distributed (Head and Rear)	18	1.50%	Incline	> 1.0%	41.00	41.00	< 0.1%	99.00%	545.63	599.00
Manifest-J	100	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3368.77	3791.00
Manifest-J	100	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2553.87	2926.00
Manifest-J	100	Distributed (Head and Rear)	26	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	74.00%	1538.74	1620.00
Manifest-J	100	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2668.18	3113.00
Manifest-J	100	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	92.00%	1819.85	1923.00
Manifest-J	100	Distributed (Head and Rear)	30	1.10%	Decline	< 0.5%	0.00	0.00	< 0.1%	40.00%	2200.94	2624.00
Manifest-J	100	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	89.00%	2093.33	2266.00
Manifest-J	100	Distributed (Head and Rear)	45	0.50%	Incline	> 1.0%	32.00	40.00	< 0.1%	89.00%	3398.76	3520.00
Manifest-J	100	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	13.00%	4912.21	5308.00
Manifest-J	100	Distributed (Head and Rear)	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	5817.35	6021.00
Manifest-J	100	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	8158.05	8391.00
Manifest-J	100	Distributed (Head and Rear)	60	0.00%	Flat	> 1.0%	45.33	89.00	< 0.1%	36.00%	6545.06	6674.00
Manifest-A	150	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	2.00%	916.95	1093.00
Manifest-A	150	Distributed (Head and Rear)	10	0.50%	Incline	> 1.0%	16.00	16.00	< 0.1%	47.00%	366.61	458.00
Manifest-A	150	Distributed (Head and Rear)	10	1.10%	Decline	> 1.0%	13.50	15.00	< 10%	14.00%	1151.07	60800.00
Manifest-A	150	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	43.00%	541.85	689.00
Manifest-A	150	Distributed (Head and Rear)	15	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	10.00%	433.69	491.00
Manifest-A	150	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	9208.06	10299.00
Manifest-A	150	Distributed (Head and Rear)	23	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	4.00%	1666.07	1740.00
Manifest-A	150	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5027.13	6061.00
Manifest-A	150	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3680.97	3995.00
Manifest-A	150	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	24.00%	2157.41	2289.00
Manifest-A	150	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	3342.17	3723.00
Manifest-A	150	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	26.00%	2693.72	2781.00
Manifest-A	150	Distributed (Head and Rear)	40	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	17.00%	3418.79	3500.00
Manifest-A	150	Distributed (Head and Rear)	40	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	6015.06	6206.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-A	150	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7202.08	7681.00
Manifest-A	150	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	11073.68	11479.00
Manifest-A	150	Distributed (Head and Rear)	60	0.00%	Flat	> 1.0%	45.60	80.00	< 10%	6.00%	8365.24	8573.00
Manifest-B	150	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	649.63	790.00
Manifest-B	150	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	73.00%	265.31	371.00
Manifest-B	150	Distributed (Head and Rear)	10	1.10%	Decline	> 50%	23.62	68.00	< 0.1%	57.00%	127.56	254.00
Manifest-B	150	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	4.00%	487.18	604.00
Manifest-B	150	Distributed (Head and Rear)	15	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	33.00%	398.26	454.00
Manifest-B	150	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	956.67	1132.00
Manifest-B	150	Distributed (Head and Rear)	23	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	7.00%	1398.79	1525.00
Manifest-B	150	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	< 0.1%	3.00%	883.97	1081.00
Manifest-B	150	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2070.86	2371.00
Manifest-B	150	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	6.00%	1566.30	1710.00
Manifest-B	150	Distributed (Head and Rear)	30	1.10%	Decline	< 0.5%	43.00	43.00	< 0.1%	32.00%	928.15	1154.00
Manifest-B	150	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	2.00%	1697.96	1801.00
Manifest-B	150	Distributed (Head and Rear)	40	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	1.00%	2232.66	2308.00
Manifest-B	150	Distributed (Head and Rear)	40	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	0.00%	2965.56	3116.00
Manifest-B	150	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	8.00%	1874.51	2234.00
Manifest-B	150	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	5170.72	5568.00
Manifest-B	150	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 10%	0.00%	4565.57	4719.00
Manifest-C	150	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	3.00%	828.82	941.00
Manifest-C	150	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	19.00%	334.40	410.00
Manifest-C	150	Distributed (Head and Rear)	10	1.10%	Decline	> 25%	26.52	112.00	< 0.1%	79.00%	319.04	418.00
Manifest-C	150	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	36.00%	476.01	586.00
Manifest-C	150	Distributed (Head and Rear)	15	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	1.00%	419.45	478.00
Manifest-C	150	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3447.22	3886.00
Manifest-C	150	Distributed (Head and Rear)	23	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	15.00%	1405.75	1688.00
Manifest-C	150	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2473.15	2886.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-C	150	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	10.00%	2938.45	3318.00
Manifest-C	150	Distributed (Head and Rear)	30	0.50%	Incline	< 0.5%	5.00	5.00	< 0.1%	10.00%	1928.14	2072.00
Manifest-C	150	Distributed (Head and Rear)	30	1.10%	Decline	> 1.0%	42.00	42.00	< 0.1%	49.00%	2097.55	2391.00
Manifest-C	150	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	12.00%	2303.76	2373.00
Manifest-C	150	Distributed (Head and Rear)	40	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	14.00%	3041.85	3116.00
Manifest-C	150	Distributed (Head and Rear)	40	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	4282.72	4394.00
Manifest-C	150	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	< 10%	13.00%	4467.89	4820.00
Manifest-C	150	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	2.00%	8387.82	8802.00
Manifest-C	150	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 10%	7.00%	6836.18	6975.00
Manifest-D	150	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	806.01	882.00
Manifest-D	150	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	39.00%	335.49	408.00
Manifest-D	150	Distributed (Head and Rear)	10	1.10%	Decline	> 50%	27.28	94.00	< 0.1%	96.00%	213.82	303.00
Manifest-D	150	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	23.00%	456.82	582.00
Manifest-D	150	Distributed (Head and Rear)	15	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	47.00%	408.98	494.00
Manifest-D	150	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2234.40	2501.00
Manifest-D	150	Distributed (Head and Rear)	23	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	9.00%	1315.84	1383.00
Manifest-D	150	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	3.00%	1737.65	2039.00
Manifest-D	150	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2718.22	3111.00
Manifest-D	150	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	13.00%	1875.79	1964.00
Manifest-D	150	Distributed (Head and Rear)	30	1.10%	Decline	> 1.0%	16.00	56.00	< 0.1%	85.00%	1588.75	1842.00
Manifest-D	150	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	5.00%	2183.36	2256.00
Manifest-D	150	Distributed (Head and Rear)	40	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	4.00%	2869.33	2983.00
Manifest-D	150	Distributed (Head and Rear)	40	1.00%	Trough	<0.1%	0.00	0.00	< 10%	0.00%	3900.64	4038.00
Manifest-D	150	Distributed (Head and Rear)	45	1.10%	Decline	> 1.0%	36.50	40.00	< 0.1%	56.00%	3418.79	3797.00
Manifest-D	150	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7405.11	7757.00
Manifest-D	150	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	1.00%	6261.98	6381.00
Manifest-E	150	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	828.47	914.00
Manifest-E	150	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	26.00%	350.17	503.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-E	150	Distributed (Head and Rear)	10	1.10%	Decline	> 50%	23.82	74.00	< 0.1%	91.00%	194.47	303.00
Manifest-E	150	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	32.00%	511.17	711.00
Manifest-E	150	Distributed (Head and Rear)	15	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	22.00%	420.51	501.00
Manifest-E	150	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2134.33	2943.00
Manifest-E	150	Distributed (Head and Rear)	23	1.00%	Crest	<0.1%	0.00	0.00	< 10%	0.00%	1318.26	1607.00
Manifest-E	150	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	15.00%	1694.40	1963.00
Manifest-E	150	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	2672.37	2832.00
Manifest-E	150	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	25.00%	1778.69	1942.00
Manifest-E	150	Distributed (Head and Rear)	30	1.10%	Decline	> 1.0%	25.46	80.00	< 0.1%	90.00%	1532.98	1840.00
Manifest-E	150	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	10.00%	2178.51	2266.00
Manifest-E	150	Distributed (Head and Rear)	40	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	11.00%	2857.70	2930.00
Manifest-E	150	Distributed (Head and Rear)	40	1.00%	Trough	<0.1%	0.00	0.00	< 10%	1.00%	3850.70	4057.00
Manifest-E	150	Distributed (Head and Rear)	45	1.10%	Decline	> 1.0%	134.00	184.00	< 0.1%	77.00%	3273.16	3576.00
Manifest-E	150	Distributed (Head and Rear)	60	0.50%	Decline	> 1.0%	172.00	277.00	< 0.1%	100.00%	4396.33	4456.00
Manifest-E	150	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 10%	4.00%	6214.17	6368.00
Manifest-F	150	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	780.01	878.00
Manifest-F	150	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	10.00%	334.11	415.00
Manifest-F	150	Distributed (Head and Rear)	10	1.10%	Decline	> 25%	21.08	76.00	< 0.1%	88.00%	253.51	358.00
Manifest-F	150	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	11.00%	449.57	536.00
Manifest-F	150	Distributed (Head and Rear)	15	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	8.00%	406.40	474.00
Manifest-F	150	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2807.36	3274.00
Manifest-F	150	Distributed (Head and Rear)	23	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	1399.02	1515.00
Manifest-F	150	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	1.00%	2077.17	2515.00
Manifest-F	150	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2727.88	2842.00
Manifest-F	150	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	4.00%	1854.10	1986.00
Manifest-F	150	Distributed (Head and Rear)	30	1.10%	Decline	> 1.0%	48.00	197.00	< 0.1%	71.00%	1762.80	2004.00
Manifest-F	150	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	8.00%	2205.46	2268.00
Manifest-F	150	Distributed (Head and Rear)	40	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	8.00%	2895.91	2986.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-F	150	Distributed (Head and Rear)	40	1.00%	Trough	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	3936.11	4080.00
Manifest-F	150	Distributed (Head and Rear)	45	1.10%	Decline	> 1.0%	38.33	72.00	< 0.1%	41.00%	3853.10	4307.00
Manifest-F	150	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7794.04	7938.00
Manifest-F	150	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 10%	1.00%	6453.52	6554.00
Manifest-G	150	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 10%	3.00%	711.25	932.00
Manifest-G	150	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	98.00%	371.90	492.00
Manifest-G	150	Distributed (Head and Rear)	10	1.10%	Decline	> 50%	46.34	114.00	< 0.1%	91.00%	234.46	455.00
Manifest-G	150	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	30.00%	529.26	654.00
Manifest-G	150	Distributed (Head and Rear)	15	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	94.00%	393.35	473.00
Manifest-G	150	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2254.49	2591.00
Manifest-G	150	Distributed (Head and Rear)	23	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	18.00%	1432.23	1511.00
Manifest-G	150	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	4.00%	1777.03	2092.00
Manifest-G	150	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2776.54	2983.00
Manifest-G	150	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	7.00%	1911.66	2018.00
Manifest-G	150	Distributed (Head and Rear)	30	1.10%	Decline	> 1.0%	21.33	24.00	< 0.1%	77.00%	1644.24	2007.00
Manifest-G	150	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	13.00%	2212.53	2279.00
Manifest-G	150	Distributed (Head and Rear)	40	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	7.00%	2927.48	3036.00
Manifest-G	150	Distributed (Head and Rear)	40	1.00%	Trough	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	4034.86	4148.00
Manifest-G	150	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	41.00%	3505.16	3928.00
Manifest-G	150	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7410.25	7576.00
Manifest-G	150	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 10%	1.00%	6379.30	6542.00
Manifest-H	150	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	800.18	961.00
Manifest-H	150	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	37.00%	354.85	487.00
Manifest-H	150	Distributed (Head and Rear)	10	1.10%	Decline	> 1.0%	13.00	48.00	< 0.1%	70.00%	374.85	530.00
Manifest-H	150	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	40.00%	514.00	636.00
Manifest-H	150	Distributed (Head and Rear)	15	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	16.00%	415.38	470.00
Manifest-H	150	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4740.69	5440.00
Manifest-H	150	Distributed (Head and Rear)	23	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	28.00%	1501.55	1572.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-H	150	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3163.56	3559.00
Manifest-H	150	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	3276.41	3517.00
Manifest-H	150	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	13.00%	2049.44	2169.00
Manifest-H	150	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	10.00%	2467.61	2813.00
Manifest-H	150	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	15.00%	2517.08	2600.00
Manifest-H	150	Distributed (Head and Rear)	40	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	10.00%	3210.38	3281.00
Manifest-H	150	Distributed (Head and Rear)	40	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	5163.11	5328.00
Manifest-H	150	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5370.33	5847.00
Manifest-H	150	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	9393.03	9674.00
Manifest-H	150	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 10%	1.00%	7438.41	7593.00
Manifest-I	150	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	3.00%	876.15	946.00
Manifest-I	150	Distributed (Head and Rear)	10	0.50%	Incline	> 1.0%	4.33	6.00	< 0.1%	54.00%	338.54	467.00
Manifest-I	150	Distributed (Head and Rear)	10	1.10%	Decline	> 25%	28.06	125.00	< 0.1%	79.00%	310.78	445.00
Manifest-I	150	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	66.00%	512.17	652.00
Manifest-I	150	Distributed (Head and Rear)	15	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	55.00%	429.21	496.00
Manifest-I	150	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3620.31	4151.00
Manifest-I	150	Distributed (Head and Rear)	23	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	80.00%	1440.62	1537.00
Manifest-I	150	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2496.99	2850.00
Manifest-I	150	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	3099.15	3564.00
Manifest-I	150	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	22.00%	2006.39	2100.00
Manifest-I	150	Distributed (Head and Rear)	30	1.10%	Decline	< 0.5%	2.00	2.00	< 0.1%	35.00%	2102.17	2433.00
Manifest-I	150	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	20.00%	2387.79	2595.00
Manifest-I	150	Distributed (Head and Rear)	40	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	15.00%	3117.67	3199.00
Manifest-I	150	Distributed (Head and Rear)	40	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	4678.53	5082.00
Manifest-I	150	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	2.00%	4467.11	5059.00
Manifest-I	150	Distributed (Head and Rear)	60	0.50%	Decline	> 1.0%	11.50	22.00	> 50%	2.00%	8754.11	8998.00
Manifest-I	150	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 10%	2.00%	6994.28	7153.00
Manifest-J	150	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	842.69	960.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v≥30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-J	150	Distributed (Head and Rear)	10	0.50%	Incline	> 1.0%	5.00	5.00	< 0.1%	76.00%	374.58	475.00
Manifest-J	150	Distributed (Head and Rear)	10	1.10%	Decline	> 25%	24.60	74.00	< 0.1%	88.00%	323.84	504.00
Manifest-J	150	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	90.00%	506.47	636.00
Manifest-J	150	Distributed (Head and Rear)	15	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	75.00%	418.91	468.00
Manifest-J	150	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3976.26	4656.00
Manifest-J	150	Distributed (Head and Rear)	23	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	57.00%	1449.00	1647.00
Manifest-J	150	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2703.79	3032.00
Manifest-J	150	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	3071.86	3366.00
Manifest-J	150	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	34.00%	1975.12	2097.00
Manifest-J	150	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	26.00%	2213.74	2693.00
Manifest-J	150	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	27.00%	2387.28	2465.00
Manifest-J	150	Distributed (Head and Rear)	40	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	15.00%	3104.73	3168.00
Manifest-J	150	Distributed (Head and Rear)	40	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	4570.34	4835.00
Manifest-J	150	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	< 10%	6.00%	4742.94	5084.00
Manifest-J	150	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	8887.87	9245.00
Manifest-J	150	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 10%	3.00%	7015.03	7155.00
Manifest-A	150	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	850.77	900.00
Manifest-A	150	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	59.00%	352.33	451.00
Manifest-A	150	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	6.00%	485.70	668.00
Manifest-A	150	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	49.00%	464.49	611.00
Manifest-A	150	Distributed (Head, Mid, Rear)	15	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	54.00%	408.49	454.00
Manifest-A	150	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	8355.60	9539.00
Manifest-A	150	Distributed (Head, Mid, Rear)	23	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	7.00%	1463.78	1504.00
Manifest-A	150	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4683.98	5349.00
Manifest-A	150	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	3266.91	3639.00
Manifest-A	150	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	12.00%	1923.24	2024.00
Manifest-A	150	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	3088.74	3333.00
Manifest-A	150	Distributed (Head, Mid, Rear)	30	0.00%	Flat	> 1.0%	33.00	33.00	< 0.1%	7.00%	2377.52	2450.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-A	150	Distributed (Head, Mid, Rear)	40	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	5.00%	3092.97	3188.00
Manifest-A	150	Distributed (Head, Mid, Rear)	40	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	5102.02	5212.00
Manifest-A	150	Distributed (Head, Mid, Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6931.42	7411.00
Manifest-A	150	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	10391.71	11021.00
Manifest-A	150	Distributed (Head, Mid, Rear)	60	0.00%	Flat	> 1.0%	75.43	153.00	> 10%, < 25%	8.00%	7635.91	7776.00
Manifest-B	150	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	537.15	666.00
Manifest-B	150	Distributed (Head, Mid, Rear)	10	0.50%	Incline	> 1.0%	2.50	4.00	< 0.1%	80.00%	234.90	318.00
Manifest-B	150	Distributed (Head, Mid, Rear)	10	1.10%	Decline	> 50%	16.25	48.00	< 0.1%	73.00%	114.34	246.00
Manifest-B	150	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	6.00%	412.40	533.00
Manifest-B	150	Distributed (Head, Mid, Rear)	15	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	64.00%	360.72	401.00
Manifest-B	150	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	912.70	1216.00
Manifest-B	150	Distributed (Head, Mid, Rear)	23	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	9.00%	1177.98	1391.00
Manifest-B	150	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	< 0.1%	1.00%	807.53	1060.00
Manifest-B	150	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	1798.24	2019.00
Manifest-B	150	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	1.00%	1408.68	1553.00
Manifest-B	150	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	19.00%	870.95	1034.00
Manifest-B	150	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	1465.50	1522.00
Manifest-B	150	Distributed (Head, Mid, Rear)	40	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	1.00%	2019.01	2087.00
Manifest-B	150	Distributed (Head, Mid, Rear)	40	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	0.00%	2525.37	2847.00
Manifest-B	150	Distributed (Head, Mid, Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	1776.05	1982.00
Manifest-B	150	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	4514.71	4800.00
Manifest-B	150	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 10%	0.00%	4083.09	4185.00
Manifest-C	150	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	46.00%	615.52	801.00
Manifest-C	150	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	61.00%	297.58	371.00
Manifest-C	150	Distributed (Head, Mid, Rear)	10	1.10%	Decline	> 25%	22.04	88.00	< 0.1%	75.00%	283.13	410.00
Manifest-C	150	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	62.00%	405.04	522.00
Manifest-C	150	Distributed (Head, Mid, Rear)	15	1.50%	Incline	< 0.5%	3.00	3.00	< 0.1%	11.00%	386.51	440.00
Manifest-C	150	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3224.99	3478.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-C	150	Distributed (Head, Mid, Rear)	23	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	1.00%	1229.40	1378.00
Manifest-C	150	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2285.39	2511.00
Manifest-C	150	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	2579.53	2702.00
Manifest-C	150	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	6.00%	1721.85	1829.00
Manifest-C	150	Distributed (Head, Mid, Rear)	30	1.10%	Decline	> 1.0%	31.00	34.00	< 0.1%	27.00%	1943.18	2129.00
Manifest-C	150	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	10.00%	2012.25	2084.00
Manifest-C	150	Distributed (Head, Mid, Rear)	40	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	5.00%	2724.35	2784.00
Manifest-C	150	Distributed (Head, Mid, Rear)	40	1.00%	Trough	<0.1%	0.00	0.00	< 10%	0.00%	3629.87	3748.00
Manifest-C	150	Distributed (Head, Mid, Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	< 10%	1.00%	4247.65	4663.00
Manifest-C	150	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7552.98	7758.00
Manifest-C	150	Distributed (Head, Mid, Rear)	60	0.00%	Flat	> 1.0%	90.00	182.00	< 10%	5.00%	6242.68	6369.00
Manifest-D	150	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	3.00%	569.51	708.00
Manifest-D	150	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	67.00%	296.31	414.00
Manifest-D	150	Distributed (Head, Mid, Rear)	10	1.10%	Decline	> 50%	23.02	52.00	< 0.1%	96.00%	199.32	292.00
Manifest-D	150	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	56.00%	395.77	514.00
Manifest-D	150	Distributed (Head, Mid, Rear)	15	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	22.00%	377.95	433.00
Manifest-D	150	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2053.13	2281.00
Manifest-D	150	Distributed (Head, Mid, Rear)	23	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	5.00%	1194.73	1252.00
Manifest-D	150	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	1599.07	1795.00
Manifest-D	150	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2299.74	2605.00
Manifest-D	150	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	2.00%	1678.16	1794.00
Manifest-D	150	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	44.00%	1457.01	1784.00
Manifest-D	150	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	1902.80	1943.00
Manifest-D	150	Distributed (Head, Mid, Rear)	40	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	2.00%	2536.32	2602.00
Manifest-D	150	Distributed (Head, Mid, Rear)	40	1.00%	Trough	<0.1%	0.00	0.00	< 10%	0.00%	3392.53	3529.00
Manifest-D	150	Distributed (Head, Mid, Rear)	45	1.10%	Decline	> 1.0%	182.00	182.00	< 0.1%	17.00%	3136.68	3373.00
Manifest-D	150	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6522.70	6700.00
Manifest-D	150	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 10%	1.00%	5545.45	5690.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-E	150	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	584.64	747.00
Manifest-E	150	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	49.00%	288.44	435.00
Manifest-E	150	Distributed (Head, Mid, Rear)	10	1.10%	Decline	> 25%	23.34	62.00	< 0.1%	91.00%	191.89	278.00
Manifest-E	150	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	6.00%	413.59	522.00
Manifest-E	150	Distributed (Head, Mid, Rear)	15	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	2.00%	377.05	454.00
Manifest-E	150	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1949.56	2528.00
Manifest-E	150	Distributed (Head, Mid, Rear)	23	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	2.00%	1149.24	1244.00
Manifest-E	150	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	3.00%	1533.45	1878.00
Manifest-E	150	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2244.16	2360.00
Manifest-E	150	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1700.76	1788.00
Manifest-E	150	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	63.00%	1443.11	1722.00
Manifest-E	150	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	1904.02	1961.00
Manifest-E	150	Distributed (Head, Mid, Rear)	40	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	2.00%	2545.13	2602.00
Manifest-E	150	Distributed (Head, Mid, Rear)	40	1.00%	Trough	<0.1%	0.00	0.00	< 10%	0.00%	3332.02	3521.00
Manifest-E	150	Distributed (Head, Mid, Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	25.00%	3061.71	3374.00
Manifest-E	150	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6369.52	6519.00
Manifest-E	150	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	1.00%	5486.10	5663.00
Manifest-F	150	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	562.35	605.00
Manifest-F	150	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	20.00%	310.42	387.00
Manifest-F	150	Distributed (Head, Mid, Rear)	10	1.10%	Decline	> 25%	19.61	55.00	< 0.1%	88.00%	232.11	327.00
Manifest-F	150	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	5.00%	390.76	490.00
Manifest-F	150	Distributed (Head, Mid, Rear)	15	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	20.00%	384.22	428.00
Manifest-F	150	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2562.50	2773.00
Manifest-F	150	Distributed (Head, Mid, Rear)	23	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	1248.43	1328.00
Manifest-F	150	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1925.58	2284.00
Manifest-F	150	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2343.48	2451.00
Manifest-F	150	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	2.00%	1652.17	1749.00
Manifest-F	150	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	59.00%	1672.10	1836.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-F	150	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	2.00%	1919.39	1999.00
Manifest-F	150	Distributed (Head, Mid, Rear)	40	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	1.00%	2577.48	2655.00
Manifest-F	150	Distributed (Head, Mid, Rear)	40	1.00%	Trough	<0.1%	0.00	0.00	< 10%	0.00%	3386.16	3504.00
Manifest-F	150	Distributed (Head, Mid, Rear)	45	1.10%	Decline	< 0.5%	7.00	7.00	< 0.1%	14.00%	3652.40	4150.00
Manifest-F	150	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6937.70	7062.00
Manifest-F	150	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 10%	2.00%	5816.93	5942.00
Manifest-G	150	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	6.00%	556.15	677.00
Manifest-G	150	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	72.00%	356.57	452.00
Manifest-G	150	Distributed (Head, Mid, Rear)	10	1.10%	Decline	> 50%	25.37	86.00	< 0.1%	81.00%	217.33	323.00
Manifest-G	150	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	58.00%	422.40	562.00
Manifest-G	150	Distributed (Head, Mid, Rear)	15	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	81.00%	377.65	459.00
Manifest-G	150	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2122.41	2314.00
Manifest-G	150	Distributed (Head, Mid, Rear)	23	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	11.00%	1260.70	1317.00
Manifest-G	150	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1633.25	1980.00
Manifest-G	150	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2391.11	2617.00
Manifest-G	150	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	16.00%	1707.04	1812.00
Manifest-G	150	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	57.00%	1531.18	1745.00
Manifest-G	150	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	8.00%	1926.35	2004.00
Manifest-G	150	Distributed (Head, Mid, Rear)	40	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	5.00%	2589.25	2713.00
Manifest-G	150	Distributed (Head, Mid, Rear)	40	1.00%	Trough	<0.1%	0.00	0.00	< 10%	0.00%	3457.31	3612.00
Manifest-G	150	Distributed (Head, Mid, Rear)	45	1.10%	Decline	< 0.5%	22.00	22.00	< 0.1%	19.00%	3312.96	3668.00
Manifest-G	150	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6662.35	6801.00
Manifest-G	150	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	5710.31	5855.00
Manifest-H	150	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	2.00%	732.51	873.00
Manifest-H	150	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	50.00%	323.41	406.00
Manifest-H	150	Distributed (Head, Mid, Rear)	10	1.10%	Decline	> 1.0%	19.33	34.00	< 0.1%	67.00%	336.57	432.00
Manifest-H	150	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	62.00%	433.82	474.00
Manifest-H	150	Distributed (Head, Mid, Rear)	15	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	21.00%	396.72	449.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-H	150	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4349.30	4665.00
Manifest-H	150	Distributed (Head, Mid, Rear)	23	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	13.00%	1342.35	1420.00
Manifest-H	150	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2933.95	3225.00
Manifest-H	150	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2819.64	2950.00
Manifest-H	150	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	11.00%	1832.40	1930.00
Manifest-H	150	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	3.00%	2310.06	2620.00
Manifest-H	150	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	8.00%	2193.24	2277.00
Manifest-H	150	Distributed (Head, Mid, Rear)	40	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	2891.82	2989.00
Manifest-H	150	Distributed (Head, Mid, Rear)	40	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	4226.25	4347.00
Manifest-H	150	Distributed (Head, Mid, Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5072.16	5468.00
Manifest-H	150	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	8608.36	9067.00
Manifest-H	150	Distributed (Head, Mid, Rear)	60	0.00%	Flat	< 0.5%	18.00	18.00	< 10%	2.00%	6837.17	6978.00
Manifest-I	150	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	737.83	857.00
Manifest-I	150	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	44.00%	311.34	399.00
Manifest-I	150	Distributed (Head, Mid, Rear)	10	1.10%	Decline	> 1.0%	14.87	52.00	< 0.1%	71.00%	284.21	370.00
Manifest-I	150	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	57.00%	427.65	548.00
Manifest-I	150	Distributed (Head, Mid, Rear)	15	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	24.00%	401.70	471.00
Manifest-I	150	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3340.46	3901.00
Manifest-I	150	Distributed (Head, Mid, Rear)	23	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	79.00%	1278.94	1410.00
Manifest-I	150	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2334.92	2788.00
Manifest-I	150	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	2568.45	2774.00
Manifest-I	150	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	19.00%	1775.99	1894.00
Manifest-I	150	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	17.00%	1947.93	2192.00
Manifest-I	150	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	11.00%	2086.57	2179.00
Manifest-I	150	Distributed (Head, Mid, Rear)	40	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	14.00%	2786.03	2892.00
Manifest-I	150	Distributed (Head, Mid, Rear)	40	1.00%	Trough	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	3839.55	4001.00
Manifest-I	150	Distributed (Head, Mid, Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	4242.39	4722.00
Manifest-I	150	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7741.53	8180.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-I	150	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 10%	2.00%	6367.12	6538.00
Manifest-J	150	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	2.00%	626.60	843.00
Manifest-J	150	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	54.00%	333.64	430.00
Manifest-J	150	Distributed (Head, Mid, Rear)	10	1.10%	Decline	> 1.0%	23.44	52.00	< 0.1%	77.00%	303.33	413.00
Manifest-J	150	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	79.00%	422.95	514.00
Manifest-J	150	Distributed (Head, Mid, Rear)	15	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	73.00%	386.30	441.00
Manifest-J	150	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3693.90	4334.00
Manifest-J	150	Distributed (Head, Mid, Rear)	23	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	26.00%	1318.89	1371.00
Manifest-J	150	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2529.09	2870.00
Manifest-J	150	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2602.11	2699.00
Manifest-J	150	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	28.00%	1768.39	1864.00
Manifest-J	150	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	12.00%	2049.69	2239.00
Manifest-J	150	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	11.00%	2091.13	2166.00
Manifest-J	150	Distributed (Head, Mid, Rear)	40	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	16.00%	2792.43	2869.00
Manifest-J	150	Distributed (Head, Mid, Rear)	40	1.00%	Trough	<0.1%	0.00	0.00	< 10%	0.00%	3834.17	3964.00
Manifest-J	150	Distributed (Head, Mid, Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	4505.05	4784.00
Manifest-J	150	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7915.67	8189.00
Manifest-J	150	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 10%	2.00%	6442.58	6553.00
Manifest-A	200	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1194.37	1292.00
Manifest-A	200	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	36.00%	414.99	538.00
Manifest-A	200	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	677.69	907.00
Manifest-A	200	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	10.00%	691.73	836.00
Manifest-A	200	Distributed (Head and Rear)	14	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	1.00%	402.98	458.00
Manifest-A	200	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	8782.16	9293.00
Manifest-A	200	Distributed (Head and Rear)	21	1.00%	Crest	<0.1%	0.00	0.00	> 25%, < 50%	30.00%	1642.38	2124.00
Manifest-A	200	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5988.45	6452.00
Manifest-A	200	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4645.02	4842.00
Manifest-A	200	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	2533.54	2642.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-A	200	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3898.31	4265.00
Manifest-A	200	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	3310.23	3386.00
Manifest-A	200	Distributed (Head and Rear)	36	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	5866.59	6003.00
Manifest-A	200	Distributed (Head and Rear)	38	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	2.00%	3701.39	3830.00
Manifest-A	200	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	8086.84	8766.00
Manifest-A	200	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	13400.82	13789.00
Manifest-A	200	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	9675.65	9821.00
Manifest-B	200	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	783.76	960.00
Manifest-B	200	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	13.00%	330.21	516.00
Manifest-B	200	Distributed (Head and Rear)	10	1.10%	Decline	> 50%	26.18	72.00	< 0.1%	70.00%	130.56	262.00
Manifest-B	200	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	1.00%	552.53	722.00
Manifest-B	200	Distributed (Head and Rear)	14	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	40.00%	376.02	477.00
Manifest-B	200	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1228.53	1555.00
Manifest-B	200	Distributed (Head and Rear)	21	1.00%	Crest	<0.1%	0.00	0.00	< 10%	0.00%	1660.39	1727.00
Manifest-B	200	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	< 0.1%	3.00%	1015.63	1278.00
Manifest-B	200	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	2678.32	2921.00
Manifest-B	200	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1848.20	1996.00
Manifest-B	200	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	33.00%	1056.89	1313.00
Manifest-B	200	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2080.61	2163.00
Manifest-B	200	Distributed (Head and Rear)	36	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	0.00%	2970.59	3166.00
Manifest-B	200	Distributed (Head and Rear)	38	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	2432.73	2551.00
Manifest-B	200	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	9.00%	2195.91	2514.00
Manifest-B	200	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6395.08	6801.00
Manifest-B	200	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	5557.79	5710.00
Manifest-C	200	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	918.44	1056.00
Manifest-C	200	Distributed (Head and Rear)	10	0.50%	Incline	> 1.0%	9.00	9.00	< 0.1%	30.00%	353.79	458.00
Manifest-C	200	Distributed (Head and Rear)	10	1.10%	Decline	> 25%	23.68	84.00	< 0.1%	77.00%	367.39	540.00
Manifest-C	200	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	34.00%	575.33	732.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-C	200	Distributed (Head and Rear)	14	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	34.00%	386.07	458.00
Manifest-C	200	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5233.58	5919.00
Manifest-C	200	Distributed (Head and Rear)	21	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	1555.46	1649.00
Manifest-C	200	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3222.36	3852.00
Manifest-C	200	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3441.88	3703.00
Manifest-C	200	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	23.00%	2130.62	2239.00
Manifest-C	200	Distributed (Head and Rear)	30	1.10%	Decline	> 1.0%	45.50	77.00	< 0.1%	29.00%	2378.18	2707.00
Manifest-C	200	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	4.00%	2618.75	2706.00
Manifest-C	200	Distributed (Head and Rear)	36	1.00%	Trough	<0.1%	0.00	0.00	< 10%	0.00%	3717.93	3902.00
Manifest-C	200	Distributed (Head and Rear)	38	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	14.00%	3084.07	3190.00
Manifest-C	200	Distributed (Head and Rear)	45	1.10%	Decline	> 1.0%	175.75	589.00	< 10%	6.00%	4998.96	5319.00
Manifest-C	200	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	9661.80	9973.00
Manifest-C	200	Distributed (Head and Rear)	60	0.00%	Flat	> 1.0%	27.00	27.00	< 10%	3.00%	7571.90	7717.00
Manifest-D	200	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	886.01	1024.00
Manifest-D	200	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	25.00%	409.52	531.00
Manifest-D	200	Distributed (Head and Rear)	10	1.10%	Decline	> 25%	29.98	90.00	< 0.1%	91.00%	289.09	452.00
Manifest-D	200	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	9.00%	554.81	613.00
Manifest-D	200	Distributed (Head and Rear)	14	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	9.00%	387.26	464.00
Manifest-D	200	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3654.87	4114.00
Manifest-D	200	Distributed (Head and Rear)	21	1.00%	Crest	<0.1%	0.00	0.00	> 25%, < 50%	6.00%	1587.10	1908.00
Manifest-D	200	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2489.02	3018.00
Manifest-D	200	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	3460.47	3579.00
Manifest-D	200	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	2185.66	2316.00
Manifest-D	200	Distributed (Head and Rear)	30	1.10%	Decline	> 1.0%	67.00	96.00	< 0.1%	54.00%	2008.04	2291.00
Manifest-D	200	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	2.00%	2676.43	2759.00
Manifest-D	200	Distributed (Head and Rear)	36	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	4112.30	4248.00
Manifest-D	200	Distributed (Head and Rear)	38	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	1.00%	3125.90	3248.00
Manifest-D	200	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	13.00%	4264.31	4733.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-D	200	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	9090.79	9426.00
Manifest-D	200	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	7519.72	7635.00
Manifest-E	200	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	912.02	1141.00
Manifest-E	200	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	6.00%	380.93	466.00
Manifest-E	200	Distributed (Head and Rear)	10	1.10%	Decline	> 25%	20.71	61.00	< 0.1%	87.00%	317.39	431.00
Manifest-E	200	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	555.13	698.00
Manifest-E	200	Distributed (Head and Rear)	14	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	6.00%	377.08	442.00
Manifest-E	200	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4540.85	5227.00
Manifest-E	200	Distributed (Head and Rear)	21	1.00%	Crest	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	2024.08	2251.00
Manifest-E	200	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2904.90	3610.00
Manifest-E	200	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	3647.62	3894.00
Manifest-E	200	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	4.00%	2160.61	2263.00
Manifest-E	200	Distributed (Head and Rear)	30	1.10%	Decline	> 1.0%	67.00	134.00	< 0.1%	61.00%	2170.09	2547.00
Manifest-E	200	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	1.00%	2666.73	2735.00
Manifest-E	200	Distributed (Head and Rear)	36	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	3862.12	4319.00
Manifest-E	200	Distributed (Head and Rear)	38	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	1.00%	3131.93	3231.00
Manifest-E	200	Distributed (Head and Rear)	45	1.10%	Decline	> 1.0%	149.00	149.00	> 10%, < 25%	5.00%	4556.59	4897.00
Manifest-E	200	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	9528.66	9890.00
Manifest-E	200	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	7593.86	7731.00
Manifest-F	200	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	940.59	1185.00
Manifest-F	200	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	16.00%	400.95	510.00
Manifest-F	200	Distributed (Head and Rear)	10	1.10%	Decline	> 1.0%	19.45	52.00	< 0.1%	71.00%	389.54	537.00
Manifest-F	200	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	9.00%	579.79	730.00
Manifest-F	200	Distributed (Head and Rear)	14	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	7.00%	396.50	448.00
Manifest-F	200	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5382.06	6044.00
Manifest-F	200	Distributed (Head and Rear)	21	1.00%	Crest	<0.1%	0.00	0.00	< 10%	3.00%	1423.78	1692.00
Manifest-F	200	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3415.79	3826.00
Manifest-F	200	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	3863.97	4104.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-F	200	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	1.00%	2238.47	2367.00
Manifest-F	200	Distributed (Head and Rear)	30	1.10%	Decline	> 1.0%	51.00	51.00	< 10%	9.00%	2448.99	2808.00
Manifest-F	200	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2784.99	2870.00
Manifest-F	200	Distributed (Head and Rear)	36	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	4211.62	4388.00
Manifest-F	200	Distributed (Head and Rear)	38	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	1.00%	3235.04	3339.00
Manifest-F	200	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	5296.45	5794.00
Manifest-F	200	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	9989.03	10313.00
Manifest-F	200	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	7968.32	8151.00
Manifest-G	200	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	934.19	1091.00
Manifest-G	200	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	19.00%	404.64	506.00
Manifest-G	200	Distributed (Head and Rear)	10	1.10%	Decline	> 1.0%	10.91	39.00	< 0.1%	46.00%	433.16	556.00
Manifest-G	200	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	42.00%	575.59	698.00
Manifest-G	200	Distributed (Head and Rear)	14	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	14.00%	398.29	463.00
Manifest-G	200	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6283.90	7049.00
Manifest-G	200	Distributed (Head and Rear)	21	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	26.00%	1606.10	1690.00
Manifest-G	200	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3837.07	4151.00
Manifest-G	200	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	3865.30	4151.00
Manifest-G	200	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	2.00%	2217.98	2334.00
Manifest-G	200	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	2.00%	2694.03	2948.00
Manifest-G	200	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	1.00%	2781.71	2881.00
Manifest-G	200	Distributed (Head and Rear)	36	1.00%	Trough	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	4133.11	4282.00
Manifest-G	200	Distributed (Head and Rear)	38	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	3223.19	3331.00
Manifest-G	200	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5726.63	6103.00
Manifest-G	200	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	10604.86	10864.00
Manifest-G	200	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	8079.84	8235.00
Manifest-H	200	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	892.28	1045.00
Manifest-H	200	Distributed (Head and Rear)	10	0.50%	Incline	> 1.0%	6.00	6.00	< 0.1%	35.00%	373.75	521.00
Manifest-H	200	Distributed (Head and Rear)	10	1.10%	Decline	> 1.0%	16.05	71.00	< 0.1%	53.00%	401.19	522.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-H	200	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	4.00%	556.24	693.00
Manifest-H	200	Distributed (Head and Rear)	14	1.50%	Incline	> 1.0%	6.00	9.00	< 0.1%	24.00%	394.27	470.00
Manifest-H	200	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5411.53	6380.00
Manifest-H	200	Distributed (Head and Rear)	21	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	15.00%	1589.40	1775.00
Manifest-H	200	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3389.53	3737.00
Manifest-H	200	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	3627.70	3849.00
Manifest-H	200	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	4.00%	2134.00	2225.00
Manifest-H	200	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	10.00%	2475.58	2794.00
Manifest-H	200	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	2.00%	2631.45	2754.00
Manifest-H	200	Distributed (Head and Rear)	36	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	3751.70	3900.00
Manifest-H	200	Distributed (Head and Rear)	38	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	1.00%	3091.81	3195.00
Manifest-H	200	Distributed (Head and Rear)	45	1.10%	Decline	> 1.0%	26.00	26.00	> 25%, < 50%	2.00%	5185.87	5611.00
Manifest-H	200	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	9647.29	9951.00
Manifest-H	200	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	7663.47	7888.00
Manifest-I	200	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	959.71	1137.00
Manifest-I	200	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	5.00%	402.68	555.00
Manifest-I	200	Distributed (Head and Rear)	10	1.10%	Decline	> 1.0%	17.50	46.00	< 0.1%	50.00%	415.00	694.00
Manifest-I	200	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	3.00%	588.58	706.00
Manifest-I	200	Distributed (Head and Rear)	14	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	1.00%	383.23	448.00
Manifest-I	200	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6292.15	7522.00
Manifest-I	200	Distributed (Head and Rear)	21	1.00%	Crest	<0.1%	0.00	0.00	> 50%	0.00%	1619.90	1833.00
Manifest-I	200	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3827.43	4408.00
Manifest-I	200	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3786.46	4109.00
Manifest-I	200	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	1.00%	2205.57	2294.00
Manifest-I	200	Distributed (Head and Rear)	30	1.10%	Decline	> 1.0%	6.00	6.00	< 0.1%	17.00%	2654.04	3018.00
Manifest-I	200	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2743.36	2841.00
Manifest-I	200	Distributed (Head and Rear)	36	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	4251.64	4477.00
Manifest-I	200	Distributed (Head and Rear)	38	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	3202.31	3298.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-I	200	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	1.00%	5563.55	6017.00
Manifest-I	200	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	10115.70	10548.00
Manifest-I	200	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	8021.86	8246.00
Manifest-J	200	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	874.63	925.00
Manifest-J	200	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	35.00%	384.33	530.00
Manifest-J	200	Distributed (Head and Rear)	10	1.10%	Decline	> 25%	22.43	82.00	< 0.1%	84.00%	323.37	439.00
Manifest-J	200	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	3.00%	550.02	618.00
Manifest-J	200	Distributed (Head and Rear)	14	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	10.00%	376.61	448.00
Manifest-J	200	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4396.92	4706.00
Manifest-J	200	Distributed (Head and Rear)	21	1.00%	Crest	<0.1%	0.00	0.00	< 10%	0.00%	1534.50	1810.00
Manifest-J	200	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2876.63	3241.00
Manifest-J	200	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3568.46	3702.00
Manifest-J	200	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	8.00%	2163.13	2303.00
Manifest-J	200	Distributed (Head and Rear)	30	1.10%	Decline	> 1.0%	95.00	303.00	< 0.1%	29.00%	2225.25	2573.00
Manifest-J	200	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2683.81	2798.00
Manifest-J	200	Distributed (Head and Rear)	36	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	4054.15	4163.00
Manifest-J	200	Distributed (Head and Rear)	38	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	1.00%	3141.04	3218.00
Manifest-J	200	Distributed (Head and Rear)	45	1.10%	Decline	> 1.0%	92.00	92.00	> 10%, < 25%	6.00%	4727.83	5564.00
Manifest-J	200	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	9499.61	9782.00
Manifest-J	200	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	7677.34	7795.00
Manifest-A	200	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	964.77	1029.00
Manifest-A	200	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	28.00%	416.84	541.00
Manifest-A	200	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	623.27	756.00
Manifest-A	200	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	583.30	711.00
Manifest-A	200	Distributed (Head, Mid, Rear)	14	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	28.00%	397.23	447.00
Manifest-A	200	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	8345.62	8869.00
Manifest-A	200	Distributed (Head, Mid, Rear)	21	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	1528.78	1592.00
Manifest-A	200	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5482.02	5975.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-A	200	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4015.08	4174.00
Manifest-A	200	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	1.00%	2284.36	2398.00
Manifest-A	200	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3633.84	3917.00
Manifest-A	200	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2907.14	2981.00
Manifest-A	200	Distributed (Head, Mid, Rear)	36	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	4818.53	4959.00
Manifest-A	200	Distributed (Head, Mid, Rear)	38	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	3351.55	3438.00
Manifest-A	200	Distributed (Head, Mid, Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7697.08	8043.00
Manifest-A	200	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	12150.98	12413.00
Manifest-A	200	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	8831.92	8952.00
Manifest-B	200	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	697.24	828.00
Manifest-B	200	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	65.00%	287.38	391.00
Manifest-B	200	Distributed (Head, Mid, Rear)	10	1.10%	Decline	> 50%	20.33	59.00	< 0.1%	65.00%	133.10	261.00
Manifest-B	200	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	5.00%	479.15	609.00
Manifest-B	200	Distributed (Head, Mid, Rear)	14	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	94.00%	363.17	399.00
Manifest-B	200	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1163.49	1363.00
Manifest-B	200	Distributed (Head, Mid, Rear)	21	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	1369.24	1446.00
Manifest-B	200	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	968.92	1288.00
Manifest-B	200	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	2246.24	2476.00
Manifest-B	200	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1596.59	1754.00
Manifest-B	200	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	15.00%	981.92	1151.00
Manifest-B	200	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	1804.20	2000.00
Manifest-B	200	Distributed (Head, Mid, Rear)	36	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	0.00%	2527.82	2878.00
Manifest-B	200	Distributed (Head, Mid, Rear)	38	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	2212.83	2287.00
Manifest-B	200	Distributed (Head, Mid, Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2051.17	2347.00
Manifest-B	200	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5527.03	5920.00
Manifest-B	200	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	4912.13	5154.00
Manifest-C	200	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	786.06	881.00
Manifest-C	200	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	12.00%	342.17	457.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-C	200	Distributed (Head, Mid, Rear)	10	1.10%	Decline	> 1.0%	12.56	30.00	< 0.1%	50.00%	343.81	465.00
Manifest-C	200	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	5.00%	491.24	613.00
Manifest-C	200	Distributed (Head, Mid, Rear)	14	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	8.00%	359.25	405.00
Manifest-C	200	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4799.41	5390.00
Manifest-C	200	Distributed (Head, Mid, Rear)	21	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	1.00%	1309.49	1363.00
Manifest-C	200	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2864.86	3262.00
Manifest-C	200	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	2910.69	3207.00
Manifest-C	200	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	2.00%	1900.36	2018.00
Manifest-C	200	Distributed (Head, Mid, Rear)	30	1.10%	Decline	< 0.5%	1.00	1.00	< 0.1%	6.00%	2197.61	2416.00
Manifest-C	200	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	2.00%	2286.11	2365.00
Manifest-C	200	Distributed (Head, Mid, Rear)	36	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	0.00%	3194.96	3467.00
Manifest-C	200	Distributed (Head, Mid, Rear)	38	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	4.00%	2762.08	2833.00
Manifest-C	200	Distributed (Head, Mid, Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	4729.24	5285.00
Manifest-C	200	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	8469.93	8655.00
Manifest-C	200	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 10%	0.00%	6852.80	7004.00
Manifest-D	200	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	720.50	766.00
Manifest-D	200	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	76.00%	349.84	497.00
Manifest-D	200	Distributed (Head, Mid, Rear)	10	1.10%	Decline	> 1.0%	17.35	61.00	< 0.1%	86.00%	271.16	360.00
Manifest-D	200	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	54.00%	480.17	555.00
Manifest-D	200	Distributed (Head, Mid, Rear)	14	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	70.00%	347.96	446.00
Manifest-D	200	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3451.75	3973.00
Manifest-D	200	Distributed (Head, Mid, Rear)	21	1.00%	Crest	<0.1%	0.00	0.00	< 10%	1.00%	1488.73	1610.00
Manifest-D	200	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2305.33	2582.00
Manifest-D	200	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2935.49	3036.00
Manifest-D	200	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	4.00%	1954.45	2065.00
Manifest-D	200	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	17.00%	1878.92	2084.00
Manifest-D	200	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2328.59	2471.00
Manifest-D	200	Distributed (Head, Mid, Rear)	36	1.00%	Trough	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	3282.76	3516.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-D	200	Distributed (Head, Mid, Rear)	38	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	2800.24	2889.00
Manifest-D	200	Distributed (Head, Mid, Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	4031.10	4468.00
Manifest-D	200	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	8045.73	8141.00
Manifest-D	200	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	6730.85	6850.00
Manifest-E	200	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	771.81	920.00
Manifest-E	200	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	3.00%	336.90	397.00
Manifest-E	200	Distributed (Head, Mid, Rear)	10	1.10%	Decline	> 1.0%	11.20	29.00	< 0.1%	69.00%	300.68	400.00
Manifest-E	200	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	499.14	607.00
Manifest-E	200	Distributed (Head, Mid, Rear)	14	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	2.00%	371.85	416.00
Manifest-E	200	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4189.79	4539.00
Manifest-E	200	Distributed (Head, Mid, Rear)	21	1.00%	Crest	<0.1%	0.00	0.00	< 10%	0.00%	1240.20	1448.00
Manifest-E	200	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2654.80	2930.00
Manifest-E	200	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	2996.35	3378.00
Manifest-E	200	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1920.73	2025.00
Manifest-E	200	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	24.00%	2031.30	2312.00
Manifest-E	200	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2314.74	2394.00
Manifest-E	200	Distributed (Head, Mid, Rear)	36	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	5.00%	3312.28	3578.00
Manifest-E	200	Distributed (Head, Mid, Rear)	38	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	2789.24	2889.00
Manifest-E	200	Distributed (Head, Mid, Rear)	45	1.10%	Decline	> 1.0%	18.00	18.00	> 10%, < 25%	3.00%	4300.73	4573.00
Manifest-E	200	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	8319.57	8467.00
Manifest-E	200	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 10%, < 25%	1.00%	6797.55	6937.00
Manifest-F	200	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	889.63	961.00
Manifest-F	200	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	57.00%	337.48	486.00
Manifest-F	200	Distributed (Head, Mid, Rear)	10	1.10%	Decline	> 1.0%	22.00	36.00	< 0.1%	37.00%	358.01	456.00
Manifest-F	200	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	7.00%	487.67	603.00
Manifest-F	200	Distributed (Head, Mid, Rear)	14	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	15.00%	352.06	407.00
Manifest-F	200	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5026.08	5432.00
Manifest-F	200	Distributed (Head, Mid, Rear)	21	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	1350.31	1423.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-F	200	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3175.99	3579.00
Manifest-F	200	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	3119.09	3285.00
Manifest-F	200	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1988.93	2103.00
Manifest-F	200	Distributed (Head, Mid, Rear)	30	1.10%	Decline	> 1.0%	46.00	46.00	< 0.1%	3.00%	2312.89	2639.00
Manifest-F	200	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2411.44	2500.00
Manifest-F	200	Distributed (Head, Mid, Rear)	36	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	3654.83	3871.00
Manifest-F	200	Distributed (Head, Mid, Rear)	38	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	2894.83	2991.00
Manifest-F	200	Distributed (Head, Mid, Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4980.90	5364.00
Manifest-F	200	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	8871.80	9007.00
Manifest-F	200	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	7199.70	7351.00
Manifest-G	200	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	744.22	789.00
Manifest-G	200	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	47.00%	378.32	483.00
Manifest-G	200	Distributed (Head, Mid, Rear)	10	1.10%	Decline	> 1.0%	8.00	8.00	< 0.1%	20.00%	402.16	539.00
Manifest-G	200	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	21.00%	488.33	603.00
Manifest-G	200	Distributed (Head, Mid, Rear)	14	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	58.00%	369.07	421.00
Manifest-G	200	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5743.78	6097.00
Manifest-G	200	Distributed (Head, Mid, Rear)	21	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	21.00%	1427.88	1488.00
Manifest-G	200	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3582.86	4018.00
Manifest-G	200	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	3166.03	3286.00
Manifest-G	200	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	2.00%	1984.48	2052.00
Manifest-G	200	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2518.31	2721.00
Manifest-G	200	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	2.00%	2428.65	2533.00
Manifest-G	200	Distributed (Head, Mid, Rear)	36	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	0.00%	3473.07	3632.00
Manifest-G	200	Distributed (Head, Mid, Rear)	38	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	2899.42	2995.00
Manifest-G	200	Distributed (Head, Mid, Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5423.44	5881.00
Manifest-G	200	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	9240.43	9441.00
Manifest-G	200	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	7343.74	7533.00
Manifest-H	200	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	860.97	918.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-H	200	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	46.00%	334.11	467.00
Manifest-H	200	Distributed (Head, Mid, Rear)	10	1.10%	Decline	> 1.0%	8.00	8.00	< 0.1%	27.00%	366.35	474.00
Manifest-H	200	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	7.00%	465.35	500.00
Manifest-H	200	Distributed (Head, Mid, Rear)	14	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	11.00%	366.21	418.00
Manifest-H	200	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5009.12	5411.00
Manifest-H	200	Distributed (Head, Mid, Rear)	21	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	1408.23	1705.00
Manifest-H	200	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3151.16	3426.00
Manifest-H	200	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	3035.68	3288.00
Manifest-H	200	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1901.06	2006.00
Manifest-H	200	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	3.00%	2285.55	2586.00
Manifest-H	200	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	1.00%	2293.35	2361.00
Manifest-H	200	Distributed (Head, Mid, Rear)	36	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	0.00%	3199.99	3375.00
Manifest-H	200	Distributed (Head, Mid, Rear)	38	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	1.00%	2781.33	2843.00
Manifest-H	200	Distributed (Head, Mid, Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	4932.42	5161.00
Manifest-H	200	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	8643.07	8834.00
Manifest-H	200	Distributed (Head, Mid, Rear)	60	0.00%	Flat	> 1.0%	22.50	31.00	> 10%, < 25%	2.00%	6966.12	7098.00
Manifest-I	200	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	815.35	861.00
Manifest-I	200	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	29.00%	344.95	452.00
Manifest-I	200	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	23.00%	406.14	522.00
Manifest-I	200	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	15.00%	486.72	596.00
Manifest-I	200	Distributed (Head, Mid, Rear)	14	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	5.00%	362.42	415.00
Manifest-I	200	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5703.90	6234.00
Manifest-I	200	Distributed (Head, Mid, Rear)	21	1.00%	Crest	<0.1%	0.00	0.00	< 10%	0.00%	1375.67	1433.00
Manifest-I	200	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3539.94	3882.00
Manifest-I	200	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	3114.40	3368.00
Manifest-I	200	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1972.40	2036.00
Manifest-I	200	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2523.17	2789.00
Manifest-I	200	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2400.88	2494.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-I	200	Distributed (Head, Mid, Rear)	36	1.00%	Trough	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	3390.26	3580.00
Manifest-I	200	Distributed (Head, Mid, Rear)	38	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	2878.13	2983.00
Manifest-I	200	Distributed (Head, Mid, Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5383.41	5732.00
Manifest-I	200	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	9321.82	9618.00
Manifest-I	200	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	7281.79	7379.00
Manifest-J	200	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	713.10	767.00
Manifest-J	200	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	48.00%	350.39	437.00
Manifest-J	200	Distributed (Head, Mid, Rear)	10	1.10%	Decline	> 1.0%	15.40	37.00	< 0.1%	84.00%	302.41	387.00
Manifest-J	200	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	13.00%	494.09	609.00
Manifest-J	200	Distributed (Head, Mid, Rear)	14	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	17.00%	360.15	425.00
Manifest-J	200	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4148.93	4403.00
Manifest-J	200	Distributed (Head, Mid, Rear)	21	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	1363.51	1420.00
Manifest-J	200	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2686.51	2966.00
Manifest-J	200	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	2938.98	3070.00
Manifest-J	200	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1930.05	2037.00
Manifest-J	200	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	4.00%	2051.35	2229.00
Manifest-J	200	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	1.00%	2326.63	2412.00
Manifest-J	200	Distributed (Head, Mid, Rear)	36	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	1.00%	3237.56	3419.00
Manifest-J	200	Distributed (Head, Mid, Rear)	38	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	2824.86	2892.00
Manifest-J	200	Distributed (Head, Mid, Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	4364.83	4576.00
Manifest-J	200	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	8427.15	8561.00
Manifest-J	200	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	6863.12	7019.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Steel Hoppers	Empty	100	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	45.00%	368.48	526.00
Unit Steel Hoppers	Empty	100	Distributed (Head and Rear)	10	0.50%	Incline	> 75%	23.01	62.00	< 0.1%	100.00%	180.46	207.00
Unit Steel Hoppers	Empty	100	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	34.00%	404.60	444.00
Unit Steel Hoppers	Empty	100	Distributed (Head and Rear)	10	0.00%	Flat	> 1.0%	6.00	13.00	< 0.1%	46.00%	309.02	427.00
Unit Steel Hoppers	Empty	100	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1513.64	1594.00
Unit Steel Hoppers	Empty	100	Distributed (Head and Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	100.00%	717.47	758.00
Unit Steel Hoppers	Empty	100	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	1469.73	1554.00
Unit Steel Hoppers	Empty	100	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	49.00%	1421.05	1584.00
Unit Steel Hoppers	Empty	100	Distributed (Head and Rear)	30	0.50%	Incline	< 0.5%	3.00	3.00	< 0.1%	100.00%	1127.53	1225.00
Unit Steel Hoppers	Empty	100	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	52.00%	1515.63	1585.00
Unit Steel Hoppers	Empty	100	Distributed (Head and Rear)	30	0.00%	Flat	> 1.0%	6.00	10.00	< 0.1%	100.00%	1172.53	1300.00
Unit Steel Hoppers	Empty	100	Distributed (Head and Rear)	46	1.00%	Crest	> 1.0%	19.00	31.00	< 0.1%	100.00%	2014.14	2109.00
Unit Steel Hoppers	Empty	100	Distributed (Head and Rear)	55	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	9.00%	3533.05	3795.00
Unit Steel Hoppers	Empty	100	Distributed (Head and Rear)	55	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	52.00%	3202.65	3317.00
Unit Steel Hoppers	Empty	100	Distributed (Head and Rear)	60	0.50%	Decline	> 1.0%	57.67	119.00	< 0.1%	97.00%	3520.72	4004.00
Unit Steel Hoppers	Empty	100	Distributed (Head and Rear)	60	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	100.00%	2922.43	3037.00
Unit Steel Hoppers	Empty	100	Distributed (Head and Rear)	60	0.00%	Flat	> 1.0%	21.00	29.00	< 0.1%	100.00%	3264.47	3461.00
Unit Steel Hoppers	Empty	100	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	3.00%	625.04	697.00
Unit Steel Hoppers	Empty	100	Head end only	10	0.50%	Incline	> 1.0%	4.78	8.00	< 0.1%	99.00%	237.78	309.00
Unit Steel Hoppers	Empty	100	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	1.00%	608.90	666.00
Unit Steel Hoppers	Empty	100	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	77.00%	360.93	431.00
Unit Steel Hoppers	Empty	100	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2058.69	2194.00
Unit Steel Hoppers	Empty	100	Head end only	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	94.00%	833.44	879.00
Unit Steel Hoppers	Empty	100	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2139.83	2262.00
Unit Steel Hoppers	Empty	100	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	35.00%	1882.67	2093.00
Unit Steel Hoppers	Empty	100	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	100.00%	1380.49	1477.00
Unit Steel Hoppers	Empty	100	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	7.00%	2133.55	2247.00
Unit Steel Hoppers	Empty	100	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	100.00%	1501.25	1675.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Steel Hoppers	Empty	100	Head end only	46	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	100.00%	2519.32	2626.00
Unit Steel Hoppers	Empty	100	Head end only	55	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	17.00%	4620.75	4848.00
Unit Steel Hoppers	Empty	100	Head end only	55	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	37.00%	4192.96	4368.00
Unit Steel Hoppers	Empty	100	Head end only	60	0.50%	Decline	> 1.0%	82.50	162.00	< 0.1%	100.00%	4527.93	4915.00
Unit Steel Hoppers	Empty	100	Head end only	60	0.50%	Incline	> 1.0%	20.00	25.00	< 0.1%	100.00%	3654.93	3740.00
Unit Steel Hoppers	Empty	100	Head end only	60	0.00%	Flat	> 1.0%	27.50	48.00	< 0.1%	100.00%	4101.87	4291.00
Unit Steel Hoppers	Loaded	100	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	13.00%	531.40	575.00
Unit Steel Hoppers	Loaded	100	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	93.00%	319.88	384.00
Unit Steel Hoppers	Loaded	100	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	852.70	917.00
Unit Steel Hoppers	Loaded	100	Distributed (Head and Rear)	10	1.50%	Incline	> 25%	12.32	34.00	< 0.1%	100.00%	167.89	199.00
Unit Steel Hoppers	Loaded	100	Distributed (Head and Rear)	10	0.00%	Flat	> 1.0%	2.00	2.00	< 0.1%	100.00%	377.85	428.00
Unit Steel Hoppers	Loaded	100	Distributed (Head and Rear)	15	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1207.99	1610.00
Unit Steel Hoppers	Loaded	100	Distributed (Head and Rear)	15	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	99.00%	634.32	678.00
Unit Steel Hoppers	Loaded	100	Distributed (Head and Rear)	15	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2278.85	2527.00
Unit Steel Hoppers	Loaded	100	Distributed (Head and Rear)	24	1.00%	Trough	<0.1%	0.00	0.00	< 10%	0.00%	1661.46	1749.00
Unit Steel Hoppers	Loaded	100	Distributed (Head and Rear)	27	0.50%	Incline	< 0.5%	1.00	1.00	< 0.1%	100.00%	1403.95	1471.00
Unit Steel Hoppers	Loaded	100	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2539.05	2646.00
Unit Steel Hoppers	Loaded	100	Distributed (Head and Rear)	30	1.10%	Decline	< 0.5%	20.00	20.00	< 0.1%	16.00%	2379.86	2580.00
Unit Steel Hoppers	Loaded	100	Distributed (Head and Rear)	30	0.00%	Flat	> 1.0%	34.91	133.00	< 0.1%	97.00%	1980.71	2104.00
Unit Steel Hoppers	Loaded	100	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	1.00%	5502.79	5943.00
Unit Steel Hoppers	Loaded	100	Distributed (Head and Rear)	50	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6025.08	6311.00
Unit Steel Hoppers	Loaded	100	Distributed (Head and Rear)	50	0.00%	Flat	> 1.0%	29.00	48.00	< 0.1%	59.00%	4771.55	5001.00
Unit Steel Hoppers	Loaded	100	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	2.00%	758.75	801.00
Unit Steel Hoppers	Loaded	100	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	72.00%	365.82	444.00
Unit Steel Hoppers	Loaded	100	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1393.68	1499.00
Unit Steel Hoppers	Loaded	100	Head end only	10	1.50%	Incline	> 25%	7.16	24.00	< 0.1%	79.00%	184.43	234.00
Unit Steel Hoppers	Loaded	100	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	99.00%	473.71	509.00
Unit Steel Hoppers	Loaded	100	Head end only	15	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2303.37	2644.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Steel Hoppers	Loaded	100	Head end only	15	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	95.00%	795.55	841.00
Unit Steel Hoppers	Loaded	100	Head end only	15	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4491.06	4938.00
Unit Steel Hoppers	Loaded	100	Head end only	24	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	2323.40	2451.00
Unit Steel Hoppers	Loaded	100	Head end only	27	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	100.00%	1673.13	1737.00
Unit Steel Hoppers	Loaded	100	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	3343.19	3467.00
Unit Steel Hoppers	Loaded	100	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	3434.07	3733.00
Unit Steel Hoppers	Loaded	100	Head end only	30	0.00%	Flat	> 1.0%	49.00	49.00	< 0.1%	95.00%	2455.66	2598.00
Unit Steel Hoppers	Loaded	100	Head end only	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7387.83	7808.00
Unit Steel Hoppers	Loaded	100	Head end only	50	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7600.32	7837.00
Unit Steel Hoppers	Loaded	100	Head end only	50	0.00%	Flat	> 1.0%	99.40	227.00	< 0.1%	69.00%	5645.40	5859.00
Unit Covered Hoppers	Empty	100	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	24.00%	460.78	622.00
Unit Covered Hoppers	Empty	100	Distributed (Head and Rear)	10	0.50%	Incline	> 50%	12.33	50.00	< 0.1%	100.00%	200.14	226.00
Unit Covered Hoppers	Empty	100	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	2.00%	477.09	533.00
Unit Covered Hoppers	Empty	100	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	61.00%	323.09	451.00
Unit Covered Hoppers	Empty	100	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1863.56	1983.00
Unit Covered Hoppers	Empty	100	Distributed (Head and Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	53.00%	795.93	825.00
Unit Covered Hoppers	Empty	100	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1792.80	1888.00
Unit Covered Hoppers	Empty	100	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	19.00%	1636.87	1822.00
Unit Covered Hoppers	Empty	100	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	94.00%	1240.54	1325.00
Unit Covered Hoppers	Empty	100	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	1804.34	1910.00
Unit Covered Hoppers	Empty	100	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	94.00%	1374.96	1487.00
Unit Covered Hoppers	Empty	100	Distributed (Head and Rear)	45	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	95.00%	2169.21	2285.00
Unit Covered Hoppers	Empty	100	Distributed (Head and Rear)	55	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	2.00%	4156.30	4295.00
Unit Covered Hoppers	Empty	100	Distributed (Head and Rear)	55	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	1.00%	3710.62	3850.00
Unit Covered Hoppers	Empty	100	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	63.00%	4062.42	4356.00
Unit Covered Hoppers	Empty	100	Distributed (Head and Rear)	60	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	77.00%	3289.18	3398.00
Unit Covered Hoppers	Empty	100	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	79.00%	3756.32	3907.00
Unit Covered Hoppers	Empty	100	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	651.66	803.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Covered Hoppers	Empty	100	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	99.00%	256.78	325.00
Unit Covered Hoppers	Empty	100	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	738.12	792.00
Unit Covered Hoppers	Empty	100	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	71.00%	397.30	457.00
Unit Covered Hoppers	Empty	100	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2561.35	2689.00
Unit Covered Hoppers	Empty	100	Head end only	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	42.00%	906.95	961.00
Unit Covered Hoppers	Empty	100	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2600.20	2704.00
Unit Covered Hoppers	Empty	100	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	11.00%	2120.66	2365.00
Unit Covered Hoppers	Empty	100	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	89.00%	1521.65	1607.00
Unit Covered Hoppers	Empty	100	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	2538.66	2646.00
Unit Covered Hoppers	Empty	100	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	67.00%	1737.42	1851.00
Unit Covered Hoppers	Empty	100	Head end only	45	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	89.00%	2764.02	2832.00
Unit Covered Hoppers	Empty	100	Head end only	55	1.10%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	1.00%	5435.99	5602.00
Unit Covered Hoppers	Empty	100	Head end only	55	1.00%	Trough	<0.1%	0.00	0.00	< 10%	0.00%	4892.62	5046.00
Unit Covered Hoppers	Empty	100	Head end only	60	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	43.00%	5244.30	5653.00
Unit Covered Hoppers	Empty	100	Head end only	60	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	44.00%	4088.93	4170.00
Unit Covered Hoppers	Empty	100	Head end only	60	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	50.00%	4743.31	4893.00
Unit Covered Hoppers	Loaded	100	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	4.00%	585.68	628.00
Unit Covered Hoppers	Loaded	100	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	73.00%	341.95	401.00
Unit Covered Hoppers	Loaded	100	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1003.71	1113.00
Unit Covered Hoppers	Loaded	100	Distributed (Head and Rear)	10	1.50%	Incline	> 25%	8.29	31.00	< 0.1%	100.00%	185.08	205.00
Unit Covered Hoppers	Loaded	100	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	96.00%	414.05	495.00
Unit Covered Hoppers	Loaded	100	Distributed (Head and Rear)	14	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	98.00%	621.52	660.00
Unit Covered Hoppers	Loaded	100	Distributed (Head and Rear)	15	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1187.36	1740.00
Unit Covered Hoppers	Loaded	100	Distributed (Head and Rear)	15	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2152.27	2334.00
Unit Covered Hoppers	Loaded	100	Distributed (Head and Rear)	23	1.00%	Trough	<0.1%	0.00	0.00	< 10%	0.00%	1615.41	1683.00
Unit Covered Hoppers	Loaded	100	Distributed (Head and Rear)	26	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	81.00%	1409.70	1467.00
Unit Covered Hoppers	Loaded	100	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2680.46	2786.00
Unit Covered Hoppers	Loaded	100	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	11.00%	2303.43	2493.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Covered Hoppers	Loaded	100	Distributed (Head and Rear)	30	0.00%	Flat	> 1.0%	41.67	56.00	< 0.1%	86.00%	2087.08	2199.00
Unit Covered Hoppers	Loaded	100	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	1.00%	5255.70	5587.00
Unit Covered Hoppers	Loaded	100	Distributed (Head and Rear)	50	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6196.53	6410.00
Unit Covered Hoppers	Loaded	100	Distributed (Head and Rear)	50	0.00%	Flat	> 1.0%	29.50	58.00	< 0.1%	36.00%	4933.33	5084.00
Unit Covered Hoppers	Loaded	100	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	828.92	875.00
Unit Covered Hoppers	Loaded	100	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	51.00%	391.28	455.00
Unit Covered Hoppers	Loaded	100	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1639.19	1733.00
Unit Covered Hoppers	Loaded	100	Head end only	10	1.50%	Incline	> 1.0%	5.71	19.00	< 0.1%	87.00%	194.60	219.00
Unit Covered Hoppers	Loaded	100	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	99.00%	519.31	562.00
Unit Covered Hoppers	Loaded	100	Head end only	14	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	84.00%	773.11	844.00
Unit Covered Hoppers	Loaded	100	Head end only	15	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2311.95	3223.00
Unit Covered Hoppers	Loaded	100	Head end only	15	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4345.87	5330.00
Unit Covered Hoppers	Loaded	100	Head end only	23	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	2216.15	2370.00
Unit Covered Hoppers	Loaded	100	Head end only	26	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	82.00%	1671.61	1742.00
Unit Covered Hoppers	Loaded	100	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	3544.11	3690.00
Unit Covered Hoppers	Loaded	100	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	3363.25	3560.00
Unit Covered Hoppers	Loaded	100	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	60.00%	2612.65	2721.00
Unit Covered Hoppers	Loaded	100	Head end only	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7147.95	7455.00
Unit Covered Hoppers	Loaded	100	Head end only	50	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7912.01	8205.00
Unit Covered Hoppers	Loaded	100	Head end only	50	0.00%	Flat	> 1.0%	55.75	120.00	< 0.1%	39.00%	5886.08	6110.00
Unit Aluminum Hoppers	Empty	100	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	4.00%	482.08	646.00
Unit Aluminum Hoppers	Empty	100	Distributed (Head and Rear)	10	0.50%	Incline	> 25%	15.88	43.00	< 0.1%	66.00%	233.90	342.00
Unit Aluminum Hoppers	Empty	100	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	2.00%	451.72	780.00
Unit Aluminum Hoppers	Empty	100	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	9.00%	401.06	511.00
Unit Aluminum Hoppers	Empty	100	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1616.06	1689.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Aluminum Hoppers	Empty	100	Distributed (Head and Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	37.00%	796.42	871.00
Unit Aluminum Hoppers	Empty	100	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1557.31	1659.00
Unit Aluminum Hoppers	Empty	100	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	31.00%	1421.96	1720.00
Unit Aluminum Hoppers	Empty	100	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	88.00%	1130.54	1308.00
Unit Aluminum Hoppers	Empty	100	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	1.00%	1612.97	1653.00
Unit Aluminum Hoppers	Empty	100	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	95.00%	1225.08	1354.00
Unit Aluminum Hoppers	Empty	100	Distributed (Head and Rear)	52	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	70.00%	2478.92	2559.00
Unit Aluminum Hoppers	Empty	100	Distributed (Head and Rear)	55	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	2.00%	3676.73	3810.00
Unit Aluminum Hoppers	Empty	100	Distributed (Head and Rear)	55	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	10.00%	3322.78	3444.00
Unit Aluminum Hoppers	Empty	100	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	56.00%	3698.25	3986.00
Unit Aluminum Hoppers	Empty	100	Distributed (Head and Rear)	60	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	57.00%	3135.82	3255.00
Unit Aluminum Hoppers	Empty	100	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	67.00%	3376.54	3554.00
Unit Aluminum Hoppers	Empty	100	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	624.42	791.00
Unit Aluminum Hoppers	Empty	100	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	29.00%	311.25	366.00
Unit Aluminum Hoppers	Empty	100	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	655.74	989.00
Unit Aluminum Hoppers	Empty	100	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	26.00%	456.62	651.00
Unit Aluminum Hoppers	Empty	100	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2130.41	2240.00
Unit Aluminum Hoppers	Empty	100	Head end only	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	37.00%	902.02	969.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Hoppers													
Unit Aluminum Hoppers	Empty	100	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2203.46	2302.00
Unit Aluminum Hoppers	Empty	100	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	7.00%	1920.15	2338.00
Unit Aluminum Hoppers	Empty	100	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	64.00%	1410.46	1635.00
Unit Aluminum Hoppers	Empty	100	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	2224.19	2562.00
Unit Aluminum Hoppers	Empty	100	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	64.00%	1553.67	1621.00
Unit Aluminum Hoppers	Empty	100	Head end only	52	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	76.00%	3033.37	3115.00
Unit Aluminum Hoppers	Empty	100	Head end only	55	1.10%	Decline	<0.1%	0.00	0.00	< 10%	1.00%	4709.65	4853.00
Unit Aluminum Hoppers	Empty	100	Head end only	55	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	1.00%	4283.56	4485.00
Unit Aluminum Hoppers	Empty	100	Head end only	60	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	25.00%	4714.83	5137.00
Unit Aluminum Hoppers	Empty	100	Head end only	60	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	41.00%	3850.50	3960.00
Unit Aluminum Hoppers	Empty	100	Head end only	60	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	43.00%	4182.84	4433.00
Unit Aluminum Hoppers	Loaded	100	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	11.00%	516.55	548.00
Unit Aluminum Hoppers	Loaded	100	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	88.00%	313.22	381.00
Unit Aluminum Hoppers	Loaded	100	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	832.82	911.00
Unit Aluminum Hoppers	Loaded	100	Distributed (Head and Rear)	10	1.50%	Incline	> 50%	13.47	30.00	< 0.1%	100.00%	175.35	201.00
Unit Aluminum Hoppers	Loaded	100	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	98.00%	372.38	441.00
Unit Aluminum Hoppers	Loaded	100	Distributed (Head and Rear)	14	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	98.00%	588.64	624.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Aluminum Hoppers	Loaded	100	Distributed (Head and Rear)	15	1.70%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	981.55	1245.00
Unit Aluminum Hoppers	Loaded	100	Distributed (Head and Rear)	15	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1826.39	1948.00
Unit Aluminum Hoppers	Loaded	100	Distributed (Head and Rear)	23	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	2.00%	1428.93	1494.00
Unit Aluminum Hoppers	Loaded	100	Distributed (Head and Rear)	26	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	91.00%	1292.27	1356.00
Unit Aluminum Hoppers	Loaded	100	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	1.00%	2375.65	2467.00
Unit Aluminum Hoppers	Loaded	100	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	30.00%	1978.73	2118.00
Unit Aluminum Hoppers	Loaded	100	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	81.00%	1881.72	2014.00
Unit Aluminum Hoppers	Loaded	100	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	4486.23	4709.00
Unit Aluminum Hoppers	Loaded	100	Distributed (Head and Rear)	50	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5483.96	5685.00
Unit Aluminum Hoppers	Loaded	100	Distributed (Head and Rear)	50	0.00%	Flat	> 1.0%	73.13	113.00	< 0.1%	30.00%	4439.71	4586.00
Unit Aluminum Hoppers	Loaded	100	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	2.00%	738.85	788.00
Unit Aluminum Hoppers	Loaded	100	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	46.00%	371.29	427.00
Unit Aluminum Hoppers	Loaded	100	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1396.03	1492.00
Unit Aluminum Hoppers	Loaded	100	Head end only	10	1.50%	Incline	> 1.0%	6.50	17.00	< 0.1%	76.00%	190.20	215.00
Unit Aluminum Hoppers	Loaded	100	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	93.00%	473.02	509.00
Unit Aluminum Hoppers	Loaded	100	Head end only	14	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	69.00%	719.74	769.00
Unit Aluminum Hoppers	Loaded	100	Head end only	15	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2039.78	2191.00
Unit Aluminum Hoppers	Loaded	100	Head end only	15	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3950.96	4171.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Hoppers													
Unit Aluminum Hoppers	Loaded	100	Head end only	23	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	1949.39	2042.00
Unit Aluminum Hoppers	Loaded	100	Head end only	26	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	79.00%	1544.03	1614.00
Unit Aluminum Hoppers	Loaded	100	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	3186.09	3313.00
Unit Aluminum Hoppers	Loaded	100	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2999.35	3287.00
Unit Aluminum Hoppers	Loaded	100	Head end only	30	0.00%	Flat	> 1.0%	37.00	37.00	< 0.1%	43.00%	2391.52	2472.00
Unit Aluminum Hoppers	Loaded	100	Head end only	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6320.28	6800.00
Unit Aluminum Hoppers	Loaded	100	Head end only	50	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7067.88	7257.00
Unit Aluminum Hoppers	Loaded	100	Head end only	50	0.00%	Flat	> 1.0%	55.50	74.00	< 0.1%	17.00%	5344.30	5505.00
Unit MultiLevel	Empty	100	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	3.00%	738.78	864.00
Unit MultiLevel	Empty	100	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	33.00%	318.34	396.00
Unit MultiLevel	Empty	100	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	944.25	1025.00
Unit MultiLevel	Empty	100	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	45.00%	437.79	591.00
Unit MultiLevel	Empty	100	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3879.17	4175.00
Unit MultiLevel	Empty	100	Distributed (Head and Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	55.00%	828.58	884.00
Unit MultiLevel	Empty	100	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3580.92	3934.00
Unit MultiLevel	Empty	100	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	2.00%	2663.99	2840.00
Unit MultiLevel	Empty	100	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	71.00%	1791.71	1897.00
Unit MultiLevel	Empty	100	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	3220.63	3414.00
Unit MultiLevel	Empty	100	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	70.00%	2067.76	2176.00
Unit MultiLevel	Empty	100	Distributed (Head and Rear)	34	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	74.00%	2295.47	2429.00
Unit MultiLevel	Empty	100	Distributed (Head and Rear)	50	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	30.00%	3648.14	3678.00
Unit MultiLevel	Empty	100	Distributed (Head and Rear)	55	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7201.57	7510.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit MultiLevel	Empty	100	Distributed (Head and Rear)	55	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	6089.37	6318.00
Unit MultiLevel	Empty	100	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	6632.10	7036.00
Unit MultiLevel	Empty	100	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	16.00%	5597.07	5749.00
Unit MultiLevel	Empty	100	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	920.62	1196.00
Unit MultiLevel	Empty	100	Head end only	10	0.50%	Incline	< 0.5%	5.00	5.00	< 0.1%	2.00%	383.08	446.00
Unit MultiLevel	Empty	100	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1561.09	1637.00
Unit MultiLevel	Empty	100	Head end only	10	0.00%	Flat	> 1.0%	22.00	22.00	< 0.1%	1.00%	607.78	777.00
Unit MultiLevel	Empty	100	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5877.99	6271.00
Unit MultiLevel	Empty	100	Head end only	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	5.00%	964.03	1000.00
Unit MultiLevel	Empty	100	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5470.77	5948.00
Unit MultiLevel	Empty	100	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	< 10%	8.00%	3386.98	3769.00
Unit MultiLevel	Empty	100	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	46.00%	2206.27	2270.00
Unit MultiLevel	Empty	100	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	1.00%	4654.02	5066.00
Unit MultiLevel	Empty	100	Head end only	30	0.00%	Flat	> 1.0%	8.00	14.00	< 0.1%	74.00%	2629.60	2852.00
Unit MultiLevel	Empty	100	Head end only	34	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	84.00%	2819.93	2935.00
Unit MultiLevel	Empty	100	Head end only	50	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	41.00%	4460.31	4573.00
Unit MultiLevel	Empty	100	Head end only	55	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	9629.54	10138.00
Unit MultiLevel	Empty	100	Head end only	55	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	8235.18	8733.00
Unit MultiLevel	Empty	100	Head end only	60	0.50%	Decline	<0.1%	0.00	0.00	< 10%	29.00%	8515.22	8827.00
Unit MultiLevel	Empty	100	Head end only	60	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	48.00%	7149.47	7380.00
Unit MultiLevel	Loaded	100	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	878.61	976.00
Unit MultiLevel	Loaded	100	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	19.00%	401.37	467.00
Unit MultiLevel	Loaded	100	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1619.14	1702.00
Unit MultiLevel	Loaded	100	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	45.00%	532.62	571.00
Unit MultiLevel	Loaded	100	Distributed (Head and Rear)	13	1.50%	Incline	> 1.0%	3.33	4.00	< 0.1%	39.00%	326.04	365.00
Unit MultiLevel	Loaded	100	Distributed (Head and Rear)	15	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4361.26	5462.00
Unit MultiLevel	Loaded	100	Distributed (Head and Rear)	19	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	50.00%	1306.45	1400.00
Unit MultiLevel	Loaded	100	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4072.90	4869.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit MultiLevel	Loaded	100	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3636.61	3920.00
Unit MultiLevel	Loaded	100	Distributed (Head and Rear)	30	1.10%	Decline	< 0.5%	6.00	6.00	> 10%, < 25%	3.00%	3034.01	3476.00
Unit MultiLevel	Loaded	100	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	33.00%	2710.10	2821.00
Unit MultiLevel	Loaded	100	Distributed (Head and Rear)	33	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	4199.96	4393.00
Unit MultiLevel	Loaded	100	Distributed (Head and Rear)	34	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	46.00%	2627.96	2708.00
Unit MultiLevel	Loaded	100	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	1.00%	6632.71	7160.00
Unit MultiLevel	Loaded	100	Distributed (Head and Rear)	50	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	8012.02	8376.00
Unit MultiLevel	Loaded	100	Distributed (Head and Rear)	50	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	19.00%	6153.59	6311.00
Unit MultiLevel	Loaded	100	Head end only	10	0.50%	Decline	> 1.0%	17.00	17.00	< 10%	10.00%	1274.40	1467.00
Unit MultiLevel	Loaded	100	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	416.18	459.00
Unit MultiLevel	Loaded	100	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2715.37	3114.00
Unit MultiLevel	Loaded	100	Head end only	10	0.00%	Flat	> 1.0%	15.22	25.00	< 0.1%	21.00%	704.66	831.00
Unit MultiLevel	Loaded	100	Head end only	13	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	354.19	396.00
Unit MultiLevel	Loaded	100	Head end only	15	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7698.68	10745.00
Unit MultiLevel	Loaded	100	Head end only	19	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	83.00%	1577.08	1656.00
Unit MultiLevel	Loaded	100	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5892.23	6985.00
Unit MultiLevel	Loaded	100	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	17.00%	4734.41	5169.00
Unit MultiLevel	Loaded	100	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	6.00%	4094.57	4691.00
Unit MultiLevel	Loaded	100	Head end only	30	0.00%	Flat	> 1.0%	15.00	27.00	< 0.1%	64.00%	3404.85	3529.00
Unit MultiLevel	Loaded	100	Head end only	33	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	6379.23	6863.00
Unit MultiLevel	Loaded	100	Head end only	34	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	58.00%	3113.26	3201.00
Unit MultiLevel	Loaded	100	Head end only	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	8371.91	9445.00
Unit MultiLevel	Loaded	100	Head end only	50	0.50%	Decline	<0.1%	0.00	0.00	> 50%	12.00%	10267.80	10981.00
Unit MultiLevel	Loaded	100	Head end only	50	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	52.00%	7485.82	7643.00
Unit Refrigerated Box	Empty	100	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	12.00%	571.31	739.00
Unit Refrigerated Box	Empty	100	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	57.00%	273.66	329.00
Unit Refrigerated Box	Empty	100	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	12.00%	723.95	797.00
Unit Refrigerated Box	Empty	100	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	58.00%	382.62	530.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Refrigerated Box	Empty	100	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2891.50	3150.00
Unit Refrigerated Box	Empty	100	Distributed (Head and Rear)	25	1.50%	Incline	> 1.0%	34.00	34.00	< 0.1%	78.00%	783.15	839.00
Unit Refrigerated Box	Empty	100	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2658.90	2983.00
Unit Refrigerated Box	Empty	100	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	24.00%	2118.03	2290.00
Unit Refrigerated Box	Empty	100	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	89.00%	1592.86	1715.00
Unit Refrigerated Box	Empty	100	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	2542.92	2799.00
Unit Refrigerated Box	Empty	100	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	93.00%	1758.17	1845.00
Unit Refrigerated Box	Empty	100	Distributed (Head and Rear)	34	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	84.00%	2003.92	2111.00
Unit Refrigerated Box	Empty	100	Distributed (Head and Rear)	50	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	76.00%	3128.17	3241.00
Unit Refrigerated Box	Empty	100	Distributed (Head and Rear)	55	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5664.66	5877.00
Unit Refrigerated Box	Empty	100	Distributed (Head and Rear)	55	1.00%	Trough	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	4940.08	5105.00
Unit Refrigerated Box	Empty	100	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	15.00%	5423.75	5725.00
Unit Refrigerated Box	Empty	100	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	64.00%	4714.05	4882.00
Unit Refrigerated Box	Empty	100	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	756.34	1013.00
Unit Refrigerated Box	Empty	100	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	392.91	448.00
Unit Refrigerated Box	Empty	100	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1209.25	1361.00
Unit Refrigerated Box	Empty	100	Head end only	10	0.00%	Flat	< 0.5%	0.00	0.00	< 0.1%	3.00%	503.75	694.00
Unit Refrigerated Box	Empty	100	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4427.19	4850.00
Unit Refrigerated Box	Empty	100	Head end only	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	8.00%	906.27	948.00
Unit Refrigerated Box	Empty	100	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4123.14	4481.00
Unit Refrigerated Box	Empty	100	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	2.00%	2845.09	3208.00
Unit Refrigerated Box	Empty	100	Head end only	30	0.50%	Incline	> 1.0%	18.39	34.00	< 0.1%	79.00%	1897.84	1983.00
Unit Refrigerated Box	Empty	100	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3704.84	3869.00
Unit Refrigerated Box	Empty	100	Head end only	30	0.00%	Flat	> 1.0%	29.00	65.00	< 0.1%	75.00%	2262.96	2389.00
Unit Refrigerated Box	Empty	100	Head end only	34	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	72.00%	2496.83	2651.00
Unit Refrigerated Box	Empty	100	Head end only	50	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	44.00%	3933.16	4059.00
Unit Refrigerated Box	Empty	100	Head end only	55	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7716.05	8054.00
Unit Refrigerated Box	Empty	100	Head end only	55	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	6696.90	7102.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Refrigerated Box	Empty	100	Head end only	60	0.50%	Decline	<0.1%	0.00	0.00	< 10%	33.00%	7205.74	7516.00
Unit Refrigerated Box	Empty	100	Head end only	60	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	39.00%	6111.30	6224.00
Unit Refrigerated Box	Loaded	100	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 10%	1.00%	796.32	884.00
Unit Refrigerated Box	Loaded	100	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	33.00%	389.97	411.00
Unit Refrigerated Box	Loaded	100	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1398.41	1484.00
Unit Refrigerated Box	Loaded	100	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	62.00%	493.39	529.00
Unit Refrigerated Box	Loaded	100	Distributed (Head and Rear)	11	1.50%	Incline	> 1.0%	1.00	1.00	< 0.1%	17.00%	227.25	252.00
Unit Refrigerated Box	Loaded	100	Distributed (Head and Rear)	15	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1543.15	1813.00
Unit Refrigerated Box	Loaded	100	Distributed (Head and Rear)	15	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2856.05	3384.00
Unit Refrigerated Box	Loaded	100	Distributed (Head and Rear)	16	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	19.00%	923.48	1061.00
Unit Refrigerated Box	Loaded	100	Distributed (Head and Rear)	26	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	2509.14	2694.00
Unit Refrigerated Box	Loaded	100	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	3373.69	3497.00
Unit Refrigerated Box	Loaded	100	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	78.00%	2026.79	2083.00
Unit Refrigerated Box	Loaded	100	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 10%	4.00%	2864.31	3181.00
Unit Refrigerated Box	Loaded	100	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	52.00%	2548.33	2643.00
Unit Refrigerated Box	Loaded	100	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6334.84	6783.00
Unit Refrigerated Box	Loaded	100	Distributed (Head and Rear)	50	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7562.31	7822.00
Unit Refrigerated Box	Loaded	100	Distributed (Head and Rear)	50	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	33.00%	5813.57	5945.00
Unit Refrigerated Box	Loaded	100	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1091.04	1298.00
Unit Refrigerated Box	Loaded	100	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	1.00%	426.30	481.00
Unit Refrigerated Box	Loaded	100	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2339.94	2625.00
Unit Refrigerated Box	Loaded	100	Head end only	10	0.00%	Flat	> 1.0%	24.50	54.00	< 0.1%	31.00%	634.05	728.00
Unit Refrigerated Box	Loaded	100	Head end only	11	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	241.66	270.00
Unit Refrigerated Box	Loaded	100	Head end only	15	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2848.79	3448.00
Unit Refrigerated Box	Loaded	100	Head end only	15	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5357.28	6248.00
Unit Refrigerated Box	Loaded	100	Head end only	16	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	73.00%	1112.88	1237.00
Unit Refrigerated Box	Loaded	100	Head end only	26	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	3581.78	3879.00
Unit Refrigerated Box	Loaded	100	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	2.00%	4479.82	4807.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Refrigerated Box	Loaded	100	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	72.00%	2387.16	2460.00
Unit Refrigerated Box	Loaded	100	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	3986.60	4708.00
Unit Refrigerated Box	Loaded	100	Head end only	30	0.00%	Flat	> 1.0%	15.00	24.00	< 0.1%	69.00%	3211.05	3350.00
Unit Refrigerated Box	Loaded	100	Head end only	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	8392.10	9494.00
Unit Refrigerated Box	Loaded	100	Head end only	50	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	9681.09	10098.00
Unit Refrigerated Box	Loaded	100	Head end only	50	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	42.00%	7167.70	7486.00
Unit Tank	Empty	100	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	25.00%	352.34	521.00
Unit Tank	Empty	100	Distributed (Head and Rear)	10	0.50%	Incline	> 25%	16.57	55.00	< 0.1%	100.00%	207.87	256.00
Unit Tank	Empty	100	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	11.00%	384.83	421.00
Unit Tank	Empty	100	Distributed (Head and Rear)	10	0.00%	Flat	> 1.0%	6.50	15.00	< 0.1%	68.00%	272.98	400.00
Unit Tank	Empty	100	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1464.48	1529.00
Unit Tank	Empty	100	Distributed (Head and Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	87.00%	693.99	715.00
Unit Tank	Empty	100	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1418.33	1506.00
Unit Tank	Empty	100	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	34.00%	1361.52	1545.00
Unit Tank	Empty	100	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	100.00%	1016.72	1117.00
Unit Tank	Empty	100	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	19.00%	1470.17	1565.00
Unit Tank	Empty	100	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	100.00%	1120.41	1220.00
Unit Tank	Empty	100	Distributed (Head and Rear)	47	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	99.00%	2013.86	2090.00
Unit Tank	Empty	100	Distributed (Head and Rear)	55	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	3507.74	3685.00
Unit Tank	Empty	100	Distributed (Head and Rear)	55	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	4.00%	3175.21	3354.00
Unit Tank	Empty	100	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	63.00%	3505.38	3781.00
Unit Tank	Empty	100	Distributed (Head and Rear)	60	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	83.00%	2912.08	2985.00
Unit Tank	Empty	100	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	99.00%	3164.42	3298.00
Unit Tank	Empty	100	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	1.00%	612.64	694.00
Unit Tank	Empty	100	Head end only	10	0.50%	Incline	> 1.0%	2.00	2.00	< 0.1%	97.00%	247.07	344.00
Unit Tank	Empty	100	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	581.30	618.00
Unit Tank	Empty	100	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	80.00%	344.44	503.00
Unit Tank	Empty	100	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2000.98	2087.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Tank	Empty	100	Head end only	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	73.00%	804.38	859.00
Unit Tank	Empty	100	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2074.14	2206.00
Unit Tank	Empty	100	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	6.00%	1843.00	2011.00
Unit Tank	Empty	100	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	93.00%	1286.93	1381.00
Unit Tank	Empty	100	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2077.37	2193.00
Unit Tank	Empty	100	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	86.00%	1472.19	1573.00
Unit Tank	Empty	100	Head end only	47	1.00%	Crest	< 0.5%	5.00	5.00	< 0.1%	73.00%	2523.87	2630.00
Unit Tank	Empty	100	Head end only	55	1.10%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	4551.44	4743.00
Unit Tank	Empty	100	Head end only	55	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	0.00%	4114.23	4289.00
Unit Tank	Empty	100	Head end only	60	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	12.00%	4452.32	4754.00
Unit Tank	Empty	100	Head end only	60	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	56.00%	3604.43	3727.00
Unit Tank	Empty	100	Head end only	60	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	51.00%	4005.70	4147.00
Unit Tank	Loaded	100	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	6.00%	501.99	538.00
Unit Tank	Loaded	100	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	88.00%	307.56	378.00
Unit Tank	Loaded	100	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	801.23	862.00
Unit Tank	Loaded	100	Distributed (Head and Rear)	10	1.50%	Incline	> 25%	9.24	21.00	< 0.1%	100.00%	160.33	196.00
Unit Tank	Loaded	100	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	100.00%	348.20	381.00
Unit Tank	Loaded	100	Distributed (Head and Rear)	15	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	97.00%	612.97	652.00
Unit Tank	Loaded	100	Distributed (Head and Rear)	15	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2284.36	2968.00
Unit Tank	Loaded	100	Distributed (Head and Rear)	20	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2063.72	2763.00
Unit Tank	Loaded	100	Distributed (Head and Rear)	25	1.00%	Trough	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	1760.94	1856.00
Unit Tank	Loaded	100	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	1.00%	2477.29	2610.00
Unit Tank	Loaded	100	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	84.00%	1593.95	1660.00
Unit Tank	Loaded	100	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	17.00%	2429.13	2599.00
Unit Tank	Loaded	100	Distributed (Head and Rear)	30	0.00%	Flat	> 1.0%	35.20	82.00	< 0.1%	84.00%	1930.55	2033.00
Unit Tank	Loaded	100	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5682.06	6052.00
Unit Tank	Loaded	100	Distributed (Head and Rear)	50	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5997.38	6220.00
Unit Tank	Loaded	100	Distributed (Head and Rear)	50	0.00%	Flat	> 1.0%	86.88	123.00	< 0.1%	48.00%	4724.93	4905.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Tank	Loaded	100	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	717.54	759.00
Unit Tank	Loaded	100	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	64.00%	349.34	434.00
Unit Tank	Loaded	100	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1278.78	1345.00
Unit Tank	Loaded	100	Head end only	10	1.50%	Incline	> 1.0%	6.43	26.00	< 0.1%	70.00%	189.32	238.00
Unit Tank	Loaded	100	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	93.00%	453.88	489.00
Unit Tank	Loaded	100	Head end only	15	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	66.00%	795.46	868.00
Unit Tank	Loaded	100	Head end only	15	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4063.59	5346.00
Unit Tank	Loaded	100	Head end only	20	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3412.65	4324.00
Unit Tank	Loaded	100	Head end only	25	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	2489.03	2626.00
Unit Tank	Loaded	100	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	3218.96	3364.00
Unit Tank	Loaded	100	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	81.00%	1884.42	1959.00
Unit Tank	Loaded	100	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	3404.43	3607.00
Unit Tank	Loaded	100	Head end only	30	0.00%	Flat	> 1.0%	12.50	17.00	< 0.1%	46.00%	2382.75	2480.00
Unit Tank	Loaded	100	Head end only	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7349.64	7699.00
Unit Tank	Loaded	100	Head end only	50	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7453.58	7626.00
Unit Tank	Loaded	100	Head end only	50	0.00%	Flat	> 1.0%	41.67	110.00	< 0.1%	28.00%	5536.58	5734.00
Unit Steel Hoppers	Empty	135	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	33.00%	438.26	659.00
Unit Steel Hoppers	Empty	135	Distributed (Head and Rear)	10	0.50%	Incline	> 25%	10.10	32.00	< 0.1%	94.00%	245.15	375.00
Unit Steel Hoppers	Empty	135	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	513.56	547.00
Unit Steel Hoppers	Empty	135	Distributed (Head and Rear)	10	0.00%	Flat	< 0.5%	0.00	0.00	< 0.1%	55.00%	348.87	490.00
Unit Steel Hoppers	Empty	135	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1979.92	2067.00
Unit Steel Hoppers	Empty	135	Distributed (Head and Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	68.00%	822.96	848.00
Unit Steel Hoppers	Empty	135	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1886.29	1974.00
Unit Steel Hoppers	Empty	135	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	54.00%	1658.69	1926.00
Unit Steel Hoppers	Empty	135	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	100.00%	1246.85	1326.00
Unit Steel Hoppers	Empty	135	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	4.00%	1877.05	1988.00
Unit Steel Hoppers	Empty	135	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	100.00%	1368.90	1441.00
Unit Steel Hoppers	Empty	135	Distributed (Head and Rear)	50	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	98.00%	2631.72	2748.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Steel Hoppers	Empty	135	Distributed (Head and Rear)	55	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	9.00%	4236.17	4367.00
Unit Steel Hoppers	Empty	135	Distributed (Head and Rear)	55	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	9.00%	3724.63	3855.00
Unit Steel Hoppers	Empty	135	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	95.00%	4141.02	4480.00
Unit Steel Hoppers	Empty	135	Distributed (Head and Rear)	60	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	98.00%	3398.56	3519.00
Unit Steel Hoppers	Empty	135	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	99.00%	3763.49	3905.00
Unit Steel Hoppers	Empty	135	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	17.00%	383.52	547.00
Unit Steel Hoppers	Empty	135	Distributed (Head, Mid, Rear)	10	0.50%	Incline	> 1.0%	14.74	39.00	< 0.1%	95.00%	219.90	355.00
Unit Steel Hoppers	Empty	135	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	414.58	464.00
Unit Steel Hoppers	Empty	135	Distributed (Head, Mid, Rear)	10	0.00%	Flat	> 1.0%	3.00	4.00	< 0.1%	88.00%	256.93	419.00
Unit Steel Hoppers	Empty	135	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1653.93	1786.00
Unit Steel Hoppers	Empty	135	Distributed (Head, Mid, Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	76.00%	736.61	791.00
Unit Steel Hoppers	Empty	135	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1552.09	1620.00
Unit Steel Hoppers	Empty	135	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	37.00%	1425.44	1670.00
Unit Steel Hoppers	Empty	135	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	100.00%	1090.19	1194.00
Unit Steel Hoppers	Empty	135	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	1.00%	1592.66	1679.00
Unit Steel Hoppers	Empty	135	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	100.00%	1194.70	1304.00
Unit Steel Hoppers	Empty	135	Distributed (Head, Mid, Rear)	50	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	84.00%	2377.36	2472.00
Unit Steel Hoppers	Empty	135	Distributed (Head, Mid, Rear)	55	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	4.00%	3675.76	3810.00
Unit Steel Hoppers	Empty	135	Distributed (Head, Mid, Rear)	55	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	16.00%	3194.07	3350.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Steel Hoppers	Empty	135	Distributed (Head, Mid, Rear)	60	0.50%	Decline	> 1.0%	48.00	48.00	< 0.1%	80.00%	3646.85	3961.00
Unit Steel Hoppers	Empty	135	Distributed (Head, Mid, Rear)	60	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	88.00%	3032.42	3131.00
Unit Steel Hoppers	Empty	135	Distributed (Head, Mid, Rear)	60	0.00%	Flat	> 1.0%	27.00	34.00	< 0.1%	96.00%	3299.17	3482.00
Unit Steel Hoppers	Loaded	135	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	669.65	719.00
Unit Steel Hoppers	Loaded	135	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	63.00%	384.05	436.00
Unit Steel Hoppers	Loaded	135	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1156.77	1243.00
Unit Steel Hoppers	Loaded	135	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	99.00%	433.11	507.00
Unit Steel Hoppers	Loaded	135	Distributed (Head and Rear)	11	1.50%	Incline	> 25%	8.56	38.00	< 0.1%	98.00%	209.18	242.00
Unit Steel Hoppers	Loaded	135	Distributed (Head and Rear)	15	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3587.43	3813.00
Unit Steel Hoppers	Loaded	135	Distributed (Head and Rear)	16	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	98.00%	833.94	889.00
Unit Steel Hoppers	Loaded	135	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3914.00	4231.00
Unit Steel Hoppers	Loaded	135	Distributed (Head and Rear)	27	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	2351.74	2450.00
Unit Steel Hoppers	Loaded	135	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	1.00%	2984.05	3098.00
Unit Steel Hoppers	Loaded	135	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	87.00%	1889.95	1968.00
Unit Steel Hoppers	Loaded	135	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	3.00%	2765.36	3028.00
Unit Steel Hoppers	Loaded	135	Distributed (Head and Rear)	30	0.00%	Flat	< 0.5%	0.00	0.00	< 0.1%	88.00%	2277.73	2390.00
Unit Steel Hoppers	Loaded	135	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6219.20	6566.00
Unit Steel Hoppers	Loaded	135	Distributed (Head and Rear)	50	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6913.74	7184.00
Unit Steel Hoppers	Loaded	135	Distributed (Head and Rear)	50	0.00%	Flat	> 1.0%	44.80	58.00	< 0.1%	35.00%	5284.83	5478.00
Unit Steel Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	1.00%	549.20	584.00
Unit Steel Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	74.00%	323.61	401.00
Unit Steel Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	932.05	995.00
Unit Steel Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	98.00%	373.54	425.00
Unit Steel Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	11	1.50%	Incline	> 25%	11.60	37.00	< 0.1%	100.00%	205.93	234.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Steel Hoppers	Loaded	135	Rear) Distributed (Head, Mid, Rear)	15	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3477.09	3720.00
Unit Steel Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	16	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	88.00%	757.99	807.00
Unit Steel Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3711.54	4032.00
Unit Steel Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	27	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	1990.04	2094.00
Unit Steel Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2643.83	2718.00
Unit Steel Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	65.00%	1699.83	1775.00
Unit Steel Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2631.60	2807.00
Unit Steel Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	66.00%	2033.80	2125.00
Unit Steel Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6014.35	6373.00
Unit Steel Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	50	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6322.96	6599.00
Unit Steel Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	50	0.00%	Flat	> 1.0%	28.80	85.00	< 0.1%	21.00%	4852.45	5114.00
Unit Covered Hoppers	Empty	135	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	18.00%	509.37	753.00
Unit Covered Hoppers	Empty	135	Distributed (Head and Rear)	10	0.50%	Incline	> 1.0%	1.67	2.00	< 0.1%	86.00%	264.77	413.00
Unit Covered Hoppers	Empty	135	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	630.95	683.00
Unit Covered Hoppers	Empty	135	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	20.00%	430.33	583.00
Unit Covered Hoppers	Empty	135	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2461.60	2637.00
Unit Covered Hoppers	Empty	135	Distributed (Head and Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	29.00%	876.24	921.00
Unit Covered Hoppers	Empty	135	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2326.49	2435.00
Unit Covered Hoppers	Empty	135	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	11.00%	1928.06	2194.00
Unit Covered Hoppers	Empty	135	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	74.00%	1403.47	1513.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Covered Hoppers	Empty	135	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2248.43	2347.00
Unit Covered Hoppers	Empty	135	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	82.00%	1587.32	1706.00
Unit Covered Hoppers	Empty	135	Distributed (Head and Rear)	47	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	29.00%	2837.18	2915.00
Unit Covered Hoppers	Empty	135	Distributed (Head and Rear)	55	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	5006.62	5171.00
Unit Covered Hoppers	Empty	135	Distributed (Head and Rear)	55	1.00%	Trough	<0.1%	0.00	0.00	< 10%	0.00%	4335.88	4503.00
Unit Covered Hoppers	Empty	135	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	19.00%	4810.23	5335.00
Unit Covered Hoppers	Empty	135	Distributed (Head and Rear)	60	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	16.00%	3845.64	3942.00
Unit Covered Hoppers	Empty	135	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	24.00%	4381.96	4530.00
Unit Covered Hoppers	Empty	135	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	6.00%	464.51	623.00
Unit Covered Hoppers	Empty	135	Distributed (Head, Mid, Rear)	10	0.50%	Incline	> 1.0%	10.38	34.00	< 0.1%	93.00%	231.48	348.00
Unit Covered Hoppers	Empty	135	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	512.59	570.00
Unit Covered Hoppers	Empty	135	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	80.00%	300.19	510.00
Unit Covered Hoppers	Empty	135	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2016.52	2178.00
Unit Covered Hoppers	Empty	135	Distributed (Head, Mid, Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	24.00%	815.68	855.00
Unit Covered Hoppers	Empty	135	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1894.24	2007.00
Unit Covered Hoppers	Empty	135	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	4.00%	1649.20	1915.00
Unit Covered Hoppers	Empty	135	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	70.00%	1238.06	1375.00
Unit Covered Hoppers	Empty	135	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	1893.19	1991.00
Unit Covered Hoppers	Empty	135	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	63.00%	1383.96	1462.00
Unit Covered Hoppers	Empty	135	Distributed (Head, Mid, Rear)	47	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	6.00%	2552.07	2592.00
Unit Covered Hoppers	Empty	135	Distributed (Head, Mid, Rear)	55	1.10%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	4328.77	4505.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Covered Hoppers	Empty	135	Rear) Distributed (Head, Mid, Rear)	55	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	0.00%	3684.40	3848.00
Unit Covered Hoppers	Empty	135	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	5.00%	4227.50	4584.00
Unit Covered Hoppers	Empty	135	Distributed (Head, Mid, Rear)	60	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	5.00%	3445.40	3549.00
Unit Covered Hoppers	Empty	135	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	24.00%	3823.44	4015.00
Unit Covered Hoppers	Loaded	135	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	749.68	794.00
Unit Covered Hoppers	Loaded	135	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	88.00%	343.39	463.00
Unit Covered Hoppers	Loaded	135	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1326.82	1393.00
Unit Covered Hoppers	Loaded	135	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	90.00%	472.54	500.00
Unit Covered Hoppers	Loaded	135	Distributed (Head and Rear)	11	1.50%	Incline	> 1.0%	3.67	4.00	< 0.1%	89.00%	231.13	264.00
Unit Covered Hoppers	Loaded	135	Distributed (Head and Rear)	15	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	71.00%	833.65	939.00
Unit Covered Hoppers	Loaded	135	Distributed (Head and Rear)	15	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3409.88	3694.00
Unit Covered Hoppers	Loaded	135	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3768.06	4199.00
Unit Covered Hoppers	Loaded	135	Distributed (Head and Rear)	27	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	2457.55	2579.00
Unit Covered Hoppers	Loaded	135	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	3193.02	3297.00
Unit Covered Hoppers	Loaded	135	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	34.00%	1985.38	2056.00
Unit Covered Hoppers	Loaded	135	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	1.00%	2721.34	3093.00
Unit Covered Hoppers	Loaded	135	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	23.00%	2433.21	2540.00
Unit Covered Hoppers	Loaded	135	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5957.19	6289.00
Unit Covered Hoppers	Loaded	135	Distributed (Head and Rear)	50	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7134.89	7414.00
Unit Covered Hoppers	Loaded	135	Distributed (Head and Rear)	50	0.00%	Flat	> 1.0%	31.50	59.00	< 0.1%	5.00%	5549.67	5749.00
Unit Covered Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	608.34	651.00
Unit Covered Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	55.00%	357.35	418.00
Unit Covered Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1041.22	1097.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Covered Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	90.00%	408.24	478.00
Unit Covered Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	11	1.50%	Incline	> 1.0%	8.00	23.00	< 0.1%	100.00%	218.04	249.00
Unit Covered Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	15	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	38.00%	753.21	805.00
Unit Covered Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	15	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3305.87	3605.00
Unit Covered Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3557.69	3805.00
Unit Covered Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	27	1.00%	Trough	<0.1%	0.00	0.00	< 10%	0.00%	2084.26	2179.00
Unit Covered Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2788.22	2927.00
Unit Covered Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	21.00%	1787.59	1872.00
Unit Covered Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2549.22	2758.00
Unit Covered Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	12.00%	2159.63	2272.00
Unit Covered Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5752.29	6136.00
Unit Covered Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	50	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6465.45	6653.00
Unit Covered Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	50	0.00%	Flat	> 1.0%	39.00	83.00	< 0.1%	6.00%	5003.64	5190.00
Unit Aluminum Hoppers	Empty	135	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	634.84	755.00
Unit Aluminum Hoppers	Empty	135	Distributed (Head and Rear)	10	0.50%	Incline	> 1.0%	0.00	0.00	< 0.1%	86.00%	247.41	403.00
Unit Aluminum Hoppers	Empty	135	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	597.58	948.00
Unit Aluminum Hoppers	Empty	135	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	11.00%	446.76	654.00
Unit Aluminum Hoppers	Empty	135	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2093.68	2201.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Hoppers													
Unit Aluminum Hoppers	Empty	135	Distributed (Head and Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	39.00%	865.69	966.00
Unit Aluminum Hoppers	Empty	135	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2010.70	2157.00
Unit Aluminum Hoppers	Empty	135	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	5.00%	1730.90	2094.00
Unit Aluminum Hoppers	Empty	135	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	59.00%	1319.82	1530.00
Unit Aluminum Hoppers	Empty	135	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2007.54	2415.00
Unit Aluminum Hoppers	Empty	135	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	46.00%	1459.42	1608.00
Unit Aluminum Hoppers	Empty	135	Distributed (Head and Rear)	55	1.10%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	4429.95	4587.00
Unit Aluminum Hoppers	Empty	135	Distributed (Head and Rear)	55	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	23.00%	3226.01	3313.00
Unit Aluminum Hoppers	Empty	135	Distributed (Head and Rear)	55	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	0.00%	3876.90	4006.00
Unit Aluminum Hoppers	Empty	135	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	8.00%	4381.72	4752.00
Unit Aluminum Hoppers	Empty	135	Distributed (Head and Rear)	60	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	17.00%	3639.90	3771.00
Unit Aluminum Hoppers	Empty	135	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	27.00%	3885.36	4075.00
Unit Aluminum Hoppers	Empty	135	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	3.00%	417.94	634.00
Unit Aluminum Hoppers	Empty	135	Distributed (Head, Mid, Rear)	10	0.50%	Incline	> 1.0%	9.30	25.00	< 0.1%	64.00%	248.95	374.00
Unit Aluminum Hoppers	Empty	135	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	475.98	863.00
Unit Aluminum Hoppers	Empty	135	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	14.00%	402.29	522.00
Unit Aluminum Hoppers	Empty	135	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1699.16	1788.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Aluminum Hoppers	Empty	135	Distributed (Head, Mid, Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	30.00%	796.04	900.00
Unit Aluminum Hoppers	Empty	135	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1653.12	1779.00
Unit Aluminum Hoppers	Empty	135	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	6.00%	1488.25	1792.00
Unit Aluminum Hoppers	Empty	135	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	59.00%	1155.49	1339.00
Unit Aluminum Hoppers	Empty	135	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	1692.47	2122.00
Unit Aluminum Hoppers	Empty	135	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	49.00%	1275.53	1600.00
Unit Aluminum Hoppers	Empty	135	Distributed (Head, Mid, Rear)	55	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	3823.61	3943.00
Unit Aluminum Hoppers	Empty	135	Distributed (Head, Mid, Rear)	55	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	7.00%	2875.69	2966.00
Unit Aluminum Hoppers	Empty	135	Distributed (Head, Mid, Rear)	55	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	4.00%	3333.20	3440.00
Unit Aluminum Hoppers	Empty	135	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	16.00%	3863.26	4217.00
Unit Aluminum Hoppers	Empty	135	Distributed (Head, Mid, Rear)	60	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	1.00%	3252.24	3292.00
Unit Aluminum Hoppers	Empty	135	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	13.00%	3462.14	3614.00
Unit Aluminum Hoppers	Loaded	135	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	653.84	699.00
Unit Aluminum Hoppers	Loaded	135	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	40.00%	381.18	434.00
Unit Aluminum Hoppers	Loaded	135	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1112.06	1170.00
Unit Aluminum Hoppers	Loaded	135	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	96.00%	428.00	520.00
Unit Aluminum Hoppers	Loaded	135	Distributed (Head and Rear)	11	1.50%	Incline	> 1.0%	7.25	26.00	< 0.1%	100.00%	210.93	239.00
Unit Aluminum Hoppers	Loaded	135	Distributed (Head and Rear)	15	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	71.00%	767.44	818.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Hoppers													
Unit Aluminum Hoppers	Loaded	135	Distributed (Head and Rear)	15	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3061.19	3214.00
Unit Aluminum Hoppers	Loaded	135	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3179.35	3433.00
Unit Aluminum Hoppers	Loaded	135	Distributed (Head and Rear)	27	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	2195.05	2281.00
Unit Aluminum Hoppers	Loaded	135	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2831.13	2937.00
Unit Aluminum Hoppers	Loaded	135	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	29.00%	1843.40	1894.00
Unit Aluminum Hoppers	Loaded	135	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	5.00%	2329.60	2516.00
Unit Aluminum Hoppers	Loaded	135	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	30.00%	2205.37	2304.00
Unit Aluminum Hoppers	Loaded	135	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	5116.51	5414.00
Unit Aluminum Hoppers	Loaded	135	Distributed (Head and Rear)	50	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6346.38	6535.00
Unit Aluminum Hoppers	Loaded	135	Distributed (Head and Rear)	50	0.00%	Flat	> 1.0%	33.25	64.00	< 0.1%	8.00%	4992.21	5179.00
Unit Aluminum Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	536.26	569.00
Unit Aluminum Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	55.00%	329.99	401.00
Unit Aluminum Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	888.80	932.00
Unit Aluminum Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	89.00%	369.52	415.00
Unit Aluminum Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	11	1.50%	Incline	> 1.0%	7.25	25.00	< 0.1%	100.00%	210.53	238.00
Unit Aluminum Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	15	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	70.00%	664.02	698.00
Unit Aluminum Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	15	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2990.29	3109.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Aluminum Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3039.28	3241.00
Unit Aluminum Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	27	1.00%	Trough	<0.1%	0.00	0.00	< 10%	0.00%	1844.56	1915.00
Unit Aluminum Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2479.09	2562.00
Unit Aluminum Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	14.00%	1666.13	1716.00
Unit Aluminum Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	2.00%	2213.57	2346.00
Unit Aluminum Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	12.00%	1954.65	2031.00
Unit Aluminum Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4977.00	5244.00
Unit Aluminum Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	50	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5763.43	5922.00
Unit Aluminum Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	50	0.00%	Flat	> 1.0%	46.25	113.00	< 0.1%	8.00%	4522.97	4738.00
Unit MultiLevel	Empty	135	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	1016.73	1150.00
Unit MultiLevel	Empty	135	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	6.00%	375.68	497.00
Unit MultiLevel	Empty	135	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1329.12	1653.00
Unit MultiLevel	Empty	135	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	3.00%	577.85	767.00
Unit MultiLevel	Empty	135	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5592.34	6133.00
Unit MultiLevel	Empty	135	Distributed (Head and Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	28.00%	971.31	1031.00
Unit MultiLevel	Empty	135	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4806.30	5250.00
Unit MultiLevel	Empty	135	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	3153.81	3502.00
Unit MultiLevel	Empty	135	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	34.00%	2061.67	2224.00
Unit MultiLevel	Empty	135	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4122.49	4379.00
Unit MultiLevel	Empty	135	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	24.00%	2427.41	2517.00
Unit MultiLevel	Empty	135	Distributed (Head and Rear)	36	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	30.00%	3026.62	3115.00
Unit MultiLevel	Empty	135	Distributed (Head and Rear)	53	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	2.00%	4577.51	4679.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit MultiLevel	Empty	135	Distributed (Head and Rear)	55	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	8752.99	9095.00
Unit MultiLevel	Empty	135	Distributed (Head and Rear)	55	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	7162.70	7317.00
Unit MultiLevel	Empty	135	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	7921.82	8291.00
Unit MultiLevel	Empty	135	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	14.00%	6710.40	6886.00
Unit MultiLevel	Empty	135	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	816.00	958.00
Unit MultiLevel	Empty	135	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	37.00%	309.52	395.00
Unit MultiLevel	Empty	135	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1006.29	1087.00
Unit MultiLevel	Empty	135	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	12.00%	505.06	662.00
Unit MultiLevel	Empty	135	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4425.82	4765.00
Unit MultiLevel	Empty	135	Distributed (Head, Mid, Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	1.00%	886.56	945.00
Unit MultiLevel	Empty	135	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3740.98	3915.00
Unit MultiLevel	Empty	135	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2680.78	2974.00
Unit MultiLevel	Empty	135	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	4.00%	1895.63	1999.00
Unit MultiLevel	Empty	135	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3291.70	3468.00
Unit MultiLevel	Empty	135	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	1.00%	2120.54	2217.00
Unit MultiLevel	Empty	135	Distributed (Head, Mid, Rear)	36	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	6.00%	2707.43	2814.00
Unit MultiLevel	Empty	135	Distributed (Head, Mid, Rear)	53	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	3.00%	4139.92	4244.00
Unit MultiLevel	Empty	135	Distributed (Head, Mid, Rear)	55	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7498.43	7667.00
Unit MultiLevel	Empty	135	Distributed (Head, Mid, Rear)	55	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	5982.37	6189.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit MultiLevel	Empty	135	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6800.57	7163.00
Unit MultiLevel	Empty	135	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 10%	0.00%	5846.98	6009.00
Unit MultiLevel	Loaded	135	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	1131.76	1193.00
Unit MultiLevel	Loaded	135	Distributed (Head and Rear)	10	0.50%	Incline	< 0.5%	1.00	1.00	< 0.1%	2.00%	414.81	490.00
Unit MultiLevel	Loaded	135	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2318.84	2594.00
Unit MultiLevel	Loaded	135	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	43.00%	640.92	766.00
Unit MultiLevel	Loaded	135	Distributed (Head and Rear)	14	1.50%	Incline	> 1.0%	17.00	17.00	< 0.1%	7.00%	384.15	443.00
Unit MultiLevel	Loaded	135	Distributed (Head and Rear)	15	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5509.34	6685.00
Unit MultiLevel	Loaded	135	Distributed (Head and Rear)	21	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	17.00%	1767.59	1851.00
Unit MultiLevel	Loaded	135	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4996.78	5634.00
Unit MultiLevel	Loaded	135	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4454.80	4607.00
Unit MultiLevel	Loaded	135	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 10%	4.00%	3374.15	4106.00
Unit MultiLevel	Loaded	135	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	7.00%	3190.30	3285.00
Unit MultiLevel	Loaded	135	Distributed (Head and Rear)	37	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	10.00%	3407.02	3484.00
Unit MultiLevel	Loaded	135	Distributed (Head and Rear)	37	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	6036.51	6402.00
Unit MultiLevel	Loaded	135	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7334.60	8412.00
Unit MultiLevel	Loaded	135	Distributed (Head and Rear)	50	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	9303.41	9616.00
Unit MultiLevel	Loaded	135	Distributed (Head and Rear)	50	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	7036.44	7203.00
Unit MultiLevel	Loaded	135	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	903.73	1014.00
Unit MultiLevel	Loaded	135	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	440.88	507.00
Unit MultiLevel	Loaded	135	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1717.75	1834.00
Unit MultiLevel	Loaded	135	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	18.00%	546.54	585.00
Unit MultiLevel	Loaded	135	Distributed (Head, Mid, Rear)	14	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	20.00%	373.63	420.00
Unit MultiLevel	Loaded	135	Distributed (Head, Mid, Rear)	15	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4830.23	5635.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit MultiLevel	Loaded	135	Rear) Distributed (Head, Mid, Rear)	21	1.00%	Crest	<0.1%	0.00	0.00	< 10%	0.00%	1587.19	1718.00
Unit MultiLevel	Loaded	135	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4477.22	4942.00
Unit MultiLevel	Loaded	135	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	3787.13	3943.00
Unit MultiLevel	Loaded	135	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	3129.06	3401.00
Unit MultiLevel	Loaded	135	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2797.53	2861.00
Unit MultiLevel	Loaded	135	Distributed (Head, Mid, Rear)	37	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	3073.21	3103.00
Unit MultiLevel	Loaded	135	Distributed (Head, Mid, Rear)	37	1.00%	Trough	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	4896.90	5119.00
Unit MultiLevel	Loaded	135	Distributed (Head, Mid, Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6911.59	7522.00
Unit MultiLevel	Loaded	135	Distributed (Head, Mid, Rear)	50	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	8250.89	8513.00
Unit MultiLevel	Loaded	135	Distributed (Head, Mid, Rear)	50	0.00%	Flat	<0.1%	0.00	0.00	< 10%	1.00%	6315.08	6481.00
Unit Refrigerated Box	Empty	135	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 10%	9.00%	702.02	927.00
Unit Refrigerated Box	Empty	135	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	15.00%	333.10	403.00
Unit Refrigerated Box	Empty	135	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	1.00%	1006.91	1082.00
Unit Refrigerated Box	Empty	135	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	4.00%	489.94	669.00
Unit Refrigerated Box	Empty	135	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4050.33	4532.00
Unit Refrigerated Box	Empty	135	Distributed (Head and Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	23.00%	919.77	972.00
Unit Refrigerated Box	Empty	135	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3542.76	3902.00
Unit Refrigerated Box	Empty	135	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	9.00%	2560.72	2862.00
Unit Refrigerated Box	Empty	135	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	67.00%	1805.12	1955.00
Unit Refrigerated Box	Empty	135	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3243.23	3667.00
Unit Refrigerated Box	Empty	135	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	59.00%	2088.10	2188.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Refrigerated Box	Empty	135	Distributed (Head and Rear)	35	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	60.00%	2478.20	2568.00
Unit Refrigerated Box	Empty	135	Distributed (Head and Rear)	52	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	26.00%	3974.74	4091.00
Unit Refrigerated Box	Empty	135	Distributed (Head and Rear)	55	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6942.46	7196.00
Unit Refrigerated Box	Empty	135	Distributed (Head and Rear)	55	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	5786.72	5988.00
Unit Refrigerated Box	Empty	135	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	6532.15	6813.00
Unit Refrigerated Box	Empty	135	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	9.00%	5610.22	5752.00
Unit Refrigerated Box	Empty	135	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	1.00%	598.74	789.00
Unit Refrigerated Box	Empty	135	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	36.00%	285.16	339.00
Unit Refrigerated Box	Empty	135	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 10%	2.00%	775.39	858.00
Unit Refrigerated Box	Empty	135	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	15.00%	428.66	562.00
Unit Refrigerated Box	Empty	135	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3215.35	3484.00
Unit Refrigerated Box	Empty	135	Distributed (Head, Mid, Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	2.00%	849.54	897.00
Unit Refrigerated Box	Empty	135	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2827.35	3038.00
Unit Refrigerated Box	Empty	135	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2267.88	2456.00
Unit Refrigerated Box	Empty	135	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	26.00%	1567.09	1700.00
Unit Refrigerated Box	Empty	135	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	2668.54	2993.00
Unit Refrigerated Box	Empty	135	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	9.00%	1798.47	1941.00
Unit Refrigerated Box	Empty	135	Distributed (Head, Mid, Rear)	35	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	30.00%	2124.47	2265.00
Unit Refrigerated Box	Empty	135	Distributed (Head, Mid, Rear)	52	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	1.00%	3440.53	3537.00
Unit Refrigerated Box	Empty	135	Distributed (Head, Mid, Rear)	55	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5900.07	6058.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Refrigerated Box	Empty	135	Rear) Distributed (Head, Mid, Rear)	55	1.00%	Trough	<0.1%	0.00	0.00	< 10%	0.00%	4848.98	5037.00
Unit Refrigerated Box	Empty	135	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	5661.05	5996.00
Unit Refrigerated Box	Empty	135	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	3.00%	4970.93	5135.00
Unit Refrigerated Box	Loaded	135	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 10%	14.00%	1033.83	1111.00
Unit Refrigerated Box	Loaded	135	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	15.00%	428.28	477.00
Unit Refrigerated Box	Loaded	135	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2028.39	2189.00
Unit Refrigerated Box	Loaded	135	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	34.00%	594.68	662.00
Unit Refrigerated Box	Loaded	135	Distributed (Head and Rear)	12	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	1.00%	270.90	314.00
Unit Refrigerated Box	Loaded	135	Distributed (Head and Rear)	15	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4405.06	5236.00
Unit Refrigerated Box	Loaded	135	Distributed (Head and Rear)	17	1.00%	Crest	<0.1%	0.00	0.00	< 10%	0.00%	1240.24	1429.00
Unit Refrigerated Box	Loaded	135	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4883.72	5445.00
Unit Refrigerated Box	Loaded	135	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4163.14	4350.00
Unit Refrigerated Box	Loaded	135	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	3312.61	3718.00
Unit Refrigerated Box	Loaded	135	Distributed (Head and Rear)	30	1.00%	Trough	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	3793.99	3981.00
Unit Refrigerated Box	Loaded	135	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	17.00%	2992.64	3119.00
Unit Refrigerated Box	Loaded	135	Distributed (Head and Rear)	31	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	38.00%	2460.94	2526.00
Unit Refrigerated Box	Loaded	135	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7129.28	7920.00
Unit Refrigerated Box	Loaded	135	Distributed (Head and Rear)	50	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	8908.31	9137.00
Unit Refrigerated Box	Loaded	135	Distributed (Head and Rear)	50	0.00%	Flat	<0.1%	0.00	0.00	< 10%	1.00%	6678.23	6844.00
Unit Refrigerated Box	Loaded	135	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	1.00%	817.08	944.00
Unit Refrigerated Box	Loaded	135	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	410.54	440.00
Unit Refrigerated Box	Loaded	135	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1530.68	1645.00
Unit Refrigerated Box	Loaded	135	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	10.00%	506.60	580.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Refrigerated Box	Loaded	135	Distributed (Head, Mid, Rear)	12	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	22.00%	271.74	312.00
Unit Refrigerated Box	Loaded	135	Distributed (Head, Mid, Rear)	15	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4036.07	4795.00
Unit Refrigerated Box	Loaded	135	Distributed (Head, Mid, Rear)	17	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	1065.51	1220.00
Unit Refrigerated Box	Loaded	135	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4496.66	4917.00
Unit Refrigerated Box	Loaded	135	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	3544.84	3706.00
Unit Refrigerated Box	Loaded	135	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	3089.00	3410.00
Unit Refrigerated Box	Loaded	135	Distributed (Head, Mid, Rear)	30	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	3181.46	3569.00
Unit Refrigerated Box	Loaded	135	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	1.00%	2624.12	2711.00
Unit Refrigerated Box	Loaded	135	Distributed (Head, Mid, Rear)	31	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	2218.33	2301.00
Unit Refrigerated Box	Loaded	135	Distributed (Head, Mid, Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6838.02	7295.00
Unit Refrigerated Box	Loaded	135	Distributed (Head, Mid, Rear)	50	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7890.31	8109.00
Unit Refrigerated Box	Loaded	135	Distributed (Head, Mid, Rear)	50	0.00%	Flat	<0.1%	0.00	0.00	< 10%	0.00%	6042.70	6191.00
Unit Tank	Empty	135	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	33.00%	401.85	607.00
Unit Tank	Empty	135	Distributed (Head and Rear)	10	0.50%	Incline	> 1.0%	8.07	34.00	< 0.1%	84.00%	252.57	334.00
Unit Tank	Empty	135	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	486.75	525.00
Unit Tank	Empty	135	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	30.00%	372.33	483.00
Unit Tank	Empty	135	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1891.54	2035.00
Unit Tank	Empty	135	Distributed (Head and Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	77.00%	755.48	816.00
Unit Tank	Empty	135	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1811.68	1890.00
Unit Tank	Empty	135	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	17.00%	1608.58	1854.00
Unit Tank	Empty	135	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	90.00%	1213.28	1297.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Tank	Empty	135	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	1810.91	1896.00
Unit Tank	Empty	135	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	92.00%	1331.45	1407.00
Unit Tank	Empty	135	Distributed (Head and Rear)	48	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	58.00%	2415.09	2539.00
Unit Tank	Empty	135	Distributed (Head and Rear)	55	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	4142.07	4315.00
Unit Tank	Empty	135	Distributed (Head and Rear)	55	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	0.00%	3676.14	3844.00
Unit Tank	Empty	135	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	8.00%	4047.12	4499.00
Unit Tank	Empty	135	Distributed (Head and Rear)	60	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	49.00%	3346.66	3459.00
Unit Tank	Empty	135	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	73.00%	3640.77	3779.00
Unit Tank	Empty	135	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	17.00%	389.80	513.00
Unit Tank	Empty	135	Distributed (Head, Mid, Rear)	10	0.50%	Incline	> 25%	11.07	32.00	< 0.1%	88.00%	207.86	286.00
Unit Tank	Empty	135	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	1.00%	389.09	424.00
Unit Tank	Empty	135	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	81.00%	260.74	426.00
Unit Tank	Empty	135	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1591.57	1708.00
Unit Tank	Empty	135	Distributed (Head, Mid, Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	47.00%	716.68	743.00
Unit Tank	Empty	135	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1494.94	1586.00
Unit Tank	Empty	135	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	17.00%	1406.35	1606.00
Unit Tank	Empty	135	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	96.00%	1058.86	1163.00
Unit Tank	Empty	135	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	1528.36	1607.00
Unit Tank	Empty	135	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	94.00%	1145.44	1268.00
Unit Tank	Empty	135	Distributed (Head, Mid, Rear)	48	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	40.00%	2156.36	2215.00
Unit Tank	Empty	135	Distributed (Head, Mid, Rear)	55	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	3626.04	3802.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Tank	Empty	135	Rear) Distributed (Head, Mid, Rear)	55	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	1.00%	3189.66	3356.00
Unit Tank	Empty	135	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	14.00%	3568.87	3839.00
Unit Tank	Empty	135	Distributed (Head, Mid, Rear)	60	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	34.00%	3013.45	3108.00
Unit Tank	Empty	135	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	56.00%	3233.42	3349.00
Unit Tank	Loaded	135	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	619.95	663.00
Unit Tank	Loaded	135	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	72.00%	337.87	442.00
Unit Tank	Loaded	135	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1060.70	1125.00
Unit Tank	Loaded	135	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	98.00%	412.16	482.00
Unit Tank	Loaded	135	Distributed (Head and Rear)	12	1.50%	Incline	> 1.0%	6.00	15.00	< 0.1%	99.00%	249.17	282.00
Unit Tank	Loaded	135	Distributed (Head and Rear)	15	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3326.64	3632.00
Unit Tank	Loaded	135	Distributed (Head and Rear)	17	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	90.00%	850.87	900.00
Unit Tank	Loaded	135	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3855.97	4155.00
Unit Tank	Loaded	135	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2871.33	3002.00
Unit Tank	Loaded	135	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2749.86	2946.00
Unit Tank	Loaded	135	Distributed (Head and Rear)	30	1.00%	Trough	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	2929.32	3088.00
Unit Tank	Loaded	135	Distributed (Head and Rear)	30	0.00%	Flat	< 0.5%	7.00	7.00	< 0.1%	44.00%	2194.24	2292.00
Unit Tank	Loaded	135	Distributed (Head and Rear)	31	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	35.00%	1931.22	1989.00
Unit Tank	Loaded	135	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6246.87	6520.00
Unit Tank	Loaded	135	Distributed (Head and Rear)	50	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6776.70	7041.00
Unit Tank	Loaded	135	Distributed (Head and Rear)	50	0.00%	Flat	> 1.0%	45.00	111.00	< 0.1%	33.00%	5182.14	5378.00
Unit Tank	Loaded	135	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	514.14	554.00
Unit Tank	Loaded	135	Distributed (Head, Mid, Rear)	10	0.50%	Incline	> 1.0%	4.00	4.00	< 0.1%	87.00%	287.84	391.00
Unit Tank	Loaded	135	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	863.25	920.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Tank	Loaded	135	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	92.00%	358.43	414.00
Unit Tank	Loaded	135	Distributed (Head, Mid, Rear)	12	1.50%	Incline	> 1.0%	9.33	21.00	< 0.1%	100.00%	246.05	277.00
Unit Tank	Loaded	135	Distributed (Head, Mid, Rear)	15	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3234.43	3429.00
Unit Tank	Loaded	135	Distributed (Head, Mid, Rear)	17	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	78.00%	764.65	830.00
Unit Tank	Loaded	135	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3677.32	4008.00
Unit Tank	Loaded	135	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2562.14	2670.00
Unit Tank	Loaded	135	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	2638.40	2810.00
Unit Tank	Loaded	135	Distributed (Head, Mid, Rear)	30	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	0.00%	2445.41	2542.00
Unit Tank	Loaded	135	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	20.00%	1989.31	2090.00
Unit Tank	Loaded	135	Distributed (Head, Mid, Rear)	31	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	24.00%	1757.62	1815.00
Unit Tank	Loaded	135	Distributed (Head, Mid, Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6142.50	6404.00
Unit Tank	Loaded	135	Distributed (Head, Mid, Rear)	50	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6259.19	6483.00
Unit Tank	Loaded	135	Distributed (Head, Mid, Rear)	50	0.00%	Flat	> 1.0%	101.57	379.00	< 0.1%	26.00%	4781.59	5030.00
Unit Steel Hoppers	Empty	200	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	1.00%	605.12	804.00
Unit Steel Hoppers	Empty	200	Distributed (Head and Rear)	10	0.50%	Incline	> 1.0%	3.00	5.00	< 0.1%	82.00%	294.65	404.00
Unit Steel Hoppers	Empty	200	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	727.67	1138.00
Unit Steel Hoppers	Empty	200	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	62.00%	422.12	636.00
Unit Steel Hoppers	Empty	200	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2719.28	2867.00
Unit Steel Hoppers	Empty	200	Distributed (Head and Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	71.00%	914.86	1001.00
Unit Steel Hoppers	Empty	200	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2513.65	2630.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Steel Hoppers	Empty	200	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	25.00%	2027.31	2312.00
Unit Steel Hoppers	Empty	200	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	38.00%	1572.59	1687.00
Unit Steel Hoppers	Empty	200	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2433.23	2536.00
Unit Steel Hoppers	Empty	200	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	87.00%	1713.07	1831.00
Unit Steel Hoppers	Empty	200	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	4064.32	4158.00
Unit Steel Hoppers	Empty	200	Distributed (Head and Rear)	45	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	68.00%	2893.04	2989.00
Unit Steel Hoppers	Empty	200	Distributed (Head and Rear)	45	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	1.00%	3318.89	3425.00
Unit Steel Hoppers	Empty	200	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	38.00%	5095.11	5503.00
Unit Steel Hoppers	Empty	200	Distributed (Head and Rear)	60	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	62.00%	4021.90	4117.00
Unit Steel Hoppers	Empty	200	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	44.00%	4623.31	4755.00
Unit Steel Hoppers	Empty	200	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	7.00%	545.42	674.00
Unit Steel Hoppers	Empty	200	Distributed (Head, Mid, Rear)	10	0.50%	Incline	> 1.0%	13.00	13.00	< 0.1%	68.00%	269.17	331.00
Unit Steel Hoppers	Empty	200	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	563.44	602.00
Unit Steel Hoppers	Empty	200	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	73.00%	342.22	519.00
Unit Steel Hoppers	Empty	200	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2243.81	2406.00
Unit Steel Hoppers	Empty	200	Distributed (Head, Mid, Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	62.00%	825.72	917.00
Unit Steel Hoppers	Empty	200	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2067.45	2158.00
Unit Steel Hoppers	Empty	200	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	7.00%	1770.83	2038.00
Unit Steel Hoppers	Empty	200	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	69.00%	1336.85	1457.00
Unit Steel Hoppers	Empty	200	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	1.00%	2032.38	2130.00
Unit Steel Hoppers	Empty	200	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	76.00%	1483.11	1596.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Steel Hoppers	Empty	200	Distributed (Head, Mid, Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	3445.09	3563.00
Unit Steel Hoppers	Empty	200	Distributed (Head, Mid, Rear)	45	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	41.00%	2532.31	2654.00
Unit Steel Hoppers	Empty	200	Distributed (Head, Mid, Rear)	45	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	37.00%	2798.29	3034.00
Unit Steel Hoppers	Empty	200	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	25.00%	4384.91	4679.00
Unit Steel Hoppers	Empty	200	Distributed (Head, Mid, Rear)	60	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	42.00%	3545.74	3679.00
Unit Steel Hoppers	Empty	200	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	16.00%	4031.06	4113.00
Unit Steel Hoppers	Loaded	200	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	904.71	952.00
Unit Steel Hoppers	Loaded	200	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	44.00%	411.35	494.00
Unit Steel Hoppers	Loaded	200	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1708.12	1786.00
Unit Steel Hoppers	Loaded	200	Distributed (Head and Rear)	10	1.50%	Incline	> 1.0%	8.00	13.00	< 0.1%	78.00%	202.37	241.00
Unit Steel Hoppers	Loaded	200	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	59.00%	553.69	594.00
Unit Steel Hoppers	Loaded	200	Distributed (Head and Rear)	15	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	10.00%	981.26	1100.00
Unit Steel Hoppers	Loaded	200	Distributed (Head and Rear)	15	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3354.48	3729.00
Unit Steel Hoppers	Loaded	200	Distributed (Head and Rear)	20	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3009.11	3283.00
Unit Steel Hoppers	Loaded	200	Distributed (Head and Rear)	27	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	23.00%	1880.37	1930.00
Unit Steel Hoppers	Loaded	200	Distributed (Head and Rear)	27	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	2845.01	2931.00
Unit Steel Hoppers	Loaded	200	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	3781.90	3856.00
Unit Steel Hoppers	Loaded	200	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	3107.94	3432.00
Unit Steel Hoppers	Loaded	200	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	10.00%	2788.03	2919.00
Unit Steel Hoppers	Loaded	200	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6572.95	7070.00
Unit Steel Hoppers	Loaded	200	Distributed (Head and Rear)	50	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	8061.72	8250.00
Unit Steel Hoppers	Loaded	200	Distributed (Head and Rear)	50	0.00%	Flat	> 1.0%	87.33	132.00	< 0.1%	6.00%	6222.54	6357.00
Unit Steel Hoppers	Loaded	200	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	748.70	791.00
Unit Steel Hoppers	Loaded	200	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	51.00%	365.83	443.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Steel Hoppers	Loaded	200	Rear) Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1356.44	1424.00
Unit Steel Hoppers	Loaded	200	Distributed (Head, Mid, Rear)	10	1.50%	Incline	> 1.0%	5.00	12.00	< 0.1%	70.00%	187.28	216.00
Unit Steel Hoppers	Loaded	200	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	43.00%	481.39	518.00
Unit Steel Hoppers	Loaded	200	Distributed (Head, Mid, Rear)	15	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	16.00%	835.26	936.00
Unit Steel Hoppers	Loaded	200	Distributed (Head, Mid, Rear)	15	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3197.93	3431.00
Unit Steel Hoppers	Loaded	200	Distributed (Head, Mid, Rear)	20	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2794.57	3093.00
Unit Steel Hoppers	Loaded	200	Distributed (Head, Mid, Rear)	27	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	7.00%	1691.66	1750.00
Unit Steel Hoppers	Loaded	200	Distributed (Head, Mid, Rear)	27	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	2364.25	2467.00
Unit Steel Hoppers	Loaded	200	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	3248.82	3372.00
Unit Steel Hoppers	Loaded	200	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2926.38	3154.00
Unit Steel Hoppers	Loaded	200	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	3.00%	2453.75	2549.00
Unit Steel Hoppers	Loaded	200	Distributed (Head, Mid, Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6302.61	6623.00
Unit Steel Hoppers	Loaded	200	Distributed (Head, Mid, Rear)	50	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7217.94	7413.00
Unit Steel Hoppers	Loaded	200	Distributed (Head, Mid, Rear)	50	0.00%	Flat	> 1.0%	137.00	137.00	< 0.1%	1.00%	5655.76	5787.00
Unit Aluminum Hoppers	Empty	200	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	696.23	1004.00
Unit Aluminum Hoppers	Empty	200	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	47.00%	339.10	543.00
Unit Aluminum Hoppers	Empty	200	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	775.20	1071.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Aluminum Hoppers	Empty	200	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	3.00%	573.49	742.00
Unit Aluminum Hoppers	Empty	200	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2817.88	2885.00
Unit Aluminum Hoppers	Empty	200	Distributed (Head and Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	14.00%	922.73	1002.00
Unit Aluminum Hoppers	Empty	200	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2647.69	2746.00
Unit Aluminum Hoppers	Empty	200	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2208.57	2585.00
Unit Aluminum Hoppers	Empty	200	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1598.51	1791.00
Unit Aluminum Hoppers	Empty	200	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	2661.97	3129.00
Unit Aluminum Hoppers	Empty	200	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	2.00%	1807.76	1981.00
Unit Aluminum Hoppers	Empty	200	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4251.06	4359.00
Unit Aluminum Hoppers	Empty	200	Distributed (Head and Rear)	45	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	3084.37	3258.00
Unit Aluminum Hoppers	Empty	200	Distributed (Head and Rear)	45	1.00%	Trough	<0.1%	0.00	0.00	< 10%	0.00%	3577.76	4087.00
Unit Aluminum Hoppers	Empty	200	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	5288.49	5748.00
Unit Aluminum Hoppers	Empty	200	Distributed (Head and Rear)	60	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	4205.00	4331.00
Unit Aluminum Hoppers	Empty	200	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	4752.67	4913.00
Unit Aluminum Hoppers	Empty	200	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	541.18	762.00
Unit Aluminum Hoppers	Empty	200	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	44.00%	291.86	453.00
Unit Aluminum Hoppers	Empty	200	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	641.90	1001.00
Unit Aluminum Hoppers	Empty	200	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	4.00%	454.97	621.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Hoppers			Rear)										
Unit Aluminum Hoppers	Empty	200	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2320.93	2380.00
Unit Aluminum Hoppers	Empty	200	Distributed (Head, Mid, Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	2.00%	912.17	977.00
Unit Aluminum Hoppers	Empty	200	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2185.99	2268.00
Unit Aluminum Hoppers	Empty	200	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	1838.14	2186.00
Unit Aluminum Hoppers	Empty	200	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	5.00%	1372.89	1600.00
Unit Aluminum Hoppers	Empty	200	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	2186.85	2531.00
Unit Aluminum Hoppers	Empty	200	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	2.00%	1539.69	1687.00
Unit Aluminum Hoppers	Empty	200	Distributed (Head, Mid, Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	3604.40	3701.00
Unit Aluminum Hoppers	Empty	200	Distributed (Head, Mid, Rear)	45	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	2655.32	2843.00
Unit Aluminum Hoppers	Empty	200	Distributed (Head, Mid, Rear)	45	1.00%	Trough	<0.1%	0.00	0.00	< 10%	0.00%	3044.79	3413.00
Unit Aluminum Hoppers	Empty	200	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	4577.86	4763.00
Unit Aluminum Hoppers	Empty	200	Distributed (Head, Mid, Rear)	60	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	3790.69	3918.00
Unit Aluminum Hoppers	Empty	200	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	4112.73	4283.00
Unit Aluminum Hoppers	Loaded	200	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	899.35	951.00
Unit Aluminum Hoppers	Loaded	200	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	28.00%	367.61	463.00
Unit Aluminum Hoppers	Loaded	200	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1656.65	1727.00
Unit Aluminum Hoppers	Loaded	200	Distributed (Head and Rear)	10	1.50%	Incline	> 1.0%	3.00	3.00	< 0.1%	54.00%	203.06	229.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Aluminum Hoppers	Loaded	200	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	17.00%	548.82	585.00
Unit Aluminum Hoppers	Loaded	200	Distributed (Head and Rear)	14	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	1.00%	911.95	1014.00
Unit Aluminum Hoppers	Loaded	200	Distributed (Head and Rear)	15	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2795.78	3101.00
Unit Aluminum Hoppers	Loaded	200	Distributed (Head and Rear)	20	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2515.75	2767.00
Unit Aluminum Hoppers	Loaded	200	Distributed (Head and Rear)	25	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	2395.96	2490.00
Unit Aluminum Hoppers	Loaded	200	Distributed (Head and Rear)	26	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	1.00%	1756.26	1813.00
Unit Aluminum Hoppers	Loaded	200	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3645.90	3751.00
Unit Aluminum Hoppers	Loaded	200	Distributed (Head and Rear)	30	1.10%	Decline	< 0.5%	13.00	13.00	< 0.1%	1.00%	2673.16	2907.00
Unit Aluminum Hoppers	Loaded	200	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2720.07	2786.00
Unit Aluminum Hoppers	Loaded	200	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5520.36	5873.00
Unit Aluminum Hoppers	Loaded	200	Distributed (Head and Rear)	50	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7651.25	7822.00
Unit Aluminum Hoppers	Loaded	200	Distributed (Head and Rear)	50	0.00%	Flat	<0.1%	0.00	0.00	< 10%	0.00%	5927.15	6031.00
Unit Aluminum Hoppers	Loaded	200	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	735.47	782.00
Unit Aluminum Hoppers	Loaded	200	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	34.00%	345.00	452.00
Unit Aluminum Hoppers	Loaded	200	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1319.15	1370.00
Unit Aluminum Hoppers	Loaded	200	Distributed (Head, Mid, Rear)	10	1.50%	Incline	> 1.0%	6.00	6.00	< 0.1%	64.00%	193.49	218.00
Unit Aluminum Hoppers	Loaded	200	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	11.00%	472.34	507.00
Unit Aluminum Hoppers	Loaded	200	Distributed (Head, Mid, Rear)	14	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	5.00%	730.76	825.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Hoppers			Rear)										
Unit Aluminum Hoppers	Loaded	200	Distributed (Head, Mid, Rear)	15	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2692.64	2838.00
Unit Aluminum Hoppers	Loaded	200	Distributed (Head, Mid, Rear)	20	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2330.77	2515.00
Unit Aluminum Hoppers	Loaded	200	Distributed (Head, Mid, Rear)	25	1.00%	Trough	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	1984.41	2054.00
Unit Aluminum Hoppers	Loaded	200	Distributed (Head, Mid, Rear)	26	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1574.17	1643.00
Unit Aluminum Hoppers	Loaded	200	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	3083.74	3165.00
Unit Aluminum Hoppers	Loaded	200	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2495.65	2670.00
Unit Aluminum Hoppers	Loaded	200	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2376.21	2503.00
Unit Aluminum Hoppers	Loaded	200	Distributed (Head, Mid, Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5264.99	5521.00
Unit Aluminum Hoppers	Loaded	200	Distributed (Head, Mid, Rear)	50	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6770.97	6952.00
Unit Aluminum Hoppers	Loaded	200	Distributed (Head, Mid, Rear)	50	0.00%	Flat	<0.1%	0.00	0.00	< 10%	0.00%	5333.12	5495.00
Unit Steel Hoppers	Empty	260	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1733.44	1748.00
Unit Steel Hoppers	Empty	260	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	727.92	944.00
Unit Steel Hoppers	Empty	260	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2434.45	2448.00
Unit Steel Hoppers	Empty	260	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	1564.23	1712.00
Unit Steel Hoppers	Empty	260	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3771.88	3793.00
Unit Steel Hoppers	Empty	260	Distributed (Head, Mid, Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	> 50%	0.00%	1594.04	1655.00
Unit Steel Hoppers	Empty	260	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	1.00%	3336.00	3361.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Steel Hoppers	Empty	260	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4100.38	4132.00
Unit Steel Hoppers	Empty	260	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	> 50%	0.00%	3339.64	3406.00
Unit Steel Hoppers	Empty	260	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5008.02	5031.00
Unit Steel Hoppers	Empty	260	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	4201.34	4234.00
Unit Steel Hoppers	Empty	260	Distributed (Head, Mid, Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4182.75	5323.00
Unit Steel Hoppers	Empty	260	Distributed (Head, Mid, Rear)	45	1.00%	Crest	<0.1%	0.00	0.00	> 50%	0.00%	5008.13	5044.00
Unit Steel Hoppers	Empty	260	Distributed (Head, Mid, Rear)	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	5314.41	5346.00
Unit Steel Hoppers	Empty	260	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	55.00%	7715.81	7754.00
Unit Steel Hoppers	Empty	260	Distributed (Head, Mid, Rear)	60	0.50%	Incline	<0.1%	0.00	0.00	> 50%	0.00%	6607.56	6658.00
Unit Steel Hoppers	Empty	260	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	100.00%	6412.24	6456.00
Unit Steel Hoppers	Loaded	260	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2234.00	2248.00
Unit Steel Hoppers	Loaded	260	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	> 50%	0.00%	1269.23	1424.00
Unit Steel Hoppers	Loaded	260	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	10276.49	10527.00
Unit Steel Hoppers	Loaded	260	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	2034.09	2047.00
Unit Steel Hoppers	Loaded	260	Distributed (Head, Mid, Rear)	12	1.50%	Incline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	726.06	788.00
Unit Steel Hoppers	Loaded	260	Distributed (Head, Mid, Rear)	15	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7478.63	8407.00
Unit Steel Hoppers	Loaded	260	Distributed (Head, Mid, Rear)	17	1.00%	Crest	<0.1%	0.00	0.00	> 50%	0.00%	2686.83	2705.00
Unit Steel Hoppers	Loaded	260	Distributed (Head, Mid, Rear)	20	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	16689.41	17403.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Steel Hoppers	Loaded	260	Rear) Distributed (Head, Mid, Rear)	28	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	4623.68	4646.00
Unit Steel Hoppers	Loaded	260	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 50%	3.00%	5905.72	5936.00
Unit Steel Hoppers	Loaded	260	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	19609.37	19707.00
Unit Steel Hoppers	Loaded	260	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	5105.72	5133.00
Unit Steel Hoppers	Loaded	260	Distributed (Head, Mid, Rear)	31	0.50%	Incline	<0.1%	0.00	0.00	> 50%	0.00%	4599.35	4627.00
Unit Steel Hoppers	Loaded	260	Distributed (Head, Mid, Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	87.00%	10044.76	11990.00
Unit Steel Hoppers	Loaded	260	Distributed (Head, Mid, Rear)	50	0.50%	Decline	<0.1%	0.00	0.00	> 50%	100.00%	8975.49	9014.00
Unit Steel Hoppers	Loaded	260	Distributed (Head, Mid, Rear)	50	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	8974.25	9012.00
Unit Aluminum Hoppers	Empty	260	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1983.23	1997.00
Unit Aluminum Hoppers	Empty	260	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	> 50%	0.00%	855.50	1337.00
Unit Aluminum Hoppers	Empty	260	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3434.87	3452.00
Unit Aluminum Hoppers	Empty	260	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	1724.73	1879.00
Unit Aluminum Hoppers	Empty	260	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3768.72	3794.00
Unit Aluminum Hoppers	Empty	260	Distributed (Head, Mid, Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	> 50%	0.00%	1704.04	1759.00
Unit Aluminum Hoppers	Empty	260	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4336.05	4362.00
Unit Aluminum Hoppers	Empty	260	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3553.61	3581.00
Unit Aluminum Hoppers	Empty	260	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	> 50%	0.00%	3252.63	3281.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Aluminum Hoppers	Empty	260	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5003.71	5030.00
Unit Aluminum Hoppers	Empty	260	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	3755.50	3783.00
Unit Aluminum Hoppers	Empty	260	Distributed (Head, Mid, Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4045.27	5010.00
Unit Aluminum Hoppers	Empty	260	Distributed (Head, Mid, Rear)	45	1.00%	Crest	<0.1%	0.00	0.00	> 50%	0.00%	4747.48	4795.00
Unit Aluminum Hoppers	Empty	260	Distributed (Head, Mid, Rear)	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	4958.46	4997.00
Unit Aluminum Hoppers	Empty	260	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	9360.76	9404.00
Unit Aluminum Hoppers	Empty	260	Distributed (Head, Mid, Rear)	60	0.50%	Incline	<0.1%	0.00	0.00	> 50%	0.00%	6748.86	6809.00
Unit Aluminum Hoppers	Empty	260	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	9050.15	9105.00
Unit Aluminum Hoppers	Loaded	260	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2283.79	2300.00
Unit Aluminum Hoppers	Loaded	260	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	> 50%	0.00%	1232.70	1428.00
Unit Aluminum Hoppers	Loaded	260	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	10494.12	10764.00
Unit Aluminum Hoppers	Loaded	260	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	2077.74	2104.00
Unit Aluminum Hoppers	Loaded	260	Distributed (Head, Mid, Rear)	11	1.50%	Incline	<0.1%	0.00	0.00	< 10%	0.00%	651.66	705.00
Unit Aluminum Hoppers	Loaded	260	Distributed (Head, Mid, Rear)	15	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6280.97	6948.00
Unit Aluminum Hoppers	Loaded	260	Distributed (Head, Mid, Rear)	16	1.00%	Crest	<0.1%	0.00	0.00	> 50%	0.00%	2827.07	2860.00
Unit Aluminum Hoppers	Loaded	260	Distributed (Head, Mid, Rear)	20	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7788.22	8641.00
Unit Aluminum Hoppers	Loaded	260	Distributed (Head, Mid, Rear)	27	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	4175.07	4201.00
Unit Aluminum Hoppers	Loaded	260	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 50%	41.00%	5352.34	5382.00

Train Type	Train Load	Train Length (No. of Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Hoppers			Rear)										
Unit Aluminum Hoppers	Loaded	260	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	> 50%	0.00%	4155.65	4182.00
Unit Aluminum Hoppers	Loaded	260	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	19937.28	20627.00
Unit Aluminum Hoppers	Loaded	260	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	4852.54	4880.00
Unit Aluminum Hoppers	Loaded	260	Distributed (Head, Mid, Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	16199.53	18225.00
Unit Aluminum Hoppers	Loaded	260	Distributed (Head, Mid, Rear)	50	0.50%	Decline	<0.1%	0.00	0.00	> 50%	100.00%	9018.90	9062.00
Unit Aluminum Hoppers	Loaded	260	Distributed (Head, Mid, Rear)	50	0.00%	Flat	<0.1%	0.00	0.00	> 50%	100.00%	7277.33	7314.00

Appendix L.
Detailed Simulation Results from Evaluation of Wabtec Enforcement
Algorithm with Assumed Brake Force

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-A	Empty	5000	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	902.61	998
Intermodal-A	Empty	5000	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	37.00%	373.06	606
Intermodal-A	Empty	5000	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	768.74	971
Intermodal-A	Empty	5000	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	2.00%	496.86	627
Intermodal-A	Empty	5000	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2744	2884
Intermodal-A	Empty	5000	Head end only	20	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3890.31	4163
Intermodal-A	Empty	5000	Head end only	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	24.00%	1040.01	1207
Intermodal-A	Empty	5000	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2762.58	2914
Intermodal-A	Empty	5000	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	5.00%	2372.49	2751
Intermodal-A	Empty	5000	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	49.00%	1632.9	1865
Intermodal-A	Empty	5000	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	2710.27	3314
Intermodal-A	Empty	5000	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	56.00%	1852.28	2298
Intermodal-A	Empty	5000	Head end only	57	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	65.00%	4045.78	4224
Intermodal-A	Empty	5000	Head end only	60	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	27.00%	5672.91	6318
Intermodal-A	Empty	5000	Head end only	60	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	12.00%	4540.8	4646
Intermodal-A	Empty	5000	Head end only	60	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	6697.38	6954
Intermodal-A	Empty	5000	Head end only	60	1.00%	Trough	<0.1%	0.00	0.00	> 25%, < 50%	1.00%	6120.37	6225
Intermodal-A	Empty	5000	Head end only	60	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	37.00%	4945.65	5170
Intermodal-B	Empty	5000	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	911.39	998
Intermodal-B	Empty	5000	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	30.00%	358.81	486
Intermodal-B	Empty	5000	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	762.36	1409
Intermodal-B	Empty	5000	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	502.6	613
Intermodal-B	Empty	5000	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2700.13	2859
Intermodal-B	Empty	5000	Head end only	20	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3754.47	4122
Intermodal-B	Empty	5000	Head end only	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	46.00%	981.92	1199
Intermodal-B	Empty	5000	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2694.8	2839
Intermodal-B	Empty	5000	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	1.00%	2433.99	2723
Intermodal-B	Empty	5000	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	51.00%	1576.35	1695

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-B	Empty	5000	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	2658.57	3188
Intermodal-B	Empty	5000	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	62.00%	1804.72	2293
Intermodal-B	Empty	5000	Head end only	57	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	45.00%	4028.45	4145
Intermodal-B	Empty	5000	Head end only	60	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	40.00%	5553.69	6225
Intermodal-B	Empty	5000	Head end only	60	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	17.00%	4459.69	4572
Intermodal-B	Empty	5000	Head end only	60	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6572.32	6794
Intermodal-B	Empty	5000	Head end only	60	1.00%	Trough	<0.1%	0.00	0.00	> 10%, < 25%	2.00%	5972.44	6155
Intermodal-B	Empty	5000	Head end only	60	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	53.00%	4856.46	5001
Intermodal-C	Empty	5000	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	883.4	995
Intermodal-C	Empty	5000	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	29.00%	381.18	629
Intermodal-C	Empty	5000	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	754.16	1161
Intermodal-C	Empty	5000	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	1.00%	488.82	601
Intermodal-C	Empty	5000	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2707.02	2885
Intermodal-C	Empty	5000	Head end only	20	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3722.52	3999
Intermodal-C	Empty	5000	Head end only	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	30.00%	1011.88	1149
Intermodal-C	Empty	5000	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2703.39	3265
Intermodal-C	Empty	5000	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	4.00%	2413.09	2721
Intermodal-C	Empty	5000	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	61.00%	1571.05	1856
Intermodal-C	Empty	5000	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	2638.75	3242
Intermodal-C	Empty	5000	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	57.00%	1820.6	2283
Intermodal-C	Empty	5000	Head end only	57	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	41.00%	4004.64	4189
Intermodal-C	Empty	5000	Head end only	60	0.50%	Decline	<0.1%	0.00	0.00	< 10%	26.00%	5570.23	6136
Intermodal-C	Empty	5000	Head end only	60	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	14.00%	4437.73	4570
Intermodal-C	Empty	5000	Head end only	60	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6574.71	6773
Intermodal-C	Empty	5000	Head end only	60	1.00%	Trough	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	5973.15	6143
Intermodal-C	Empty	5000	Head end only	60	0.00%	Flat	< 0.5%	32.00	32.00	< 0.1%	35.00%	4857.49	5016
Intermodal-D	Empty	5000	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	918.82	997
Intermodal-D	Empty	5000	Head end only	10	0.50%	Incline	< 0.5%	1.00	1.00	< 0.1%	32.00%	365.82	626

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-D	Empty	5000	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	774.82	1149
Intermodal-D	Empty	5000	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	2.00%	490.22	611
Intermodal-D	Empty	5000	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2772.34	2906
Intermodal-D	Empty	5000	Head end only	20	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3887.94	4194
Intermodal-D	Empty	5000	Head end only	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	26.00%	1033.41	1202
Intermodal-D	Empty	5000	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2764.48	2914
Intermodal-D	Empty	5000	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	2380.75	2722
Intermodal-D	Empty	5000	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	52.00%	1594.98	1687
Intermodal-D	Empty	5000	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	2695.52	3151
Intermodal-D	Empty	5000	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	65.00%	1826.35	2299
Intermodal-D	Empty	5000	Head end only	57	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	57.00%	4052	4210
Intermodal-D	Empty	5000	Head end only	60	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	39.00%	5659.48	6232
Intermodal-D	Empty	5000	Head end only	60	0.50%	Incline	< 0.5%	50.00	50.00	< 0.1%	17.00%	4540.41	4642
Intermodal-D	Empty	5000	Head end only	60	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6741.24	6972
Intermodal-D	Empty	5000	Head end only	60	1.00%	Trough	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	6116.1	6171
Intermodal-D	Empty	5000	Head end only	60	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	47.00%	4944.67	5174
Intermodal-E	Empty	5000	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	910.84	997
Intermodal-E	Empty	5000	Head end only	10	0.50%	Incline	> 1.0%	15.00	15.00	< 0.1%	40.00%	356.63	623
Intermodal-E	Empty	5000	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	797.06	1291
Intermodal-E	Empty	5000	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	4.00%	498.12	632
Intermodal-E	Empty	5000	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2716.67	2938
Intermodal-E	Empty	5000	Head end only	20	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3746.97	3908
Intermodal-E	Empty	5000	Head end only	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	32.00%	1009.77	1202
Intermodal-E	Empty	5000	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2724.07	2853
Intermodal-E	Empty	5000	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	2.00%	2416.08	2721
Intermodal-E	Empty	5000	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	35.00%	1587.19	1695
Intermodal-E	Empty	5000	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	2676.67	3270
Intermodal-E	Empty	5000	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	57.00%	1818.37	2153

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-E	Empty	5000	Head end only	57	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	46.00%	4001.38	4186
Intermodal-E	Empty	5000	Head end only	60	0.50%	Decline	<0.1%	0.00	0.00	< 10%	21.00%	5670.15	6324
Intermodal-E	Empty	5000	Head end only	60	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	10.00%	4473.76	4579
Intermodal-E	Empty	5000	Head end only	60	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6646.24	7508
Intermodal-E	Empty	5000	Head end only	60	1.00%	Trough	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	6041.9	6569
Intermodal-E	Empty	5000	Head end only	60	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	28.00%	4916.29	5222
Intermodal-A	Loaded	5000	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1103.83	1179
Intermodal-A	Loaded	5000	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	6.00%	502.15	580
Intermodal-A	Loaded	5000	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1660.61	1780
Intermodal-A	Loaded	5000	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	24.00%	579.58	639
Intermodal-A	Loaded	5000	Head end only	15	2.80%	Decline	1	903.57	1403.00	< 0.1%	0.00%	-69.82	-43
Intermodal-A	Loaded	5000	Head end only	20	2.20%	Decline	1	1460.38	2784.00	< 0.1%	0.00%	-97.89	-56
Intermodal-A	Loaded	5000	Head end only	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	37.00%	1015.85	1110
Intermodal-A	Loaded	5000	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7514.68	7777
Intermodal-A	Loaded	5000	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	< 10%	5.00%	3833.83	3880
Intermodal-A	Loaded	5000	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	2236.71	2362
Intermodal-A	Loaded	5000	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6225.9	6726
Intermodal-A	Loaded	5000	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2924.68	3000
Intermodal-A	Loaded	5000	Head end only	35	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	1.00%	2841.42	2971
Intermodal-A	Loaded	5000	Head end only	55	0.50%	Incline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	6310.7	6452
Intermodal-A	Loaded	5000	Head end only	70	0.50%	Decline	<0.1%	0.00	0.00	> 50%	2.00%	15306.98	15347
Intermodal-A	Loaded	5000	Head end only	70	1.10%	Decline	<0.1%	0.00	0.00	> 50%	10.00%	20860.2	20898
Intermodal-A	Loaded	5000	Head end only	70	1.00%	Trough	<0.1%	0.00	0.00	> 50%	100.00%	15302.65	15346
Intermodal-A	Loaded	5000	Head end only	70	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	12042.57	12256
Intermodal-B	Loaded	5000	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	924.38	1068
Intermodal-B	Loaded	5000	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	91.00%	326.44	540
Intermodal-B	Loaded	5000	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1236.89	1300
Intermodal-B	Loaded	5000	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	17.00%	507.97	703

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-B	Loaded	5000	Head end only	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5629.62	6251
Intermodal-B	Loaded	5000	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6311.56	6540
Intermodal-B	Loaded	5000	Head end only	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	29.00%	1031.49	1123
Intermodal-B	Loaded	5000	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5290.49	5477
Intermodal-B	Loaded	5000	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3432.13	3651
Intermodal-B	Loaded	5000	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	2051.78	2155
Intermodal-B	Loaded	5000	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4523.38	4671
Intermodal-B	Loaded	5000	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	1.00%	2462.96	2675
Intermodal-B	Loaded	5000	Head end only	35	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	2595.66	2691
Intermodal-B	Loaded	5000	Head end only	55	0.50%	Incline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	5270.38	5378
Intermodal-B	Loaded	5000	Head end only	70	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	11919.88	12088
Intermodal-B	Loaded	5000	Head end only	70	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	15352.94	15394
Intermodal-B	Loaded	5000	Head end only	70	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	15066.28	15242
Intermodal-B	Loaded	5000	Head end only	70	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	9660.08	9824
Intermodal-C	Loaded	5000	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	883.88	1061
Intermodal-C	Loaded	5000	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	494.04	567
Intermodal-C	Loaded	5000	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1081.1	1144
Intermodal-C	Loaded	5000	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	28.00%	489.84	711
Intermodal-C	Loaded	5000	Head end only	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2990.48	3878
Intermodal-C	Loaded	5000	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5185.58	5398
Intermodal-C	Loaded	5000	Head end only	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	19.00%	956.7	1012
Intermodal-C	Loaded	5000	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4444.7	4656
Intermodal-C	Loaded	5000	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	3101.43	3348
Intermodal-C	Loaded	5000	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	2.00%	1913.78	2013
Intermodal-C	Loaded	5000	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3894.86	4036
Intermodal-C	Loaded	5000	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	1.00%	2262.48	2336
Intermodal-C	Loaded	5000	Head end only	35	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	2.00%	2450.59	2546
Intermodal-C	Loaded	5000	Head end only	55	0.50%	Incline	<0.1%	0.00	0.00	< 10%	0.00%	4930.27	5055

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-C	Loaded	5000	Head end only	70	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	10535.88	11267
Intermodal-C	Loaded	5000	Head end only	70	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	13916.67	14145
Intermodal-C	Loaded	5000	Head end only	70	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	12406.02	12570
Intermodal-C	Loaded	5000	Head end only	70	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	8695.21	8893
Intermodal-D	Loaded	5000	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	994.4	1091
Intermodal-D	Loaded	5000	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	15.00%	458	565
Intermodal-D	Loaded	5000	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1244.48	1344
Intermodal-D	Loaded	5000	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	23.00%	514.56	710
Intermodal-D	Loaded	5000	Head end only	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5612.95	6086
Intermodal-D	Loaded	5000	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6302.62	6478
Intermodal-D	Loaded	5000	Head end only	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	14.00%	976.33	1119
Intermodal-D	Loaded	5000	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5301.3	5489
Intermodal-D	Loaded	5000	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3427.38	3654
Intermodal-D	Loaded	5000	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	2070.16	2159
Intermodal-D	Loaded	5000	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4523.52	4671
Intermodal-D	Loaded	5000	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2468.94	2696
Intermodal-D	Loaded	5000	Head end only	35	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	1.00%	2578.09	2673
Intermodal-D	Loaded	5000	Head end only	55	0.50%	Incline	<0.1%	0.00	0.00	< 10%	0.00%	5279.03	5379
Intermodal-D	Loaded	5000	Head end only	70	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	12099.17	12672
Intermodal-D	Loaded	5000	Head end only	70	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	17077.77	17321
Intermodal-D	Loaded	5000	Head end only	70	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	15068.85	15242
Intermodal-D	Loaded	5000	Head end only	70	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	9718.12	9912
Intermodal-E	Loaded	5000	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	964.3	1089
Intermodal-E	Loaded	5000	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	14.00%	451.49	555
Intermodal-E	Loaded	5000	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1165.95	1238
Intermodal-E	Loaded	5000	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	21.00%	510.12	708
Intermodal-E	Loaded	5000	Head end only	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4390.26	5398
Intermodal-E	Loaded	5000	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5729.91	5960

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-E	Loaded	5000	Head end only	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	19.00%	974.01	1071
Intermodal-E	Loaded	5000	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4842.68	5024
Intermodal-E	Loaded	5000	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3368.72	3564
Intermodal-E	Loaded	5000	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	2.00%	2036.5	2143
Intermodal-E	Loaded	5000	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4187.77	4392
Intermodal-E	Loaded	5000	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	1.00%	2369.43	2463
Intermodal-E	Loaded	5000	Head end only	35	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	2.00%	2524.65	2661
Intermodal-E	Loaded	5000	Head end only	55	0.50%	Incline	<0.1%	0.00	0.00	< 10%	0.00%	5126.67	5225
Intermodal-E	Loaded	5000	Head end only	70	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	11296.28	11679
Intermodal-E	Loaded	5000	Head end only	70	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	15122.95	15288
Intermodal-E	Loaded	5000	Head end only	70	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	13616.92	13812
Intermodal-E	Loaded	5000	Head end only	70	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	9228.5	9411
Intermodal-A	Empty	5000	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	1.00%	552.46	642
Intermodal-A	Empty	5000	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	33.00%	276.9	324
Intermodal-A	Empty	5000	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	623.04	987
Intermodal-A	Empty	5000	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	3.00%	395.07	519
Intermodal-A	Empty	5000	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2082.69	2221
Intermodal-A	Empty	5000	Distributed (Head and Rear)	20	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3854.55	4054
Intermodal-A	Empty	5000	Distributed (Head and Rear)	25	1.50%	Incline	> 1.0%	13.36	45.00	< 0.1%	100.00%	651.26	689
Intermodal-A	Empty	5000	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2031.03	2152
Intermodal-A	Empty	5000	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	21.00%	1748.88	2093
Intermodal-A	Empty	5000	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	96.00%	1277.68	1343

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-A	Empty	5000	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	2145.93	2663
Intermodal-A	Empty	5000	Distributed (Head and Rear)	30	0.00%	Flat	< 0.5%	19.00	19.00	< 0.1%	79.00%	1462.96	1782
Intermodal-A	Empty	5000	Distributed (Head and Rear)	57	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	89.00%	3423.48	3591
Intermodal-A	Empty	5000	Distributed (Head and Rear)	60	0.50%	Decline	> 1.0%	129.33	148.00	< 0.1%	76.00%	4707.19	5174
Intermodal-A	Empty	5000	Distributed (Head and Rear)	60	0.50%	Incline	> 1.0%	79.50	97.00	< 0.1%	94.00%	3698.91	3851
Intermodal-A	Empty	5000	Distributed (Head and Rear)	60	1.10%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	5.00%	5495.89	5644
Intermodal-A	Empty	5000	Distributed (Head and Rear)	60	1.00%	Trough	< 0.5%	14.00	14.00	< 10%	35.00%	5021.06	5743
Intermodal-A	Empty	5000	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	92.00%	4159.57	4405
Intermodal-B	Empty	5000	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	546.55	625
Intermodal-B	Empty	5000	Distributed (Head and Rear)	10	0.50%	Incline	> 1.0%	17.32	34.00	< 0.1%	38.00%	295.1	402
Intermodal-B	Empty	5000	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	575.32	982
Intermodal-B	Empty	5000	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	3.00%	394.93	538
Intermodal-B	Empty	5000	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2040.99	2204
Intermodal-B	Empty	5000	Distributed (Head and Rear)	20	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3758.66	4008
Intermodal-B	Empty	5000	Distributed (Head and Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	96.00%	723.6	959
Intermodal-B	Empty	5000	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1967.83	2096
Intermodal-B	Empty	5000	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	19.00%	1719.81	2094
Intermodal-B	Empty	5000	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	89.00%	1281.59	1378

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-B	Empty	5000	Rear) Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	1.00%	2039.09	2648
Intermodal-B	Empty	5000	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	89.00%	1429.33	1777
Intermodal-B	Empty	5000	Distributed (Head and Rear)	57	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	88.00%	3388.29	3533
Intermodal-B	Empty	5000	Distributed (Head and Rear)	60	0.50%	Decline	> 1.0%	58.00	58.00	< 0.1%	89.00%	4588.63	5135
Intermodal-B	Empty	5000	Distributed (Head and Rear)	60	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	90.00%	3664.35	3780
Intermodal-B	Empty	5000	Distributed (Head and Rear)	60	1.10%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	8.00%	5391.35	5543
Intermodal-B	Empty	5000	Distributed (Head and Rear)	60	1.00%	Trough	<0.1%	0.00	0.00	< 10%	41.00%	4944.57	5590
Intermodal-B	Empty	5000	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	89.00%	4104.34	4241
Intermodal-C	Empty	5000	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	537.7	631
Intermodal-C	Empty	5000	Distributed (Head and Rear)	10	0.50%	Incline	> 1.0%	18.91	40.00	< 0.1%	32.00%	305.41	420
Intermodal-C	Empty	5000	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	571.39	973
Intermodal-C	Empty	5000	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	4.00%	399.34	513
Intermodal-C	Empty	5000	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2043.06	2192
Intermodal-C	Empty	5000	Distributed (Head and Rear)	20	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3795.49	4036
Intermodal-C	Empty	5000	Distributed (Head and Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	96.00%	730.08	922
Intermodal-C	Empty	5000	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	1.00%	1975.83	2115
Intermodal-C	Empty	5000	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	28.00%	1704.54	2109

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-C	Empty	5000	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	92.00%	1275.84	1357
Intermodal-C	Empty	5000	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	2.00%	2075.56	2633
Intermodal-C	Empty	5000	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	86.00%	1427.12	1786
Intermodal-C	Empty	5000	Distributed (Head and Rear)	57	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	88.00%	3388.39	3554
Intermodal-C	Empty	5000	Distributed (Head and Rear)	60	0.50%	Decline	> 1.0%	57.00	57.00	< 0.1%	85.00%	4613.63	5185
Intermodal-C	Empty	5000	Distributed (Head and Rear)	60	0.50%	Incline	< 0.5%	44.00	44.00	< 0.1%	91.00%	3666.3	3778
Intermodal-C	Empty	5000	Distributed (Head and Rear)	60	1.10%	Decline	< 0.5%	1.00	1.00	> 10%, < 25%	7.00%	5405.92	5553
Intermodal-C	Empty	5000	Distributed (Head and Rear)	60	1.00%	Trough	<0.1%	0.00	0.00	< 10%	36.00%	4913.01	5656
Intermodal-C	Empty	5000	Distributed (Head and Rear)	60	0.00%	Flat	> 1.0%	32.00	32.00	< 0.1%	84.00%	4084.03	4243
Intermodal-D	Empty	5000	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	546.56	629
Intermodal-D	Empty	5000	Distributed (Head and Rear)	10	0.50%	Incline	> 1.0%	21.71	62.00	< 0.1%	36.00%	299.1	403
Intermodal-D	Empty	5000	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	581.24	1053
Intermodal-D	Empty	5000	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	6.00%	393.42	514
Intermodal-D	Empty	5000	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2112.24	2694
Intermodal-D	Empty	5000	Distributed (Head and Rear)	20	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3879.21	4146
Intermodal-D	Empty	5000	Distributed (Head and Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	97.00%	730.34	945
Intermodal-D	Empty	5000	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2034.78	2324
Intermodal-D	Empty	5000	Distributed (Head and Rear)	30	0.50%	Decline	< 0.5%	4.00	4.00	< 0.1%	24.00%	1744.08	2096

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-D	Empty	5000	Rear) Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	92.00%	1284.42	1504
Intermodal-D	Empty	5000	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 10%	2.00%	2102.36	2694
Intermodal-D	Empty	5000	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	92.00%	1438.78	1783
Intermodal-D	Empty	5000	Distributed (Head and Rear)	57	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	94.00%	3428.69	3587
Intermodal-D	Empty	5000	Distributed (Head and Rear)	60	0.50%	Decline	> 1.0%	57.00	57.00	< 0.1%	86.00%	4693.41	5271
Intermodal-D	Empty	5000	Distributed (Head and Rear)	60	0.50%	Incline	> 1.0%	51.50	78.00	< 0.1%	99.00%	3667.2	3852
Intermodal-D	Empty	5000	Distributed (Head and Rear)	60	1.10%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	7.00%	5529.41	5650
Intermodal-D	Empty	5000	Distributed (Head and Rear)	60	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	17.00%	4982.66	5170
Intermodal-D	Empty	5000	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	83.00%	4164.51	4292
Intermodal-E	Empty	5000	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	549.69	631
Intermodal-E	Empty	5000	Distributed (Head and Rear)	10	0.50%	Incline	> 1.0%	24.00	43.00	< 0.1%	41.00%	296.94	420
Intermodal-E	Empty	5000	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	608.8	991
Intermodal-E	Empty	5000	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	7.00%	385.62	495
Intermodal-E	Empty	5000	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2068.5	2181
Intermodal-E	Empty	5000	Distributed (Head and Rear)	20	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3816.27	4080
Intermodal-E	Empty	5000	Distributed (Head and Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	92.00%	743.94	943
Intermodal-E	Empty	5000	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1981.54	2123

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-E	Empty	5000	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	22.00%	1722.72	2109
Intermodal-E	Empty	5000	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	93.00%	1286.36	1376
Intermodal-E	Empty	5000	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2070.07	2547
Intermodal-E	Empty	5000	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	93.00%	1433.37	1698
Intermodal-E	Empty	5000	Distributed (Head and Rear)	57	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	87.00%	3381.26	3521
Intermodal-E	Empty	5000	Distributed (Head and Rear)	60	0.50%	Decline	< 0.5%	17.00	17.00	< 0.1%	65.00%	4743.73	5282
Intermodal-E	Empty	5000	Distributed (Head and Rear)	60	0.50%	Incline	> 1.0%	16.50	32.00	< 0.1%	79.00%	3677.28	3787
Intermodal-E	Empty	5000	Distributed (Head and Rear)	60	1.10%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	4.00%	5462.57	5565
Intermodal-E	Empty	5000	Distributed (Head and Rear)	60	1.00%	Trough	<0.1%	0.00	0.00	< 10%	25.00%	4960.55	5571
Intermodal-E	Empty	5000	Distributed (Head and Rear)	60	0.00%	Flat	< 0.5%	19.00	19.00	< 0.1%	79.00%	4096.51	4263
Intermodal-A	Loaded	5000	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	676.88	1044
Intermodal-A	Loaded	5000	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	98.00%	322.53	423
Intermodal-A	Loaded	5000	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1167.39	1249
Intermodal-A	Loaded	5000	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	61.00%	450.19	598
Intermodal-A	Loaded	5000	Distributed (Head and Rear)	15	2.80%	Decline	1	725.92	1141.00	< 0.1%	0.00%	-70.31	-43
Intermodal-A	Loaded	5000	Distributed (Head and Rear)	20	2.20%	Decline	> 50%	1157.77	1489.00	> 25%, < 50%	0.00%	2775.94	6830
Intermodal-A	Loaded	5000	Distributed (Head and Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	31.00%	926.43	1017
Intermodal-A	Loaded	5000	Distributed (Head and	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6259.1	6645

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-A	Loaded	5000	Rear) Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3569.93	3731
Intermodal-A	Loaded	5000	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	3.00%	1980.29	2058
Intermodal-A	Loaded	5000	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5175.62	5443
Intermodal-A	Loaded	5000	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	3.00%	2416.11	2795
Intermodal-A	Loaded	5000	Distributed (Head and Rear)	35	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	9.00%	2430.97	2610
Intermodal-A	Loaded	5000	Distributed (Head and Rear)	55	0.50%	Incline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	5374.25	5520
Intermodal-A	Loaded	5000	Distributed (Head and Rear)	70	0.50%	Decline	<0.1%	0.00	0.00	> 50%	1.00%	14283.72	14544
Intermodal-A	Loaded	5000	Distributed (Head and Rear)	70	1.10%	Decline	<0.1%	0.00	0.00	> 50%	92.00%	19050.48	19098
Intermodal-A	Loaded	5000	Distributed (Head and Rear)	70	1.00%	Trough	<0.1%	0.00	0.00	> 50%	100.00%	14394.45	14451
Intermodal-A	Loaded	5000	Distributed (Head and Rear)	70	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	10668.97	10861
Intermodal-B	Loaded	5000	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	650.17	716
Intermodal-B	Loaded	5000	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	97.00%	286.95	322
Intermodal-B	Loaded	5000	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	829.47	909
Intermodal-B	Loaded	5000	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	38.00%	407.81	594
Intermodal-B	Loaded	5000	Distributed (Head and Rear)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4976.24	5261
Intermodal-B	Loaded	5000	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4637.65	4794
Intermodal-B	Loaded	5000	Distributed (Head and Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	38.00%	910.45	989

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-B	Loaded	5000	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4083.49	4272
Intermodal-B	Loaded	5000	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2501.93	2574
Intermodal-B	Loaded	5000	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	8.00%	1643.97	1737
Intermodal-B	Loaded	5000	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3551.32	3706
Intermodal-B	Loaded	5000	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	3.00%	1989.57	2226
Intermodal-B	Loaded	5000	Distributed (Head and Rear)	35	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	1.00%	2238.72	2322
Intermodal-B	Loaded	5000	Distributed (Head and Rear)	55	0.50%	Incline	<0.1%	0.00	0.00	< 10%	0.00%	4533.99	4645
Intermodal-B	Loaded	5000	Distributed (Head and Rear)	70	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	10535.44	10971
Intermodal-B	Loaded	5000	Distributed (Head and Rear)	70	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	13540.87	13596
Intermodal-B	Loaded	5000	Distributed (Head and Rear)	70	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	13025.34	13319
Intermodal-B	Loaded	5000	Distributed (Head and Rear)	70	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	8365.72	8526
Intermodal-C	Loaded	5000	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	613.12	704
Intermodal-C	Loaded	5000	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	98.00%	315.99	348
Intermodal-C	Loaded	5000	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	729.37	799
Intermodal-C	Loaded	5000	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	36.00%	405.88	596
Intermodal-C	Loaded	5000	Distributed (Head and Rear)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3291.29	4033
Intermodal-C	Loaded	5000	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3762.76	3944
Intermodal-C	Loaded	5000	Distributed (Head and Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	27.00%	853.95	906

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-C	Loaded	5000	Rear) Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3338.83	3507
Intermodal-C	Loaded	5000	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2248.56	2489
Intermodal-C	Loaded	5000	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	40.00%	1482.29	1556
Intermodal-C	Loaded	5000	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3005.68	3180
Intermodal-C	Loaded	5000	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	11.00%	1812.54	1923
Intermodal-C	Loaded	5000	Distributed (Head and Rear)	35	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	3.00%	2055.08	2110
Intermodal-C	Loaded	5000	Distributed (Head and Rear)	55	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	4215.66	4381
Intermodal-C	Loaded	5000	Distributed (Head and Rear)	70	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	9025.16	9647
Intermodal-C	Loaded	5000	Distributed (Head and Rear)	70	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	12173.08	12450
Intermodal-C	Loaded	5000	Distributed (Head and Rear)	70	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	10610.6	10750
Intermodal-C	Loaded	5000	Distributed (Head and Rear)	70	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	7500.37	7612
Intermodal-D	Loaded	5000	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	659.02	730
Intermodal-D	Loaded	5000	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	86.00%	303.49	421
Intermodal-D	Loaded	5000	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	836.52	896
Intermodal-D	Loaded	5000	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	42.00%	419.09	608
Intermodal-D	Loaded	5000	Distributed (Head and Rear)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5001.29	5551
Intermodal-D	Loaded	5000	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4647.5	4878

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-D	Loaded	5000	Distributed (Head and Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	50.00%	855.73	1006
Intermodal-D	Loaded	5000	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4088.17	4251
Intermodal-D	Loaded	5000	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	2535.15	2964
Intermodal-D	Loaded	5000	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	17.00%	1640.47	1769
Intermodal-D	Loaded	5000	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3573.6	3677
Intermodal-D	Loaded	5000	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	3.00%	1995.26	2310
Intermodal-D	Loaded	5000	Distributed (Head and Rear)	35	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	16.00%	2164.47	2310
Intermodal-D	Loaded	5000	Distributed (Head and Rear)	55	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	4569.18	4713
Intermodal-D	Loaded	5000	Distributed (Head and Rear)	70	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	10631.48	11083
Intermodal-D	Loaded	5000	Distributed (Head and Rear)	70	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	15097.77	16126
Intermodal-D	Loaded	5000	Distributed (Head and Rear)	70	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	13100.1	13322
Intermodal-D	Loaded	5000	Distributed (Head and Rear)	70	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	8450.15	8609
Intermodal-E	Loaded	5000	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	632.38	714
Intermodal-E	Loaded	5000	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	83.00%	315.77	432
Intermodal-E	Loaded	5000	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	780.65	852
Intermodal-E	Loaded	5000	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	37.00%	421.53	600
Intermodal-E	Loaded	5000	Distributed (Head and Rear)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4153.79	4856
Intermodal-E	Loaded	5000	Distributed (Head and	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4150.82	4319

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v≥30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-E	Loaded	5000	Rear) Distributed (Head and Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	28.00%	876.23	966
Intermodal-E	Loaded	5000	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3675.54	3899
Intermodal-E	Loaded	5000	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2364.76	2497
Intermodal-E	Loaded	5000	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	36.00%	1566.1	1724
Intermodal-E	Loaded	5000	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3278.96	3512
Intermodal-E	Loaded	5000	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	9.00%	1905.04	2226
Intermodal-E	Loaded	5000	Distributed (Head and Rear)	35	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	4.00%	2087.29	2183
Intermodal-E	Loaded	5000	Distributed (Head and Rear)	55	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	4388.79	4552
Intermodal-E	Loaded	5000	Distributed (Head and Rear)	70	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	9834.49	10464
Intermodal-E	Loaded	5000	Distributed (Head and Rear)	70	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	13318.85	13487
Intermodal-E	Loaded	5000	Distributed (Head and Rear)	70	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	11806.74	11988
Intermodal-E	Loaded	5000	Distributed (Head and Rear)	70	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	7991.13	8118
Intermodal-A	Empty	7500	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	884.25	991
Intermodal-A	Empty	7500	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	7.00%	433.88	646
Intermodal-A	Empty	7500	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1037.47	1120
Intermodal-A	Empty	7500	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	1.00%	584.94	709
Intermodal-A	Empty	7500	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3843.79	4088
Intermodal-A	Empty	7500	Head end only	20	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5462.26	5992
Intermodal-A	Empty	7500	Head end only	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	1.00%	1134.95	1210
Intermodal-A	Empty	7500	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3664.74	3841

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-A	Empty	7500	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	2847.7	3220
Intermodal-A	Empty	7500	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	3.00%	1805.54	1900
Intermodal-A	Empty	7500	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3393.5	3608
Intermodal-A	Empty	7500	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	1.00%	2144.54	2331
Intermodal-A	Empty	7500	Head end only	52	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	2.00%	4190.29	4353
Intermodal-A	Empty	7500	Head end only	60	0.50%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	6643.2	7291
Intermodal-A	Empty	7500	Head end only	60	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	5051.88	5195
Intermodal-A	Empty	7500	Head end only	60	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7803.37	7950
Intermodal-A	Empty	7500	Head end only	60	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	7040.85	7206
Intermodal-A	Empty	7500	Head end only	60	0.00%	Flat	<0.1%	0.00	0.00	< 10%	1.00%	5801.81	6139
Intermodal-B	Empty	7500	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	882.58	984
Intermodal-B	Empty	7500	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	3.00%	450.27	636
Intermodal-B	Empty	7500	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1059.08	1130
Intermodal-B	Empty	7500	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	584.88	714
Intermodal-B	Empty	7500	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3960.17	4198
Intermodal-B	Empty	7500	Head end only	20	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5662.94	6032
Intermodal-B	Empty	7500	Head end only	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1122.4	1197
Intermodal-B	Empty	7500	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3749.51	3948
Intermodal-B	Empty	7500	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	2920.45	3299
Intermodal-B	Empty	7500	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	9.00%	1825.55	1936
Intermodal-B	Empty	7500	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3461.18	3625
Intermodal-B	Empty	7500	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	3.00%	2181.17	2657
Intermodal-B	Empty	7500	Head end only	52	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	12.00%	4215.43	4412
Intermodal-B	Empty	7500	Head end only	60	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	2.00%	6709.9	7363
Intermodal-B	Empty	7500	Head end only	60	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	5135.93	5203
Intermodal-B	Empty	7500	Head end only	60	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7997.42	8140
Intermodal-B	Empty	7500	Head end only	60	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	7184.02	7304
Intermodal-B	Empty	7500	Head end only	60	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	5876.01	6170

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-C	Empty	7500	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	887.15	980
Intermodal-C	Empty	7500	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	2.00%	457.91	655
Intermodal-C	Empty	7500	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1045.77	1135
Intermodal-C	Empty	7500	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	580.78	726
Intermodal-C	Empty	7500	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3914.8	4086
Intermodal-C	Empty	7500	Head end only	20	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5603.46	6061
Intermodal-C	Empty	7500	Head end only	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	2.00%	1150.17	1221
Intermodal-C	Empty	7500	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3727.04	3897
Intermodal-C	Empty	7500	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	2914.93	3339
Intermodal-C	Empty	7500	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	2.00%	1826.41	1942
Intermodal-C	Empty	7500	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3436.18	3631
Intermodal-C	Empty	7500	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	2.00%	2166.88	2613
Intermodal-C	Empty	7500	Head end only	52	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	6.00%	4220.16	4450
Intermodal-C	Empty	7500	Head end only	60	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	6701.79	7191
Intermodal-C	Empty	7500	Head end only	60	0.50%	Incline	<0.1%	0.00	0.00	< 10%	0.00%	5134.46	5202
Intermodal-C	Empty	7500	Head end only	60	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7945.25	8057
Intermodal-C	Empty	7500	Head end only	60	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	7123.85	7295
Intermodal-C	Empty	7500	Head end only	60	0.00%	Flat	<0.1%	0.00	0.00	< 10%	0.00%	5861.65	6160
Intermodal-D	Empty	7500	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	882.55	992
Intermodal-D	Empty	7500	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	5.00%	428.42	490
Intermodal-D	Empty	7500	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1055.28	1145
Intermodal-D	Empty	7500	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	578.36	722
Intermodal-D	Empty	7500	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3942.67	4148
Intermodal-D	Empty	7500	Head end only	20	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5609.28	5966
Intermodal-D	Empty	7500	Head end only	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1145.36	1215
Intermodal-D	Empty	7500	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3719.32	3892
Intermodal-D	Empty	7500	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	2928.59	3347
Intermodal-D	Empty	7500	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	2.00%	1825.55	1944

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-D	Empty	7500	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3428.92	3586
Intermodal-D	Empty	7500	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	1.00%	2179.53	2663
Intermodal-D	Empty	7500	Head end only	52	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	5.00%	4237.99	4371
Intermodal-D	Empty	7500	Head end only	60	0.50%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	6714.16	7358
Intermodal-D	Empty	7500	Head end only	60	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	5104.49	5209
Intermodal-D	Empty	7500	Head end only	60	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7949.68	8128
Intermodal-D	Empty	7500	Head end only	60	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	7133.87	7807
Intermodal-D	Empty	7500	Head end only	60	0.00%	Flat	<0.1%	0.00	0.00	< 10%	3.00%	5895.89	6225
Intermodal-E	Empty	7500	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	887.32	977
Intermodal-E	Empty	7500	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	1.00%	444.75	493
Intermodal-E	Empty	7500	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1061.4	1600
Intermodal-E	Empty	7500	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	585.99	714
Intermodal-E	Empty	7500	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3955.78	4261
Intermodal-E	Empty	7500	Head end only	20	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5643.58	6122
Intermodal-E	Empty	7500	Head end only	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1151.1	1199
Intermodal-E	Empty	7500	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3755.01	3935
Intermodal-E	Empty	7500	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	2864.31	3225
Intermodal-E	Empty	7500	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	3.00%	1829.34	1943
Intermodal-E	Empty	7500	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3455.97	3618
Intermodal-E	Empty	7500	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	3.00%	2182.24	2379
Intermodal-E	Empty	7500	Head end only	52	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	6.00%	4245.51	4434
Intermodal-E	Empty	7500	Head end only	60	0.50%	Decline	> 1.0%	55.00	55.00	> 10%, < 25%	1.00%	6733.68	7446
Intermodal-E	Empty	7500	Head end only	60	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	5140.49	5268
Intermodal-E	Empty	7500	Head end only	60	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7974.36	8137
Intermodal-E	Empty	7500	Head end only	60	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	7194.88	7308
Intermodal-E	Empty	7500	Head end only	60	0.00%	Flat	<0.1%	0.00	0.00	< 10%	0.00%	5895.39	6165
Intermodal-A	Loaded	7500	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	1150.87	1194
Intermodal-A	Loaded	7500	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	652.67	683

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-A	Loaded	7500	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2474.04	2609
Intermodal-A	Loaded	7500	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	4.00%	702.21	747
Intermodal-A	Loaded	7500	Head end only	15	2.80%	Decline	1	986.59	2626.00	< 0.1%	0.00%	-66.69	-43
Intermodal-A	Loaded	7500	Head end only	20	2.20%	Decline	1	1738.87	2670.00	< 0.1%	0.00%	-92.47	-58
Intermodal-A	Loaded	7500	Head end only	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	16.00%	1139.82	1279
Intermodal-A	Loaded	7500	Head end only	25	1.70%	Decline	> 1.0%	2398.40	2709.00	> 50%	0.00%	12680.95	13914
Intermodal-A	Loaded	7500	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	4457.48	4480
Intermodal-A	Loaded	7500	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	2570.56	2705
Intermodal-A	Loaded	7500	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	8538.36	9212
Intermodal-A	Loaded	7500	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	3464.43	3554
Intermodal-A	Loaded	7500	Head end only	33	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	3242.16	3327
Intermodal-A	Loaded	7500	Head end only	50	0.50%	Incline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	5952.11	6144
Intermodal-A	Loaded	7500	Head end only	70	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	18204.41	18246
Intermodal-A	Loaded	7500	Head end only	70	1.10%	Decline	> 1.0%	10937.40	12127.00	> 50%	0.00%	25170.75	26599
Intermodal-A	Loaded	7500	Head end only	70	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	17204.7	17247
Intermodal-A	Loaded	7500	Head end only	70	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	13566.52	13741
Intermodal-B	Loaded	7500	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1099.86	1198
Intermodal-B	Loaded	7500	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	22.00%	431	581
Intermodal-B	Loaded	7500	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1725.2	1848
Intermodal-B	Loaded	7500	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	1.00%	591.91	665
Intermodal-B	Loaded	7500	Head end only	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7430.45	8892
Intermodal-B	Loaded	7500	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	10200.97	10801
Intermodal-B	Loaded	7500	Head end only	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	4.00%	1134.15	1202
Intermodal-B	Loaded	7500	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7159.05	7255
Intermodal-B	Loaded	7500	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4014.2	4214
Intermodal-B	Loaded	7500	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	2336.92	2454
Intermodal-B	Loaded	7500	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5754.25	6162
Intermodal-B	Loaded	7500	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2878.01	2982

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-B	Loaded	7500	Head end only	33	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	2905.45	2969
Intermodal-B	Loaded	7500	Head end only	50	0.50%	Incline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	5023.56	5145
Intermodal-B	Loaded	7500	Head end only	70	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	13160.57	13323
Intermodal-B	Loaded	7500	Head end only	70	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	18985.89	20159
Intermodal-B	Loaded	7500	Head end only	70	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	14319.2	14465
Intermodal-B	Loaded	7500	Head end only	70	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	10633.92	10793
Intermodal-C	Loaded	7500	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1095.78	1180
Intermodal-C	Loaded	7500	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	30.00%	456.49	581
Intermodal-C	Loaded	7500	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1685.82	1835
Intermodal-C	Loaded	7500	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	1.00%	589.54	671
Intermodal-C	Loaded	7500	Head end only	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6168.74	8416
Intermodal-C	Loaded	7500	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	9795.76	10600
Intermodal-C	Loaded	7500	Head end only	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	9.00%	1102.12	1206
Intermodal-C	Loaded	7500	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7601.84	8200
Intermodal-C	Loaded	7500	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3974.79	4214
Intermodal-C	Loaded	7500	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	2335.96	2441
Intermodal-C	Loaded	7500	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5636.9	5921
Intermodal-C	Loaded	7500	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2840.12	2969
Intermodal-C	Loaded	7500	Head end only	33	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	2915.99	3007
Intermodal-C	Loaded	7500	Head end only	50	0.50%	Incline	<0.1%	0.00	0.00	< 10%	0.00%	5019.3	5136
Intermodal-C	Loaded	7500	Head end only	70	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	13105.34	13651
Intermodal-C	Loaded	7500	Head end only	70	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	18021.37	18191
Intermodal-C	Loaded	7500	Head end only	70	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	13989.58	14172
Intermodal-C	Loaded	7500	Head end only	70	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	10557.36	10791
Intermodal-D	Loaded	7500	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1081.57	1176
Intermodal-D	Loaded	7500	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	53.00%	411.28	650
Intermodal-D	Loaded	7500	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1597.51	1716
Intermodal-D	Loaded	7500	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	1.00%	577.47	796

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-D	Loaded	7500	Head end only	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4474.67	5288
Intermodal-D	Loaded	7500	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7375.18	7391
Intermodal-D	Loaded	7500	Head end only	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	6.00%	1030.48	1167
Intermodal-D	Loaded	7500	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6759.97	6860
Intermodal-D	Loaded	7500	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3919.26	4168
Intermodal-D	Loaded	7500	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	2227.78	2317
Intermodal-D	Loaded	7500	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5304.94	5507
Intermodal-D	Loaded	7500	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2766.97	2854
Intermodal-D	Loaded	7500	Head end only	33	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	2890.55	2962
Intermodal-D	Loaded	7500	Head end only	50	0.50%	Incline	<0.1%	0.00	0.00	< 10%	0.00%	4911.89	5056
Intermodal-D	Loaded	7500	Head end only	70	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	12339.59	12925
Intermodal-D	Loaded	7500	Head end only	70	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	16697.26	16849
Intermodal-D	Loaded	7500	Head end only	70	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	12953.53	13152
Intermodal-D	Loaded	7500	Head end only	70	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	10228.27	10675
Intermodal-E	Loaded	7500	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1100.52	1190
Intermodal-E	Loaded	7500	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	10.00%	486.86	585
Intermodal-E	Loaded	7500	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1673.72	1760
Intermodal-E	Loaded	7500	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	586.92	661
Intermodal-E	Loaded	7500	Head end only	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6049.44	8197
Intermodal-E	Loaded	7500	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	9765.32	10257
Intermodal-E	Loaded	7500	Head end only	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	4.00%	1094.16	1203
Intermodal-E	Loaded	7500	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7511.05	8010
Intermodal-E	Loaded	7500	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3943.78	4171
Intermodal-E	Loaded	7500	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	2329.11	2447
Intermodal-E	Loaded	7500	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5591.67	5859
Intermodal-E	Loaded	7500	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2830.64	2924
Intermodal-E	Loaded	7500	Head end only	33	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	2918.76	3005
Intermodal-E	Loaded	7500	Head end only	50	0.50%	Incline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	4989.35	5130

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-E	Loaded	7500	Head end only	70	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	13018.07	13649
Intermodal-E	Loaded	7500	Head end only	70	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	18211.08	19300
Intermodal-E	Loaded	7500	Head end only	70	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	13783.19	13968
Intermodal-E	Loaded	7500	Head end only	70	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	10520.95	10721
Intermodal-A	Empty	7500	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	799.95	890
Intermodal-A	Empty	7500	Distributed (Head and Rear)	10	0.50%	Incline	> 1.0%	4.00	9.00	< 0.1%	30.00%	332.55	434
Intermodal-A	Empty	7500	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	695.96	759
Intermodal-A	Empty	7500	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	2.00%	481.82	612
Intermodal-A	Empty	7500	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2698.27	2853
Intermodal-A	Empty	7500	Distributed (Head and Rear)	20	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4839.54	5089
Intermodal-A	Empty	7500	Distributed (Head and Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	32.00%	924.2	1056
Intermodal-A	Empty	7500	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2536.04	2717
Intermodal-A	Empty	7500	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2259.6	2536
Intermodal-A	Empty	7500	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	43.00%	1488.19	1650
Intermodal-A	Empty	7500	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 10%	1.00%	2466.12	2899
Intermodal-A	Empty	7500	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	37.00%	1692.23	1819
Intermodal-A	Empty	7500	Distributed (Head and Rear)	52	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	45.00%	3464.29	3586
Intermodal-A	Empty	7500	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	37.00%	5274.18	5770
Intermodal-A	Empty	7500	Distributed (Head and Rear)	60	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	25.00%	4142.33	4287

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-A	Empty	7500	Distributed (Head and Rear)	60	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	6170.66	6294
Intermodal-A	Empty	7500	Distributed (Head and Rear)	60	1.00%	Trough	<0.1%	0.00	0.00	< 10%	0.00%	5453.37	5561
Intermodal-A	Empty	7500	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	37.00%	4682.28	4921
Intermodal-B	Empty	7500	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	813.93	904
Intermodal-B	Empty	7500	Distributed (Head and Rear)	10	0.50%	Incline	> 1.0%	14.00	43.00	< 0.1%	32.00%	324.3	406
Intermodal-B	Empty	7500	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	707.49	1111
Intermodal-B	Empty	7500	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	2.00%	485.62	617
Intermodal-B	Empty	7500	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2776.89	2931
Intermodal-B	Empty	7500	Distributed (Head and Rear)	20	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4977.8	5224
Intermodal-B	Empty	7500	Distributed (Head and Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	19.00%	937.77	1046
Intermodal-B	Empty	7500	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2599.73	2735
Intermodal-B	Empty	7500	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	1.00%	2331.03	2539
Intermodal-B	Empty	7500	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	45.00%	1506.85	1652
Intermodal-B	Empty	7500	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2511.82	2614
Intermodal-B	Empty	7500	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	49.00%	1709.55	2154
Intermodal-B	Empty	7500	Distributed (Head and Rear)	52	1.00%	Crest	< 0.5%	40.00	40.00	< 0.1%	45.00%	3474.26	3610
Intermodal-B	Empty	7500	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	45.00%	5352.34	5853
Intermodal-B	Empty	7500	Distributed (Head and Rear)	60	0.50%	Incline	> 1.0%	75.50	144.00	< 0.1%	31.00%	4216.04	4301

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-B	Empty	7500	Rear) Distributed (Head and Rear)	60	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	6334.29	6469
Intermodal-B	Empty	7500	Distributed (Head and Rear)	60	1.00%	Trough	<0.1%	0.00	0.00	< 10%	1.00%	5595.98	5719
Intermodal-B	Empty	7500	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	49.00%	4715.24	4995
Intermodal-C	Empty	7500	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	795.06	904
Intermodal-C	Empty	7500	Distributed (Head and Rear)	10	0.50%	Incline	> 1.0%	16.00	27.00	< 0.1%	34.00%	316.79	412
Intermodal-C	Empty	7500	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	708.94	1098
Intermodal-C	Empty	7500	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	481.89	607
Intermodal-C	Empty	7500	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2752.06	2905
Intermodal-C	Empty	7500	Distributed (Head and Rear)	20	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4972.99	5259
Intermodal-C	Empty	7500	Distributed (Head and Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	33.00%	923.22	1094
Intermodal-C	Empty	7500	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2583.86	2741
Intermodal-C	Empty	7500	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2328.36	2544
Intermodal-C	Empty	7500	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	44.00%	1487.56	1643
Intermodal-C	Empty	7500	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	2506.74	2808
Intermodal-C	Empty	7500	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	38.00%	1703.23	2024
Intermodal-C	Empty	7500	Distributed (Head and Rear)	52	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	44.00%	3511.02	3651
Intermodal-C	Empty	7500	Distributed (Head and Rear)	60	0.50%	Decline	> 1.0%	66.00	66.00	< 0.1%	37.00%	5343.42	5933

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-C	Empty	7500	Distributed (Head and Rear)	60	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	17.00%	4181.45	4304
Intermodal-C	Empty	7500	Distributed (Head and Rear)	60	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	6281.61	6449
Intermodal-C	Empty	7500	Distributed (Head and Rear)	60	1.00%	Trough	<0.1%	0.00	0.00	< 10%	0.00%	5567.42	5648
Intermodal-C	Empty	7500	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	41.00%	4703.93	4990
Intermodal-D	Empty	7500	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	797.12	907
Intermodal-D	Empty	7500	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	22.00%	291.34	324
Intermodal-D	Empty	7500	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	702.56	757
Intermodal-D	Empty	7500	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	2.00%	489.96	613
Intermodal-D	Empty	7500	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2764.97	2928
Intermodal-D	Empty	7500	Distributed (Head and Rear)	20	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4953.62	5171
Intermodal-D	Empty	7500	Distributed (Head and Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	21.00%	948.41	1097
Intermodal-D	Empty	7500	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2588.29	2714
Intermodal-D	Empty	7500	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2324.88	2536
Intermodal-D	Empty	7500	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	39.00%	1503.2	1652
Intermodal-D	Empty	7500	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	2509.3	3125
Intermodal-D	Empty	7500	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	41.00%	1711.54	1886
Intermodal-D	Empty	7500	Distributed (Head and Rear)	52	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	46.00%	3481.13	3597
Intermodal-D	Empty	7500	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	38.00%	5371.23	5860

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-D	Empty	7500	Rear) Distributed (Head and Rear)	60	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	24.00%	4178.75	4302
Intermodal-D	Empty	7500	Distributed (Head and Rear)	60	1.10%	Decline	<0.1%	0.00	0.00	> 50%	1.00%	6305.86	6461
Intermodal-D	Empty	7500	Distributed (Head and Rear)	60	1.00%	Trough	<0.1%	0.00	0.00	< 10%	2.00%	5574.65	5650
Intermodal-D	Empty	7500	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	41.00%	4707.26	4997
Intermodal-E	Empty	7500	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	805.31	893
Intermodal-E	Empty	7500	Distributed (Head and Rear)	10	0.50%	Incline	< 0.5%	0.00	0.00	< 0.1%	30.00%	326.84	434
Intermodal-E	Empty	7500	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	705.54	1126
Intermodal-E	Empty	7500	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	3.00%	472.87	618
Intermodal-E	Empty	7500	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2602.58	2687
Intermodal-E	Empty	7500	Distributed (Head and Rear)	20	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4995.45	5254
Intermodal-E	Empty	7500	Distributed (Head and Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	22.00%	943.06	1056
Intermodal-E	Empty	7500	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2615	2765
Intermodal-E	Empty	7500	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2338.2	2537
Intermodal-E	Empty	7500	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	35.00%	1510.64	1650
Intermodal-E	Empty	7500	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	2520.61	2993
Intermodal-E	Empty	7500	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	50.00%	1716.33	2108
Intermodal-E	Empty	7500	Distributed (Head and Rear)	52	1.00%	Crest	> 1.0%	41.00	41.00	< 0.1%	39.00%	3524.31	3655

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-E	Empty	7500	Distributed (Head and Rear)	60	0.50%	Decline	> 1.0%	47.50	52.00	< 0.1%	34.00%	5376.15	5857
Intermodal-E	Empty	7500	Distributed (Head and Rear)	60	0.50%	Incline	< 0.5%	43.00	43.00	< 0.1%	22.00%	4226.63	4303
Intermodal-E	Empty	7500	Distributed (Head and Rear)	60	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	6341.37	6473
Intermodal-E	Empty	7500	Distributed (Head and Rear)	60	1.00%	Trough	<0.1%	0.00	0.00	< 10%	0.00%	5601.57	5721
Intermodal-E	Empty	7500	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	32.00%	4734.28	4984
Intermodal-A	Loaded	7500	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	936.34	987
Intermodal-A	Loaded	7500	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	27.00%	468.15	573
Intermodal-A	Loaded	7500	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1628.66	1719
Intermodal-A	Loaded	7500	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	11.00%	552.08	718
Intermodal-A	Loaded	7500	Distributed (Head and Rear)	15	2.80%	Decline	1	805.66	1171.00	< 0.1%	0.00%	-69.09	-43
Intermodal-A	Loaded	7500	Distributed (Head and Rear)	20	2.20%	Decline	1	1323.88	1847.00	< 0.1%	0.00%	-91.96	-61
Intermodal-A	Loaded	7500	Distributed (Head and Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	16.00%	1013.35	1101
Intermodal-A	Loaded	7500	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7884.7	8442
Intermodal-A	Loaded	7500	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4016.8	4121
Intermodal-A	Loaded	7500	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	2240.68	2341
Intermodal-A	Loaded	7500	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6333.99	6592
Intermodal-A	Loaded	7500	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2819.13	2888
Intermodal-A	Loaded	7500	Distributed (Head and Rear)	33	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	2746.21	2860

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-A	Loaded	7500	Rear) Distributed (Head and Rear)	50	0.50%	Incline	<0.1%	0.00	0.00	< 10%	0.00%	5140.91	5345
Intermodal-A	Loaded	7500	Distributed (Head and Rear)	70	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	15471.77	15739
Intermodal-A	Loaded	7500	Distributed (Head and Rear)	70	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	23460.85	23498
Intermodal-A	Loaded	7500	Distributed (Head and Rear)	70	1.00%	Trough	<0.1%	0.00	0.00	> 50%	4.00%	15601.1	15650
Intermodal-A	Loaded	7500	Distributed (Head and Rear)	70	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	11617.33	11846
Intermodal-B	Loaded	7500	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	823.42	921
Intermodal-B	Loaded	7500	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	72.00%	334.09	408
Intermodal-B	Loaded	7500	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1113.36	1167
Intermodal-B	Loaded	7500	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	15.00%	467.91	681
Intermodal-B	Loaded	7500	Distributed (Head and Rear)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5414.92	5800
Intermodal-B	Loaded	7500	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5998.69	6272
Intermodal-B	Loaded	7500	Distributed (Head and Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	13.00%	1006.05	1067
Intermodal-B	Loaded	7500	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4904.59	5096
Intermodal-B	Loaded	7500	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	2892.04	3000
Intermodal-B	Loaded	7500	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	1.00%	1885.09	1972
Intermodal-B	Loaded	7500	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4131.7	4322
Intermodal-B	Loaded	7500	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2282.56	2428

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-B	Loaded	7500	Distributed (Head and Rear)	33	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	2410.44	2535
Intermodal-B	Loaded	7500	Distributed (Head and Rear)	50	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	4223.34	4342
Intermodal-B	Loaded	7500	Distributed (Head and Rear)	70	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	11122.49	11673
Intermodal-B	Loaded	7500	Distributed (Head and Rear)	70	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	14929.85	15185
Intermodal-B	Loaded	7500	Distributed (Head and Rear)	70	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	12365.8	12499
Intermodal-B	Loaded	7500	Distributed (Head and Rear)	70	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	8881.12	9091
Intermodal-C	Loaded	7500	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	825.05	921
Intermodal-C	Loaded	7500	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	62.00%	328.89	386
Intermodal-C	Loaded	7500	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1091.02	1167
Intermodal-C	Loaded	7500	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	11.00%	480.55	680
Intermodal-C	Loaded	7500	Distributed (Head and Rear)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5097.67	6026
Intermodal-C	Loaded	7500	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5790.85	6046
Intermodal-C	Loaded	7500	Distributed (Head and Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	20.00%	976.92	1082
Intermodal-C	Loaded	7500	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4752.67	4969
Intermodal-C	Loaded	7500	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2872.48	3040
Intermodal-C	Loaded	7500	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1862.04	1974
Intermodal-C	Loaded	7500	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4042.02	4237
Intermodal-C	Loaded	7500	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2260.62	2382

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-C	Loaded	7500	Rear) Distributed (Head and Rear)	33	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	2424.59	2530
Intermodal-C	Loaded	7500	Distributed (Head and Rear)	50	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	4206.1	4340
Intermodal-C	Loaded	7500	Distributed (Head and Rear)	70	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	10954.16	11563
Intermodal-C	Loaded	7500	Distributed (Head and Rear)	70	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	14904.33	15088
Intermodal-C	Loaded	7500	Distributed (Head and Rear)	70	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	12218.9	12493
Intermodal-C	Loaded	7500	Distributed (Head and Rear)	70	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	8765.8	8979
Intermodal-D	Loaded	7500	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	827.17	913
Intermodal-D	Loaded	7500	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	63.00%	315.17	358
Intermodal-D	Loaded	7500	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1037.37	1094
Intermodal-D	Loaded	7500	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	14.00%	457.58	681
Intermodal-D	Loaded	7500	Distributed (Head and Rear)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4203.55	4580
Intermodal-D	Loaded	7500	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5328.91	5534
Intermodal-D	Loaded	7500	Distributed (Head and Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	11.00%	927.16	1006
Intermodal-D	Loaded	7500	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4429.64	4655
Intermodal-D	Loaded	7500	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2705.9	2781
Intermodal-D	Loaded	7500	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1775.93	1934
Intermodal-D	Loaded	7500	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3805.26	3947

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-D	Loaded	7500	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2184.64	2266
Intermodal-D	Loaded	7500	Distributed (Head and Rear)	33	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	2391.86	2524
Intermodal-D	Loaded	7500	Distributed (Head and Rear)	50	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	4087.94	4198
Intermodal-D	Loaded	7500	Distributed (Head and Rear)	70	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	10219.68	10738
Intermodal-D	Loaded	7500	Distributed (Head and Rear)	70	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	13991.06	14262
Intermodal-D	Loaded	7500	Distributed (Head and Rear)	70	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	10419.68	10618
Intermodal-D	Loaded	7500	Distributed (Head and Rear)	70	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	8442.67	8603
Intermodal-E	Loaded	7500	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	829.25	924
Intermodal-E	Loaded	7500	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	39.00%	331.05	370
Intermodal-E	Loaded	7500	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1078.28	1139
Intermodal-E	Loaded	7500	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	10.00%	477.19	684
Intermodal-E	Loaded	7500	Distributed (Head and Rear)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5069.39	5581
Intermodal-E	Loaded	7500	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5792.18	6050
Intermodal-E	Loaded	7500	Distributed (Head and Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	19.00%	971.86	1061
Intermodal-E	Loaded	7500	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4708.24	5013
Intermodal-E	Loaded	7500	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2849.14	3029
Intermodal-E	Loaded	7500	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1857.4	1937
Intermodal-E	Loaded	7500	Distributed (Head and	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4005.11	4178

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-E	Loaded	7500	Rear) Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2241.35	2330
Intermodal-E	Loaded	7500	Distributed (Head and Rear)	33	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	2396.64	2532
Intermodal-E	Loaded	7500	Distributed (Head and Rear)	50	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	4195.16	4271
Intermodal-E	Loaded	7500	Distributed (Head and Rear)	70	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	10828.38	11363
Intermodal-E	Loaded	7500	Distributed (Head and Rear)	70	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	14909.22	14989
Intermodal-E	Loaded	7500	Distributed (Head and Rear)	70	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	12210.54	12493
Intermodal-E	Loaded	7500	Distributed (Head and Rear)	70	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	8728.82	8897
Intermodal-A	Empty	10000	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	955.91	1061
Intermodal-A	Empty	10000	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	381.99	431
Intermodal-A	Empty	10000	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	944.53	1576
Intermodal-A	Empty	10000	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	1.00%	487.61	557
Intermodal-A	Empty	10000	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3635.66	3761
Intermodal-A	Empty	10000	Distributed (Head and Rear)	20	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6516.64	6768
Intermodal-A	Empty	10000	Distributed (Head and Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1147.46	1203
Intermodal-A	Empty	10000	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3353.01	4140
Intermodal-A	Empty	10000	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	2758.57	3081
Intermodal-A	Empty	10000	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	3.00%	1734.8	1849

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-A	Empty	10000	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3139.13	3869
Intermodal-A	Empty	10000	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	1.00%	2028.98	2223
Intermodal-A	Empty	10000	Distributed (Head and Rear)	53	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	1.00%	4070.22	4159
Intermodal-A	Empty	10000	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	6209.26	6455
Intermodal-A	Empty	10000	Distributed (Head and Rear)	60	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	4859.48	4948
Intermodal-A	Empty	10000	Distributed (Head and Rear)	60	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7546.42	7652
Intermodal-A	Empty	10000	Distributed (Head and Rear)	60	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	6468.96	6606
Intermodal-A	Empty	10000	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	5457.73	5757
Intermodal-B	Empty	10000	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	946.24	1058
Intermodal-B	Empty	10000	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	381	433
Intermodal-B	Empty	10000	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	921	977
Intermodal-B	Empty	10000	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	483.03	557
Intermodal-B	Empty	10000	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3660.97	3855
Intermodal-B	Empty	10000	Distributed (Head and Rear)	20	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5474.16	5491
Intermodal-B	Empty	10000	Distributed (Head and Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1119.11	1168
Intermodal-B	Empty	10000	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3350.32	3489
Intermodal-B	Empty	10000	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	2678.07	2991
Intermodal-B	Empty	10000	Distributed (Head and	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	3.00%	1711.81	1851

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-B	Empty	10000	Rear) Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	3126.26	3562
Intermodal-B	Empty	10000	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	2.00%	2019	2181
Intermodal-B	Empty	10000	Distributed (Head and Rear)	53	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	1.00%	4047.85	4152
Intermodal-B	Empty	10000	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	6208.54	6390
Intermodal-B	Empty	10000	Distributed (Head and Rear)	60	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	4826.12	4946
Intermodal-B	Empty	10000	Distributed (Head and Rear)	60	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7568.43	7649
Intermodal-B	Empty	10000	Distributed (Head and Rear)	60	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	6476.15	7157
Intermodal-B	Empty	10000	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 10%	0.00%	5449.35	5685
Intermodal-C	Empty	10000	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	954.49	1063
Intermodal-C	Empty	10000	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	385.12	433
Intermodal-C	Empty	10000	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	961.38	1419
Intermodal-C	Empty	10000	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	494.71	559
Intermodal-C	Empty	10000	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3793.72	3960
Intermodal-C	Empty	10000	Distributed (Head and Rear)	20	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5474.37	5492
Intermodal-C	Empty	10000	Distributed (Head and Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1136.04	1203
Intermodal-C	Empty	10000	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3463.57	3621
Intermodal-C	Empty	10000	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	2816.71	3076

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-C	Empty	10000	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1756.4	1850
Intermodal-C	Empty	10000	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3238.24	3800
Intermodal-C	Empty	10000	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2081.43	2218
Intermodal-C	Empty	10000	Distributed (Head and Rear)	53	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	2.00%	4091.95	4222
Intermodal-C	Empty	10000	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	6391.08	7084
Intermodal-C	Empty	10000	Distributed (Head and Rear)	60	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	4915.93	5034
Intermodal-C	Empty	10000	Distributed (Head and Rear)	60	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7813.2	7909
Intermodal-C	Empty	10000	Distributed (Head and Rear)	60	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	6722.48	7163
Intermodal-C	Empty	10000	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	5566.11	5750
Intermodal-D	Empty	10000	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	602.37	646
Intermodal-D	Empty	10000	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	379.73	429
Intermodal-D	Empty	10000	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	920.93	997
Intermodal-D	Empty	10000	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	1.00%	488.53	592
Intermodal-D	Empty	10000	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3623.59	3789
Intermodal-D	Empty	10000	Distributed (Head and Rear)	20	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5475.42	5492
Intermodal-D	Empty	10000	Distributed (Head and Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	3.00%	1025.41	1095
Intermodal-D	Empty	10000	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3318.07	4163
Intermodal-D	Empty	10000	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	2678.46	3006

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-D	Empty	10000	Rear) Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	3.00%	1716.08	1853
Intermodal-D	Empty	10000	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3116.41	3853
Intermodal-D	Empty	10000	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2013.55	2226
Intermodal-D	Empty	10000	Distributed (Head and Rear)	53	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	1.00%	4001.68	4108
Intermodal-D	Empty	10000	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	1.00%	6213.02	6397
Intermodal-D	Empty	10000	Distributed (Head and Rear)	60	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	4797.12	4872
Intermodal-D	Empty	10000	Distributed (Head and Rear)	60	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7461.05	7640
Intermodal-D	Empty	10000	Distributed (Head and Rear)	60	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	6452.52	7158
Intermodal-D	Empty	10000	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 10%	0.00%	5459.07	5673
Intermodal-E	Empty	10000	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	1.00%	598.68	618
Intermodal-E	Empty	10000	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	380.34	422
Intermodal-E	Empty	10000	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	924.36	1286
Intermodal-E	Empty	10000	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	488.12	555
Intermodal-E	Empty	10000	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3630.1	3840
Intermodal-E	Empty	10000	Distributed (Head and Rear)	20	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5475.88	5490
Intermodal-E	Empty	10000	Distributed (Head and Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	2.00%	1031.82	1128
Intermodal-E	Empty	10000	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3308.6	3458

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-E	Empty	10000	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2496.3	2723
Intermodal-E	Empty	10000	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	2.00%	1700.06	1846
Intermodal-E	Empty	10000	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	3119.12	3224
Intermodal-E	Empty	10000	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	1.00%	2023.06	2339
Intermodal-E	Empty	10000	Distributed (Head and Rear)	53	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	4009	4104
Intermodal-E	Empty	10000	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	6201.15	6387
Intermodal-E	Empty	10000	Distributed (Head and Rear)	60	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	4776.52	4941
Intermodal-E	Empty	10000	Distributed (Head and Rear)	60	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7478.38	7637
Intermodal-E	Empty	10000	Distributed (Head and Rear)	60	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	6456.05	7242
Intermodal-E	Empty	10000	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	1.00%	5429.75	5665
Intermodal-A	Loaded	10000	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1328.03	1416
Intermodal-A	Loaded	10000	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	6.00%	464.64	557
Intermodal-A	Loaded	10000	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2253.66	2400
Intermodal-A	Loaded	10000	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	651.68	685
Intermodal-A	Loaded	10000	Distributed (Head and Rear)	15	2.80%	Decline	1	875.83	1380.00	< 0.1%	0.00%	-70.94	-44
Intermodal-A	Loaded	10000	Distributed (Head and Rear)	20	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	9.00%	777.34	871
Intermodal-A	Loaded	10000	Distributed (Head and Rear)	20	2.20%	Decline	1	1336.65	1900.00	< 0.1%	0.00%	-93.74	-58
Intermodal-A	Loaded	10000	Distributed (Head and	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	10451.09	10822

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-A	Loaded	10000	Rear) Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4991.74	5141
Intermodal-A	Loaded	10000	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	2613.42	2736
Intermodal-A	Loaded	10000	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7731.68	7960
Intermodal-A	Loaded	10000	Distributed (Head and Rear)	30	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	2782.73	2893
Intermodal-A	Loaded	10000	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	3227.47	3278
Intermodal-A	Loaded	10000	Distributed (Head and Rear)	48	0.50%	Incline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	5110.43	5186
Intermodal-A	Loaded	10000	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	13112.67	13158
Intermodal-A	Loaded	10000	Distributed (Head and Rear)	60	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	21958.4	22224
Intermodal-A	Loaded	10000	Distributed (Head and Rear)	60	1.00%	Trough	<0.1%	0.00	0.00	> 50%	3.00%	13130.92	13157
Intermodal-A	Loaded	10000	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	9763.25	9894
Intermodal-B	Loaded	10000	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	905.87	1289
Intermodal-B	Loaded	10000	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	34.00%	365.31	431
Intermodal-B	Loaded	10000	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1482.39	1567
Intermodal-B	Loaded	10000	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	1.00%	537.98	744
Intermodal-B	Loaded	10000	Distributed (Head and Rear)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6633.18	7027
Intermodal-B	Loaded	10000	Distributed (Head and Rear)	20	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	11.00%	718.69	837
Intermodal-B	Loaded	10000	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7935.58	8274

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-B	Loaded	10000	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6306.26	6564
Intermodal-B	Loaded	10000	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3430.83	3608
Intermodal-B	Loaded	10000	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	2142.21	2215
Intermodal-B	Loaded	10000	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4981.61	5142
Intermodal-B	Loaded	10000	Distributed (Head and Rear)	30	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	2475.37	2597
Intermodal-B	Loaded	10000	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2646	2773
Intermodal-B	Loaded	10000	Distributed (Head and Rear)	48	0.50%	Incline	<0.1%	0.00	0.00	< 10%	0.00%	4402.62	4478
Intermodal-B	Loaded	10000	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	9021.88	9055
Intermodal-B	Loaded	10000	Distributed (Head and Rear)	60	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	11708.62	11756
Intermodal-B	Loaded	10000	Distributed (Head and Rear)	60	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	11059.72	11294
Intermodal-B	Loaded	10000	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	7773.42	7944
Intermodal-C	Loaded	10000	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	12.00%	736.15	749
Intermodal-C	Loaded	10000	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	53.00%	372.26	477
Intermodal-C	Loaded	10000	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1573.49	1692
Intermodal-C	Loaded	10000	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	561.1	684
Intermodal-C	Loaded	10000	Distributed (Head and Rear)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7412.85	8012
Intermodal-C	Loaded	10000	Distributed (Head and Rear)	20	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	15.00%	721.51	784
Intermodal-C	Loaded	10000	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	8543.71	9041

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-C	Loaded	10000	Rear) Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6766.07	7070
Intermodal-C	Loaded	10000	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3583.99	3823
Intermodal-C	Loaded	10000	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	2165.46	2259
Intermodal-C	Loaded	10000	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5283.31	5472
Intermodal-C	Loaded	10000	Distributed (Head and Rear)	30	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	2467.41	2603
Intermodal-C	Loaded	10000	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2730.56	3006
Intermodal-C	Loaded	10000	Distributed (Head and Rear)	48	0.50%	Incline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	4498.71	4555
Intermodal-C	Loaded	10000	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	9025.62	9056
Intermodal-C	Loaded	10000	Distributed (Head and Rear)	60	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	14713.12	15104
Intermodal-C	Loaded	10000	Distributed (Head and Rear)	60	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	11772.32	11842
Intermodal-C	Loaded	10000	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	7997.58	8139
Intermodal-D	Loaded	10000	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	949.1	1310
Intermodal-D	Loaded	10000	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	42.00%	364.7	449
Intermodal-D	Loaded	10000	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1515.78	1617
Intermodal-D	Loaded	10000	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	2.00%	547.53	700
Intermodal-D	Loaded	10000	Distributed (Head and Rear)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6756.24	7265
Intermodal-D	Loaded	10000	Distributed (Head and Rear)	20	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	19.00%	718.37	837

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-D	Loaded	10000	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	8095.78	8421
Intermodal-D	Loaded	10000	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6429.13	6748
Intermodal-D	Loaded	10000	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3485.39	3771
Intermodal-D	Loaded	10000	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	2157.87	2250
Intermodal-D	Loaded	10000	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5075.34	5240
Intermodal-D	Loaded	10000	Distributed (Head and Rear)	30	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	2498.03	2612
Intermodal-D	Loaded	10000	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2678.78	2887
Intermodal-D	Loaded	10000	Distributed (Head and Rear)	48	0.50%	Incline	<0.1%	0.00	0.00	< 10%	0.00%	4397.97	4487
Intermodal-D	Loaded	10000	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	9035.05	9057
Intermodal-D	Loaded	10000	Distributed (Head and Rear)	60	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	11721.42	11754
Intermodal-D	Loaded	10000	Distributed (Head and Rear)	60	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	11263.2	11479
Intermodal-D	Loaded	10000	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	7835.34	7967
Intermodal-E	Loaded	10000	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	735.61	749
Intermodal-E	Loaded	10000	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	44.00%	363.84	442
Intermodal-E	Loaded	10000	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1503.94	1581
Intermodal-E	Loaded	10000	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	1.00%	541.01	596
Intermodal-E	Loaded	10000	Distributed (Head and Rear)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6868.41	7511
Intermodal-E	Loaded	10000	Distributed (Head and	20	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	9.00%	721.63	847

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-E	Loaded	10000	Rear) Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	8095.99	8408
Intermodal-E	Loaded	10000	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6392.25	6666
Intermodal-E	Loaded	10000	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3449.88	3598
Intermodal-E	Loaded	10000	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	2146.91	2217
Intermodal-E	Loaded	10000	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5044.46	5237
Intermodal-E	Loaded	10000	Distributed (Head and Rear)	30	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	2491.1	2605
Intermodal-E	Loaded	10000	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2675.11	2847
Intermodal-E	Loaded	10000	Distributed (Head and Rear)	48	0.50%	Incline	<0.1%	0.00	0.00	< 10%	0.00%	4410.81	4485
Intermodal-E	Loaded	10000	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	9023.78	9056
Intermodal-E	Loaded	10000	Distributed (Head and Rear)	60	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	11712.5	11757
Intermodal-E	Loaded	10000	Distributed (Head and Rear)	60	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	11245.96	11379
Intermodal-E	Loaded	10000	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	7811.97	7956
Intermodal-A	Empty	10000	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	840.44	1016
Intermodal-A	Empty	10000	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	40.00%	322.95	403
Intermodal-A	Empty	10000	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	726.52	888
Intermodal-A	Empty	10000	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	478.94	617
Intermodal-A	Empty	10000	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2914.38	3082

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-A	Empty	10000	Distributed (Head, Mid, Rear)	20	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5382.53	5457
Intermodal-A	Empty	10000	Distributed (Head, Mid, Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	4.00%	1021.72	1130
Intermodal-A	Empty	10000	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2704.64	2873
Intermodal-A	Empty	10000	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2234.54	2627
Intermodal-A	Empty	10000	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	7.00%	1547.82	1750
Intermodal-A	Empty	10000	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	2603.82	3269
Intermodal-A	Empty	10000	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	6.00%	1772	2157
Intermodal-A	Empty	10000	Distributed (Head, Mid, Rear)	53	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	5.00%	3703.65	3804
Intermodal-A	Empty	10000	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	< 10%	11.00%	5511.07	6105
Intermodal-A	Empty	10000	Distributed (Head, Mid, Rear)	60	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	3.00%	4322.14	4422
Intermodal-A	Empty	10000	Distributed (Head, Mid, Rear)	60	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6511.03	6672
Intermodal-A	Empty	10000	Distributed (Head, Mid, Rear)	60	1.00%	Trough	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	5561.47	5732
Intermodal-A	Empty	10000	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	9.00%	4806.82	5068
Intermodal-B	Empty	10000	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	570.07	618
Intermodal-B	Empty	10000	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	21.00%	346.77	409
Intermodal-B	Empty	10000	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	730.38	1167
Intermodal-B	Empty	10000	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	472.32	613
Intermodal-B	Empty	10000	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2927.34	3084

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-B	Empty	10000	Rear) Distributed (Head, Mid, Rear)	20	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5395.34	5483
Intermodal-B	Empty	10000	Distributed (Head, Mid, Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	2.00%	1017.42	1130
Intermodal-B	Empty	10000	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2704.33	2848
Intermodal-B	Empty	10000	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	1.00%	2169.5	2587
Intermodal-B	Empty	10000	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	4.00%	1532.3	1750
Intermodal-B	Empty	10000	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	2579.5	2689
Intermodal-B	Empty	10000	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	5.00%	1749.97	1880
Intermodal-B	Empty	10000	Distributed (Head, Mid, Rear)	53	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	9.00%	3665.13	3787
Intermodal-B	Empty	10000	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	< 10%	19.00%	5478.14	6107
Intermodal-B	Empty	10000	Distributed (Head, Mid, Rear)	60	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	5.00%	4326.46	4367
Intermodal-B	Empty	10000	Distributed (Head, Mid, Rear)	60	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6517.79	6668
Intermodal-B	Empty	10000	Distributed (Head, Mid, Rear)	60	1.00%	Trough	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	5519.06	5678
Intermodal-B	Empty	10000	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	10.00%	4812.69	4985
Intermodal-C	Empty	10000	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	571.34	644
Intermodal-C	Empty	10000	Distributed (Head, Mid, Rear)	10	0.50%	Incline	< 0.5%	6.00	6.00	< 0.1%	16.00%	350.86	411
Intermodal-C	Empty	10000	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	753.27	818
Intermodal-C	Empty	10000	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	474.37	610

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-C	Empty	10000	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3056.07	3224
Intermodal-C	Empty	10000	Distributed (Head, Mid, Rear)	20	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5409.9	5485
Intermodal-C	Empty	10000	Distributed (Head, Mid, Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	1.00%	1039.56	1130
Intermodal-C	Empty	10000	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2822.86	2980
Intermodal-C	Empty	10000	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2268.72	2553
Intermodal-C	Empty	10000	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	4.00%	1576.85	1759
Intermodal-C	Empty	10000	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	2698.7	2813
Intermodal-C	Empty	10000	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	2.00%	1820.26	2261
Intermodal-C	Empty	10000	Distributed (Head, Mid, Rear)	53	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	8.00%	3744.57	3856
Intermodal-C	Empty	10000	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	10.00%	5619.07	6275
Intermodal-C	Empty	10000	Distributed (Head, Mid, Rear)	60	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	6.00%	4420.57	4529
Intermodal-C	Empty	10000	Distributed (Head, Mid, Rear)	60	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6803.86	6941
Intermodal-C	Empty	10000	Distributed (Head, Mid, Rear)	60	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	5793.57	5857
Intermodal-C	Empty	10000	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	7.00%	4933.17	5159
Intermodal-D	Empty	10000	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	569.95	639
Intermodal-D	Empty	10000	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	17.00%	352.44	407
Intermodal-D	Empty	10000	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	724.88	781
Intermodal-D	Empty	10000	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	482.4	612

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-D	Empty	10000	Rear) Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2908.18	3056
Intermodal-D	Empty	10000	Distributed (Head, Mid, Rear)	20	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5381.18	5430
Intermodal-D	Empty	10000	Distributed (Head, Mid, Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	1.00%	1025.89	1127
Intermodal-D	Empty	10000	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2683.81	2819
Intermodal-D	Empty	10000	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2212.16	2507
Intermodal-D	Empty	10000	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	5.00%	1543.95	1710
Intermodal-D	Empty	10000	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	2580.52	3298
Intermodal-D	Empty	10000	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	4.00%	1745.71	2084
Intermodal-D	Empty	10000	Distributed (Head, Mid, Rear)	53	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	3.00%	3646.27	3772
Intermodal-D	Empty	10000	Distributed (Head, Mid, Rear)	60	0.50%	Decline	> 1.0%	36.50	40.00	< 10%	7.00%	5496.72	6110
Intermodal-D	Empty	10000	Distributed (Head, Mid, Rear)	60	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	2.00%	4300.98	4367
Intermodal-D	Empty	10000	Distributed (Head, Mid, Rear)	60	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6494.95	6661
Intermodal-D	Empty	10000	Distributed (Head, Mid, Rear)	60	1.00%	Trough	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	5512.54	5662
Intermodal-D	Empty	10000	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	6.00%	4797	4993
Intermodal-E	Empty	10000	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	2.00%	570.72	641
Intermodal-E	Empty	10000	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	13.00%	357.11	406
Intermodal-E	Empty	10000	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	730.54	789

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-E	Empty	10000	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	475.67	610
Intermodal-E	Empty	10000	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2918.95	3086
Intermodal-E	Empty	10000	Distributed (Head, Mid, Rear)	20	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5379.09	5431
Intermodal-E	Empty	10000	Distributed (Head, Mid, Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1002.4	1129
Intermodal-E	Empty	10000	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2699.74	2866
Intermodal-E	Empty	10000	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2197.96	2544
Intermodal-E	Empty	10000	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	4.00%	1550.42	1758
Intermodal-E	Empty	10000	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	2591.49	2683
Intermodal-E	Empty	10000	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	6.00%	1753.39	2041
Intermodal-E	Empty	10000	Distributed (Head, Mid, Rear)	53	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	3.00%	3660.82	3780
Intermodal-E	Empty	10000	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	17.00%	5458.48	5836
Intermodal-E	Empty	10000	Distributed (Head, Mid, Rear)	60	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	8.00%	4291.9	4428
Intermodal-E	Empty	10000	Distributed (Head, Mid, Rear)	60	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6502.21	6668
Intermodal-E	Empty	10000	Distributed (Head, Mid, Rear)	60	1.00%	Trough	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	5517.87	5835
Intermodal-E	Empty	10000	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	14.00%	4790.36	4981
Intermodal-A	Loaded	10000	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1093.21	1205
Intermodal-A	Loaded	10000	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	45.00%	389.64	433
Intermodal-A	Loaded	10000	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1756.52	1898

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-A	Loaded	10000	Rear) Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	568.41	607
Intermodal-A	Loaded	10000	Distributed (Head, Mid, Rear)	15	2.80%	Decline	1	738.65	1102.00	< 0.1%	0.00%	-69.36	-46
Intermodal-A	Loaded	10000	Distributed (Head, Mid, Rear)	20	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	18.00%	689.24	748
Intermodal-A	Loaded	10000	Distributed (Head, Mid, Rear)	20	2.20%	Decline	1	1219.22	1659.00	< 0.1%	0.00%	-92.97	-59
Intermodal-A	Loaded	10000	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	9582.68	9958
Intermodal-A	Loaded	10000	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4249.55	4346
Intermodal-A	Loaded	10000	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	2230.29	2302
Intermodal-A	Loaded	10000	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6824.52	7129
Intermodal-A	Loaded	10000	Distributed (Head, Mid, Rear)	30	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	2484.46	2567
Intermodal-A	Loaded	10000	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 10%	0.00%	2884.84	3052
Intermodal-A	Loaded	10000	Distributed (Head, Mid, Rear)	48	0.50%	Incline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	4757.27	4903
Intermodal-A	Loaded	10000	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	11716.48	11754
Intermodal-A	Loaded	10000	Distributed (Head, Mid, Rear)	60	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	20795.11	21068
Intermodal-A	Loaded	10000	Distributed (Head, Mid, Rear)	60	1.00%	Trough	<0.1%	0.00	0.00	> 50%	99.00%	11508.02	11558
Intermodal-A	Loaded	10000	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	9134.01	9269
Intermodal-B	Loaded	10000	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	697.83	718
Intermodal-B	Loaded	10000	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	32.00%	350.07	405

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-B	Loaded	10000	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1159.58	1229
Intermodal-B	Loaded	10000	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	478.48	705
Intermodal-B	Loaded	10000	Distributed (Head, Mid, Rear)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6303.84	6656
Intermodal-B	Loaded	10000	Distributed (Head, Mid, Rear)	20	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	6.00%	644.88	718
Intermodal-B	Loaded	10000	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6932.93	7300
Intermodal-B	Loaded	10000	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5366.98	5659
Intermodal-B	Loaded	10000	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2910.92	2942
Intermodal-B	Loaded	10000	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1895.94	2026
Intermodal-B	Loaded	10000	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4241.4	4409
Intermodal-B	Loaded	10000	Distributed (Head, Mid, Rear)	30	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	2133.1	2224
Intermodal-B	Loaded	10000	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2315.99	2393
Intermodal-B	Loaded	10000	Distributed (Head, Mid, Rear)	48	0.50%	Incline	<0.1%	0.00	0.00	< 10%	0.00%	4032.86	4132
Intermodal-B	Loaded	10000	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	8720.05	8874
Intermodal-B	Loaded	10000	Distributed (Head, Mid, Rear)	60	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	11693.32	11757
Intermodal-B	Loaded	10000	Distributed (Head, Mid, Rear)	60	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	9780.91	9967
Intermodal-B	Loaded	10000	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	7106.95	7258
Intermodal-C	Loaded	10000	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	704.85	739
Intermodal-C	Loaded	10000	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	74.00%	320.87	424

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-C	Loaded	10000	Rear) Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1221	1290
Intermodal-C	Loaded	10000	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	503.6	683
Intermodal-C	Loaded	10000	Distributed (Head, Mid, Rear)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7106.32	7634
Intermodal-C	Loaded	10000	Distributed (Head, Mid, Rear)	20	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	19.00%	644.18	719
Intermodal-C	Loaded	10000	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7532.19	7919
Intermodal-C	Loaded	10000	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5828.28	6076
Intermodal-C	Loaded	10000	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2912.79	3028
Intermodal-C	Loaded	10000	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1962.13	2039
Intermodal-C	Loaded	10000	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4487.26	4652
Intermodal-C	Loaded	10000	Distributed (Head, Mid, Rear)	30	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	2190.56	2263
Intermodal-C	Loaded	10000	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2378.96	2474
Intermodal-C	Loaded	10000	Distributed (Head, Mid, Rear)	48	0.50%	Incline	<0.1%	0.00	0.00	< 10%	0.00%	4113.74	4213
Intermodal-C	Loaded	10000	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	8810.33	9050
Intermodal-C	Loaded	10000	Distributed (Head, Mid, Rear)	60	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	11722.69	11759
Intermodal-C	Loaded	10000	Distributed (Head, Mid, Rear)	60	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	8830.85	8859
Intermodal-C	Loaded	10000	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	7369.93	7508
Intermodal-D	Loaded	10000	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	702.43	739

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-D	Loaded	10000	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	43.00%	340.16	414
Intermodal-D	Loaded	10000	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1168.24	1250
Intermodal-D	Loaded	10000	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	2.00%	481.18	708
Intermodal-D	Loaded	10000	Distributed (Head, Mid, Rear)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6456.95	7152
Intermodal-D	Loaded	10000	Distributed (Head, Mid, Rear)	20	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	7.00%	653.77	701
Intermodal-D	Loaded	10000	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3779.32	3793
Intermodal-D	Loaded	10000	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5455.99	5705
Intermodal-D	Loaded	10000	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2906.77	2944
Intermodal-D	Loaded	10000	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1926.87	2040
Intermodal-D	Loaded	10000	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4319.74	4466
Intermodal-D	Loaded	10000	Distributed (Head, Mid, Rear)	30	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	2143.19	2255
Intermodal-D	Loaded	10000	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2342.54	2398
Intermodal-D	Loaded	10000	Distributed (Head, Mid, Rear)	48	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	4059.89	4194
Intermodal-D	Loaded	10000	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	8780.24	9044
Intermodal-D	Loaded	10000	Distributed (Head, Mid, Rear)	60	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	11731.98	11755
Intermodal-D	Loaded	10000	Distributed (Head, Mid, Rear)	60	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	8828.7	8858
Intermodal-D	Loaded	10000	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	7189.07	7338
Intermodal-E	Loaded	10000	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	700.64	743

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-E	Loaded	10000	Rear) Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	47.00%	336.42	421
Intermodal-E	Loaded	10000	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1168.32	1231
Intermodal-E	Loaded	10000	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	1.00%	474.88	686
Intermodal-E	Loaded	10000	Distributed (Head, Mid, Rear)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6527.3	7223
Intermodal-E	Loaded	10000	Distributed (Head, Mid, Rear)	20	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	1.00%	655.82	707
Intermodal-E	Loaded	10000	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3770.34	3793
Intermodal-E	Loaded	10000	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5442.79	5660
Intermodal-E	Loaded	10000	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2904.05	2942
Intermodal-E	Loaded	10000	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1894.18	2029
Intermodal-E	Loaded	10000	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4288.06	4471
Intermodal-E	Loaded	10000	Distributed (Head, Mid, Rear)	30	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	2104.91	2188
Intermodal-E	Loaded	10000	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2321.16	2394
Intermodal-E	Loaded	10000	Distributed (Head, Mid, Rear)	48	0.50%	Incline	<0.1%	0.00	0.00	< 10%	0.00%	4036.64	4134
Intermodal-E	Loaded	10000	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	8783.56	8876
Intermodal-E	Loaded	10000	Distributed (Head, Mid, Rear)	60	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	11706.14	11754
Intermodal-E	Loaded	10000	Distributed (Head, Mid, Rear)	60	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	8825.23	8856
Intermodal-E	Loaded	10000	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	7171.28	7266

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-A	Empty	15000	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	931.46	1019
Intermodal-A	Empty	15000	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	387.99	425
Intermodal-A	Empty	15000	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1055.53	1688
Intermodal-A	Empty	15000	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	577.52	712
Intermodal-A	Empty	15000	Distributed (Head, Mid, Rear)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5509.13	5648
Intermodal-A	Empty	15000	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4208.26	4354
Intermodal-A	Empty	15000	Distributed (Head, Mid, Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	1.00%	1149.31	1234
Intermodal-A	Empty	15000	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3738.85	3937
Intermodal-A	Empty	15000	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	2866.66	3259
Intermodal-A	Empty	15000	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1806.07	2062
Intermodal-A	Empty	15000	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3422.05	3538
Intermodal-A	Empty	15000	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2155.96	2359
Intermodal-A	Empty	15000	Distributed (Head, Mid, Rear)	52	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	4385.28	4559
Intermodal-A	Empty	15000	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6645.93	7304
Intermodal-A	Empty	15000	Distributed (Head, Mid, Rear)	60	0.50%	Incline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	5050.8	5117
Intermodal-A	Empty	15000	Distributed (Head, Mid, Rear)	60	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	8059.24	8243
Intermodal-A	Empty	15000	Distributed (Head, Mid, Rear)	60	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	6530.22	7152
Intermodal-A	Empty	15000	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	5765.19	5962

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-B	Empty	15000	Rear) Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	928.96	1041
Intermodal-B	Empty	15000	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	391.28	423
Intermodal-B	Empty	15000	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1054.77	1706
Intermodal-B	Empty	15000	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	580.33	711
Intermodal-B	Empty	15000	Distributed (Head, Mid, Rear)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5548.57	5766
Intermodal-B	Empty	15000	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4247.65	4405
Intermodal-B	Empty	15000	Distributed (Head, Mid, Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1128.93	1202
Intermodal-B	Empty	15000	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3732.11	3904
Intermodal-B	Empty	15000	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	2830.77	3220
Intermodal-B	Empty	15000	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1801.07	1895
Intermodal-B	Empty	15000	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3411.76	3526
Intermodal-B	Empty	15000	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2157.5	2348
Intermodal-B	Empty	15000	Distributed (Head, Mid, Rear)	52	1.00%	Crest	<0.1%	0.00	0.00	< 10%	0.00%	4395.79	4502
Intermodal-B	Empty	15000	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6654.45	7134
Intermodal-B	Empty	15000	Distributed (Head, Mid, Rear)	60	0.50%	Incline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	5019.13	5113
Intermodal-B	Empty	15000	Distributed (Head, Mid, Rear)	60	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	8064.66	8219
Intermodal-B	Empty	15000	Distributed (Head, Mid, Rear)	60	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	6558.7	7136

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-B	Empty	15000	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	5806.85	5973
Intermodal-C	Empty	15000	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	919.54	1024
Intermodal-C	Empty	15000	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	391.79	424
Intermodal-C	Empty	15000	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1071.41	1377
Intermodal-C	Empty	15000	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	574.98	698
Intermodal-C	Empty	15000	Distributed (Head, Mid, Rear)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5687.24	5950
Intermodal-C	Empty	15000	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4356.57	4534
Intermodal-C	Empty	15000	Distributed (Head, Mid, Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1136.2	1207
Intermodal-C	Empty	15000	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3809.91	3993
Intermodal-C	Empty	15000	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2694.62	2930
Intermodal-C	Empty	15000	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1811.58	1938
Intermodal-C	Empty	15000	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3483.39	3621
Intermodal-C	Empty	15000	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2184.14	2353
Intermodal-C	Empty	15000	Distributed (Head, Mid, Rear)	52	1.00%	Crest	<0.1%	0.00	0.00	< 10%	0.00%	4450.08	4505
Intermodal-C	Empty	15000	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6735.81	7296
Intermodal-C	Empty	15000	Distributed (Head, Mid, Rear)	60	0.50%	Incline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	5081.57	5188
Intermodal-C	Empty	15000	Distributed (Head, Mid, Rear)	60	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	8259.97	8398
Intermodal-C	Empty	15000	Distributed (Head, Mid, Rear)	60	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	6673.4	7317

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-C	Empty	15000	Rear) Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	5904.4	6059
Intermodal-D	Empty	15000	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	936.26	1023
Intermodal-D	Empty	15000	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	389.15	425
Intermodal-D	Empty	15000	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1062.52	1141
Intermodal-D	Empty	15000	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	575.14	714
Intermodal-D	Empty	15000	Distributed (Head, Mid, Rear)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5616.94	5881
Intermodal-D	Empty	15000	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4284.79	4432
Intermodal-D	Empty	15000	Distributed (Head, Mid, Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1120.85	1183
Intermodal-D	Empty	15000	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3774.99	3921
Intermodal-D	Empty	15000	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	2901.93	3274
Intermodal-D	Empty	15000	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1817.15	1902
Intermodal-D	Empty	15000	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3459.35	3586
Intermodal-D	Empty	15000	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2175.74	2360
Intermodal-D	Empty	15000	Distributed (Head, Mid, Rear)	52	1.00%	Crest	<0.1%	0.00	0.00	< 10%	0.00%	4415.91	4503
Intermodal-D	Empty	15000	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6723.53	7348
Intermodal-D	Empty	15000	Distributed (Head, Mid, Rear)	60	0.50%	Incline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	5047.82	5119
Intermodal-D	Empty	15000	Distributed (Head, Mid, Rear)	60	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	8169.76	8992

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-D	Empty	15000	Distributed (Head, Mid, Rear)	60	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	6640.82	7063
Intermodal-D	Empty	15000	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	5888.34	6064
Intermodal-E	Empty	15000	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	940.75	1017
Intermodal-E	Empty	15000	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	385.28	423
Intermodal-E	Empty	15000	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1057.63	1587
Intermodal-E	Empty	15000	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	582.9	713
Intermodal-E	Empty	15000	Distributed (Head, Mid, Rear)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5602.46	5810
Intermodal-E	Empty	15000	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4307.32	4503
Intermodal-E	Empty	15000	Distributed (Head, Mid, Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1135.34	1200
Intermodal-E	Empty	15000	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3769.62	3939
Intermodal-E	Empty	15000	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3001.8	3278
Intermodal-E	Empty	15000	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1807.77	1942
Intermodal-E	Empty	15000	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3453.27	3563
Intermodal-E	Empty	15000	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2182.24	2391
Intermodal-E	Empty	15000	Distributed (Head, Mid, Rear)	52	1.00%	Crest	<0.1%	0.00	0.00	< 10%	0.00%	4442.47	4501
Intermodal-E	Empty	15000	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6726.24	7309
Intermodal-E	Empty	15000	Distributed (Head, Mid, Rear)	60	0.50%	Incline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	5081.86	5187
Intermodal-E	Empty	15000	Distributed (Head, Mid, Rear)	60	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	8166.69	8723

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-E	Empty	15000	Rear) Distributed (Head, Mid, Rear)	60	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	6606.39	7071
Intermodal-E	Empty	15000	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	5839.02	6109
Intermodal-A	Loaded	15000	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	1122.74	1148
Intermodal-A	Loaded	15000	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	35.00%	414.45	674
Intermodal-A	Loaded	15000	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2676.43	2827
Intermodal-A	Loaded	15000	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 10%	0.00%	728.19	1001
Intermodal-A	Loaded	15000	Distributed (Head, Mid, Rear)	15	2.20%	Decline	1	903.20	1472.00	< 0.1%	0.00%	-69.45	-43
Intermodal-A	Loaded	15000	Distributed (Head, Mid, Rear)	15	2.80%	Decline	1	844.10	1150.00	< 0.1%	0.00%	-68.15	-45
Intermodal-A	Loaded	15000	Distributed (Head, Mid, Rear)	21	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	815.45	907
Intermodal-A	Loaded	15000	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	12490.8	12867
Intermodal-A	Loaded	15000	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	4098.77	4130
Intermodal-A	Loaded	15000	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	2585.69	2716
Intermodal-A	Loaded	15000	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	8750.51	8991
Intermodal-A	Loaded	15000	Distributed (Head, Mid, Rear)	30	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	3178.75	3244
Intermodal-A	Loaded	15000	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	3465.95	3780
Intermodal-A	Loaded	15000	Distributed (Head, Mid, Rear)	50	0.50%	Incline	<0.1%	0.00	0.00	> 50%	0.00%	6000.54	6093
Intermodal-A	Loaded	15000	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	12290.34	12355

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-A	Loaded	15000	Distributed (Head, Mid, Rear)	60	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	24564.42	25159
Intermodal-A	Loaded	15000	Distributed (Head, Mid, Rear)	60	1.00%	Trough	<0.1%	0.00	0.00	> 50%	65.00%	10694	10756
Intermodal-A	Loaded	15000	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	10343.93	10516
Intermodal-B	Loaded	15000	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1059.96	1136
Intermodal-B	Loaded	15000	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	22.00%	374.63	510
Intermodal-B	Loaded	15000	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1628.08	1706
Intermodal-B	Loaded	15000	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	568.56	619
Intermodal-B	Loaded	15000	Distributed (Head, Mid, Rear)	15	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7074.06	7390
Intermodal-B	Loaded	15000	Distributed (Head, Mid, Rear)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7465.53	8368
Intermodal-B	Loaded	15000	Distributed (Head, Mid, Rear)	21	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	779.21	838
Intermodal-B	Loaded	15000	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6696.08	6924
Intermodal-B	Loaded	15000	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3773.64	4035
Intermodal-B	Loaded	15000	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	2218.32	2277
Intermodal-B	Loaded	15000	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5205.79	5340
Intermodal-B	Loaded	15000	Distributed (Head, Mid, Rear)	30	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	2661.32	2769
Intermodal-B	Loaded	15000	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2748.92	2875
Intermodal-B	Loaded	15000	Distributed (Head, Mid, Rear)	50	0.50%	Incline	<0.1%	0.00	0.00	> 50%	0.00%	4838.33	4986
Intermodal-B	Loaded	15000	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	9669.25	10312

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-B	Loaded	15000	Rear) Distributed (Head, Mid, Rear)	60	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	13635.81	13776
Intermodal-B	Loaded	15000	Distributed (Head, Mid, Rear)	60	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	10066.46	10228
Intermodal-B	Loaded	15000	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	7923.74	8093
Intermodal-C	Loaded	15000	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1069.97	1148
Intermodal-C	Loaded	15000	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	14.00%	383.03	457
Intermodal-C	Loaded	15000	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1715.69	1812
Intermodal-C	Loaded	15000	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	584.75	800
Intermodal-C	Loaded	15000	Distributed (Head, Mid, Rear)	15	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7783.44	8180
Intermodal-C	Loaded	15000	Distributed (Head, Mid, Rear)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	9739.54	10728
Intermodal-C	Loaded	15000	Distributed (Head, Mid, Rear)	21	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	2.00%	784.41	872
Intermodal-C	Loaded	15000	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7229.62	7452
Intermodal-C	Loaded	15000	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3913.19	4041
Intermodal-C	Loaded	15000	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	2260.29	2314
Intermodal-C	Loaded	15000	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5513.09	5656
Intermodal-C	Loaded	15000	Distributed (Head, Mid, Rear)	30	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	2733.81	2875
Intermodal-C	Loaded	15000	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2836.15	3008
Intermodal-C	Loaded	15000	Distributed (Head, Mid, Rear)	50	0.50%	Incline	<0.1%	0.00	0.00	> 50%	0.00%	4972.16	4996

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-C	Loaded	15000	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	10292.12	10763
Intermodal-C	Loaded	15000	Distributed (Head, Mid, Rear)	60	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	13889.59	13955
Intermodal-C	Loaded	15000	Distributed (Head, Mid, Rear)	60	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	10523.77	10753
Intermodal-C	Loaded	15000	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	8165.2	8292
Intermodal-D	Loaded	15000	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1072.19	1142
Intermodal-D	Loaded	15000	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	4.00%	408.94	483
Intermodal-D	Loaded	15000	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1755.01	1870
Intermodal-D	Loaded	15000	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	593.74	623
Intermodal-D	Loaded	15000	Distributed (Head, Mid, Rear)	15	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	8068.1	8434
Intermodal-D	Loaded	15000	Distributed (Head, Mid, Rear)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	11223.92	12042
Intermodal-D	Loaded	15000	Distributed (Head, Mid, Rear)	21	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	1.00%	773.22	843
Intermodal-D	Loaded	15000	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7460.25	7751
Intermodal-D	Loaded	15000	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3937.64	4040
Intermodal-D	Loaded	15000	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	2267.95	2356
Intermodal-D	Loaded	15000	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5640.92	5830
Intermodal-D	Loaded	15000	Distributed (Head, Mid, Rear)	30	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	2736.84	2960
Intermodal-D	Loaded	15000	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2856.52	3019
Intermodal-D	Loaded	15000	Distributed (Head, Mid, Rear)	50	0.50%	Incline	<0.1%	0.00	0.00	> 50%	0.00%	4963.81	5062

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-D	Loaded	15000	Rear) Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	10340.5	10940
Intermodal-D	Loaded	15000	Distributed (Head, Mid, Rear)	60	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	15094.8	15574
Intermodal-D	Loaded	15000	Distributed (Head, Mid, Rear)	60	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	10541.24	10753
Intermodal-D	Loaded	15000	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	8258.55	8448
Intermodal-E	Loaded	15000	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1056.86	1141
Intermodal-E	Loaded	15000	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	11.00%	401.27	600
Intermodal-E	Loaded	15000	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1632.12	1728
Intermodal-E	Loaded	15000	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	571.39	621
Intermodal-E	Loaded	15000	Distributed (Head, Mid, Rear)	15	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7099.62	7431
Intermodal-E	Loaded	15000	Distributed (Head, Mid, Rear)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7516.62	8227
Intermodal-E	Loaded	15000	Distributed (Head, Mid, Rear)	21	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	1.00%	776.21	831
Intermodal-E	Loaded	15000	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6711.53	6947
Intermodal-E	Loaded	15000	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3766.63	3992
Intermodal-E	Loaded	15000	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	2234.2	2274
Intermodal-E	Loaded	15000	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5228.63	5410
Intermodal-E	Loaded	15000	Distributed (Head, Mid, Rear)	30	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	2644.13	2785
Intermodal-E	Loaded	15000	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2753.16	2920

Train Type	Train Load	Train Length (ft)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Intermodal-E	Loaded	15000	Distributed (Head, Mid, Rear)	50	0.50%	Incline	<0.1%	0.00	0.00	> 50%	0.00%	4847.76	4982
Intermodal-E	Loaded	15000	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	9667.76	10316
Intermodal-E	Loaded	15000	Distributed (Head, Mid, Rear)	60	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	13643.65	13777
Intermodal-E	Loaded	15000	Distributed (Head, Mid, Rear)	60	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	10083.57	10234
Intermodal-E	Loaded	15000	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	7943.98	8093

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-A	0	Head end only (SD70s)	10	0.50%	Decline	> 1.0%	42.00	67.00	< 0.1%	0.00%	220.25	382.00
Manifest-A	0	Head end only (SD70s)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	146.11	183.00
Manifest-A	0	Head end only (SD70s)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	328.16	389.00
Manifest-A	0	Head end only (SD70s)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	7.00%	139.57	333.00
Manifest-A	0	Head end only (SD70s)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1043.91	1580.00
Manifest-A	0	Head end only (SD70s)	20	2.80%	Decline	> 1.0%	36.50	47.00	> 50%	8.00%	734.64	953.00
Manifest-A	0	Head end only (SD70s)	25	1.50%	Incline	> 1.0%	42.75	74.00	< 0.1%	11.00%	409.64	585.00
Manifest-A	0	Head end only (SD70s)	25	1.70%	Decline	<0.1%	0.00	0.00	< 10%	9.00%	770.61	854.00
Manifest-A	0	Head end only (SD70s)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	1030.33	1424.00
Manifest-A	0	Head end only (SD70s)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	2.00%	782.31	848.00
Manifest-A	0	Head end only (SD70s)	30	1.10%	Decline	< 0.5%	22.00	22.00	> 10%, < 25%	1.00%	1409.97	1918.00
Manifest-A	0	Head end only (SD70s)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	2.00%	883.35	1313.00
Manifest-A	0	Head end only (SD70s)	55	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3556.51	4940.00
Manifest-A	0	Head end only (SD70s)	55	1.00%	Crest	<0.1%	0.00	0.00	< 10%	4.00%	2101.62	2538.00
Manifest-A	0	Head end only (SD70s)	55	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	4284.44	5222.00
Manifest-A	0	Head end only (SD70s)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	7.00%	4546.02	5422.00
Manifest-A	0	Head end only (SD70s)	60	0.50%	Incline	<0.1%	0.00	0.00	< 10%	4.00%	2538.55	2719.00
Manifest-A	0	Head end only (SD70s)	60	0.00%	Flat	<0.1%	0.00	0.00	> 25%, < 50%	4.00%	2882.05	4390.00
Manifest-A	0	Head end only (GP40s)	10	0.50%	Decline	< 0.5%	8.00	8.00	< 0.1%	0.00%	312.62	429.00
Manifest-A	0	Head end only (GP40s)	10	0.50%	Incline	> 1.0%	29.00	30.00	< 0.1%	0.00%	110.31	226.00
Manifest-A	0	Head end only (GP40s)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	622.49	840.00
Manifest-A	0	Head end only (GP40s)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	133.35	318.00
Manifest-A	0	Head end only (GP40s)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1236.36	1562.00
Manifest-A	0	Head end only (GP40s)	20	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1621.49	1979.00
Manifest-A	0	Head end only (GP40s)	25	1.50%	Incline	> 1.0%	16.00	26.00	< 10%	1.00%	416.23	742.00
Manifest-A	0	Head end only (GP40s)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1298.71	1933.00
Manifest-A	0	Head end only (GP40s)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	1083.41	1427.00
Manifest-A	0	Head end only (GP40s)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	1.00%	679.76	835.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-A	0	Head end only (GP40s)	30	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	1406.29	2057.00
Manifest-A	0	Head end only (GP40s)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	1.00%	796.37	1317.00
Manifest-A	0	Head end only (GP40s)	55	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3352.27	4522.00
Manifest-A	0	Head end only (GP40s)	55	1.00%	Crest	<0.1%	0.00	0.00	> 50%	0.00%	2178.99	2563.00
Manifest-A	0	Head end only (GP40s)	55	1.00%	Trough	<0.1%	0.00	0.00	> 50%	63.00%	2986.44	3201.00
Manifest-A	0	Head end only (GP40s)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	1.00%	3804.33	5345.00
Manifest-A	0	Head end only (GP40s)	60	0.50%	Incline	<0.1%	0.00	0.00	> 50%	0.00%	2520.51	2809.00
Manifest-A	0	Head end only (GP40s)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	2.00%	2693.72	2996.00
Manifest-B	0	Head end only (SD70s)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	221.43	348.00
Manifest-B	0	Head end only (SD70s)	10	0.50%	Incline	< 0.5%	10.00	10.00	< 0.1%	0.00%	147.12	197.00
Manifest-B	0	Head end only (SD70s)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	332.81	391.00
Manifest-B	0	Head end only (SD70s)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	152.51	275.00
Manifest-B	0	Head end only (SD70s)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1046.98	1533.00
Manifest-B	0	Head end only (SD70s)	20	2.80%	Decline	<0.1%	0.00	0.00	> 50%	1.00%	827.09	957.00
Manifest-B	0	Head end only (SD70s)	25	1.50%	Incline	> 1.0%	23.00	23.00	< 0.1%	14.00%	436.03	612.00
Manifest-B	0	Head end only (SD70s)	25	1.70%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	775.83	884.00
Manifest-B	0	Head end only (SD70s)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	1.00%	1054.63	1347.00
Manifest-B	0	Head end only (SD70s)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	1.00%	803.19	889.00
Manifest-B	0	Head end only (SD70s)	30	1.10%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	1448.76	2138.00
Manifest-B	0	Head end only (SD70s)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	1.00%	892.47	1317.00
Manifest-B	0	Head end only (SD70s)	55	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3633.69	4926.00
Manifest-B	0	Head end only (SD70s)	55	1.00%	Crest	<0.1%	0.00	0.00	< 10%	0.00%	2160.51	2523.00
Manifest-B	0	Head end only (SD70s)	55	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	4439.96	5447.00
Manifest-B	0	Head end only (SD70s)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	2.00%	4542.97	5341.00
Manifest-B	0	Head end only (SD70s)	60	0.50%	Incline	<0.1%	0.00	0.00	< 10%	0.00%	2586.13	2713.00
Manifest-B	0	Head end only (SD70s)	60	0.00%	Flat	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	2943.10	4300.00
Manifest-B	0	Head end only (GP40s)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	313.17	427.00
Manifest-B	0	Head end only (GP40s)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	121.62	231.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-B	0	Head end only (GP40s)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	273.72	439.00
Manifest-B	0	Head end only (GP40s)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	145.77	320.00
Manifest-B	0	Head end only (GP40s)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1257.78	1590.00
Manifest-B	0	Head end only (GP40s)	20	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	787.18	870.00
Manifest-B	0	Head end only (GP40s)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	432.62	733.00
Manifest-B	0	Head end only (GP40s)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	797.07	1109.00
Manifest-B	0	Head end only (GP40s)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	1134.66	1433.00
Manifest-B	0	Head end only (GP40s)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	716.42	891.00
Manifest-B	0	Head end only (GP40s)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	1.00%	1135.36	1296.00
Manifest-B	0	Head end only (GP40s)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	807.98	1317.00
Manifest-B	0	Head end only (GP40s)	55	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3316.73	4446.00
Manifest-B	0	Head end only (GP40s)	55	1.00%	Crest	<0.1%	0.00	0.00	> 50%	0.00%	2151.80	2479.00
Manifest-B	0	Head end only (GP40s)	55	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	3851.12	4861.00
Manifest-B	0	Head end only (GP40s)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3842.06	5345.00
Manifest-B	0	Head end only (GP40s)	60	0.50%	Incline	<0.1%	0.00	0.00	> 50%	0.00%	2557.98	2976.00
Manifest-B	0	Head end only (GP40s)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	2803.81	3055.00
Manifest-A	3	Head end only (SD70s)	10	0.50%	Decline	< 0.5%	10.00	10.00	< 0.1%	2.00%	298.14	434.00
Manifest-A	3	Head end only (SD70s)	10	0.50%	Incline	> 1.0%	3.00	6.00	< 0.1%	28.00%	163.24	215.00
Manifest-A	3	Head end only (SD70s)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	6.00%	290.05	595.00
Manifest-A	3	Head end only (SD70s)	10	0.00%	Flat	> 1.0%	11.00	11.00	< 0.1%	5.00%	238.91	370.00
Manifest-A	3	Head end only (SD70s)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	40.00%	1214.29	1287.00
Manifest-A	3	Head end only (SD70s)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1295.89	1557.00
Manifest-A	3	Head end only (SD70s)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	36.00%	537.33	706.00
Manifest-A	3	Head end only (SD70s)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1714.56	2053.00
Manifest-A	3	Head end only (SD70s)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	4.00%	1443.36	1923.00
Manifest-A	3	Head end only (SD70s)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	33.00%	960.22	1181.00
Manifest-A	3	Head end only (SD70s)	30	1.10%	Decline	<0.1%	0.00	0.00	< 10%	2.00%	1781.13	2208.00
Manifest-A	3	Head end only (SD70s)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	80.00%	1085.51	1226.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-A	3	Head end only (SD70s)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3843.65	4600.00
Manifest-A	3	Head end only (SD70s)	45	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	9.00%	1953.89	2261.00
Manifest-A	3	Head end only (SD70s)	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	1.00%	3658.41	3867.00
Manifest-A	3	Head end only (SD70s)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	100.00%	5622.76	5861.00
Manifest-A	3	Head end only (SD70s)	60	0.50%	Incline	<0.1%	0.00	0.00	> 50%	91.00%	3944.81	4125.00
Manifest-A	3	Head end only (SD70s)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	37.00%	4712.71	5090.00
Manifest-A	3	Head end only (GP40s)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	7.00%	173.43	196.00
Manifest-A	3	Head end only (GP40s)	10	0.50%	Incline	> 1.0%	6.00	11.00	< 0.1%	9.00%	131.23	189.00
Manifest-A	3	Head end only (GP40s)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	2.00%	220.77	251.00
Manifest-A	3	Head end only (GP40s)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	5.00%	153.09	316.00
Manifest-A	3	Head end only (GP40s)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	15.00%	1112.28	1261.00
Manifest-A	3	Head end only (GP40s)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	1.00%	1191.69	1441.00
Manifest-A	3	Head end only (GP40s)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	2.00%	631.57	802.00
Manifest-A	3	Head end only (GP40s)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1761.94	2065.00
Manifest-A	3	Head end only (GP40s)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	1.00%	1737.12	1957.00
Manifest-A	3	Head end only (GP40s)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	7.00%	1016.17	1215.00
Manifest-A	3	Head end only (GP40s)	30	1.10%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	1900.87	2269.00
Manifest-A	3	Head end only (GP40s)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	73.00%	1205.16	1557.00
Manifest-A	3	Head end only (GP40s)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4393.71	4832.00
Manifest-A	3	Head end only (GP40s)	45	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	2160.14	2390.00
Manifest-A	3	Head end only (GP40s)	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	4163.95	4344.00
Manifest-A	3	Head end only (GP40s)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	100.00%	5619.85	5855.00
Manifest-A	3	Head end only (GP40s)	60	0.50%	Incline	<0.1%	0.00	0.00	> 50%	98.00%	4223.03	4387.00
Manifest-A	3	Head end only (GP40s)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	54.00%	5309.79	5709.00
Manifest-B	3	Head end only (SD70s)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	318.41	555.00
Manifest-B	3	Head end only (SD70s)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	148.43	215.00
Manifest-B	3	Head end only (SD70s)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	311.09	378.00
Manifest-B	3	Head end only (SD70s)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	4.00%	150.78	249.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-B	3	Head end only (SD70s)	15	2.80%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	584.20	1199.00
Manifest-B	3	Head end only (SD70s)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	985.36	1352.00
Manifest-B	3	Head end only (SD70s)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	11.00%	451.40	600.00
Manifest-B	3	Head end only (SD70s)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1296.38	1652.00
Manifest-B	3	Head end only (SD70s)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	1082.36	1422.00
Manifest-B	3	Head end only (SD70s)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	2.00%	879.38	1173.00
Manifest-B	3	Head end only (SD70s)	30	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	1265.24	1855.00
Manifest-B	3	Head end only (SD70s)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	5.00%	847.97	1271.00
Manifest-B	3	Head end only (SD70s)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	54.00%	2590.97	2772.00
Manifest-B	3	Head end only (SD70s)	45	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	1566.31	1885.00
Manifest-B	3	Head end only (SD70s)	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	18.00%	3059.02	3273.00
Manifest-B	3	Head end only (SD70s)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	7.00%	4623.46	5337.00
Manifest-B	3	Head end only (SD70s)	60	0.50%	Incline	<0.1%	0.00	0.00	> 50%	0.00%	3287.96	3431.00
Manifest-B	3	Head end only (SD70s)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	3294.06	4401.00
Manifest-B	3	Head end only (GP40s)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	276.67	357.00
Manifest-B	3	Head end only (GP40s)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	121.76	148.00
Manifest-B	3	Head end only (GP40s)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	167.35	201.00
Manifest-B	3	Head end only (GP40s)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	155.54	317.00
Manifest-B	3	Head end only (GP40s)	15	2.80%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	609.33	709.00
Manifest-B	3	Head end only (GP40s)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1071.75	1393.00
Manifest-B	3	Head end only (GP40s)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	483.28	643.00
Manifest-B	3	Head end only (GP40s)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	5.00%	969.73	1072.00
Manifest-B	3	Head end only (GP40s)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	1084.28	1336.00
Manifest-B	3	Head end only (GP40s)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	842.07	935.00
Manifest-B	3	Head end only (GP40s)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	12.00%	1221.45	1339.00
Manifest-B	3	Head end only (GP40s)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	853.91	1065.00
Manifest-B	3	Head end only (GP40s)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	41.00%	2766.09	2911.00
Manifest-B	3	Head end only (GP40s)	45	1.00%	Crest	<0.1%	0.00	0.00	< 10%	0.00%	1631.28	1933.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-B	3	Head end only (GP40s)	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	10.00%	2874.51	3204.00
Manifest-B	3	Head end only (GP40s)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4062.33	5167.00
Manifest-B	3	Head end only (GP40s)	60	0.50%	Incline	<0.1%	0.00	0.00	> 50%	0.00%	3273.59	3587.00
Manifest-B	3	Head end only (GP40s)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	3408.21	3597.00
Manifest-C	3	Head end only (SD70s)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	3.00%	273.53	418.00
Manifest-C	3	Head end only (SD70s)	10	0.50%	Incline	> 1.0%	4.33	7.00	< 0.1%	22.00%	167.98	217.00
Manifest-C	3	Head end only (SD70s)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	4.00%	297.53	582.00
Manifest-C	3	Head end only (SD70s)	10	0.00%	Flat	< 0.5%	3.00	3.00	< 0.1%	3.00%	244.45	365.00
Manifest-C	3	Head end only (SD70s)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	62.00%	1216.02	1269.00
Manifest-C	3	Head end only (SD70s)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	2.00%	1135.96	1455.00
Manifest-C	3	Head end only (SD70s)	25	1.50%	Incline	> 1.0%	17.00	32.00	< 0.1%	26.00%	543.09	676.00
Manifest-C	3	Head end only (SD70s)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1611.76	1953.00
Manifest-C	3	Head end only (SD70s)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	2.00%	1426.42	1856.00
Manifest-C	3	Head end only (SD70s)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	23.00%	959.79	1182.00
Manifest-C	3	Head end only (SD70s)	30	1.10%	Decline	< 0.5%	2.00	2.00	< 10%	2.00%	1664.79	2302.00
Manifest-C	3	Head end only (SD70s)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	73.00%	1110.44	1329.00
Manifest-C	3	Head end only (SD70s)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	1.00%	3728.25	4562.00
Manifest-C	3	Head end only (SD70s)	45	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	9.00%	1963.11	2213.00
Manifest-C	3	Head end only (SD70s)	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	3640.31	3821.00
Manifest-C	3	Head end only (SD70s)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	100.00%	5617.95	5868.00
Manifest-C	3	Head end only (SD70s)	60	0.50%	Incline	<0.1%	0.00	0.00	> 50%	89.00%	3976.08	4216.00
Manifest-C	3	Head end only (SD70s)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	48.00%	4695.11	5086.00
Manifest-C	3	Head end only (GP40s)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	5.00%	173.90	198.00
Manifest-C	3	Head end only (GP40s)	10	0.50%	Incline	> 1.0%	3.50	4.00	< 0.1%	9.00%	131.46	192.00
Manifest-C	3	Head end only (GP40s)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	2.00%	223.31	263.00
Manifest-C	3	Head end only (GP40s)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	7.00%	163.64	313.00
Manifest-C	3	Head end only (GP40s)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	18.00%	1191.07	1284.00
Manifest-C	3	Head end only (GP40s)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	2.00%	1172.49	1486.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-C	3	Head end only (GP40s)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	8.00%	636.02	815.00
Manifest-C	3	Head end only (GP40s)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1777.12	2028.00
Manifest-C	3	Head end only (GP40s)	30	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	1757.43	1992.00
Manifest-C	3	Head end only (GP40s)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	3.00%	1028.76	1250.00
Manifest-C	3	Head end only (GP40s)	30	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	1922.76	2280.00
Manifest-C	3	Head end only (GP40s)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	67.00%	1194.39	1556.00
Manifest-C	3	Head end only (GP40s)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4343.60	4818.00
Manifest-C	3	Head end only (GP40s)	45	1.00%	Crest	<0.1%	0.00	0.00	< 10%	0.00%	2150.67	2397.00
Manifest-C	3	Head end only (GP40s)	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	4173.42	4906.00
Manifest-C	3	Head end only (GP40s)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	100.00%	5611.59	5777.00
Manifest-C	3	Head end only (GP40s)	60	0.50%	Incline	<0.1%	0.00	0.00	> 50%	93.00%	4162.67	4472.00
Manifest-C	3	Head end only (GP40s)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	53.00%	5343.95	5699.00
Manifest-D	3	Head end only (SD70s)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	1.00%	254.69	551.00
Manifest-D	3	Head end only (SD70s)	10	0.50%	Incline	> 1.0%	6.67	9.00	< 0.1%	3.00%	126.91	214.00
Manifest-D	3	Head end only (SD70s)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	199.92	362.00
Manifest-D	3	Head end only (SD70s)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	11.00%	145.39	328.00
Manifest-D	3	Head end only (SD70s)	15	2.80%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	537.99	640.00
Manifest-D	3	Head end only (SD70s)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	916.30	1331.00
Manifest-D	3	Head end only (SD70s)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	27.00%	459.91	633.00
Manifest-D	3	Head end only (SD70s)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	49.00%	928.75	999.00
Manifest-D	3	Head end only (SD70s)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	11.00%	1093.02	1544.00
Manifest-D	3	Head end only (SD70s)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	27.00%	822.00	896.00
Manifest-D	3	Head end only (SD70s)	30	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	1326.55	1993.00
Manifest-D	3	Head end only (SD70s)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	8.00%	865.02	1100.00
Manifest-D	3	Head end only (SD70s)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	88.00%	2678.80	2782.00
Manifest-D	3	Head end only (SD70s)	45	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	1546.30	1803.00
Manifest-D	3	Head end only (SD70s)	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	81.00%	2969.31	3267.00
Manifest-D	3	Head end only (SD70s)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	32.00%	4730.09	5423.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-D	3	Head end only (SD70s)	60	0.50%	Incline	<0.1%	0.00	0.00	> 50%	8.00%	3314.02	3595.00
Manifest-D	3	Head end only (SD70s)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	3268.90	4560.00
Manifest-D	3	Head end only (GP40s)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	270.48	356.00
Manifest-D	3	Head end only (GP40s)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	118.88	170.00
Manifest-D	3	Head end only (GP40s)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	167.21	201.00
Manifest-D	3	Head end only (GP40s)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	142.91	349.00
Manifest-D	3	Head end only (GP40s)	15	2.80%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	601.89	717.00
Manifest-D	3	Head end only (GP40s)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1151.91	1325.00
Manifest-D	3	Head end only (GP40s)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	6.00%	495.66	718.00
Manifest-D	3	Head end only (GP40s)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	41.00%	1016.72	1106.00
Manifest-D	3	Head end only (GP40s)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	8.00%	1192.71	1508.00
Manifest-D	3	Head end only (GP40s)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	4.00%	849.39	905.00
Manifest-D	3	Head end only (GP40s)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	52.00%	1165.72	1251.00
Manifest-D	3	Head end only (GP40s)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	870.30	1182.00
Manifest-D	3	Head end only (GP40s)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	85.00%	2753.69	2907.00
Manifest-D	3	Head end only (GP40s)	45	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	1671.23	1937.00
Manifest-D	3	Head end only (GP40s)	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	47.00%	2988.83	3269.00
Manifest-D	3	Head end only (GP40s)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	12.00%	4196.74	5166.00
Manifest-D	3	Head end only (GP40s)	60	0.50%	Incline	<0.1%	0.00	0.00	> 50%	1.00%	3480.33	3763.00
Manifest-D	3	Head end only (GP40s)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	3419.40	3601.00
Manifest-E	3	Head end only (SD70s)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	3.00%	300.18	484.00
Manifest-E	3	Head end only (SD70s)	10	0.50%	Incline	> 1.0%	3.00	3.00	< 0.1%	22.00%	166.73	211.00
Manifest-E	3	Head end only (SD70s)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	4.00%	317.82	600.00
Manifest-E	3	Head end only (SD70s)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	1.00%	262.29	388.00
Manifest-E	3	Head end only (SD70s)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	62.00%	1215.20	1275.00
Manifest-E	3	Head end only (SD70s)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1239.68	1483.00
Manifest-E	3	Head end only (SD70s)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	36.00%	539.45	651.00
Manifest-E	3	Head end only (SD70s)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1733.82	2054.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-E	3	Head end only (SD70s)	30	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	1547.13	1984.00
Manifest-E	3	Head end only (SD70s)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	20.00%	984.11	1219.00
Manifest-E	3	Head end only (SD70s)	30	1.10%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	1839.29	2244.00
Manifest-E	3	Head end only (SD70s)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	77.00%	1119.67	1265.00
Manifest-E	3	Head end only (SD70s)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3755.32	4570.00
Manifest-E	3	Head end only (SD70s)	45	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	6.00%	1973.35	2181.00
Manifest-E	3	Head end only (SD70s)	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	3633.60	3860.00
Manifest-E	3	Head end only (SD70s)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	97.00%	5630.55	5860.00
Manifest-E	3	Head end only (SD70s)	60	0.50%	Incline	<0.1%	0.00	0.00	> 50%	89.00%	3985.52	4051.00
Manifest-E	3	Head end only (SD70s)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	48.00%	4718.89	5015.00
Manifest-E	3	Head end only (GP40s)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	178.87	204.00
Manifest-E	3	Head end only (GP40s)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	8.00%	135.04	187.00
Manifest-E	3	Head end only (GP40s)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	227.79	263.00
Manifest-E	3	Head end only (GP40s)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	9.00%	165.51	314.00
Manifest-E	3	Head end only (GP40s)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	31.00%	1197.77	1283.00
Manifest-E	3	Head end only (GP40s)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1187.42	1494.00
Manifest-E	3	Head end only (GP40s)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	1.00%	638.36	820.00
Manifest-E	3	Head end only (GP40s)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1782.36	2029.00
Manifest-E	3	Head end only (GP40s)	30	0.50%	Decline	<0.1%	0.00	0.00	< 10%	1.00%	1652.85	1966.00
Manifest-E	3	Head end only (GP40s)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	8.00%	1033.36	1209.00
Manifest-E	3	Head end only (GP40s)	30	1.10%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	1863.46	2309.00
Manifest-E	3	Head end only (GP40s)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	57.00%	1211.69	1557.00
Manifest-E	3	Head end only (GP40s)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4368.34	4957.00
Manifest-E	3	Head end only (GP40s)	45	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	2155.96	2360.00
Manifest-E	3	Head end only (GP40s)	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	4179.82	5111.00
Manifest-E	3	Head end only (GP40s)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	100.00%	5604.64	5945.00
Manifest-E	3	Head end only (GP40s)	60	0.50%	Incline	<0.1%	0.00	0.00	> 50%	94.00%	4166.98	4306.00
Manifest-E	3	Head end only (GP40s)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	51.00%	5310.67	5706.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-F	3	Head end only (SD70s)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	288.23	441.00
Manifest-F	3	Head end only (SD70s)	10	0.50%	Incline	> 1.0%	6.33	16.00	< 0.1%	19.00%	165.07	223.00
Manifest-F	3	Head end only (SD70s)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	1.00%	365.06	597.00
Manifest-F	3	Head end only (SD70s)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	3.00%	242.46	367.00
Manifest-F	3	Head end only (SD70s)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	63.00%	1215.14	1262.00
Manifest-F	3	Head end only (SD70s)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1191.48	1472.00
Manifest-F	3	Head end only (SD70s)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	29.00%	553.33	767.00
Manifest-F	3	Head end only (SD70s)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	1.00%	1649.86	2065.00
Manifest-F	3	Head end only (SD70s)	30	0.50%	Decline	<0.1%	0.00	0.00	< 10%	1.00%	1483.78	1897.00
Manifest-F	3	Head end only (SD70s)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	20.00%	958.88	1207.00
Manifest-F	3	Head end only (SD70s)	30	1.10%	Decline	<0.1%	0.00	0.00	< 10%	1.00%	1803.58	2244.00
Manifest-F	3	Head end only (SD70s)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	67.00%	1133.60	1431.00
Manifest-F	3	Head end only (SD70s)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3766.49	4525.00
Manifest-F	3	Head end only (SD70s)	45	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	8.00%	1953.26	2211.00
Manifest-F	3	Head end only (SD70s)	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	3663.68	4702.00
Manifest-F	3	Head end only (SD70s)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	100.00%	5616.78	5860.00
Manifest-F	3	Head end only (SD70s)	60	0.50%	Incline	<0.1%	0.00	0.00	> 50%	92.00%	3992.43	4123.00
Manifest-F	3	Head end only (SD70s)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	53.00%	4727.60	5093.00
Manifest-F	3	Head end only (GP40s)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	3.00%	181.16	365.00
Manifest-F	3	Head end only (GP40s)	10	0.50%	Incline	> 1.0%	6.00	6.00	< 0.1%	6.00%	134.06	189.00
Manifest-F	3	Head end only (GP40s)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	4.00%	223.76	263.00
Manifest-F	3	Head end only (GP40s)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	3.00%	183.13	313.00
Manifest-F	3	Head end only (GP40s)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	30.00%	1199.17	1260.00
Manifest-F	3	Head end only (GP40s)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1210.28	1488.00
Manifest-F	3	Head end only (GP40s)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	6.00%	650.10	821.00
Manifest-F	3	Head end only (GP40s)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1749.41	2008.00
Manifest-F	3	Head end only (GP40s)	30	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	1748.08	1984.00
Manifest-F	3	Head end only (GP40s)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	5.00%	1036.90	1255.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-F	3	Head end only (GP40s)	30	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	1940.90	2294.00
Manifest-F	3	Head end only (GP40s)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	67.00%	1185.50	1318.00
Manifest-F	3	Head end only (GP40s)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4347.93	4887.00
Manifest-F	3	Head end only (GP40s)	45	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	2151.74	2376.00
Manifest-F	3	Head end only (GP40s)	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	4248.51	5131.00
Manifest-F	3	Head end only (GP40s)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	100.00%	5611.28	5775.00
Manifest-F	3	Head end only (GP40s)	60	0.50%	Incline	<0.1%	0.00	0.00	> 50%	97.00%	4179.29	4387.00
Manifest-F	3	Head end only (GP40s)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	60.00%	5328.83	5705.00
Manifest-G	3	Head end only (SD70s)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	1.00%	304.15	456.00
Manifest-G	3	Head end only (SD70s)	10	0.50%	Incline	> 1.0%	13.80	41.00	< 0.1%	29.00%	163.02	213.00
Manifest-G	3	Head end only (SD70s)	10	1.10%	Decline	<0.1%	0.00	0.00	< 10%	5.00%	311.35	611.00
Manifest-G	3	Head end only (SD70s)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	265.70	363.00
Manifest-G	3	Head end only (SD70s)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	34.00%	1211.46	1284.00
Manifest-G	3	Head end only (SD70s)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1233.43	1513.00
Manifest-G	3	Head end only (SD70s)	25	1.50%	Incline	> 1.0%	9.33	19.00	< 0.1%	45.00%	521.30	704.00
Manifest-G	3	Head end only (SD70s)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1718.20	2048.00
Manifest-G	3	Head end only (SD70s)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	1563.48	1835.00
Manifest-G	3	Head end only (SD70s)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	31.00%	924.93	1080.00
Manifest-G	3	Head end only (SD70s)	30	1.10%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	1846.45	2246.00
Manifest-G	3	Head end only (SD70s)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	77.00%	1094.72	1270.00
Manifest-G	3	Head end only (SD70s)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3702.46	4301.00
Manifest-G	3	Head end only (SD70s)	45	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	4.00%	1958.50	2199.00
Manifest-G	3	Head end only (SD70s)	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	3502.46	3772.00
Manifest-G	3	Head end only (SD70s)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	100.00%	5613.30	5857.00
Manifest-G	3	Head end only (SD70s)	60	0.50%	Incline	<0.1%	0.00	0.00	> 50%	95.00%	3967.37	4051.00
Manifest-G	3	Head end only (SD70s)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	37.00%	4672.66	5006.00
Manifest-G	3	Head end only (GP40s)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	7.00%	165.04	192.00
Manifest-G	3	Head end only (GP40s)	10	0.50%	Incline	> 1.0%	3.25	7.00	< 0.1%	17.00%	128.98	185.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-G	3	Head end only (GP40s)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	1.00%	214.67	246.00
Manifest-G	3	Head end only (GP40s)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	14.00%	156.10	304.00
Manifest-G	3	Head end only (GP40s)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	15.00%	1205.77	1279.00
Manifest-G	3	Head end only (GP40s)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	1.00%	1212.23	1473.00
Manifest-G	3	Head end only (GP40s)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	6.00%	624.80	778.00
Manifest-G	3	Head end only (GP40s)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1731.73	2023.00
Manifest-G	3	Head end only (GP40s)	30	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	1666.25	1956.00
Manifest-G	3	Head end only (GP40s)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	2.00%	1071.14	1234.00
Manifest-G	3	Head end only (GP40s)	30	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	1881.01	2236.00
Manifest-G	3	Head end only (GP40s)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	65.00%	1181.82	1555.00
Manifest-G	3	Head end only (GP40s)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4244.32	4696.00
Manifest-G	3	Head end only (GP40s)	45	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	2113.05	2401.00
Manifest-G	3	Head end only (GP40s)	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	4005.84	4282.00
Manifest-G	3	Head end only (GP40s)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	100.00%	5601.01	5861.00
Manifest-G	3	Head end only (GP40s)	60	0.50%	Incline	<0.1%	0.00	0.00	> 50%	100.00%	4130.16	4382.00
Manifest-G	3	Head end only (GP40s)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	44.00%	5238.60	5701.00
Manifest-H	3	Head end only (SD70s)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	211.80	439.00
Manifest-H	3	Head end only (SD70s)	10	0.50%	Incline	> 1.0%	19.00	37.00	< 0.1%	9.00%	149.63	231.00
Manifest-H	3	Head end only (SD70s)	10	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	459.82	626.00
Manifest-H	3	Head end only (SD70s)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	8.00%	154.45	331.00
Manifest-H	3	Head end only (SD70s)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	917.59	1108.00
Manifest-H	3	Head end only (SD70s)	20	2.20%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	923.05	1382.00
Manifest-H	3	Head end only (SD70s)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	25.00%	504.35	705.00
Manifest-H	3	Head end only (SD70s)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1336.52	1725.00
Manifest-H	3	Head end only (SD70s)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	1300.27	1804.00
Manifest-H	3	Head end only (SD70s)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	15.00%	859.34	1041.00
Manifest-H	3	Head end only (SD70s)	30	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	1523.61	2020.00
Manifest-H	3	Head end only (SD70s)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	24.00%	996.11	1256.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-H	3	Head end only (SD70s)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3481.72	4363.00
Manifest-H	3	Head end only (SD70s)	45	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	2.00%	1768.68	2046.00
Manifest-H	3	Head end only (SD70s)	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	95.00%	3086.46	3340.00
Manifest-H	3	Head end only (SD70s)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	89.00%	5380.86	5863.00
Manifest-H	3	Head end only (SD70s)	60	0.50%	Incline	<0.1%	0.00	0.00	> 50%	21.00%	3650.39	3784.00
Manifest-H	3	Head end only (SD70s)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	3871.80	5087.00
Manifest-H	3	Head end only (GP40s)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	242.79	445.00
Manifest-H	3	Head end only (GP40s)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	1.00%	125.39	205.00
Manifest-H	3	Head end only (GP40s)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	200.49	235.00
Manifest-H	3	Head end only (GP40s)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	151.41	319.00
Manifest-H	3	Head end only (GP40s)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	40.00%	1193.77	1213.00
Manifest-H	3	Head end only (GP40s)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1060.82	1386.00
Manifest-H	3	Head end only (GP40s)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	2.00%	559.78	773.00
Manifest-H	3	Head end only (GP40s)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1586.11	1865.00
Manifest-H	3	Head end only (GP40s)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	29.00%	1440.09	1675.00
Manifest-H	3	Head end only (GP40s)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	1.00%	915.47	1119.00
Manifest-H	3	Head end only (GP40s)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1804.63	2080.00
Manifest-H	3	Head end only (GP40s)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	4.00%	1036.15	1183.00
Manifest-H	3	Head end only (GP40s)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3836.64	4309.00
Manifest-H	3	Head end only (GP40s)	45	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	1880.26	2216.00
Manifest-H	3	Head end only (GP40s)	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	99.00%	3078.93	3204.00
Manifest-H	3	Head end only (GP40s)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	89.00%	5418.08	5772.00
Manifest-H	3	Head end only (GP40s)	60	0.50%	Incline	<0.1%	0.00	0.00	> 50%	25.00%	3830.73	3876.00
Manifest-H	3	Head end only (GP40s)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	4170.43	4404.00
Manifest-I	3	Head end only (SD70s)	10	0.50%	Decline	<0.1%	0.00	0.00	< 10%	1.00%	241.83	609.00
Manifest-I	3	Head end only (SD70s)	10	0.50%	Incline	> 1.0%	2.00	2.00	< 0.1%	13.00%	118.78	227.00
Manifest-I	3	Head end only (SD70s)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	232.05	309.00
Manifest-I	3	Head end only (SD70s)	10	0.00%	Flat	> 1.0%	5.00	9.00	< 0.1%	18.00%	134.03	249.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-I	3	Head end only (SD70s)	15	2.80%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	649.48	790.00
Manifest-I	3	Head end only (SD70s)	20	2.20%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	830.77	1271.00
Manifest-I	3	Head end only (SD70s)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	20.00%	502.23	687.00
Manifest-I	3	Head end only (SD70s)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1201.83	1762.00
Manifest-I	3	Head end only (SD70s)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	22.00%	1108.08	1590.00
Manifest-I	3	Head end only (SD70s)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	12.00%	764.06	1041.00
Manifest-I	3	Head end only (SD70s)	30	1.10%	Decline	<0.1%	0.00	0.00	< 10%	1.00%	1403.53	1965.00
Manifest-I	3	Head end only (SD70s)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	15.00%	900.39	1180.00
Manifest-I	3	Head end only (SD70s)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	83.00%	2780.85	2906.00
Manifest-I	3	Head end only (SD70s)	45	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	1696.99	2036.00
Manifest-I	3	Head end only (SD70s)	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	88.00%	3020.79	3264.00
Manifest-I	3	Head end only (SD70s)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	48.00%	4875.15	5597.00
Manifest-I	3	Head end only (SD70s)	60	0.50%	Incline	<0.1%	0.00	0.00	> 50%	16.00%	3418.79	3601.00
Manifest-I	3	Head end only (SD70s)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	3558.25	4828.00
Manifest-I	3	Head end only (GP40s)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	281.54	372.00
Manifest-I	3	Head end only (GP40s)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	116.63	196.00
Manifest-I	3	Head end only (GP40s)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	174.95	202.00
Manifest-I	3	Head end only (GP40s)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	136.69	320.00
Manifest-I	3	Head end only (GP40s)	15	2.80%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	659.08	763.00
Manifest-I	3	Head end only (GP40s)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1101.63	1326.00
Manifest-I	3	Head end only (GP40s)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	2.00%	523.34	738.00
Manifest-I	3	Head end only (GP40s)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	59.00%	1105.36	1182.00
Manifest-I	3	Head end only (GP40s)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	17.00%	1283.59	1550.00
Manifest-I	3	Head end only (GP40s)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	12.00%	855.44	947.00
Manifest-I	3	Head end only (GP40s)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	55.00%	1248.99	1339.00
Manifest-I	3	Head end only (GP40s)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	915.44	1183.00
Manifest-I	3	Head end only (GP40s)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	89.00%	2786.68	2909.00
Manifest-I	3	Head end only (GP40s)	45	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	1779.38	2095.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-I	3	Head end only (GP40s)	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	87.00%	3049.67	3204.00
Manifest-I	3	Head end only (GP40s)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	31.00%	4524.38	5341.00
Manifest-I	3	Head end only (GP40s)	60	0.50%	Incline	<0.1%	0.00	0.00	> 50%	4.00%	3636.05	3782.00
Manifest-I	3	Head end only (GP40s)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	3485.69	3845.00
Manifest-J	3	Head end only (SD70s)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	300.41	530.00
Manifest-J	3	Head end only (SD70s)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	2.00%	141.04	213.00
Manifest-J	3	Head end only (SD70s)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	282.70	374.00
Manifest-J	3	Head end only (SD70s)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	1.00%	150.50	242.00
Manifest-J	3	Head end only (SD70s)	15	2.80%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	596.90	976.00
Manifest-J	3	Head end only (SD70s)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	979.90	1334.00
Manifest-J	3	Head end only (SD70s)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	11.00%	456.66	640.00
Manifest-J	3	Head end only (SD70s)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1339.24	1713.00
Manifest-J	3	Head end only (SD70s)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	3.00%	1072.00	1344.00
Manifest-J	3	Head end only (SD70s)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	2.00%	912.71	1188.00
Manifest-J	3	Head end only (SD70s)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	1263.00	1718.00
Manifest-J	3	Head end only (SD70s)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	5.00%	871.42	1159.00
Manifest-J	3	Head end only (SD70s)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	67.00%	2741.40	2903.00
Manifest-J	3	Head end only (SD70s)	45	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	1570.75	1879.00
Manifest-J	3	Head end only (SD70s)	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	57.00%	2991.91	3271.00
Manifest-J	3	Head end only (SD70s)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	14.00%	4567.63	5337.00
Manifest-J	3	Head end only (SD70s)	60	0.50%	Incline	<0.1%	0.00	0.00	> 50%	1.00%	3401.27	3594.00
Manifest-J	3	Head end only (SD70s)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	3377.14	4651.00
Manifest-J	3	Head end only (GP40s)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	270.59	412.00
Manifest-J	3	Head end only (GP40s)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	122.14	148.00
Manifest-J	3	Head end only (GP40s)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	171.34	208.00
Manifest-J	3	Head end only (GP40s)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	158.09	277.00
Manifest-J	3	Head end only (GP40s)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	727.75	858.00
Manifest-J	3	Head end only (GP40s)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1073.10	1371.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-J	3	Head end only (GP40s)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	1.00%	494.36	716.00
Manifest-J	3	Head end only (GP40s)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	10.00%	1043.62	1109.00
Manifest-J	3	Head end only (GP40s)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	1124.01	1423.00
Manifest-J	3	Head end only (GP40s)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	1.00%	845.88	951.00
Manifest-J	3	Head end only (GP40s)	30	1.10%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	1430.10	1878.00
Manifest-J	3	Head end only (GP40s)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	870.20	1010.00
Manifest-J	3	Head end only (GP40s)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	55.00%	2783.95	2908.00
Manifest-J	3	Head end only (GP40s)	45	1.00%	Crest	<0.1%	0.00	0.00	< 10%	0.00%	1668.64	2014.00
Manifest-J	3	Head end only (GP40s)	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	29.00%	2975.60	3330.00
Manifest-J	3	Head end only (GP40s)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	5.00%	4307.89	5171.00
Manifest-J	3	Head end only (GP40s)	60	0.50%	Incline	<0.1%	0.00	0.00	> 50%	0.00%	3514.97	3775.00
Manifest-J	3	Head end only (GP40s)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	3559.37	3783.00
Manifest-A	10	Head end only (SD70s)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	5.00%	306.82	462.00
Manifest-A	10	Head end only (SD70s)	10	0.50%	Incline	> 1.0%	9.00	17.00	< 0.1%	36.00%	187.83	292.00
Manifest-A	10	Head end only (SD70s)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	2.00%	307.91	351.00
Manifest-A	10	Head end only (SD70s)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	5.00%	282.35	364.00
Manifest-A	10	Head end only (SD70s)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1971.67	2160.00
Manifest-A	10	Head end only (SD70s)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1628.19	1834.00
Manifest-A	10	Head end only (SD70s)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	24.00%	655.21	781.00
Manifest-A	10	Head end only (SD70s)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	1.00%	2044.48	2378.00
Manifest-A	10	Head end only (SD70s)	30	0.50%	Decline	<0.1%	0.00	0.00	< 10%	2.00%	1811.67	2175.00
Manifest-A	10	Head end only (SD70s)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	29.00%	1170.29	1368.00
Manifest-A	10	Head end only (SD70s)	30	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	1.00%	2218.35	2590.00
Manifest-A	10	Head end only (SD70s)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	38.00%	1357.80	1609.00
Manifest-A	10	Head end only (SD70s)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4641.37	5284.00
Manifest-A	10	Head end only (SD70s)	45	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	10.00%	2291.00	2466.00
Manifest-A	10	Head end only (SD70s)	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	4648.99	4840.00
Manifest-A	10	Head end only (SD70s)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	1.00%	6685.98	7283.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-A	10	Head end only (SD70s)	60	0.50%	Incline	<0.1%	0.00	0.00	> 50%	8.00%	4554.74	4877.00
Manifest-A	10	Head end only (SD70s)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	9.00%	5357.94	5844.00
Manifest-A	10	Head end only (GP40s)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	6.00%	242.56	274.00
Manifest-A	10	Head end only (GP40s)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	23.00%	179.42	260.00
Manifest-A	10	Head end only (GP40s)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	321.96	365.00
Manifest-A	10	Head end only (GP40s)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	12.00%	205.21	320.00
Manifest-A	10	Head end only (GP40s)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1943.69	2006.00
Manifest-A	10	Head end only (GP40s)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1553.03	1787.00
Manifest-A	10	Head end only (GP40s)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	8.00%	699.76	816.00
Manifest-A	10	Head end only (GP40s)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2135.09	2384.00
Manifest-A	10	Head end only (GP40s)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	3.00%	1726.77	2051.00
Manifest-A	10	Head end only (GP40s)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	12.00%	1228.99	1434.00
Manifest-A	10	Head end only (GP40s)	30	1.10%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	2.00%	2228.10	2401.00
Manifest-A	10	Head end only (GP40s)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	16.00%	1422.41	1659.00
Manifest-A	10	Head end only (GP40s)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	4.00%	5157.23	5686.00
Manifest-A	10	Head end only (GP40s)	45	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	2.00%	2431.86	2660.00
Manifest-A	10	Head end only (GP40s)	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	5226.31	5467.00
Manifest-A	10	Head end only (GP40s)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	2.00%	7674.54	8165.00
Manifest-A	10	Head end only (GP40s)	60	0.50%	Incline	<0.1%	0.00	0.00	> 50%	0.00%	4855.28	5161.00
Manifest-A	10	Head end only (GP40s)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	11.00%	5834.56	6189.00
Manifest-B	10	Head end only (SD70s)	10	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	440.23	642.00
Manifest-B	10	Head end only (SD70s)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	225.77	417.00
Manifest-B	10	Head end only (SD70s)	10	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	508.52	697.00
Manifest-B	10	Head end only (SD70s)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	397.44	513.00
Manifest-B	10	Head end only (SD70s)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	846.30	1901.00
Manifest-B	10	Head end only (SD70s)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1311.59	1678.00
Manifest-B	10	Head end only (SD70s)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	6.00%	526.07	776.00
Manifest-B	10	Head end only (SD70s)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1701.29	2056.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-B	10	Head end only (SD70s)	30	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	1460.89	1897.00
Manifest-B	10	Head end only (SD70s)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	2.00%	862.61	1005.00
Manifest-B	10	Head end only (SD70s)	30	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	1705.45	2236.00
Manifest-B	10	Head end only (SD70s)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	1009.72	1551.00
Manifest-B	10	Head end only (SD70s)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3182.83	3749.00
Manifest-B	10	Head end only (SD70s)	45	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	1778.75	2087.00
Manifest-B	10	Head end only (SD70s)	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	3408.30	3921.00
Manifest-B	10	Head end only (SD70s)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4356.04	5412.00
Manifest-B	10	Head end only (SD70s)	60	0.50%	Incline	<0.1%	0.00	0.00	> 50%	0.00%	3238.38	3579.00
Manifest-B	10	Head end only (SD70s)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	3626.99	3891.00
Manifest-B	10	Head end only (GP40s)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	370.52	490.00
Manifest-B	10	Head end only (GP40s)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	152.63	349.00
Manifest-B	10	Head end only (GP40s)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	254.58	498.00
Manifest-B	10	Head end only (GP40s)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	276.56	497.00
Manifest-B	10	Head end only (GP40s)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	824.89	937.00
Manifest-B	10	Head end only (GP40s)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1342.06	1550.00
Manifest-B	10	Head end only (GP40s)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	543.65	794.00
Manifest-B	10	Head end only (GP40s)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1544.31	1935.00
Manifest-B	10	Head end only (GP40s)	30	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	1475.49	1859.00
Manifest-B	10	Head end only (GP40s)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	911.31	1125.00
Manifest-B	10	Head end only (GP40s)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1916.15	2160.00
Manifest-B	10	Head end only (GP40s)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	964.35	1339.00
Manifest-B	10	Head end only (GP40s)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3480.77	3899.00
Manifest-B	10	Head end only (GP40s)	45	1.00%	Crest	<0.1%	0.00	0.00	< 10%	0.00%	1844.01	2127.00
Manifest-B	10	Head end only (GP40s)	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	3207.23	3881.00
Manifest-B	10	Head end only (GP40s)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4354.48	5155.00
Manifest-B	10	Head end only (GP40s)	60	0.50%	Incline	<0.1%	0.00	0.00	> 50%	0.00%	3394.41	3878.00
Manifest-B	10	Head end only (GP40s)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	3755.05	4175.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-C	10	Head end only (SD70s)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	359.79	555.00
Manifest-C	10	Head end only (SD70s)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	16.00%	155.40	344.00
Manifest-C	10	Head end only (SD70s)	10	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	548.63	686.00
Manifest-C	10	Head end only (SD70s)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	340.53	446.00
Manifest-C	10	Head end only (SD70s)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1306.03	1930.00
Manifest-C	10	Head end only (SD70s)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1351.65	1606.00
Manifest-C	10	Head end only (SD70s)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	10.00%	609.95	781.00
Manifest-C	10	Head end only (SD70s)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1758.89	2116.00
Manifest-C	10	Head end only (SD70s)	30	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	1461.18	1886.00
Manifest-C	10	Head end only (SD70s)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	9.00%	939.68	1120.00
Manifest-C	10	Head end only (SD70s)	30	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	1802.57	2233.00
Manifest-C	10	Head end only (SD70s)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	2.00%	1156.88	1683.00
Manifest-C	10	Head end only (SD70s)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3882.77	4355.00
Manifest-C	10	Head end only (SD70s)	45	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	1939.02	2212.00
Manifest-C	10	Head end only (SD70s)	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	3159.00	3770.00
Manifest-C	10	Head end only (SD70s)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5302.02	6022.00
Manifest-C	10	Head end only (SD70s)	60	0.50%	Incline	<0.1%	0.00	0.00	> 50%	0.00%	3629.27	3948.00
Manifest-C	10	Head end only (SD70s)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	4159.73	4448.00
Manifest-C	10	Head end only (GP40s)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	273.09	468.00
Manifest-C	10	Head end only (GP40s)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	151.60	199.00
Manifest-C	10	Head end only (GP40s)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	254.96	295.00
Manifest-C	10	Head end only (GP40s)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	254.85	414.00
Manifest-C	10	Head end only (GP40s)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1133.39	1261.00
Manifest-C	10	Head end only (GP40s)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1425.78	1667.00
Manifest-C	10	Head end only (GP40s)	25	1.50%	Incline	<0.1%	0.00	0.00	< 10%	0.00%	652.04	881.00
Manifest-C	10	Head end only (GP40s)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1798.18	2063.00
Manifest-C	10	Head end only (GP40s)	30	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	1529.59	1859.00
Manifest-C	10	Head end only (GP40s)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1021.16	1205.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-C	10	Head end only (GP40s)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1940.58	2284.00
Manifest-C	10	Head end only (GP40s)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	1111.38	1299.00
Manifest-C	10	Head end only (GP40s)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3916.78	4370.00
Manifest-C	10	Head end only (GP40s)	45	1.00%	Crest	<0.1%	0.00	0.00	< 10%	0.00%	2044.37	2229.00
Manifest-C	10	Head end only (GP40s)	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	3866.55	4527.00
Manifest-C	10	Head end only (GP40s)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5363.50	6105.00
Manifest-C	10	Head end only (GP40s)	60	0.50%	Incline	<0.1%	0.00	0.00	> 50%	0.00%	3902.93	4235.00
Manifest-C	10	Head end only (GP40s)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	4367.92	4734.00
Manifest-D	10	Head end only (SD70s)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	347.04	474.00
Manifest-D	10	Head end only (SD70s)	10	0.50%	Incline	> 1.0%	5.00	5.00	< 0.1%	39.00%	162.38	312.00
Manifest-D	10	Head end only (SD70s)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	365.47	616.00
Manifest-D	10	Head end only (SD70s)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	306.47	391.00
Manifest-D	10	Head end only (SD70s)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1777.85	2059.00
Manifest-D	10	Head end only (SD70s)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1489.48	1766.00
Manifest-D	10	Head end only (SD70s)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	23.00%	647.86	821.00
Manifest-D	10	Head end only (SD70s)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1919.98	2269.00
Manifest-D	10	Head end only (SD70s)	30	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	1597.66	1976.00
Manifest-D	10	Head end only (SD70s)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	19.00%	1080.65	1349.00
Manifest-D	10	Head end only (SD70s)	30	1.10%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	1871.55	2387.00
Manifest-D	10	Head end only (SD70s)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	8.00%	1244.70	1717.00
Manifest-D	10	Head end only (SD70s)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4384.05	4892.00
Manifest-D	10	Head end only (SD70s)	45	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	2133.52	2325.00
Manifest-D	10	Head end only (SD70s)	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	3896.49	4291.00
Manifest-D	10	Head end only (SD70s)	60	0.50%	Incline	<0.1%	0.00	0.00	> 50%	0.00%	4182.98	4481.00
Manifest-D	10	Head end only (SD70s)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	4761.40	5118.00
Manifest-D	10	Head end only (GP40s)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	1.00%	229.64	433.00
Manifest-D	10	Head end only (GP40s)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	13.00%	166.10	258.00
Manifest-D	10	Head end only (GP40s)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	290.89	328.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-D	10	Head end only (GP40s)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	3.00%	209.08	349.00
Manifest-D	10	Head end only (GP40s)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1702.15	2078.00
Manifest-D	10	Head end only (GP40s)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1610.82	1816.00
Manifest-D	10	Head end only (GP40s)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	6.00%	680.29	845.00
Manifest-D	10	Head end only (GP40s)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2000.31	2295.00
Manifest-D	10	Head end only (GP40s)	30	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	1732.36	2018.00
Manifest-D	10	Head end only (GP40s)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	1.00%	1127.93	1350.00
Manifest-D	10	Head end only (GP40s)	30	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	2128.05	2420.00
Manifest-D	10	Head end only (GP40s)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	2.00%	1270.32	1452.00
Manifest-D	10	Head end only (GP40s)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4599.26	5081.00
Manifest-D	10	Head end only (GP40s)	45	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	2283.81	2463.00
Manifest-D	10	Head end only (GP40s)	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	4335.91	4846.00
Manifest-D	10	Head end only (GP40s)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6571.78	7224.00
Manifest-D	10	Head end only (GP40s)	60	0.50%	Incline	<0.1%	0.00	0.00	> 50%	0.00%	4462.15	4771.00
Manifest-D	10	Head end only (GP40s)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	5102.30	5458.00
Manifest-E	10	Head end only (SD70s)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	341.35	469.00
Manifest-E	10	Head end only (SD70s)	10	0.50%	Incline	> 1.0%	4.33	6.00	< 0.1%	33.00%	184.22	297.00
Manifest-E	10	Head end only (SD70s)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	7.00%	282.31	548.00
Manifest-E	10	Head end only (SD70s)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	7.00%	282.47	370.00
Manifest-E	10	Head end only (SD70s)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1939.95	2140.00
Manifest-E	10	Head end only (SD70s)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1569.32	1807.00
Manifest-E	10	Head end only (SD70s)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	21.00%	641.02	811.00
Manifest-E	10	Head end only (SD70s)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2001.73	2338.00
Manifest-E	10	Head end only (SD70s)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	1731.51	2081.00
Manifest-E	10	Head end only (SD70s)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	24.00%	1120.24	1329.00
Manifest-E	10	Head end only (SD70s)	30	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	2203.58	2523.00
Manifest-E	10	Head end only (SD70s)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	12.00%	1256.20	1567.00
Manifest-E	10	Head end only (SD70s)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4370.32	5073.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-E	10	Head end only (SD70s)	45	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	1.00%	2192.50	2426.00
Manifest-E	10	Head end only (SD70s)	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	4203.23	4442.00
Manifest-E	10	Head end only (SD70s)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6213.76	7204.00
Manifest-E	10	Head end only (SD70s)	60	0.50%	Incline	<0.1%	0.00	0.00	> 50%	0.00%	4306.20	4639.00
Manifest-E	10	Head end only (SD70s)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	5012.67	5462.00
Manifest-E	10	Head end only (GP40s)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	3.00%	225.14	262.00
Manifest-E	10	Head end only (GP40s)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	17.00%	176.50	245.00
Manifest-E	10	Head end only (GP40s)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	299.57	346.00
Manifest-E	10	Head end only (GP40s)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	7.00%	197.85	310.00
Manifest-E	10	Head end only (GP40s)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1840.13	1941.00
Manifest-E	10	Head end only (GP40s)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1513.65	1787.00
Manifest-E	10	Head end only (GP40s)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	5.00%	695.41	833.00
Manifest-E	10	Head end only (GP40s)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2129.25	2414.00
Manifest-E	10	Head end only (GP40s)	30	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	1725.28	1978.00
Manifest-E	10	Head end only (GP40s)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	13.00%	1163.71	1426.00
Manifest-E	10	Head end only (GP40s)	30	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	2208.33	2556.00
Manifest-E	10	Head end only (GP40s)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	10.00%	1329.59	1644.00
Manifest-E	10	Head end only (GP40s)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4987.57	5393.00
Manifest-E	10	Head end only (GP40s)	45	1.00%	Crest	<0.1%	0.00	0.00	< 10%	0.00%	2360.39	2593.00
Manifest-E	10	Head end only (GP40s)	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	4726.30	5057.00
Manifest-E	10	Head end only (GP40s)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7110.42	7614.00
Manifest-E	10	Head end only (GP40s)	60	0.50%	Incline	<0.1%	0.00	0.00	> 50%	0.00%	4630.35	4849.00
Manifest-E	10	Head end only (GP40s)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	5484.32	5780.00
Manifest-F	10	Head end only (SD70s)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	320.74	522.00
Manifest-F	10	Head end only (SD70s)	10	0.50%	Incline	> 1.0%	12.50	13.00	< 0.1%	31.00%	175.87	322.00
Manifest-F	10	Head end only (SD70s)	10	1.10%	Decline	<0.1%	0.00	0.00	< 10%	2.00%	306.40	610.00
Manifest-F	10	Head end only (SD70s)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	3.00%	300.43	413.00
Manifest-F	10	Head end only (SD70s)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1605.82	2028.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-F	10	Head end only (SD70s)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1436.69	1702.00
Manifest-F	10	Head end only (SD70s)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	14.00%	640.15	809.00
Manifest-F	10	Head end only (SD70s)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1875.82	2162.00
Manifest-F	10	Head end only (SD70s)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	1569.35	1904.00
Manifest-F	10	Head end only (SD70s)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	15.00%	1017.33	1212.00
Manifest-F	10	Head end only (SD70s)	30	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	1944.28	2319.00
Manifest-F	10	Head end only (SD70s)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	3.00%	1196.84	1534.00
Manifest-F	10	Head end only (SD70s)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4244.27	4727.00
Manifest-F	10	Head end only (SD70s)	45	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	1.00%	2071.08	2329.00
Manifest-F	10	Head end only (SD70s)	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	3616.75	3795.00
Manifest-F	10	Head end only (SD70s)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5705.50	6504.00
Manifest-F	10	Head end only (SD70s)	60	0.50%	Incline	<0.1%	0.00	0.00	> 50%	0.00%	4050.93	4355.00
Manifest-F	10	Head end only (SD70s)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	4531.96	4818.00
Manifest-F	10	Head end only (GP40s)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	1.00%	208.69	237.00
Manifest-F	10	Head end only (GP40s)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	9.00%	162.52	233.00
Manifest-F	10	Head end only (GP40s)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	270.77	316.00
Manifest-F	10	Head end only (GP40s)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	2.00%	210.91	332.00
Manifest-F	10	Head end only (GP40s)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1562.60	2040.00
Manifest-F	10	Head end only (GP40s)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1555.74	1710.00
Manifest-F	10	Head end only (GP40s)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	2.00%	685.74	862.00
Manifest-F	10	Head end only (GP40s)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2000.88	2165.00
Manifest-F	10	Head end only (GP40s)	30	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	1643.49	1923.00
Manifest-F	10	Head end only (GP40s)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	2.00%	1082.41	1302.00
Manifest-F	10	Head end only (GP40s)	30	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	2018.71	2375.00
Manifest-F	10	Head end only (GP40s)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	1269.73	1536.00
Manifest-F	10	Head end only (GP40s)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4433.17	4890.00
Manifest-F	10	Head end only (GP40s)	45	1.00%	Crest	<0.1%	0.00	0.00	< 10%	0.00%	2201.38	2472.00
Manifest-F	10	Head end only (GP40s)	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	4025.76	4838.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-F	10	Head end only (GP40s)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6183.59	6793.00
Manifest-F	10	Head end only (GP40s)	60	0.50%	Incline	<0.1%	0.00	0.00	> 50%	0.00%	4310.51	4747.00
Manifest-F	10	Head end only (GP40s)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	4847.48	5244.00
Manifest-G	10	Head end only (SD70s)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	305.76	514.00
Manifest-G	10	Head end only (SD70s)	10	0.50%	Incline	> 1.0%	11.50	14.00	< 0.1%	29.00%	171.59	314.00
Manifest-G	10	Head end only (SD70s)	10	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	523.32	707.00
Manifest-G	10	Head end only (SD70s)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	324.72	437.00
Manifest-G	10	Head end only (SD70s)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1530.41	2027.00
Manifest-G	10	Head end only (SD70s)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1366.93	1684.00
Manifest-G	10	Head end only (SD70s)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	19.00%	621.54	767.00
Manifest-G	10	Head end only (SD70s)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1811.01	2186.00
Manifest-G	10	Head end only (SD70s)	30	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	1517.17	1931.00
Manifest-G	10	Head end only (SD70s)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	19.00%	991.01	1163.00
Manifest-G	10	Head end only (SD70s)	30	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	1907.42	2410.00
Manifest-G	10	Head end only (SD70s)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	4.00%	1162.04	1638.00
Manifest-G	10	Head end only (SD70s)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4122.76	4639.00
Manifest-G	10	Head end only (SD70s)	45	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	2043.05	2267.00
Manifest-G	10	Head end only (SD70s)	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	3444.98	3657.00
Manifest-G	10	Head end only (SD70s)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5658.79	6393.00
Manifest-G	10	Head end only (SD70s)	60	0.50%	Incline	<0.1%	0.00	0.00	> 50%	0.00%	3878.04	4188.00
Manifest-G	10	Head end only (SD70s)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	4400.43	4746.00
Manifest-G	10	Head end only (GP40s)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	207.77	251.00
Manifest-G	10	Head end only (GP40s)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	4.00%	159.80	211.00
Manifest-G	10	Head end only (GP40s)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	268.74	307.00
Manifest-G	10	Head end only (GP40s)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	211.38	373.00
Manifest-G	10	Head end only (GP40s)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1421.00	2030.00
Manifest-G	10	Head end only (GP40s)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1514.44	1713.00
Manifest-G	10	Head end only (GP40s)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	1.00%	667.26	906.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-G	10	Head end only (GP40s)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1897.26	2169.00
Manifest-G	10	Head end only (GP40s)	30	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	1634.81	1890.00
Manifest-G	10	Head end only (GP40s)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	1.00%	1055.87	1281.00
Manifest-G	10	Head end only (GP40s)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2078.29	2349.00
Manifest-G	10	Head end only (GP40s)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	1.00%	1182.31	1528.00
Manifest-G	10	Head end only (GP40s)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4167.38	4788.00
Manifest-G	10	Head end only (GP40s)	45	1.00%	Crest	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	2168.69	2443.00
Manifest-G	10	Head end only (GP40s)	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	3976.49	4871.00
Manifest-G	10	Head end only (GP40s)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5960.09	6535.00
Manifest-G	10	Head end only (GP40s)	60	0.50%	Incline	<0.1%	0.00	0.00	> 50%	0.00%	4109.34	4632.00
Manifest-G	10	Head end only (GP40s)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	4754.08	5150.00
Manifest-H	10	Head end only (SD70s)	10	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	377.45	603.00
Manifest-H	10	Head end only (SD70s)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	9.00%	144.56	307.00
Manifest-H	10	Head end only (SD70s)	10	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	556.51	777.00
Manifest-H	10	Head end only (SD70s)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	392.67	556.00
Manifest-H	10	Head end only (SD70s)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	843.25	1006.00
Manifest-H	10	Head end only (SD70s)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1296.34	1646.00
Manifest-H	10	Head end only (SD70s)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	5.00%	545.45	753.00
Manifest-H	10	Head end only (SD70s)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1700.11	1924.00
Manifest-H	10	Head end only (SD70s)	30	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	1299.04	1810.00
Manifest-H	10	Head end only (SD70s)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	5.00%	893.77	1297.00
Manifest-H	10	Head end only (SD70s)	30	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	1732.89	2199.00
Manifest-H	10	Head end only (SD70s)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	1098.24	1529.00
Manifest-H	10	Head end only (SD70s)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3505.63	4097.00
Manifest-H	10	Head end only (SD70s)	45	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	1809.13	2112.00
Manifest-H	10	Head end only (SD70s)	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	3529.38	4091.00
Manifest-H	10	Head end only (SD70s)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4810.67	5504.00
Manifest-H	10	Head end only (SD70s)	60	0.50%	Incline	<0.1%	0.00	0.00	> 50%	0.00%	3330.15	3625.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-H	10	Head end only (SD70s)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	3718.63	4022.00
Manifest-H	10	Head end only (GP40s)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	359.46	521.00
Manifest-H	10	Head end only (GP40s)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	180.45	403.00
Manifest-H	10	Head end only (GP40s)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	233.52	264.00
Manifest-H	10	Head end only (GP40s)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	291.80	413.00
Manifest-H	10	Head end only (GP40s)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	909.49	1034.00
Manifest-H	10	Head end only (GP40s)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1379.05	1581.00
Manifest-H	10	Head end only (GP40s)	25	1.50%	Incline	<0.1%	0.00	0.00	< 10%	7.00%	569.10	815.00
Manifest-H	10	Head end only (GP40s)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1751.18	1988.00
Manifest-H	10	Head end only (GP40s)	30	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	1324.19	1727.00
Manifest-H	10	Head end only (GP40s)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	922.26	1151.00
Manifest-H	10	Head end only (GP40s)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1854.93	2157.00
Manifest-H	10	Head end only (GP40s)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	1027.21	1290.00
Manifest-H	10	Head end only (GP40s)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3381.10	4100.00
Manifest-H	10	Head end only (GP40s)	45	1.00%	Crest	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	1901.73	2190.00
Manifest-H	10	Head end only (GP40s)	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	3560.05	3964.00
Manifest-H	10	Head end only (GP40s)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4659.85	5435.00
Manifest-H	10	Head end only (GP40s)	60	0.50%	Incline	<0.1%	0.00	0.00	> 50%	0.00%	3549.12	3881.00
Manifest-H	10	Head end only (GP40s)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	3899.55	4237.00
Manifest-I	10	Head end only (SD70s)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	3.00%	333.51	446.00
Manifest-I	10	Head end only (SD70s)	10	0.50%	Incline	> 1.0%	21.00	27.00	< 0.1%	33.00%	192.54	276.00
Manifest-I	10	Head end only (SD70s)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	3.00%	310.41	586.00
Manifest-I	10	Head end only (SD70s)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	18.00%	259.84	395.00
Manifest-I	10	Head end only (SD70s)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2026.19	2176.00
Manifest-I	10	Head end only (SD70s)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1673.45	1855.00
Manifest-I	10	Head end only (SD70s)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	31.00%	657.26	795.00
Manifest-I	10	Head end only (SD70s)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2128.33	2409.00
Manifest-I	10	Head end only (SD70s)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	2.00%	1786.41	2148.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-I	10	Head end only (SD70s)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	24.00%	1191.33	1390.00
Manifest-I	10	Head end only (SD70s)	30	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	1.00%	2282.03	2628.00
Manifest-I	10	Head end only (SD70s)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	22.00%	1323.39	1541.00
Manifest-I	10	Head end only (SD70s)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4663.43	5172.00
Manifest-I	10	Head end only (SD70s)	45	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	4.00%	2290.71	2484.00
Manifest-I	10	Head end only (SD70s)	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	4736.48	4997.00
Manifest-I	10	Head end only (SD70s)	60	0.50%	Incline	<0.1%	0.00	0.00	> 50%	0.00%	4528.14	4845.00
Manifest-I	10	Head end only (SD70s)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	4.00%	5363.54	5827.00
Manifest-I	10	Head end only (GP40s)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	6.00%	240.64	263.00
Manifest-I	10	Head end only (GP40s)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	27.00%	180.14	244.00
Manifest-I	10	Head end only (GP40s)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	1.00%	324.97	369.00
Manifest-I	10	Head end only (GP40s)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	17.00%	198.05	258.00
Manifest-I	10	Head end only (GP40s)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1976.14	2048.00
Manifest-I	10	Head end only (GP40s)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	1.00%	1564.13	1769.00
Manifest-I	10	Head end only (GP40s)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	4.00%	706.19	830.00
Manifest-I	10	Head end only (GP40s)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2173.91	2447.00
Manifest-I	10	Head end only (GP40s)	30	0.50%	Decline	<0.1%	0.00	0.00	< 10%	4.00%	1720.37	2044.00
Manifest-I	10	Head end only (GP40s)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	28.00%	1212.91	1425.00
Manifest-I	10	Head end only (GP40s)	30	1.10%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	1.00%	2261.52	2637.00
Manifest-I	10	Head end only (GP40s)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	21.00%	1388.39	1525.00
Manifest-I	10	Head end only (GP40s)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	2.00%	5225.27	5682.00
Manifest-I	10	Head end only (GP40s)	45	1.00%	Crest	<0.1%	0.00	0.00	< 10%	0.00%	2457.10	2652.00
Manifest-I	10	Head end only (GP40s)	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	5319.89	5541.00
Manifest-I	10	Head end only (GP40s)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	2.00%	7581.44	8168.00
Manifest-I	10	Head end only (GP40s)	60	0.50%	Incline	<0.1%	0.00	0.00	> 50%	1.00%	4913.95	5151.00
Manifest-I	10	Head end only (GP40s)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	4.00%	5865.24	6215.00
Manifest-J	10	Head end only (SD70s)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	1.00%	321.75	461.00
Manifest-J	10	Head end only (SD70s)	10	0.50%	Incline	> 1.0%	16.67	20.00	< 0.1%	45.00%	169.02	297.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-J	10	Head end only (SD70s)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	3.00%	291.06	545.00
Manifest-J	10	Head end only (SD70s)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	1.00%	292.38	385.00
Manifest-J	10	Head end only (SD70s)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1944.45	2099.00
Manifest-J	10	Head end only (SD70s)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1541.97	1787.00
Manifest-J	10	Head end only (SD70s)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	27.00%	638.59	797.00
Manifest-J	10	Head end only (SD70s)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1984.13	2253.00
Manifest-J	10	Head end only (SD70s)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	1676.03	1993.00
Manifest-J	10	Head end only (SD70s)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	21.00%	1066.17	1306.00
Manifest-J	10	Head end only (SD70s)	30	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	2126.64	2483.00
Manifest-J	10	Head end only (SD70s)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	15.00%	1243.22	1554.00
Manifest-J	10	Head end only (SD70s)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4371.73	5021.00
Manifest-J	10	Head end only (SD70s)	45	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	2138.55	2322.00
Manifest-J	10	Head end only (SD70s)	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	4035.41	4289.00
Manifest-J	10	Head end only (SD70s)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5972.11	7055.00
Manifest-J	10	Head end only (SD70s)	60	0.50%	Incline	<0.1%	0.00	0.00	> 50%	0.00%	4237.09	4558.00
Manifest-J	10	Head end only (SD70s)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	4852.93	5299.00
Manifest-J	10	Head end only (GP40s)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	2.00%	222.81	253.00
Manifest-J	10	Head end only (GP40s)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	21.00%	169.62	252.00
Manifest-J	10	Head end only (GP40s)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	288.21	330.00
Manifest-J	10	Head end only (GP40s)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	11.00%	192.62	301.00
Manifest-J	10	Head end only (GP40s)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1763.06	2038.00
Manifest-J	10	Head end only (GP40s)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1583.26	1791.00
Manifest-J	10	Head end only (GP40s)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	8.00%	674.68	816.00
Manifest-J	10	Head end only (GP40s)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2077.74	2313.00
Manifest-J	10	Head end only (GP40s)	30	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	1735.52	2021.00
Manifest-J	10	Head end only (GP40s)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	9.00%	1122.77	1310.00
Manifest-J	10	Head end only (GP40s)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2203.32	2511.00
Manifest-J	10	Head end only (GP40s)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	7.00%	1303.15	1621.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-J	10	Head end only (GP40s)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4785.68	5268.00
Manifest-J	10	Head end only (GP40s)	45	1.00%	Crest	<0.1%	0.00	0.00	< 10%	0.00%	2326.09	2528.00
Manifest-J	10	Head end only (GP40s)	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	4478.12	5098.00
Manifest-J	10	Head end only (GP40s)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6754.47	7328.00
Manifest-J	10	Head end only (GP40s)	60	0.50%	Incline	<0.1%	0.00	0.00	> 50%	0.00%	4523.52	4783.00
Manifest-J	10	Head end only (GP40s)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	5226.11	5600.00
Manifest-A	40	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	39.00%	565.86	780.00
Manifest-A	40	Head end only	10	0.50%	Incline	> 1.0%	6.69	17.00	< 0.1%	100.00%	296.52	389.00
Manifest-A	40	Head end only	10	1.10%	Decline	> 1.0%	17.33	21.00	< 0.1%	46.00%	470.96	651.00
Manifest-A	40	Head end only	10	0.00%	Flat	> 1.0%	8.00	8.00	< 0.1%	65.00%	440.05	553.00
Manifest-A	40	Head end only	15	2.80%	Decline	> 1.0%	2348.33	6263.00	> 50%	0.00%	3573.79	4124.00
Manifest-A	40	Head end only	20	1.50%	Incline	> 1.0%	9.00	17.00	< 0.1%	100.00%	603.22	714.00
Manifest-A	40	Head end only	20	2.20%	Decline	> 1.0%	814.75	2200.00	> 50%	98.00%	2890.28	3125.00
Manifest-A	40	Head end only	25	1.70%	Decline	< 0.5%	61.00	61.00	> 50%	95.00%	3066.38	3715.00
Manifest-A	40	Head end only	28	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	100.00%	1422.90	1528.00
Manifest-A	40	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	80.00%	2553.53	2844.00
Manifest-A	40	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	100.00%	1594.59	1809.00
Manifest-A	40	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	97.00%	2660.11	3131.00
Manifest-A	40	Head end only	30	0.00%	Flat	> 1.0%	61.50	86.00	< 0.1%	100.00%	1983.92	2216.00
Manifest-A	40	Head end only	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	100.00%	5839.61	6339.00
Manifest-A	40	Head end only	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	68.00%	6111.06	6508.00
Manifest-A	40	Head end only	46	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	100.00%	3393.05	3582.00
Manifest-A	40	Head end only	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	99.00%	8263.10	8918.00
Manifest-A	40	Head end only	60	0.00%	Flat	< 0.5%	45.00	45.00	> 10%, < 25%	100.00%	6489.14	6785.00
Manifest-B	40	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	2.00%	454.26	564.00
Manifest-B	40	Head end only	10	0.50%	Incline	> 1.0%	11.00	32.00	< 0.1%	90.00%	222.76	350.00
Manifest-B	40	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	2.00%	262.83	426.00
Manifest-B	40	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	24.00%	351.94	452.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-B	40	Head end only	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1284.10	1618.00
Manifest-B	40	Head end only	20	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	95.00%	496.78	624.00
Manifest-B	40	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1201.71	1551.00
Manifest-B	40	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1286.46	1673.00
Manifest-B	40	Head end only	28	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	92.00%	1238.59	1290.00
Manifest-B	40	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	5.00%	1729.92	2005.00
Manifest-B	40	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	90.00%	1206.86	1410.00
Manifest-B	40	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	1457.53	1735.00
Manifest-B	40	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	95.00%	1341.28	1452.00
Manifest-B	40	Head end only	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3051.72	3317.00
Manifest-B	40	Head end only	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	3295.61	3481.00
Manifest-B	40	Head end only	46	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	81.00%	2354.75	2455.00
Manifest-B	40	Head end only	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4998.05	5393.00
Manifest-B	40	Head end only	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	3.00%	4311.44	4433.00
Manifest-C	40	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	48.00%	484.26	660.00
Manifest-C	40	Head end only	10	0.50%	Incline	> 1.0%	11.47	27.00	< 0.1%	93.00%	279.83	410.00
Manifest-C	40	Head end only	10	1.10%	Decline	< 0.5%	3.00	3.00	< 0.1%	49.00%	378.38	540.00
Manifest-C	40	Head end only	10	0.00%	Flat	> 1.0%	14.00	14.00	< 0.1%	64.00%	385.73	504.00
Manifest-C	40	Head end only	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	73.00%	3241.66	3941.00
Manifest-C	40	Head end only	20	1.50%	Incline	> 1.0%	8.00	8.00	< 0.1%	99.00%	569.44	644.00
Manifest-C	40	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	84.00%	2511.90	3132.00
Manifest-C	40	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	86.00%	2345.94	3051.00
Manifest-C	40	Head end only	28	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	100.00%	1372.82	1443.00
Manifest-C	40	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	24.00%	2408.67	2743.00
Manifest-C	40	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	100.00%	1447.36	1649.00
Manifest-C	40	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	99.00%	2236.10	2551.00
Manifest-C	40	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	100.00%	1784.70	2023.00
Manifest-C	40	Head end only	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	100.00%	4763.54	5447.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-C	40	Head end only	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	38.00%	5114.45	5430.00
Manifest-C	40	Head end only	46	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	100.00%	3084.76	3269.00
Manifest-C	40	Head end only	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	96.00%	7238.21	7891.00
Manifest-C	40	Head end only	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	100.00%	5961.76	6192.00
Manifest-D	40	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	46.00%	493.03	651.00
Manifest-D	40	Head end only	10	0.50%	Incline	> 25%	16.33	45.00	< 0.1%	99.00%	265.77	367.00
Manifest-D	40	Head end only	10	1.10%	Decline	> 1.0%	5.00	5.00	< 0.1%	84.00%	382.84	541.00
Manifest-D	40	Head end only	10	0.00%	Flat	> 1.0%	1.00	1.00	< 0.1%	90.00%	364.58	504.00
Manifest-D	40	Head end only	15	2.80%	Decline	> 1.0%	463.00	472.00	> 50%	0.00%	3740.34	4032.00
Manifest-D	40	Head end only	20	1.50%	Incline	> 1.0%	9.40	22.00	< 0.1%	100.00%	572.71	661.00
Manifest-D	40	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	99.00%	2886.55	3132.00
Manifest-D	40	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	100.00%	2832.73	3077.00
Manifest-D	40	Head end only	28	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	100.00%	1418.22	1491.00
Manifest-D	40	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	88.00%	2389.54	2502.00
Manifest-D	40	Head end only	30	0.50%	Incline	> 1.0%	26.00	26.00	< 0.1%	100.00%	1540.62	1761.00
Manifest-D	40	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	100.00%	2482.89	2604.00
Manifest-D	40	Head end only	30	0.00%	Flat	> 1.0%	54.25	85.00	< 0.1%	100.00%	1892.00	2140.00
Manifest-D	40	Head end only	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	100.00%	5483.95	5812.00
Manifest-D	40	Head end only	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	73.00%	5750.70	5950.00
Manifest-D	40	Head end only	46	0.50%	Incline	> 1.0%	77.25	115.00	< 0.1%	100.00%	3252.37	3425.00
Manifest-D	40	Head end only	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	100.00%	7985.61	8213.00
Manifest-D	40	Head end only	60	0.00%	Flat	> 1.0%	219.33	507.00	< 10%	100.00%	6288.19	6592.00
Manifest-E	40	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	52.00%	468.75	622.00
Manifest-E	40	Head end only	10	0.50%	Incline	> 1.0%	11.18	27.00	< 0.1%	98.00%	274.05	355.00
Manifest-E	40	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	61.00%	375.19	517.00
Manifest-E	40	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	91.00%	354.16	465.00
Manifest-E	40	Head end only	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	3.00%	3456.04	3837.00
Manifest-E	40	Head end only	20	1.50%	Incline	> 1.0%	7.00	11.00	< 0.1%	100.00%	582.46	645.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-E	40	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	100.00%	2611.05	3082.00
Manifest-E	40	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	100.00%	2531.52	2697.00
Manifest-E	40	Head end only	28	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	100.00%	1385.41	1464.00
Manifest-E	40	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	89.00%	2288.92	2427.00
Manifest-E	40	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	100.00%	1531.32	1714.00
Manifest-E	40	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	100.00%	2301.36	2618.00
Manifest-E	40	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	99.00%	1827.10	2062.00
Manifest-E	40	Head end only	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	100.00%	5030.71	5460.00
Manifest-E	40	Head end only	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	60.00%	5391.86	5577.00
Manifest-E	40	Head end only	46	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	100.00%	3171.48	3349.00
Manifest-E	40	Head end only	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	100.00%	7547.47	7784.00
Manifest-E	40	Head end only	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	100.00%	6011.85	6266.00
Manifest-F	40	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	22.00%	437.27	582.00
Manifest-F	40	Head end only	10	0.50%	Incline	> 1.0%	10.33	21.00	< 0.1%	100.00%	259.92	345.00
Manifest-F	40	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	30.00%	309.05	426.00
Manifest-F	40	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	93.00%	334.45	464.00
Manifest-F	40	Head end only	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	15.00%	2168.79	2491.00
Manifest-F	40	Head end only	20	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	100.00%	546.02	648.00
Manifest-F	40	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	32.00%	1903.95	2081.00
Manifest-F	40	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	54.00%	1924.54	2264.00
Manifest-F	40	Head end only	28	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	100.00%	1303.21	1408.00
Manifest-F	40	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	45.00%	2036.11	2266.00
Manifest-F	40	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	100.00%	1418.06	1570.00
Manifest-F	40	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	88.00%	1896.44	2114.00
Manifest-F	40	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	100.00%	1668.26	1769.00
Manifest-F	40	Head end only	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	99.00%	4091.47	4396.00
Manifest-F	40	Head end only	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	4.00%	4612.77	4800.00
Manifest-F	40	Head end only	46	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	100.00%	2926.73	3098.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-F	40	Head end only	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	95.00%	6575.57	6806.00
Manifest-F	40	Head end only	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	100.00%	5584.31	5747.00
Manifest-G	40	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	53.00%	424.21	594.00
Manifest-G	40	Head end only	10	0.50%	Incline	> 1.0%	7.27	26.00	< 0.1%	99.00%	247.80	341.00
Manifest-G	40	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	34.00%	301.39	394.00
Manifest-G	40	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	88.00%	325.39	432.00
Manifest-G	40	Head end only	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	3.00%	1817.21	2012.00
Manifest-G	40	Head end only	20	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	100.00%	541.91	640.00
Manifest-G	40	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	10.00%	1681.95	2179.00
Manifest-G	40	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	50.00%	1793.90	2117.00
Manifest-G	40	Head end only	28	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	100.00%	1290.55	1345.00
Manifest-G	40	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	55.00%	1928.07	2298.00
Manifest-G	40	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	100.00%	1361.71	1520.00
Manifest-G	40	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	77.00%	1815.48	2037.00
Manifest-G	40	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	100.00%	1615.54	1676.00
Manifest-G	40	Head end only	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	97.00%	3833.99	4151.00
Manifest-G	40	Head end only	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	11.00%	4322.74	4467.00
Manifest-G	40	Head end only	46	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	100.00%	2829.07	3007.00
Manifest-G	40	Head end only	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	93.00%	6195.78	6355.00
Manifest-G	40	Head end only	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	99.00%	5343.03	5505.00
Manifest-H	40	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	43.00%	505.82	686.00
Manifest-H	40	Head end only	10	0.50%	Incline	> 1.0%	2.50	3.00	< 0.1%	96.00%	283.57	403.00
Manifest-H	40	Head end only	10	1.10%	Decline	> 1.0%	22.50	27.00	< 0.1%	49.00%	408.89	545.00
Manifest-H	40	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	71.00%	399.59	538.00
Manifest-H	40	Head end only	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	18.00%	3320.51	3828.00
Manifest-H	40	Head end only	20	1.50%	Incline	> 1.0%	2.00	3.00	< 0.1%	98.00%	581.13	684.00
Manifest-H	40	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	93.00%	2674.99	3152.00
Manifest-H	40	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	91.00%	2563.31	3111.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-H	40	Head end only	28	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	100.00%	1397.02	1485.00
Manifest-H	40	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	68.00%	2391.42	2652.00
Manifest-H	40	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	100.00%	1584.89	1747.00
Manifest-H	40	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	< 10%	99.00%	2375.45	2765.00
Manifest-H	40	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	100.00%	1873.32	1992.00
Manifest-H	40	Head end only	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	100.00%	5256.99	5763.00
Manifest-H	40	Head end only	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	29.00%	5587.16	5856.00
Manifest-H	40	Head end only	46	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	100.00%	3246.70	3404.00
Manifest-H	40	Head end only	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	98.00%	7687.33	7984.00
Manifest-H	40	Head end only	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	100.00%	6121.67	6431.00
Manifest-I	40	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	10.00%	499.24	645.00
Manifest-I	40	Head end only	10	0.50%	Incline	> 1.0%	22.00	22.00	< 0.1%	95.00%	260.69	372.00
Manifest-I	40	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	26.00%	282.70	421.00
Manifest-I	40	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	74.00%	352.70	507.00
Manifest-I	40	Head end only	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1646.59	2567.00
Manifest-I	40	Head end only	20	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	92.00%	555.47	699.00
Manifest-I	40	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1732.88	1975.00
Manifest-I	40	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	7.00%	1748.33	2066.00
Manifest-I	40	Head end only	28	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	96.00%	1313.38	1391.00
Manifest-I	40	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	23.00%	2038.61	2310.00
Manifest-I	40	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	98.00%	1410.74	1572.00
Manifest-I	40	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	44.00%	1741.36	1964.00
Manifest-I	40	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	100.00%	1640.42	1712.00
Manifest-I	40	Head end only	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	54.00%	3679.67	3985.00
Manifest-I	40	Head end only	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	4340.62	4528.00
Manifest-I	40	Head end only	46	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	91.00%	2839.33	3066.00
Manifest-I	40	Head end only	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	31.00%	6116.16	6598.00
Manifest-I	40	Head end only	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	69.00%	5313.63	5505.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-J	40	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	16.00%	442.75	574.00
Manifest-J	40	Head end only	10	0.50%	Incline	> 1.0%	10.50	16.00	< 0.1%	97.00%	263.15	387.00
Manifest-J	40	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	60.00%	303.98	406.00
Manifest-J	40	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	98.00%	322.71	435.00
Manifest-J	40	Head end only	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	38.00%	2276.09	2767.00
Manifest-J	40	Head end only	20	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	100.00%	544.66	614.00
Manifest-J	40	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	20.00%	1985.13	2606.00
Manifest-J	40	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	46.00%	1973.12	2484.00
Manifest-J	40	Head end only	28	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	90.00%	1322.02	1389.00
Manifest-J	40	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	38.00%	2036.43	2435.00
Manifest-J	40	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	100.00%	1445.80	1582.00
Manifest-J	40	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	96.00%	1916.75	2148.00
Manifest-J	40	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	100.00%	1651.93	1764.00
Manifest-J	40	Head end only	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	98.00%	4162.97	4552.00
Manifest-J	40	Head end only	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	2.00%	4607.10	4798.00
Manifest-J	40	Head end only	46	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	100.00%	2923.81	3096.00
Manifest-J	40	Head end only	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	43.00%	6651.61	7222.00
Manifest-J	40	Head end only	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	100.00%	5573.69	5749.00
Manifest-A	100	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	16.00%	617.56	799.00
Manifest-A	100	Distributed (Head and Rear)	10	0.50%	Incline	> 1.0%	0.00	0.00	< 0.1%	97.00%	299.32	367.00
Manifest-A	100	Distributed (Head and Rear)	10	1.10%	Decline	> 50%	30.49	95.00	< 0.1%	92.00%	338.77	519.00
Manifest-A	100	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	68.00%	444.98	565.00
Manifest-A	100	Distributed (Head and Rear)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6187.10	6554.00
Manifest-A	100	Distributed (Head and Rear)	18	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	81.00%	546.91	601.00
Manifest-A	100	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	83.00%	4358.42	4975.00
Manifest-A	100	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	99.00%	2960.79	3196.00
Manifest-A	100	Distributed (Head and Rear)	26	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	100.00%	1574.69	1680.00
Manifest-A	100	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	76.00%	2656.60	2979.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-A	100	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	100.00%	1694.48	1853.00
Manifest-A	100	Distributed (Head and Rear)	30	1.10%	Decline	> 1.0%	92.25	265.00	< 0.1%	100.00%	2348.78	2717.00
Manifest-A	100	Distributed (Head and Rear)	30	0.00%	Flat	< 0.5%	46.00	46.00	< 0.1%	100.00%	2046.25	2188.00
Manifest-A	100	Distributed (Head and Rear)	45	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	100.00%	3370.59	3498.00
Manifest-A	100	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	100.00%	5307.83	5808.00
Manifest-A	100	Distributed (Head and Rear)	45	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	93.00%	3170.18	3730.00
Manifest-A	100	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	100.00%	8413.88	8689.00
Manifest-A	100	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 10%, < 25%	100.00%	6707.54	6885.00
Manifest-B	100	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 10%	1.00%	569.48	768.00
Manifest-B	100	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	92.00%	248.09	298.00
Manifest-B	100	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	2.00%	259.07	403.00
Manifest-B	100	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	44.00%	387.31	593.00
Manifest-B	100	Distributed (Head and Rear)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2244.39	2874.00
Manifest-B	100	Distributed (Head and Rear)	18	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	100.00%	500.51	550.00
Manifest-B	100	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1384.52	1672.00
Manifest-B	100	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1414.26	1670.00
Manifest-B	100	Distributed (Head and Rear)	26	1.00%	Crest	<0.1%	0.00	0.00	> 25%, < 50%	5.00%	1485.95	1768.00
Manifest-B	100	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	2094.23	2437.00
Manifest-B	100	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	12.00%	1506.90	1681.00
Manifest-B	100	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	1442.78	1663.00
Manifest-B	100	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	1.00%	1665.20	1736.00
Manifest-B	100	Distributed (Head and Rear)	45	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	2.00%	2674.95	2774.00
Manifest-B	100	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2954.91	3231.00
Manifest-B	100	Distributed (Head and Rear)	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	4080.23	4348.00
Manifest-B	100	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5682.01	6159.00
Manifest-B	100	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	4897.09	5114.00
Manifest-C	100	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	17.00%	594.40	814.00
Manifest-C	100	Distributed (Head and Rear)	10	0.50%	Incline	< 0.5%	0.00	0.00	< 0.1%	83.00%	305.51	422.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-C	100	Distributed (Head and Rear)	10	1.10%	Decline	> 1.0%	25.90	74.00	< 0.1%	85.00%	268.52	421.00
Manifest-C	100	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	61.00%	435.81	564.00
Manifest-C	100	Distributed (Head and Rear)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3797.56	4279.00
Manifest-C	100	Distributed (Head and Rear)	18	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	77.00%	552.76	633.00
Manifest-C	100	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	2.00%	2272.49	2866.00
Manifest-C	100	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	27.00%	1984.70	2421.00
Manifest-C	100	Distributed (Head and Rear)	26	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	52.00%	1356.07	1514.00
Manifest-C	100	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 10%	33.00%	2406.54	2904.00
Manifest-C	100	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	76.00%	1751.79	1861.00
Manifest-C	100	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	95.00%	1872.92	2152.00
Manifest-C	100	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	96.00%	1964.74	2040.00
Manifest-C	100	Distributed (Head and Rear)	45	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	94.00%	3189.19	3321.00
Manifest-C	100	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	99.00%	4050.19	4515.00
Manifest-C	100	Distributed (Head and Rear)	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	5019.63	5409.00
Manifest-C	100	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	18.00%	7432.88	7754.00
Manifest-C	100	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	80.00%	6067.22	6231.00
Manifest-D	100	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	16.00%	633.19	825.00
Manifest-D	100	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	84.00%	322.07	394.00
Manifest-D	100	Distributed (Head and Rear)	10	1.10%	Decline	> 25%	24.91	77.00	< 0.1%	92.00%	326.22	473.00
Manifest-D	100	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	84.00%	421.60	547.00
Manifest-D	100	Distributed (Head and Rear)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	7.00%	5279.96	5625.00
Manifest-D	100	Distributed (Head and Rear)	18	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	76.00%	548.65	612.00
Manifest-D	100	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	31.00%	3628.90	4207.00
Manifest-D	100	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	85.00%	2619.70	3037.00
Manifest-D	100	Distributed (Head and Rear)	26	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	45.00%	1542.79	1603.00
Manifest-D	100	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	15.00%	2704.21	2988.00
Manifest-D	100	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	100.00%	1806.21	1915.00
Manifest-D	100	Distributed (Head and Rear)	30	1.10%	Decline	> 1.0%	57.00	108.00	< 0.1%	99.00%	2209.13	2669.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-D	100	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	100.00%	2083.55	2167.00
Manifest-D	100	Distributed (Head and Rear)	45	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	100.00%	3401.32	3502.00
Manifest-D	100	Distributed (Head and Rear)	45	1.10%	Decline	< 0.5%	24.00	24.00	> 25%, < 50%	100.00%	4937.15	5271.00
Manifest-D	100	Distributed (Head and Rear)	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	7.00%	5780.32	5888.00
Manifest-D	100	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	65.00%	8119.89	8281.00
Manifest-D	100	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 25%, < 50%	100.00%	6621.23	6774.00
Manifest-E	100	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	4.00%	564.98	720.00
Manifest-E	100	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	89.00%	295.76	397.00
Manifest-E	100	Distributed (Head and Rear)	10	1.10%	Decline	> 1.0%	27.72	53.00	< 0.1%	91.00%	269.88	411.00
Manifest-E	100	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	87.00%	384.96	510.00
Manifest-E	100	Distributed (Head and Rear)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4467.07	4978.00
Manifest-E	100	Distributed (Head and Rear)	18	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	91.00%	512.10	575.00
Manifest-E	100	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	1.00%	2489.06	3076.00
Manifest-E	100	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	66.00%	2101.17	2662.00
Manifest-E	100	Distributed (Head and Rear)	26	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	47.00%	1448.27	1515.00
Manifest-E	100	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	3.00%	2336.26	2439.00
Manifest-E	100	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	76.00%	1682.33	1763.00
Manifest-E	100	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	99.00%	1924.78	2233.00
Manifest-E	100	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	96.00%	1897.23	1958.00
Manifest-E	100	Distributed (Head and Rear)	45	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	100.00%	3139.63	3254.00
Manifest-E	100	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	100.00%	4177.46	4504.00
Manifest-E	100	Distributed (Head and Rear)	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	4838.18	5011.00
Manifest-E	100	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	34.00%	7228.25	7417.00
Manifest-E	100	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	100.00%	6001.31	6138.00
Manifest-F	100	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	14.00%	606.03	694.00
Manifest-F	100	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	54.00%	291.48	452.00
Manifest-F	100	Distributed (Head and Rear)	10	1.10%	Decline	> 1.0%	12.29	19.00	< 0.1%	76.00%	289.18	422.00
Manifest-F	100	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	51.00%	417.71	512.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-F	100	Distributed (Head and Rear)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4591.63	5100.00
Manifest-F	100	Distributed (Head and Rear)	18	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	30.00%	537.86	602.00
Manifest-F	100	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2944.28	3658.00
Manifest-F	100	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	51.00%	2226.07	2730.00
Manifest-F	100	Distributed (Head and Rear)	26	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	87.00%	1436.78	1493.00
Manifest-F	100	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	2541.02	2869.00
Manifest-F	100	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	60.00%	1753.28	1867.00
Manifest-F	100	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	89.00%	2010.77	2347.00
Manifest-F	100	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	84.00%	2009.59	2103.00
Manifest-F	100	Distributed (Head and Rear)	45	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	80.00%	3280.82	3386.00
Manifest-F	100	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	99.00%	4428.66	4995.00
Manifest-F	100	Distributed (Head and Rear)	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	5310.43	5489.00
Manifest-F	100	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	34.00%	7846.40	8196.00
Manifest-F	100	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	83.00%	6243.73	6402.00
Manifest-G	100	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	6.00%	578.90	761.00
Manifest-G	100	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	71.00%	317.34	397.00
Manifest-G	100	Distributed (Head and Rear)	10	1.10%	Decline	> 1.0%	18.64	58.00	< 0.1%	85.00%	281.59	399.00
Manifest-G	100	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	59.00%	437.60	542.00
Manifest-G	100	Distributed (Head and Rear)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4330.35	4849.00
Manifest-G	100	Distributed (Head and Rear)	18	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	74.00%	525.42	603.00
Manifest-G	100	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	1.00%	2652.02	3052.00
Manifest-G	100	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	70.00%	2164.62	2550.00
Manifest-G	100	Distributed (Head and Rear)	26	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	75.00%	1460.98	1539.00
Manifest-G	100	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	23.00%	2583.52	2827.00
Manifest-G	100	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	61.00%	1773.31	1855.00
Manifest-G	100	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	97.00%	1990.38	2334.00
Manifest-G	100	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	79.00%	2032.19	2097.00
Manifest-G	100	Distributed (Head and Rear)	45	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	87.00%	3293.99	3394.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-G	100	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	100.00%	4393.79	4857.00
Manifest-G	100	Distributed (Head and Rear)	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	5396.39	5500.00
Manifest-G	100	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	1.00%	7684.64	8014.00
Manifest-G	100	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	88.00%	6271.43	6409.00
Manifest-H	100	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	10.00%	617.77	809.00
Manifest-H	100	Distributed (Head and Rear)	10	0.50%	Incline	> 1.0%	5.00	6.00	< 0.1%	91.00%	306.56	405.00
Manifest-H	100	Distributed (Head and Rear)	10	1.10%	Decline	> 25%	24.22	84.00	< 0.1%	91.00%	298.44	425.00
Manifest-H	100	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	56.00%	442.84	541.00
Manifest-H	100	Distributed (Head and Rear)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4443.44	4895.00
Manifest-H	100	Distributed (Head and Rear)	18	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	99.00%	527.82	593.00
Manifest-H	100	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	1.00%	2758.74	3142.00
Manifest-H	100	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	71.00%	2197.84	2460.00
Manifest-H	100	Distributed (Head and Rear)	26	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	100.00%	1517.41	1617.00
Manifest-H	100	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	34.00%	2566.80	2829.00
Manifest-H	100	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	100.00%	1756.51	1844.00
Manifest-H	100	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	99.00%	2031.85	2332.00
Manifest-H	100	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	100.00%	2018.38	2100.00
Manifest-H	100	Distributed (Head and Rear)	45	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	100.00%	3299.41	3392.00
Manifest-H	100	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	100.00%	4418.58	4717.00
Manifest-H	100	Distributed (Head and Rear)	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	5394.17	5495.00
Manifest-H	100	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	97.00%	7705.51	7939.00
Manifest-H	100	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	100.00%	6255.09	6405.00
Manifest-I	100	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	23.00%	548.29	680.00
Manifest-I	100	Distributed (Head and Rear)	10	0.50%	Incline	> 1.0%	7.00	10.00	< 0.1%	97.00%	337.21	429.00
Manifest-I	100	Distributed (Head and Rear)	10	1.10%	Decline	> 25%	26.65	72.00	< 0.1%	93.00%	294.76	426.00
Manifest-I	100	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	70.00%	377.43	533.00
Manifest-I	100	Distributed (Head and Rear)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	21.00%	5066.86	5354.00
Manifest-I	100	Distributed (Head and Rear)	18	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	99.00%	518.27	576.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-I	100	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	15.00%	3018.23	3306.00
Manifest-I	100	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	91.00%	2347.47	2574.00
Manifest-I	100	Distributed (Head and Rear)	26	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	100.00%	1497.87	1555.00
Manifest-I	100	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	54.00%	2475.54	2543.00
Manifest-I	100	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	100.00%	1726.12	1853.00
Manifest-I	100	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	100.00%	2082.35	2339.00
Manifest-I	100	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	99.00%	1966.33	2125.00
Manifest-I	100	Distributed (Head and Rear)	45	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	100.00%	3250.05	3377.00
Manifest-I	100	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	100.00%	4645.65	5014.00
Manifest-I	100	Distributed (Head and Rear)	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	5231.91	5371.00
Manifest-I	100	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	27.00%	7727.57	7851.00
Manifest-I	100	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	100.00%	6264.29	6479.00
Manifest-J	100	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	13.00%	592.69	851.00
Manifest-J	100	Distributed (Head and Rear)	10	0.50%	Incline	> 1.0%	7.00	7.00	< 0.1%	100.00%	298.42	401.00
Manifest-J	100	Distributed (Head and Rear)	10	1.10%	Decline	> 25%	38.97	84.00	< 0.1%	95.00%	307.09	465.00
Manifest-J	100	Distributed (Head and Rear)	10	0.00%	Flat	> 1.0%	7.50	12.00	< 0.1%	98.00%	435.34	541.00
Manifest-J	100	Distributed (Head and Rear)	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	6.00%	4892.25	5365.00
Manifest-J	100	Distributed (Head and Rear)	18	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	100.00%	545.28	609.00
Manifest-J	100	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	8.00%	3209.64	3618.00
Manifest-J	100	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	70.00%	2460.81	2803.00
Manifest-J	100	Distributed (Head and Rear)	26	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	99.00%	1530.96	1606.00
Manifest-J	100	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	31.00%	2621.76	2754.00
Manifest-J	100	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	100.00%	1814.15	1903.00
Manifest-J	100	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	100.00%	2134.45	2567.00
Manifest-J	100	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	100.00%	2067.02	2157.00
Manifest-J	100	Distributed (Head and Rear)	45	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	100.00%	3373.34	3469.00
Manifest-J	100	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	100.00%	4737.91	5212.00
Manifest-J	100	Distributed (Head and Rear)	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	5672.17	5830.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-J	100	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	57.00%	7988.50	8133.00
Manifest-J	100	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 25%, < 50%	100.00%	6439.14	6582.00
Manifest-A	100	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	< 10%	6.00%	898.21	1124.00
Manifest-A	100	Head end only	10	0.50%	Incline	> 1.0%	13.00	24.00	< 0.1%	70.00%	423.94	559.00
Manifest-A	100	Head end only	10	1.10%	Decline	< 0.5%	4.00	4.00	< 10%	11.00%	2894.10	57800.00
Manifest-A	100	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	69.00%	559.86	734.00
Manifest-A	100	Head end only	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	17322.71	17932.00
Manifest-A	100	Head end only	18	1.50%	Incline	> 1.0%	24.00	24.00	< 0.1%	78.00%	611.34	690.00
Manifest-A	100	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	8.00%	8257.45	9136.00
Manifest-A	100	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	1.00%	5161.83	5691.00
Manifest-A	100	Head end only	26	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	84.00%	1868.66	2031.00
Manifest-A	100	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	14.00%	3441.36	3735.00
Manifest-A	100	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	99.00%	2125.23	2235.00
Manifest-A	100	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	< 10%	32.00%	3416.07	4046.00
Manifest-A	100	Head end only	30	0.00%	Flat	< 0.5%	43.00	43.00	< 0.1%	100.00%	2558.68	2727.00
Manifest-A	100	Head end only	45	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	100.00%	3936.32	4054.00
Manifest-A	100	Head end only	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	79.00%	7195.52	7655.00
Manifest-A	100	Head end only	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	1.00%	7143.19	7436.00
Manifest-A	100	Head end only	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	53.00%	10553.19	10816.00
Manifest-A	100	Head end only	60	0.00%	Flat	> 1.0%	116.67	167.00	< 10%	100.00%	7954.78	8122.00
Manifest-B	100	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	866.21	957.00
Manifest-B	100	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	33.00%	323.07	435.00
Manifest-B	100	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	372.55	631.00
Manifest-B	100	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	2.00%	569.48	733.00
Manifest-B	100	Head end only	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1851.66	2305.00
Manifest-B	100	Head end only	18	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	93.00%	520.86	603.00
Manifest-B	100	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1723.80	2068.00
Manifest-B	100	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1815.25	2124.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-B	100	Head end only	26	1.00%	Crest	<0.1%	0.00	0.00	< 10%	5.00%	1854.65	1944.00
Manifest-B	100	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	2598.13	2981.00
Manifest-B	100	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1898.92	2028.00
Manifest-B	100	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	1832.95	2134.00
Manifest-B	100	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2125.47	2220.00
Manifest-B	100	Head end only	45	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	3200.09	3308.00
Manifest-B	100	Head end only	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3590.02	3965.00
Manifest-B	100	Head end only	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	4877.86	5240.00
Manifest-B	100	Head end only	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6938.34	7415.00
Manifest-B	100	Head end only	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	5841.96	5943.00
Manifest-C	100	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	< 10%	2.00%	871.63	1094.00
Manifest-C	100	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	10.00%	443.35	599.00
Manifest-C	100	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	442.06	767.00
Manifest-C	100	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	10.00%	565.00	745.00
Manifest-C	100	Head end only	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4551.33	5599.00
Manifest-C	100	Head end only	18	1.50%	Incline	> 1.0%	5.00	5.00	< 0.1%	18.00%	577.09	668.00
Manifest-C	100	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3193.68	3815.00
Manifest-C	100	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2836.71	3257.00
Manifest-C	100	Head end only	26	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	38.00%	1732.62	1856.00
Manifest-C	100	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	< 10%	2.00%	3377.52	3819.00
Manifest-C	100	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	53.00%	2119.01	2251.00
Manifest-C	100	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	9.00%	2466.74	2804.00
Manifest-C	100	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	47.00%	2495.41	2578.00
Manifest-C	100	Head end only	45	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	78.00%	3824.05	3946.00
Manifest-C	100	Head end only	45	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	9.00%	5024.60	5521.00
Manifest-C	100	Head end only	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	6501.56	6932.00
Manifest-C	100	Head end only	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	3.00%	9082.43	9447.00
Manifest-C	100	Head end only	60	0.00%	Flat	<0.1%	0.00	0.00	> 10%, < 25%	43.00%	7330.79	7521.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-D	100	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	899.35	1127.00
Manifest-D	100	Head end only	10	0.50%	Incline	> 1.0%	1.50	2.00	< 0.1%	80.00%	385.28	498.00
Manifest-D	100	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	14.00%	589.78	829.00
Manifest-D	100	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	87.00%	554.16	708.00
Manifest-D	100	Head end only	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	13582.07	15854.00
Manifest-D	100	Head end only	18	1.50%	Incline	> 1.0%	0.00	0.00	< 0.1%	73.00%	599.39	678.00
Manifest-D	100	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	1.00%	6011.91	6914.00
Manifest-D	100	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4283.79	5021.00
Manifest-D	100	Head end only	26	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	28.00%	1858.20	1966.00
Manifest-D	100	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	< 10%	9.00%	3576.57	3880.00
Manifest-D	100	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	96.00%	2135.37	2257.00
Manifest-D	100	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	24.00%	3173.91	3595.00
Manifest-D	100	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	98.00%	2610.16	2698.00
Manifest-D	100	Head end only	45	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	95.00%	4012.66	4129.00
Manifest-D	100	Head end only	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	45.00%	6540.85	6976.00
Manifest-D	100	Head end only	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	7322.64	7653.00
Manifest-D	100	Head end only	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	10204.23	10430.00
Manifest-D	100	Head end only	60	0.00%	Flat	<0.1%	0.00	0.00	> 25%, < 50%	94.00%	7867.06	8053.00
Manifest-E	100	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	761.94	1014.00
Manifest-E	100	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	58.00%	341.50	440.00
Manifest-E	100	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	1.00%	483.45	618.00
Manifest-E	100	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	55.00%	514.62	646.00
Manifest-E	100	Head end only	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5767.30	6726.00
Manifest-E	100	Head end only	18	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	71.00%	546.97	651.00
Manifest-E	100	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3674.76	4242.00
Manifest-E	100	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3129.94	3640.00
Manifest-E	100	Head end only	26	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	2.00%	1783.89	1844.00
Manifest-E	100	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	3071.99	3532.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-E	100	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	57.00%	2025.02	2145.00
Manifest-E	100	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	23.00%	2649.01	2909.00
Manifest-E	100	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	75.00%	2413.68	2499.00
Manifest-E	100	Head end only	45	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	65.00%	3735.84	3854.00
Manifest-E	100	Head end only	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	56.00%	5406.20	5898.00
Manifest-E	100	Head end only	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	6256.23	6518.00
Manifest-E	100	Head end only	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	8968.20	9248.00
Manifest-E	100	Head end only	60	0.00%	Flat	<0.1%	0.00	0.00	> 10%, < 25%	33.00%	7267.58	7435.00
Manifest-F	100	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	< 10%	3.00%	899.84	1060.00
Manifest-F	100	Head end only	10	0.50%	Incline	< 0.5%	2.00	2.00	< 0.1%	25.00%	407.91	566.00
Manifest-F	100	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	496.92	609.00
Manifest-F	100	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	27.00%	543.99	680.00
Manifest-F	100	Head end only	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6930.90	8610.00
Manifest-F	100	Head end only	18	1.50%	Incline	> 1.0%	4.00	4.00	< 0.1%	70.00%	561.80	675.00
Manifest-F	100	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4216.50	4936.00
Manifest-F	100	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3366.87	3924.00
Manifest-F	100	Head end only	26	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	30.00%	1815.98	1941.00
Manifest-F	100	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3377.04	3745.00
Manifest-F	100	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	92.00%	2134.42	2220.00
Manifest-F	100	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	12.00%	2690.07	3030.00
Manifest-F	100	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	86.00%	2555.37	2617.00
Manifest-F	100	Head end only	45	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	93.00%	3922.51	4054.00
Manifest-F	100	Head end only	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	15.00%	5491.22	6185.00
Manifest-F	100	Head end only	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	6876.39	7194.00
Manifest-F	100	Head end only	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	1.00%	9596.75	9967.00
Manifest-F	100	Head end only	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	52.00%	7551.83	7706.00
Manifest-G	100	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	875.65	1109.00
Manifest-G	100	Head end only	10	0.50%	Incline	< 0.5%	5.00	5.00	< 0.1%	71.00%	345.65	411.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-G	100	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	5.00%	495.79	707.00
Manifest-G	100	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	73.00%	542.51	676.00
Manifest-G	100	Head end only	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6692.93	8355.00
Manifest-G	100	Head end only	18	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	55.00%	566.41	656.00
Manifest-G	100	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4039.97	4689.00
Manifest-G	100	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3310.02	3742.00
Manifest-G	100	Head end only	26	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	24.00%	1814.76	1905.00
Manifest-G	100	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3497.84	3850.00
Manifest-G	100	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	31.00%	2134.03	2247.00
Manifest-G	100	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	15.00%	2778.93	3059.00
Manifest-G	100	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	38.00%	2571.03	2644.00
Manifest-G	100	Head end only	45	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	49.00%	3935.57	4054.00
Manifest-G	100	Head end only	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	14.00%	5685.96	6174.00
Manifest-G	100	Head end only	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	6960.46	7149.00
Manifest-G	100	Head end only	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	9619.92	10064.00
Manifest-G	100	Head end only	60	0.00%	Flat	<0.1%	0.00	0.00	> 10%, < 25%	22.00%	7606.21	7787.00
Manifest-H	100	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	860.87	1081.00
Manifest-H	100	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	66.00%	364.70	446.00
Manifest-H	100	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	6.00%	517.36	699.00
Manifest-H	100	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	60.00%	539.64	662.00
Manifest-H	100	Head end only	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6790.87	9224.00
Manifest-H	100	Head end only	18	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	53.00%	605.38	669.00
Manifest-H	100	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4192.92	4851.00
Manifest-H	100	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3354.18	3783.00
Manifest-H	100	Head end only	26	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	81.00%	1867.05	1963.00
Manifest-H	100	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	4.00%	3331.22	3638.00
Manifest-H	100	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	71.00%	2114.54	2213.00
Manifest-H	100	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	12.00%	2812.08	3160.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-H	100	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	83.00%	2557.82	2668.00
Manifest-H	100	Head end only	45	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	83.00%	3922.65	4023.00
Manifest-H	100	Head end only	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	33.00%	5689.11	6416.00
Manifest-H	100	Head end only	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	6916.87	7079.00
Manifest-H	100	Head end only	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	1.00%	9661.48	9877.00
Manifest-H	100	Head end only	60	0.00%	Flat	<0.1%	0.00	0.00	> 25%, < 50%	62.00%	7606.15	7784.00
Manifest-I	100	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	1.00%	781.27	831.00
Manifest-I	100	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	70.00%	359.98	483.00
Manifest-I	100	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	2.00%	534.34	660.00
Manifest-I	100	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	72.00%	511.26	649.00
Manifest-I	100	Head end only	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	1.00%	8794.17	10789.00
Manifest-I	100	Head end only	18	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	66.00%	560.73	652.00
Manifest-I	100	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4731.51	5168.00
Manifest-I	100	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3686.06	4070.00
Manifest-I	100	Head end only	26	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	100.00%	1890.67	2035.00
Manifest-I	100	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	3250.13	3413.00
Manifest-I	100	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	80.00%	2068.92	2171.00
Manifest-I	100	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	< 10%	10.00%	2903.15	3235.00
Manifest-I	100	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	95.00%	2484.93	2606.00
Manifest-I	100	Head end only	45	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	97.00%	3844.95	3954.00
Manifest-I	100	Head end only	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	39.00%	6009.52	6488.00
Manifest-I	100	Head end only	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	6736.46	7005.00
Manifest-I	100	Head end only	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	9652.04	9809.00
Manifest-I	100	Head end only	60	0.00%	Flat	<0.1%	0.00	0.00	> 25%, < 50%	77.00%	7552.85	7777.00
Manifest-J	100	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	< 10%	1.00%	901.88	1088.00
Manifest-J	100	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	57.00%	377.58	538.00
Manifest-J	100	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	6.00%	570.28	753.00
Manifest-J	100	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	57.00%	554.77	693.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-J	100	Head end only	15	2.80%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	10700.17	14919.00
Manifest-J	100	Head end only	18	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	25.00%	607.32	673.00
Manifest-J	100	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5232.91	6123.00
Manifest-J	100	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	1.00%	3845.93	4511.00
Manifest-J	100	Head end only	26	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	76.00%	1895.60	1995.00
Manifest-J	100	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	3490.98	3768.00
Manifest-J	100	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	89.00%	2169.33	2263.00
Manifest-J	100	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	12.00%	3020.23	3500.00
Manifest-J	100	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	94.00%	2612.57	2697.00
Manifest-J	100	Head end only	45	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	99.00%	4010.83	4120.00
Manifest-J	100	Head end only	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	41.00%	6149.84	6572.00
Manifest-J	100	Head end only	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	7159.20	7359.00
Manifest-J	100	Head end only	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	10084.45	10504.00
Manifest-J	100	Head end only	60	0.00%	Flat	<0.1%	0.00	0.00	< 10%	98.00%	7818.43	7968.00
Manifest-A	150	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	23.00%	856.73	1021.00
Manifest-A	150	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	64.00%	357.59	439.00
Manifest-A	150	Distributed (Head and Rear)	10	1.10%	Decline	> 1.0%	40.75	77.00	< 0.1%	76.00%	458.10	595.00
Manifest-A	150	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	83.00%	513.23	608.00
Manifest-A	150	Distributed (Head and Rear)	15	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	33.00%	428.93	493.00
Manifest-A	150	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6429.97	7429.00
Manifest-A	150	Distributed (Head and Rear)	23	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	66.00%	1601.29	1677.00
Manifest-A	150	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	1.00%	3940.88	4431.00
Manifest-A	150	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3347.26	3591.00
Manifest-A	150	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	94.00%	2062.60	2160.00
Manifest-A	150	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	91.00%	2773.25	3123.00
Manifest-A	150	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	97.00%	2538.80	2633.00
Manifest-A	150	Distributed (Head and Rear)	40	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	100.00%	3251.27	3337.00
Manifest-A	150	Distributed (Head and Rear)	40	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	5284.91	5493.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-A	150	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	96.00%	5918.43	6325.00
Manifest-A	150	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	15.00%	9818.52	10233.00
Manifest-A	150	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 10%, < 25%	98.00%	7766.39	7891.00
Manifest-B	150	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	785.56	933.00
Manifest-B	150	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	39.00%	299.07	428.00
Manifest-B	150	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	1.00%	299.57	511.00
Manifest-B	150	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	577.99	717.00
Manifest-B	150	Distributed (Head and Rear)	15	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	20.00%	436.81	498.00
Manifest-B	150	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1727.32	2087.00
Manifest-B	150	Distributed (Head and Rear)	23	1.00%	Crest	<0.1%	0.00	0.00	> 50%	0.00%	1716.13	1798.00
Manifest-B	150	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1619.50	1959.00
Manifest-B	150	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2732.68	3061.00
Manifest-B	150	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1801.41	1971.00
Manifest-B	150	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	1617.32	1983.00
Manifest-B	150	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2082.31	2150.00
Manifest-B	150	Distributed (Head and Rear)	40	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	2621.20	2711.00
Manifest-B	150	Distributed (Head and Rear)	40	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	3612.48	3781.00
Manifest-B	150	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3173.13	3654.00
Manifest-B	150	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6733.51	7216.00
Manifest-B	150	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	5732.50	5882.00
Manifest-C	150	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	4.00%	874.74	963.00
Manifest-C	150	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	27.00%	336.45	510.00
Manifest-C	150	Distributed (Head and Rear)	10	1.10%	Decline	> 1.0%	18.14	33.00	< 0.1%	78.00%	335.99	484.00
Manifest-C	150	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	47.00%	479.69	565.00
Manifest-C	150	Distributed (Head and Rear)	15	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	417.26	482.00
Manifest-C	150	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3810.26	4398.00
Manifest-C	150	Distributed (Head and Rear)	23	1.00%	Crest	<0.1%	0.00	0.00	< 10%	42.00%	1437.25	1707.00
Manifest-C	150	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	3.00%	2721.69	3063.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-C	150	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	28.00%	3059.78	3392.00
Manifest-C	150	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	20.00%	1957.38	2110.00
Manifest-C	150	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	94.00%	2264.02	2547.00
Manifest-C	150	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	29.00%	2370.26	2457.00
Manifest-C	150	Distributed (Head and Rear)	40	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	28.00%	3101.77	3176.00
Manifest-C	150	Distributed (Head and Rear)	40	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	4535.13	4646.00
Manifest-C	150	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	99.00%	4858.13	5249.00
Manifest-C	150	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	32.00%	8830.88	9236.00
Manifest-C	150	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 10%, < 25%	47.00%	7054.29	7234.00
Manifest-D	150	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	847.93	926.00
Manifest-D	150	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	27.00%	349.89	406.00
Manifest-D	150	Distributed (Head and Rear)	10	1.10%	Decline	< 0.5%	4.00	4.00	< 0.1%	69.00%	299.71	437.00
Manifest-D	150	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	11.00%	486.17	583.00
Manifest-D	150	Distributed (Head and Rear)	15	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	44.00%	418.59	507.00
Manifest-D	150	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2934.23	3468.00
Manifest-D	150	Distributed (Head and Rear)	23	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	12.00%	1379.09	1504.00
Manifest-D	150	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	4.00%	2337.78	2785.00
Manifest-D	150	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	3109.15	3438.00
Manifest-D	150	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	7.00%	2000.87	2100.00
Manifest-D	150	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	70.00%	1992.25	2222.00
Manifest-D	150	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	1.00%	2375.00	2430.00
Manifest-D	150	Distributed (Head and Rear)	40	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	7.00%	3079.18	3203.00
Manifest-D	150	Distributed (Head and Rear)	40	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	4505.93	4722.00
Manifest-D	150	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	65.00%	4333.20	4700.00
Manifest-D	150	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	8414.73	8806.00
Manifest-D	150	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	1.00%	6898.15	7058.00
Manifest-E	150	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	886.48	949.00
Manifest-E	150	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	24.00%	359.04	524.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-E	150	Distributed (Head and Rear)	10	1.10%	Decline	> 1.0%	33.00	49.00	< 0.1%	58.00%	275.42	439.00
Manifest-E	150	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	23.00%	553.68	779.00
Manifest-E	150	Distributed (Head and Rear)	15	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	20.00%	423.94	524.00
Manifest-E	150	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2780.34	3778.00
Manifest-E	150	Distributed (Head and Rear)	23	1.00%	Crest	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	1452.34	1666.00
Manifest-E	150	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	20.00%	2131.89	2606.00
Manifest-E	150	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3045.60	3359.00
Manifest-E	150	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	6.00%	1909.09	2083.00
Manifest-E	150	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	59.00%	1959.05	2230.00
Manifest-E	150	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	3.00%	2372.77	2485.00
Manifest-E	150	Distributed (Head and Rear)	40	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	3.00%	3061.59	3211.00
Manifest-E	150	Distributed (Head and Rear)	40	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	4504.35	4846.00
Manifest-E	150	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	51.00%	4149.86	4398.00
Manifest-E	150	Distributed (Head and Rear)	60	0.50%	Decline	> 1.0%	140.71	251.00	< 0.1%	100.00%	4392.89	4456.00
Manifest-E	150	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	6876.71	6976.00
Manifest-F	150	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	1.00%	860.60	941.00
Manifest-F	150	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	9.00%	345.72	458.00
Manifest-F	150	Distributed (Head and Rear)	10	1.10%	Decline	> 1.0%	9.80	28.00	< 0.1%	70.00%	308.57	451.00
Manifest-F	150	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	11.00%	473.07	588.00
Manifest-F	150	Distributed (Head and Rear)	15	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	3.00%	406.59	479.00
Manifest-F	150	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3348.62	4108.00
Manifest-F	150	Distributed (Head and Rear)	23	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	1461.93	1545.00
Manifest-F	150	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	10.00%	2515.28	3109.00
Manifest-F	150	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2936.37	3203.00
Manifest-F	150	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	3.00%	1931.83	2008.00
Manifest-F	150	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	91.00%	2055.78	2393.00
Manifest-F	150	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	9.00%	2329.70	2393.00
Manifest-F	150	Distributed (Head and Rear)	40	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	10.00%	3015.89	3112.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-F	150	Distributed (Head and Rear)	40	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	4319.35	4443.00
Manifest-F	150	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	96.00%	4505.05	5114.00
Manifest-F	150	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	8471.63	8714.00
Manifest-F	150	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 25%, < 50%	5.00%	6882.03	6986.00
Manifest-G	150	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	955.80	1022.00
Manifest-G	150	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	98.00%	388.96	532.00
Manifest-G	150	Distributed (Head and Rear)	10	1.10%	Decline	> 1.0%	14.08	38.00	< 0.1%	82.00%	314.98	475.00
Manifest-G	150	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	45.00%	551.93	683.00
Manifest-G	150	Distributed (Head and Rear)	15	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	89.00%	407.00	476.00
Manifest-G	150	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2955.90	3358.00
Manifest-G	150	Distributed (Head and Rear)	23	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	3.00%	1519.70	1589.00
Manifest-G	150	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	3.00%	2316.12	2802.00
Manifest-G	150	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	3073.99	3332.00
Manifest-G	150	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	24.00%	2030.20	2118.00
Manifest-G	150	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	78.00%	2049.87	2382.00
Manifest-G	150	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	19.00%	2395.38	2476.00
Manifest-G	150	Distributed (Head and Rear)	40	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	11.00%	3110.75	3212.00
Manifest-G	150	Distributed (Head and Rear)	40	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	4669.79	4788.00
Manifest-G	150	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	95.00%	4382.62	4758.00
Manifest-G	150	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	8464.78	8972.00
Manifest-G	150	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	1.00%	6964.01	7150.00
Manifest-H	150	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	789.35	951.00
Manifest-H	150	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	55.00%	350.29	482.00
Manifest-H	150	Distributed (Head and Rear)	10	1.10%	Decline	> 1.0%	19.55	76.00	< 0.1%	85.00%	370.42	490.00
Manifest-H	150	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	81.00%	500.56	538.00
Manifest-H	150	Distributed (Head and Rear)	15	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	29.00%	418.52	470.00
Manifest-H	150	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4620.78	5294.00
Manifest-H	150	Distributed (Head and Rear)	23	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	75.00%	1494.14	1556.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-H	150	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	5.00%	3092.40	3418.00
Manifest-H	150	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	4.00%	3252.99	3542.00
Manifest-H	150	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	56.00%	2034.39	2132.00
Manifest-H	150	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	94.00%	2404.20	2646.00
Manifest-H	150	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	68.00%	2497.90	2562.00
Manifest-H	150	Distributed (Head and Rear)	40	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	68.00%	3178.01	3266.00
Manifest-H	150	Distributed (Head and Rear)	40	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	5088.20	5261.00
Manifest-H	150	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	97.00%	5201.74	5540.00
Manifest-H	150	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	10.00%	9215.71	9353.00
Manifest-H	150	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	82.00%	7366.57	7491.00
Manifest-I	150	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	19.00%	879.83	950.00
Manifest-I	150	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	56.00%	348.38	477.00
Manifest-I	150	Distributed (Head and Rear)	10	1.10%	Decline	> 1.0%	15.54	38.00	< 0.1%	81.00%	345.57	474.00
Manifest-I	150	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	70.00%	518.07	650.00
Manifest-I	150	Distributed (Head and Rear)	15	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	55.00%	437.00	516.00
Manifest-I	150	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4095.02	4747.00
Manifest-I	150	Distributed (Head and Rear)	23	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	84.00%	1486.85	1580.00
Manifest-I	150	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	5.00%	2821.86	3416.00
Manifest-I	150	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3302.34	3565.00
Manifest-I	150	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	60.00%	2040.44	2172.00
Manifest-I	150	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	95.00%	2319.90	2677.00
Manifest-I	150	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	46.00%	2460.62	2564.00
Manifest-I	150	Distributed (Head and Rear)	40	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	63.00%	3191.79	3303.00
Manifest-I	150	Distributed (Head and Rear)	40	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	5038.02	5308.00
Manifest-I	150	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	95.00%	4927.25	5570.00
Manifest-I	150	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	45.00%	9194.22	9426.00
Manifest-I	150	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	67.00%	7248.09	7414.00
Manifest-J	150	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 10%	1.00%	872.64	964.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-J	150	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	81.00%	381.49	480.00
Manifest-J	150	Distributed (Head and Rear)	10	1.10%	Decline	> 1.0%	18.77	52.00	< 0.1%	90.00%	344.38	462.00
Manifest-J	150	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	87.00%	516.78	619.00
Manifest-J	150	Distributed (Head and Rear)	15	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	83.00%	421.89	476.00
Manifest-J	150	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4269.07	5039.00
Manifest-J	150	Distributed (Head and Rear)	23	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	96.00%	1463.81	1563.00
Manifest-J	150	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	1.00%	2862.72	3187.00
Manifest-J	150	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	3201.58	3559.00
Manifest-J	150	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	84.00%	1999.84	2129.00
Manifest-J	150	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	97.00%	2312.27	2666.00
Manifest-J	150	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	95.00%	2421.86	2503.00
Manifest-J	150	Distributed (Head and Rear)	40	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	86.00%	3155.32	3219.00
Manifest-J	150	Distributed (Head and Rear)	40	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	4765.66	4976.00
Manifest-J	150	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	100.00%	4937.17	5272.00
Manifest-J	150	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	11.00%	9169.79	9428.00
Manifest-J	150	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	99.00%	7135.46	7250.00
Manifest-A	150	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	8136.59	8283.00
Manifest-A	150	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	73.00%	2670.36	2778.00
Manifest-A	150	Distributed (Head, Mid, Rear)	10	1.10%	Decline	> 1.0%	3.50	4.00	< 0.1%	64.00%	647.05	854.00
Manifest-A	150	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	93.00%	4725.41	4983.00
Manifest-A	150	Distributed (Head, Mid, Rear)	15	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	74.00%	7040.45	7162.00
Manifest-A	150	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2153.48	2385.00
Manifest-A	150	Distributed (Head, Mid, Rear)	23	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	74.00%	2229.72	2322.00
Manifest-A	150	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	442.15	524.00
Manifest-A	150	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	318.91	422.00
Manifest-A	150	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	94.00%	2947.48	3016.00
Manifest-A	150	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 10%	95.00%	1840.39	1947.00
Manifest-A	150	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	98.00%	342.16	447.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-A	150	Distributed (Head, Mid, Rear)	40	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	99.00%	401.27	445.00
Manifest-A	150	Distributed (Head, Mid, Rear)	40	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	9079.18	9332.00
Manifest-A	150	Distributed (Head, Mid, Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	99.00%	2647.63	3085.00
Manifest-A	150	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2915.30	3100.00
Manifest-A	150	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 10%, < 25%	97.00%	836.92	891.00
Manifest-B	150	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	5665.47	5980.00
Manifest-B	150	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	65.00%	3914.24	4307.00
Manifest-B	150	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	1.00%	2579.53	2816.00
Manifest-B	150	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	404.86	541.00
Manifest-B	150	Distributed (Head, Mid, Rear)	15	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	70.00%	1340.67	1374.00
Manifest-B	150	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3945.58	4040.00
Manifest-B	150	Distributed (Head, Mid, Rear)	23	1.00%	Crest	<0.1%	0.00	0.00	> 50%	0.00%	3686.80	4507.00
Manifest-B	150	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5942.84	6789.00
Manifest-B	150	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	1405.25	1458.00
Manifest-B	150	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	4328.72	4453.00
Manifest-B	150	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	5132.35	5295.00
Manifest-B	150	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	1827.50	1987.00
Manifest-B	150	Distributed (Head, Mid, Rear)	40	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	502.90	640.00
Manifest-B	150	Distributed (Head, Mid, Rear)	40	1.00%	Trough	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	2361.43	2469.00
Manifest-B	150	Distributed (Head, Mid, Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1621.11	1752.00
Manifest-B	150	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	269.47	341.00
Manifest-B	150	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	386.65	419.00
Manifest-C	150	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	47.00%	2279.55	2627.00
Manifest-C	150	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	78.00%	702.91	857.00
Manifest-C	150	Distributed (Head, Mid, Rear)	10	1.10%	Decline	> 1.0%	7.00	14.00	< 0.1%	83.00%	3052.98	3353.00
Manifest-C	150	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	76.00%	6073.68	6517.00
Manifest-C	150	Distributed (Head, Mid, Rear)	15	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	12.00%	1496.20	1702.00
Manifest-C	150	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	280.86	432.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-C	150	Distributed (Head, Mid, Rear)	23	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	18.00%	1472.00	1902.00
Manifest-C	150	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	3.00%	1560.69	2007.00
Manifest-C	150	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 10%	3.00%	3121.30	3334.00
Manifest-C	150	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	29.00%	6478.36	6554.00
Manifest-C	150	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	96.00%	1564.10	1629.00
Manifest-C	150	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	45.00%	2085.71	2148.00
Manifest-C	150	Distributed (Head, Mid, Rear)	40	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	42.00%	417.98	554.00
Manifest-C	150	Distributed (Head, Mid, Rear)	40	1.00%	Trough	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	2778.46	2888.00
Manifest-C	150	Distributed (Head, Mid, Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	99.00%	1756.05	1842.00
Manifest-C	150	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	67.00%	295.31	350.00
Manifest-C	150	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 25%, < 50%	51.00%	390.65	438.00
Manifest-D	150	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 10%	3.00%	7944.44	8082.00
Manifest-D	150	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	61.00%	2664.98	2833.00
Manifest-D	150	Distributed (Head, Mid, Rear)	10	1.10%	Decline	> 1.0%	20.00	20.00	< 0.1%	91.00%	666.18	839.00
Manifest-D	150	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	37.00%	4629.57	5035.00
Manifest-D	150	Distributed (Head, Mid, Rear)	15	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	18.00%	2135.69	2445.00
Manifest-D	150	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	309.34	437.00
Manifest-D	150	Distributed (Head, Mid, Rear)	23	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	2507.75	2703.00
Manifest-D	150	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	2.00%	3561.70	3949.00
Manifest-D	150	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	1263.50	1469.00
Manifest-D	150	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	9.00%	3788.70	3865.00
Manifest-D	150	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	59.00%	6299.89	6386.00
Manifest-D	150	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	5.00%	2069.27	2136.00
Manifest-D	150	Distributed (Head, Mid, Rear)	40	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	9.00%	425.11	540.00
Manifest-D	150	Distributed (Head, Mid, Rear)	40	1.00%	Trough	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	2727.65	2832.00
Manifest-D	150	Distributed (Head, Mid, Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	67.00%	1785.61	1893.00
Manifest-D	150	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	1.00%	314.76	447.00
Manifest-D	150	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	391.64	459.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-E	150	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	7482.05	7598.00
Manifest-E	150	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	43.00%	2646.55	2922.00
Manifest-E	150	Distributed (Head, Mid, Rear)	10	1.10%	Decline	> 1.0%	3.00	3.00	< 0.1%	70.00%	644.00	884.00
Manifest-E	150	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	3.00%	4015.19	4452.00
Manifest-E	150	Distributed (Head, Mid, Rear)	15	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	6.00%	1866.54	2070.00
Manifest-E	150	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	268.00	358.00
Manifest-E	150	Distributed (Head, Mid, Rear)	23	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	2663.17	2944.00
Manifest-E	150	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	11.00%	2110.69	2526.00
Manifest-E	150	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	6176.41	6366.00
Manifest-E	150	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	2081.38	2161.00
Manifest-E	150	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	60.00%	452.96	580.00
Manifest-E	150	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2731.19	2828.00
Manifest-E	150	Distributed (Head, Mid, Rear)	40	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	2.00%	1821.57	1917.00
Manifest-E	150	Distributed (Head, Mid, Rear)	40	1.00%	Trough	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	304.06	519.00
Manifest-E	150	Distributed (Head, Mid, Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	42.00%	386.05	494.00
Manifest-E	150	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7426.57	7826.00
Manifest-E	150	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	1.00%	2532.09	2729.00
Manifest-F	150	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	1.00%	721.65	844.00
Manifest-F	150	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	23.00%	3948.12	4281.00
Manifest-F	150	Distributed (Head, Mid, Rear)	10	1.10%	Decline	> 1.0%	7.00	10.00	< 0.1%	87.00%	1850.01	2077.00
Manifest-F	150	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	7.00%	252.72	324.00
Manifest-F	150	Distributed (Head, Mid, Rear)	15	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	28.00%	2088.61	2457.00
Manifest-F	150	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2532.88	3064.00
Manifest-F	150	Distributed (Head, Mid, Rear)	23	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	1.00%	1223.64	1331.00
Manifest-F	150	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	6.00%	3819.69	4001.00
Manifest-F	150	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 10%	1.00%	6328.42	6385.00
Manifest-F	150	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	1.00%	2035.70	2097.00
Manifest-F	150	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	95.00%	412.04	521.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-F	150	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	1.00%	2707.62	2776.00
Manifest-F	150	Distributed (Head, Mid, Rear)	40	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	4.00%	1730.07	1821.00
Manifest-F	150	Distributed (Head, Mid, Rear)	40	1.00%	Trough	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	318.94	416.00
Manifest-F	150	Distributed (Head, Mid, Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	98.00%	394.17	442.00
Manifest-F	150	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7605.06	7857.00
Manifest-F	150	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 25%, < 50%	5.00%	2510.42	2640.00
Manifest-G	150	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	1.00%	595.63	745.00
Manifest-G	150	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	69.00%	4275.80	4767.00
Manifest-G	150	Distributed (Head, Mid, Rear)	10	1.10%	Decline	> 1.0%	11.00	11.00	< 0.1%	66.00%	1948.83	2147.00
Manifest-G	150	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	66.00%	277.15	358.00
Manifest-G	150	Distributed (Head, Mid, Rear)	15	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	73.00%	2282.14	2579.00
Manifest-G	150	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3048.43	3347.00
Manifest-G	150	Distributed (Head, Mid, Rear)	23	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	8.00%	1304.75	1359.00
Manifest-G	150	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	1.00%	3711.50	3823.00
Manifest-G	150	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	6365.72	6454.00
Manifest-G	150	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	27.00%	2098.48	2175.00
Manifest-G	150	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	78.00%	454.06	610.00
Manifest-G	150	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	20.00%	2791.31	2896.00
Manifest-G	150	Distributed (Head, Mid, Rear)	40	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	26.00%	1820.29	1913.00
Manifest-G	150	Distributed (Head, Mid, Rear)	40	1.00%	Trough	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	363.94	459.00
Manifest-G	150	Distributed (Head, Mid, Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	91.00%	395.30	483.00
Manifest-G	150	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1268.48	1342.00
Manifest-G	150	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	3.00%	3815.15	3937.00
Manifest-H	150	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	3.00%	7566.90	7739.00
Manifest-H	150	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	79.00%	2626.34	2814.00
Manifest-H	150	Distributed (Head, Mid, Rear)	10	1.10%	Decline	> 1.0%	15.00	31.00	< 0.1%	90.00%	611.72	708.00
Manifest-H	150	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	91.00%	4153.61	4569.00
Manifest-H	150	Distributed (Head, Mid, Rear)	15	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	27.00%	1920.24	2222.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-H	150	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	294.32	446.00
Manifest-H	150	Distributed (Head, Mid, Rear)	23	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	51.00%	2184.32	2281.00
Manifest-H	150	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	430.25	464.00
Manifest-H	150	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	4.00%	2876.09	2980.00
Manifest-H	150	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	65.00%	1821.28	1942.00
Manifest-H	150	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	91.00%	314.97	397.00
Manifest-H	150	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	78.00%	396.90	447.00
Manifest-H	150	Distributed (Head, Mid, Rear)	40	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	69.00%	8436.61	8804.00
Manifest-H	150	Distributed (Head, Mid, Rear)	40	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	2774.79	2891.00
Manifest-H	150	Distributed (Head, Mid, Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	94.00%	716.83	867.00
Manifest-H	150	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	1.00%	4951.44	5386.00
Manifest-H	150	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	85.00%	2256.78	2514.00
Manifest-I	150	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	327.38	452.00
Manifest-I	150	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	48.00%	2129.82	2550.00
Manifest-I	150	Distributed (Head, Mid, Rear)	10	1.10%	Decline	> 1.0%	11.50	29.00	< 0.1%	85.00%	2721.42	2959.00
Manifest-I	150	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	57.00%	1332.26	1394.00
Manifest-I	150	Distributed (Head, Mid, Rear)	15	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	25.00%	3898.61	3968.00
Manifest-I	150	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6759.80	6888.00
Manifest-I	150	Distributed (Head, Mid, Rear)	23	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	93.00%	2862.08	3202.00
Manifest-I	150	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	7.00%	4226.72	4564.00
Manifest-I	150	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	3.00%	1331.76	1395.00
Manifest-I	150	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	57.00%	4159.58	4281.00
Manifest-I	150	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	98.00%	6668.54	6731.00
Manifest-I	150	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	52.00%	2167.01	2223.00
Manifest-I	150	Distributed (Head, Mid, Rear)	40	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	78.00%	437.72	551.00
Manifest-I	150	Distributed (Head, Mid, Rear)	40	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	2870.29	2942.00
Manifest-I	150	Distributed (Head, Mid, Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	100.00%	1827.65	1938.00
Manifest-I	150	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	6.00%	320.59	409.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-I	150	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	71.00%	401.48	467.00
Manifest-J	150	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	1.00%	8259.46	8636.00
Manifest-J	150	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	70.00%	2682.92	2930.00
Manifest-J	150	Distributed (Head, Mid, Rear)	10	1.10%	Decline	> 1.0%	17.60	34.00	< 0.1%	87.00%	765.55	868.00
Manifest-J	150	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	83.00%	4666.43	5027.00
Manifest-J	150	Distributed (Head, Mid, Rear)	15	1.50%	Incline	< 0.5%	2.00	2.00	< 0.1%	75.00%	2142.96	2421.00
Manifest-J	150	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	307.46	445.00
Manifest-J	150	Distributed (Head, Mid, Rear)	23	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	64.00%	2642.82	2975.00
Manifest-J	150	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	3.00%	3800.54	4323.00
Manifest-J	150	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	2122.21	2184.00
Manifest-J	150	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	81.00%	1308.09	1403.00
Manifest-J	150	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	99.00%	434.69	551.00
Manifest-J	150	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	88.00%	2844.15	2880.00
Manifest-J	150	Distributed (Head, Mid, Rear)	40	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	89.00%	1785.36	1898.00
Manifest-J	150	Distributed (Head, Mid, Rear)	40	1.00%	Trough	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	330.65	428.00
Manifest-J	150	Distributed (Head, Mid, Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	100.00%	387.44	441.00
Manifest-J	150	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4047.19	4278.00
Manifest-J	150	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	99.00%	6569.93	6712.00
Manifest-A	200	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1092.33	1165.00
Manifest-A	200	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	53.00%	409.83	573.00
Manifest-A	200	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	20.00%	576.06	745.00
Manifest-A	200	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	46.00%	652.77	796.00
Manifest-A	200	Distributed (Head and Rear)	14	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	2.00%	396.60	453.00
Manifest-A	200	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	1.00%	7133.76	7799.00
Manifest-A	200	Distributed (Head and Rear)	21	1.00%	Crest	<0.1%	0.00	0.00	< 10%	78.00%	1471.16	1973.00
Manifest-A	200	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4693.22	5262.00
Manifest-A	200	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	4294.71	4420.00
Manifest-A	200	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	43.00%	2418.65	2522.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-A	200	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 10%	26.00%	3274.54	3527.00
Manifest-A	200	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	32.00%	3129.25	3206.00
Manifest-A	200	Distributed (Head and Rear)	36	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	5302.02	5429.00
Manifest-A	200	Distributed (Head and Rear)	38	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	23.00%	3550.66	3663.00
Manifest-A	200	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	95.00%	6726.15	7309.00
Manifest-A	200	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	11899.82	12270.00
Manifest-A	200	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 10%, < 25%	13.00%	9051.77	9206.00
Manifest-B	200	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	889.45	1028.00
Manifest-B	200	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	10.00%	363.06	549.00
Manifest-B	200	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	4.00%	321.06	501.00
Manifest-B	200	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	599.24	790.00
Manifest-B	200	Distributed (Head and Rear)	14	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	39.00%	388.79	490.00
Manifest-B	200	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2127.64	2553.00
Manifest-B	200	Distributed (Head and Rear)	21	1.00%	Crest	<0.1%	0.00	0.00	> 50%	0.00%	1879.02	2056.00
Manifest-B	200	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1894.66	2248.00
Manifest-B	200	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3380.19	3677.00
Manifest-B	200	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	2081.13	2228.00
Manifest-B	200	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	1830.83	2113.00
Manifest-B	200	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2527.79	2609.00
Manifest-B	200	Distributed (Head and Rear)	36	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	3508.68	3617.00
Manifest-B	200	Distributed (Head and Rear)	38	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	2861.67	2940.00
Manifest-B	200	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3638.32	4056.00
Manifest-B	200	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	8126.77	8654.00
Manifest-B	200	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	6778.13	6931.00
Manifest-C	200	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	2.00%	958.19	1104.00
Manifest-C	200	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	26.00%	362.48	480.00
Manifest-C	200	Distributed (Head and Rear)	10	1.10%	Decline	> 1.0%	25.00	60.00	< 0.1%	67.00%	417.28	544.00
Manifest-C	200	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	31.00%	599.76	723.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-C	200	Distributed (Head and Rear)	14	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	31.00%	391.49	476.00
Manifest-C	200	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5882.53	6455.00
Manifest-C	200	Distributed (Head and Rear)	21	1.00%	Crest	<0.1%	0.00	0.00	< 10%	0.00%	1606.70	1703.00
Manifest-C	200	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	1.00%	3668.48	4239.00
Manifest-C	200	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3650.77	3899.00
Manifest-C	200	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	46.00%	2190.28	2316.00
Manifest-C	200	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	77.00%	2666.15	2975.00
Manifest-C	200	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	33.00%	2728.45	2804.00
Manifest-C	200	Distributed (Head and Rear)	36	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	3939.78	4158.00
Manifest-C	200	Distributed (Head and Rear)	38	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	55.00%	3173.94	3247.00
Manifest-C	200	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	78.00%	5587.39	6267.00
Manifest-C	200	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	10292.84	10508.00
Manifest-C	200	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	32.00%	7928.84	8065.00
Manifest-D	200	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	948.39	1014.00
Manifest-D	200	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	21.00%	434.60	547.00
Manifest-D	200	Distributed (Head and Rear)	10	1.10%	Decline	> 1.0%	10.00	10.00	< 0.1%	73.00%	356.04	525.00
Manifest-D	200	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	6.00%	586.71	668.00
Manifest-D	200	Distributed (Head and Rear)	14	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	15.00%	399.72	476.00
Manifest-D	200	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4337.41	5105.00
Manifest-D	200	Distributed (Head and Rear)	21	1.00%	Crest	<0.1%	0.00	0.00	> 50%	0.00%	1790.17	1937.00
Manifest-D	200	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2993.72	3639.00
Manifest-D	200	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3828.88	4237.00
Manifest-D	200	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	2284.57	2400.00
Manifest-D	200	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	33.00%	2383.36	2760.00
Manifest-D	200	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	1.00%	2838.86	2924.00
Manifest-D	200	Distributed (Head and Rear)	36	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	4525.77	4602.00
Manifest-D	200	Distributed (Head and Rear)	38	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	1.00%	3274.66	3404.00
Manifest-D	200	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	34.00%	5073.50	5509.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-D	200	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	10133.22	10497.00
Manifest-D	200	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	7996.83	8152.00
Manifest-E	200	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	974.26	1151.00
Manifest-E	200	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	4.00%	391.50	492.00
Manifest-E	200	Distributed (Head and Rear)	10	1.10%	Decline	> 1.0%	2.75	5.00	< 0.1%	73.00%	378.75	527.00
Manifest-E	200	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	581.78	744.00
Manifest-E	200	Distributed (Head and Rear)	14	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	7.00%	379.12	457.00
Manifest-E	200	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5218.92	6347.00
Manifest-E	200	Distributed (Head and Rear)	21	1.00%	Crest	<0.1%	0.00	0.00	> 50%	0.00%	2132.96	2332.00
Manifest-E	200	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3317.14	4277.00
Manifest-E	200	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	3848.84	4011.00
Manifest-E	200	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	6.00%	2228.45	2340.00
Manifest-E	200	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	78.00%	2462.73	2739.00
Manifest-E	200	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2796.89	2877.00
Manifest-E	200	Distributed (Head and Rear)	36	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	4245.41	4661.00
Manifest-E	200	Distributed (Head and Rear)	38	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	2.00%	3254.57	3341.00
Manifest-E	200	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	48.00%	5277.10	5769.00
Manifest-E	200	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	10202.89	10413.00
Manifest-E	200	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	1.00%	7994.80	8148.00
Manifest-F	200	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	994.69	1272.00
Manifest-F	200	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	17.00%	402.08	490.00
Manifest-F	200	Distributed (Head and Rear)	10	1.10%	Decline	< 0.5%	23.00	23.00	< 0.1%	66.00%	428.88	592.00
Manifest-F	200	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	16.00%	598.31	786.00
Manifest-F	200	Distributed (Head and Rear)	14	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	6.00%	403.36	475.00
Manifest-F	200	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5938.65	6557.00
Manifest-F	200	Distributed (Head and Rear)	21	1.00%	Crest	<0.1%	0.00	0.00	> 10%, < 25%	8.00%	1479.67	1779.00
Manifest-F	200	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3756.17	4153.00
Manifest-F	200	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4056.16	4247.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-F	200	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	11.00%	2289.89	2423.00
Manifest-F	200	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	46.00%	2713.03	2994.00
Manifest-F	200	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	15.00%	2872.66	2962.00
Manifest-F	200	Distributed (Head and Rear)	36	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	4420.50	4582.00
Manifest-F	200	Distributed (Head and Rear)	38	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	3.00%	3314.74	3404.00
Manifest-F	200	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	87.00%	5798.12	6336.00
Manifest-F	200	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	10548.21	10832.00
Manifest-F	200	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	8251.34	8414.00
Manifest-G	200	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	953.79	1170.00
Manifest-G	200	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	34.00%	404.94	499.00
Manifest-G	200	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	57.00%	449.23	642.00
Manifest-G	200	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	67.00%	575.09	656.00
Manifest-G	200	Distributed (Head and Rear)	14	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	20.00%	395.94	448.00
Manifest-G	200	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6425.52	7158.00
Manifest-G	200	Distributed (Head and Rear)	21	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	51.00%	1617.83	1677.00
Manifest-G	200	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3951.56	4291.00
Manifest-G	200	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	3946.67	4147.00
Manifest-G	200	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	13.00%	2238.08	2355.00
Manifest-G	200	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	47.00%	2778.80	3024.00
Manifest-G	200	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	8.00%	2800.60	2885.00
Manifest-G	200	Distributed (Head and Rear)	36	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	4205.96	4337.00
Manifest-G	200	Distributed (Head and Rear)	38	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	11.00%	3248.03	3342.00
Manifest-G	200	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	54.00%	5864.59	6470.00
Manifest-G	200	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	10748.82	11028.00
Manifest-G	200	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 25%, < 50%	3.00%	8147.79	8313.00
Manifest-H	200	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 10%	1.00%	911.91	1087.00
Manifest-H	200	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	43.00%	379.72	506.00
Manifest-H	200	Distributed (Head and Rear)	10	1.10%	Decline	> 1.0%	26.50	35.00	< 0.1%	62.00%	425.86	548.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-H	200	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	10.00%	561.95	708.00
Manifest-H	200	Distributed (Head and Rear)	14	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	43.00%	391.05	487.00
Manifest-H	200	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5729.94	6542.00
Manifest-H	200	Distributed (Head and Rear)	21	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	31.00%	1614.68	1791.00
Manifest-H	200	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3590.53	3907.00
Manifest-H	200	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	3720.88	3893.00
Manifest-H	200	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	47.00%	2165.50	2282.00
Manifest-H	200	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	68.00%	2640.62	2973.00
Manifest-H	200	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	9.00%	2681.76	2762.00
Manifest-H	200	Distributed (Head and Rear)	36	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	3863.11	3994.00
Manifest-H	200	Distributed (Head and Rear)	38	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	27.00%	3142.13	3244.00
Manifest-H	200	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	46.00%	5518.50	5921.00
Manifest-H	200	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	9948.75	10294.00
Manifest-H	200	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 25%, < 50%	5.00%	7846.66	8052.00
Manifest-I	200	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	1.00%	968.31	1208.00
Manifest-I	200	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	7.00%	400.78	557.00
Manifest-I	200	Distributed (Head and Rear)	10	1.10%	Decline	< 0.5%	3.00	3.00	< 0.1%	60.00%	438.87	702.00
Manifest-I	200	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	13.00%	594.69	735.00
Manifest-I	200	Distributed (Head and Rear)	14	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	1.00%	384.64	458.00
Manifest-I	200	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6449.09	7590.00
Manifest-I	200	Distributed (Head and Rear)	21	1.00%	Crest	<0.1%	0.00	0.00	> 50%	0.00%	1591.34	1800.00
Manifest-I	200	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4010.63	4586.00
Manifest-I	200	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3856.91	4113.00
Manifest-I	200	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	10.00%	2213.00	2314.00
Manifest-I	200	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 10%	72.00%	2698.44	3001.00
Manifest-I	200	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	5.00%	2780.56	2871.00
Manifest-I	200	Distributed (Head and Rear)	36	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	4359.13	4581.00
Manifest-I	200	Distributed (Head and Rear)	38	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	9.00%	3221.96	3307.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-I	200	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	52.00%	5778.11	6185.00
Manifest-I	200	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	10348.73	10732.00
Manifest-I	200	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	1.00%	8148.77	8249.00
Manifest-J	200	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	924.49	977.00
Manifest-J	200	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	42.00%	386.02	550.00
Manifest-J	200	Distributed (Head and Rear)	10	1.10%	Decline	> 1.0%	32.14	66.00	< 0.1%	75.00%	377.42	546.00
Manifest-J	200	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	6.00%	572.47	714.00
Manifest-J	200	Distributed (Head and Rear)	14	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	17.00%	377.76	455.00
Manifest-J	200	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4961.33	5435.00
Manifest-J	200	Distributed (Head and Rear)	21	1.00%	Crest	<0.1%	0.00	0.00	< 10%	1.00%	1586.04	1942.00
Manifest-J	200	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3270.71	3594.00
Manifest-J	200	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3832.66	3972.00
Manifest-J	200	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	9.00%	2228.07	2313.00
Manifest-J	200	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	49.00%	2538.64	2823.00
Manifest-J	200	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	1.00%	2805.10	2930.00
Manifest-J	200	Distributed (Head and Rear)	36	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	4285.80	4398.00
Manifest-J	200	Distributed (Head and Rear)	38	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	5.00%	3244.23	3364.00
Manifest-J	200	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	16.00%	5413.53	6235.00
Manifest-J	200	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	10181.53	10589.00
Manifest-J	200	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	8044.84	8156.00
Manifest-A	200	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	895.80	977.00
Manifest-A	200	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	45.00%	403.57	524.00
Manifest-A	200	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	2.00%	536.74	676.00
Manifest-A	200	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	30.00%	550.21	606.00
Manifest-A	200	Distributed (Head, Mid, Rear)	14	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	34.00%	393.45	441.00
Manifest-A	200	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6536.96	6964.00
Manifest-A	200	Distributed (Head, Mid, Rear)	21	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	31.00%	1483.95	1562.00
Manifest-A	200	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4386.09	4754.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-A	200	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3655.20	3785.00
Manifest-A	200	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	39.00%	2178.08	2315.00
Manifest-A	200	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 10%	23.00%	3057.99	3299.00
Manifest-A	200	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	21.00%	2729.37	2811.00
Manifest-A	200	Distributed (Head, Mid, Rear)	36	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	4372.53	4491.00
Manifest-A	200	Distributed (Head, Mid, Rear)	38	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	22.00%	3188.44	3275.00
Manifest-A	200	Distributed (Head, Mid, Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	86.00%	6404.67	6706.00
Manifest-A	200	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	10643.17	10914.00
Manifest-A	200	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 10%, < 25%	10.00%	8223.47	8406.00
Manifest-B	200	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	802.20	967.00
Manifest-B	200	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	33.00%	331.12	448.00
Manifest-B	200	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	5.00%	311.29	506.00
Manifest-B	200	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	521.31	680.00
Manifest-B	200	Distributed (Head, Mid, Rear)	14	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	91.00%	381.54	432.00
Manifest-B	200	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1958.09	2437.00
Manifest-B	200	Distributed (Head, Mid, Rear)	21	1.00%	Crest	<0.1%	0.00	0.00	> 50%	0.00%	1648.55	1711.00
Manifest-B	200	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1748.55	2010.00
Manifest-B	200	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2851.43	3152.00
Manifest-B	200	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1836.62	1989.00
Manifest-B	200	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	1702.84	2062.00
Manifest-B	200	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2194.82	2291.00
Manifest-B	200	Distributed (Head, Mid, Rear)	36	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	3248.14	3526.00
Manifest-B	200	Distributed (Head, Mid, Rear)	38	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	2545.12	2650.00
Manifest-B	200	Distributed (Head, Mid, Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3403.30	3765.00
Manifest-B	200	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7136.20	7579.00
Manifest-B	200	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	6028.43	6198.00
Manifest-C	200	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	1.00%	805.27	884.00
Manifest-C	200	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	12.00%	350.11	443.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-C	200	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 10%	33.00%	392.86	554.00
Manifest-C	200	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	4.00%	512.16	639.00
Manifest-C	200	Distributed (Head, Mid, Rear)	14	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	9.00%	365.75	427.00
Manifest-C	200	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5287.16	6242.00
Manifest-C	200	Distributed (Head, Mid, Rear)	21	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	1367.19	1439.00
Manifest-C	200	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3220.72	3814.00
Manifest-C	200	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3120.56	3347.00
Manifest-C	200	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	3.00%	1964.19	2098.00
Manifest-C	200	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	65.00%	2487.57	2764.00
Manifest-C	200	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	2.00%	2381.52	2452.00
Manifest-C	200	Distributed (Head, Mid, Rear)	36	1.00%	Trough	<0.1%	0.00	0.00	< 10%	7.00%	3386.76	3667.00
Manifest-C	200	Distributed (Head, Mid, Rear)	38	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	17.00%	2858.76	2942.00
Manifest-C	200	Distributed (Head, Mid, Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	75.00%	5337.91	5817.00
Manifest-C	200	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	9058.84	9179.00
Manifest-C	200	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	23.00%	7205.23	7349.00
Manifest-D	200	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	782.26	829.00
Manifest-D	200	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	67.00%	368.44	468.00
Manifest-D	200	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	80.00%	330.03	427.00
Manifest-D	200	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	53.00%	500.59	544.00
Manifest-D	200	Distributed (Head, Mid, Rear)	14	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	74.00%	350.80	453.00
Manifest-D	200	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4057.22	4491.00
Manifest-D	200	Distributed (Head, Mid, Rear)	21	1.00%	Crest	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	1578.73	1734.00
Manifest-D	200	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2777.63	3167.00
Manifest-D	200	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	3192.94	3265.00
Manifest-D	200	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	3.00%	2038.67	2146.00
Manifest-D	200	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	39.00%	2195.84	2476.00
Manifest-D	200	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2469.98	2612.00
Manifest-D	200	Distributed (Head, Mid, Rear)	36	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	3782.63	4089.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-D	200	Distributed (Head, Mid, Rear)	38	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	2946.64	3051.00
Manifest-D	200	Distributed (Head, Mid, Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	23.00%	4831.79	5429.00
Manifest-D	200	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	8824.32	8927.00
Manifest-D	200	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	7240.44	7364.00
Manifest-E	200	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	810.81	972.00
Manifest-E	200	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	8.00%	343.49	425.00
Manifest-E	200	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	67.00%	349.47	470.00
Manifest-E	200	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	2.00%	516.39	634.00
Manifest-E	200	Distributed (Head, Mid, Rear)	14	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	373.98	415.00
Manifest-E	200	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4776.98	5345.00
Manifest-E	200	Distributed (Head, Mid, Rear)	21	1.00%	Crest	<0.1%	0.00	0.00	< 10%	0.00%	1269.14	1474.00
Manifest-E	200	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3067.26	3550.00
Manifest-E	200	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	3226.53	3576.00
Manifest-E	200	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	2.00%	2005.02	2110.00
Manifest-E	200	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	62.00%	2305.32	2777.00
Manifest-E	200	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	1.00%	2425.66	2503.00
Manifest-E	200	Distributed (Head, Mid, Rear)	36	1.00%	Trough	<0.1%	0.00	0.00	< 10%	3.00%	3533.88	3738.00
Manifest-E	200	Distributed (Head, Mid, Rear)	38	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	1.00%	2904.22	2990.00
Manifest-E	200	Distributed (Head, Mid, Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	51.00%	4980.89	5318.00
Manifest-E	200	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	9084.08	9348.00
Manifest-E	200	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	7228.17	7358.00
Manifest-F	200	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	907.49	973.00
Manifest-F	200	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	59.00%	343.75	521.00
Manifest-F	200	Distributed (Head, Mid, Rear)	10	1.10%	Decline	< 0.5%	14.00	14.00	< 0.1%	46.00%	396.75	491.00
Manifest-F	200	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	24.00%	498.58	597.00
Manifest-F	200	Distributed (Head, Mid, Rear)	14	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	26.00%	357.69	413.00
Manifest-F	200	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5464.98	5951.00
Manifest-F	200	Distributed (Head, Mid, Rear)	21	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	1.00%	1391.84	1446.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-F	200	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3487.32	3759.00
Manifest-F	200	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	3266.47	3403.00
Manifest-F	200	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	2.00%	2037.89	2148.00
Manifest-F	200	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	33.00%	2509.10	2828.00
Manifest-F	200	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	1.00%	2494.66	2581.00
Manifest-F	200	Distributed (Head, Mid, Rear)	36	1.00%	Trough	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	3832.61	4054.00
Manifest-F	200	Distributed (Head, Mid, Rear)	38	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	1.00%	2974.50	3054.00
Manifest-F	200	Distributed (Head, Mid, Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	84.00%	5452.76	6003.00
Manifest-F	200	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	9401.74	9682.00
Manifest-F	200	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	1.00%	7483.86	7627.00
Manifest-G	200	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	754.48	794.00
Manifest-G	200	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	62.00%	375.88	470.00
Manifest-G	200	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	45.00%	412.88	549.00
Manifest-G	200	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	58.00%	491.59	547.00
Manifest-G	200	Distributed (Head, Mid, Rear)	14	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	68.00%	374.37	421.00
Manifest-G	200	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5914.16	6259.00
Manifest-G	200	Distributed (Head, Mid, Rear)	21	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	66.00%	1436.85	1509.00
Manifest-G	200	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3689.24	4062.00
Manifest-G	200	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	3218.76	3329.00
Manifest-G	200	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	8.00%	2002.28	2117.00
Manifest-G	200	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	41.00%	2606.92	2932.00
Manifest-G	200	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	13.00%	2452.54	2508.00
Manifest-G	200	Distributed (Head, Mid, Rear)	36	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	0.00%	3508.86	3722.00
Manifest-G	200	Distributed (Head, Mid, Rear)	38	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	11.00%	2908.72	3002.00
Manifest-G	200	Distributed (Head, Mid, Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	55.00%	5569.60	6061.00
Manifest-G	200	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	9428.07	9608.00
Manifest-G	200	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 25%, < 50%	5.00%	7417.34	7546.00
Manifest-H	200	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	1.00%	879.42	940.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-H	200	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	48.00%	339.76	460.00
Manifest-H	200	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	48.00%	393.88	512.00
Manifest-H	200	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	18.00%	474.07	566.00
Manifest-H	200	Distributed (Head, Mid, Rear)	14	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	14.00%	368.46	403.00
Manifest-H	200	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5297.39	5617.00
Manifest-H	200	Distributed (Head, Mid, Rear)	21	1.00%	Crest	<0.1%	0.00	0.00	< 10%	3.00%	1421.89	1708.00
Manifest-H	200	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3345.02	3757.00
Manifest-H	200	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	3125.32	3269.00
Manifest-H	200	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1929.80	2036.00
Manifest-H	200	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	61.00%	2424.64	2647.00
Manifest-H	200	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	5.00%	2338.44	2415.00
Manifest-H	200	Distributed (Head, Mid, Rear)	36	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	2.00%	3290.40	3483.00
Manifest-H	200	Distributed (Head, Mid, Rear)	38	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	4.00%	2829.26	2890.00
Manifest-H	200	Distributed (Head, Mid, Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	73.00%	5242.58	5458.00
Manifest-H	200	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	8944.58	9081.00
Manifest-H	200	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 25%, < 50%	3.00%	7171.88	7278.00
Manifest-I	200	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	4.00%	821.40	863.00
Manifest-I	200	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	31.00%	348.83	426.00
Manifest-I	200	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	44.00%	415.70	610.00
Manifest-I	200	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	22.00%	494.80	609.00
Manifest-I	200	Distributed (Head, Mid, Rear)	14	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	9.00%	365.20	424.00
Manifest-I	200	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5875.88	6415.00
Manifest-I	200	Distributed (Head, Mid, Rear)	21	1.00%	Crest	<0.1%	0.00	0.00	< 10%	0.00%	1383.88	1453.00
Manifest-I	200	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3663.77	4017.00
Manifest-I	200	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3174.73	3602.00
Manifest-I	200	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	3.00%	1991.16	2108.00
Manifest-I	200	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	61.00%	2604.57	3066.00
Manifest-I	200	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	4.00%	2419.93	2504.00

Train Type	Train Length (No. cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Manifest-I	200	Distributed (Head, Mid, Rear)	36	1.00%	Trough	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	3460.18	3627.00
Manifest-I	200	Distributed (Head, Mid, Rear)	38	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	1.00%	2892.94	2981.00
Manifest-I	200	Distributed (Head, Mid, Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	49.00%	5553.47	5820.00
Manifest-I	200	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	9516.56	9789.00
Manifest-I	200	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	7360.81	7527.00
Manifest-J	200	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	752.34	819.00
Manifest-J	200	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	48.00%	354.41	476.00
Manifest-J	200	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	75.00%	351.14	479.00
Manifest-J	200	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	23.00%	509.42	636.00
Manifest-J	200	Distributed (Head, Mid, Rear)	14	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	24.00%	365.19	433.00
Manifest-J	200	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4666.34	5104.00
Manifest-J	200	Distributed (Head, Mid, Rear)	21	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	1410.79	1481.00
Manifest-J	200	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3050.43	3317.00
Manifest-J	200	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3156.92	3307.00
Manifest-J	200	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	1.00%	2005.28	2113.00
Manifest-J	200	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	48.00%	2329.21	2719.00
Manifest-J	200	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	1.00%	2437.01	2521.00
Manifest-J	200	Distributed (Head, Mid, Rear)	36	1.00%	Trough	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	3466.53	3686.00
Manifest-J	200	Distributed (Head, Mid, Rear)	38	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	2917.25	2998.00
Manifest-J	200	Distributed (Head, Mid, Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	15.00%	4943.45	5268.00
Manifest-J	200	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	9021.78	9177.00
Manifest-J	200	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	7273.11	7372.00

Train Type	Train Load	Train Length (No. Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Steel Hoppers	Empty	100	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	637.23	716.00
Unit Steel Hoppers	Empty	100	Distributed (Head and Rear)	10	0.50%	Incline	> 1.0%	8.79	24.00	< 0.1%	100.00%	209.58	240.00
Unit Steel Hoppers	Empty	100	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	570.42	613.00
Unit Steel Hoppers	Empty	100	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	49.00%	350.56	515.00
Unit Steel Hoppers	Empty	100	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2315.11	2387.00
Unit Steel Hoppers	Empty	100	Distributed (Head and Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	18.00%	836.08	868.00
Unit Steel Hoppers	Empty	100	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2361.74	2475.00
Unit Steel Hoppers	Empty	100	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	1.00%	1880.67	2219.00
Unit Steel Hoppers	Empty	100	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	62.00%	1364.26	1460.00
Unit Steel Hoppers	Empty	100	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2284.11	2354.00
Unit Steel Hoppers	Empty	100	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	49.00%	1550.44	1697.00
Unit Steel Hoppers	Empty	100	Distributed (Head and Rear)	46	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	20.00%	2516.61	2616.00
Unit Steel Hoppers	Empty	100	Distributed (Head and Rear)	55	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5627.72	5747.00
Unit Steel Hoppers	Empty	100	Distributed (Head and Rear)	55	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	4914.54	5072.00
Unit Steel Hoppers	Empty	100	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5219.67	5789.00
Unit Steel Hoppers	Empty	100	Distributed (Head and Rear)	60	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	2.00%	3889.01	3981.00
Unit Steel Hoppers	Empty	100	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 10%, < 25%	1.00%	4645.40	4779.00
Unit Steel Hoppers	Empty	100	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	697.60	857.00
Unit Steel Hoppers	Empty	100	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	99.00%	267.77	334.00
Unit Steel Hoppers	Empty	100	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	853.58	922.00
Unit Steel Hoppers	Empty	100	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	65.00%	418.39	487.00
Unit Steel Hoppers	Empty	100	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3426.83	3604.00
Unit Steel Hoppers	Empty	100	Head end only	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	3.00%	976.74	1023.00
Unit Steel Hoppers	Empty	100	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3245.84	3385.00
Unit Steel Hoppers	Empty	100	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2406.02	2715.00
Unit Steel Hoppers	Empty	100	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	39.00%	1638.79	1699.00
Unit Steel Hoppers	Empty	100	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3022.20	3106.00
Unit Steel Hoppers	Empty	100	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	14.00%	1939.99	2095.00

Train Type	Train Load	Train Length (No. Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Steel Hoppers	Empty	100	Head end only	46	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	10.00%	3031.99	3147.00
Unit Steel Hoppers	Empty	100	Head end only	55	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6891.24	7106.00
Unit Steel Hoppers	Empty	100	Head end only	55	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	6120.20	6289.00
Unit Steel Hoppers	Empty	100	Head end only	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6307.63	6787.00
Unit Steel Hoppers	Empty	100	Head end only	60	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	7.00%	4557.80	4677.00
Unit Steel Hoppers	Empty	100	Head end only	60	0.00%	Flat	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	5546.30	5701.00
Unit Steel Hoppers	Loaded	100	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	44.00%	504.28	532.00
Unit Steel Hoppers	Loaded	100	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	100.00%	303.90	379.00
Unit Steel Hoppers	Loaded	100	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	788.24	837.00
Unit Steel Hoppers	Loaded	100	Distributed (Head and Rear)	10	1.50%	Incline	> 50%	10.63	40.00	< 0.1%	100.00%	170.60	199.00
Unit Steel Hoppers	Loaded	100	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	100.00%	360.34	410.00
Unit Steel Hoppers	Loaded	100	Distributed (Head and Rear)	15	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5463.78	5751.00
Unit Steel Hoppers	Loaded	100	Distributed (Head and Rear)	15	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	100.00%	612.73	656.00
Unit Steel Hoppers	Loaded	100	Distributed (Head and Rear)	15	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6532.10	6725.00
Unit Steel Hoppers	Loaded	100	Distributed (Head and Rear)	24	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	37.00%	1547.52	1622.00
Unit Steel Hoppers	Loaded	100	Distributed (Head and Rear)	27	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	100.00%	1357.40	1413.00
Unit Steel Hoppers	Loaded	100	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	74.00%	2363.82	2459.00
Unit Steel Hoppers	Loaded	100	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3626.22	3811.00
Unit Steel Hoppers	Loaded	100	Distributed (Head and Rear)	30	0.00%	Flat	< 0.5%	9.00	9.00	< 0.1%	100.00%	1879.20	1978.00
Unit Steel Hoppers	Loaded	100	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	87.00%	8431.90	8759.00
Unit Steel Hoppers	Loaded	100	Distributed (Head and Rear)	50	0.50%	Decline	<0.1%	0.00	0.00	> 50%	100.00%	5540.03	5749.00
Unit Steel Hoppers	Loaded	100	Distributed (Head and Rear)	50	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	100.00%	4459.01	4589.00
Unit Steel Hoppers	Loaded	100	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	22.00%	720.24	771.00
Unit Steel Hoppers	Loaded	100	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	88.00%	349.72	433.00
Unit Steel Hoppers	Loaded	100	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1297.41	1409.00
Unit Steel Hoppers	Loaded	100	Head end only	10	1.50%	Incline	> 1.0%	6.58	20.00	< 0.1%	88.00%	183.87	225.00
Unit Steel Hoppers	Loaded	100	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	100.00%	459.23	492.00
Unit Steel Hoppers	Loaded	100	Head end only	15	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7429.29	7687.00

Train Type	Train Load	Train Length (No. Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Steel Hoppers	Loaded	100	Head end only	15	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	100.00%	765.17	833.00
Unit Steel Hoppers	Loaded	100	Head end only	15	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	11039.61	11297.00
Unit Steel Hoppers	Loaded	100	Head end only	24	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	2125.46	2288.00
Unit Steel Hoppers	Loaded	100	Head end only	27	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	100.00%	1617.03	1679.00
Unit Steel Hoppers	Loaded	100	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	16.00%	3142.29	3264.00
Unit Steel Hoppers	Loaded	100	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5428.95	5646.00
Unit Steel Hoppers	Loaded	100	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	100.00%	2353.08	2469.00
Unit Steel Hoppers	Loaded	100	Head end only	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	11284.53	11631.00
Unit Steel Hoppers	Loaded	100	Head end only	50	0.50%	Decline	<0.1%	0.00	0.00	> 50%	14.00%	7059.18	7315.00
Unit Steel Hoppers	Loaded	100	Head end only	50	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	100.00%	5320.51	5521.00
Unit Covered Hoppers	Empty	100	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	660.69	758.00
Unit Covered Hoppers	Empty	100	Distributed (Head and Rear)	10	0.50%	Incline	> 1.0%	6.00	9.00	< 0.1%	100.00%	230.17	295.00
Unit Covered Hoppers	Empty	100	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	674.01	860.00
Unit Covered Hoppers	Empty	100	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	46.00%	376.59	513.00
Unit Covered Hoppers	Empty	100	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2365.53	2390.00
Unit Covered Hoppers	Empty	100	Distributed (Head and Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	9.00%	885.22	930.00
Unit Covered Hoppers	Empty	100	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2676.22	2812.00
Unit Covered Hoppers	Empty	100	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2055.15	2376.00
Unit Covered Hoppers	Empty	100	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	25.00%	1444.59	1540.00
Unit Covered Hoppers	Empty	100	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	2513.27	2631.00
Unit Covered Hoppers	Empty	100	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	9.00%	1706.76	1873.00
Unit Covered Hoppers	Empty	100	Distributed (Head and Rear)	45	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	2.00%	2678.87	2732.00
Unit Covered Hoppers	Empty	100	Distributed (Head and Rear)	55	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6143.83	6228.00
Unit Covered Hoppers	Empty	100	Distributed (Head and Rear)	55	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	5305.62	5458.00
Unit Covered Hoppers	Empty	100	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5636.99	5981.00
Unit Covered Hoppers	Empty	100	Distributed (Head and Rear)	60	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	1.00%	4119.69	4248.00
Unit Covered Hoppers	Empty	100	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	4957.06	5060.00
Unit Covered Hoppers	Empty	100	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	784.62	915.00

Train Type	Train Load	Train Length (No. Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Covered Hoppers	Empty	100	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	52.00%	326.14	378.00
Unit Covered Hoppers	Empty	100	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1005.40	1063.00
Unit Covered Hoppers	Empty	100	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	29.00%	452.75	490.00
Unit Covered Hoppers	Empty	100	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3805.68	3884.00
Unit Covered Hoppers	Empty	100	Head end only	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	6.00%	975.90	1033.00
Unit Covered Hoppers	Empty	100	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3791.06	3971.00
Unit Covered Hoppers	Empty	100	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	2707.45	3111.00
Unit Covered Hoppers	Empty	100	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	6.00%	1744.84	1830.00
Unit Covered Hoppers	Empty	100	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3393.71	3512.00
Unit Covered Hoppers	Empty	100	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2151.10	2298.00
Unit Covered Hoppers	Empty	100	Head end only	45	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	1.00%	3204.24	3282.00
Unit Covered Hoppers	Empty	100	Head end only	55	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7598.59	7841.00
Unit Covered Hoppers	Empty	100	Head end only	55	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	6704.17	7007.00
Unit Covered Hoppers	Empty	100	Head end only	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6889.35	7321.00
Unit Covered Hoppers	Empty	100	Head end only	60	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	4914.78	5020.00
Unit Covered Hoppers	Empty	100	Head end only	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	5946.52	6130.00
Unit Covered Hoppers	Loaded	100	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	26.00%	573.38	609.00
Unit Covered Hoppers	Loaded	100	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	93.00%	331.88	395.00
Unit Covered Hoppers	Loaded	100	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	963.13	1063.00
Unit Covered Hoppers	Loaded	100	Distributed (Head and Rear)	10	1.50%	Incline	> 50%	10.93	31.00	< 0.1%	100.00%	179.40	204.00
Unit Covered Hoppers	Loaded	100	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	98.00%	404.01	481.00
Unit Covered Hoppers	Loaded	100	Distributed (Head and Rear)	14	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	100.00%	608.88	662.00
Unit Covered Hoppers	Loaded	100	Distributed (Head and Rear)	15	1.70%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	13.00%	1089.36	1525.00
Unit Covered Hoppers	Loaded	100	Distributed (Head and Rear)	15	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1982.41	2158.00
Unit Covered Hoppers	Loaded	100	Distributed (Head and Rear)	23	1.00%	Trough	<0.1%	0.00	0.00	< 10%	30.00%	1563.74	1644.00
Unit Covered Hoppers	Loaded	100	Distributed (Head and Rear)	26	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	100.00%	1375.90	1434.00
Unit Covered Hoppers	Loaded	100	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	34.00%	2575.04	2666.00
Unit Covered Hoppers	Loaded	100	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	100.00%	2139.97	2287.00

Train Type	Train Load	Train Length (No. Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Covered Hoppers	Loaded	100	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	100.00%	2026.08	2148.00
Unit Covered Hoppers	Loaded	100	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	100.00%	4874.35	5116.00
Unit Covered Hoppers	Loaded	100	Distributed (Head and Rear)	50	0.50%	Decline	<0.1%	0.00	0.00	> 50%	50.00%	5905.11	6075.00
Unit Covered Hoppers	Loaded	100	Distributed (Head and Rear)	50	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	100.00%	4753.15	4931.00
Unit Covered Hoppers	Loaded	100	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	3.00%	801.82	851.00
Unit Covered Hoppers	Loaded	100	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	55.00%	390.23	464.00
Unit Covered Hoppers	Loaded	100	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1577.11	1668.00
Unit Covered Hoppers	Loaded	100	Head end only	10	1.50%	Incline	> 1.0%	5.43	10.00	< 0.1%	91.00%	193.93	216.00
Unit Covered Hoppers	Loaded	100	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	98.00%	508.41	545.00
Unit Covered Hoppers	Loaded	100	Head end only	14	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	98.00%	760.16	833.00
Unit Covered Hoppers	Loaded	100	Head end only	15	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2205.96	3021.00
Unit Covered Hoppers	Loaded	100	Head end only	15	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4138.00	5096.00
Unit Covered Hoppers	Loaded	100	Head end only	23	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	2135.96	2234.00
Unit Covered Hoppers	Loaded	100	Head end only	26	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	99.00%	1644.12	1703.00
Unit Covered Hoppers	Loaded	100	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	1.00%	3442.93	3583.00
Unit Covered Hoppers	Loaded	100	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	< 10%	12.00%	3180.44	3527.00
Unit Covered Hoppers	Loaded	100	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	97.00%	2553.26	2647.00
Unit Covered Hoppers	Loaded	100	Head end only	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	22.00%	6747.12	7184.00
Unit Covered Hoppers	Loaded	100	Head end only	50	0.50%	Decline	<0.1%	0.00	0.00	> 50%	1.00%	7614.26	7857.00
Unit Covered Hoppers	Loaded	100	Head end only	50	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	97.00%	5721.22	5919.00
Unit Aluminum Hoppers	Empty	100	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	584.36	753.00
Unit Aluminum Hoppers	Empty	100	Distributed (Head and Rear)	10	0.50%	Incline	> 1.0%	9.00	11.00	< 0.1%	32.00%	309.47	429.00
Unit Aluminum Hoppers	Empty	100	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	617.91	888.00
Unit Aluminum Hoppers	Empty	100	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	7.00%	467.78	606.00
Unit Aluminum Hoppers	Empty	100	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2301.55	2385.00

Train Type	Train Load	Train Length (No. Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Aluminum Hoppers	Empty	100	Distributed (Head and Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	6.00%	914.49	992.00
Unit Aluminum Hoppers	Empty	100	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2382.65	2480.00
Unit Aluminum Hoppers	Empty	100	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	1917.82	2332.00
Unit Aluminum Hoppers	Empty	100	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	11.00%	1373.11	1564.00
Unit Aluminum Hoppers	Empty	100	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	2324.94	2662.00
Unit Aluminum Hoppers	Empty	100	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	3.00%	1598.82	1708.00
Unit Aluminum Hoppers	Empty	100	Distributed (Head and Rear)	52	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	3077.12	3150.00
Unit Aluminum Hoppers	Empty	100	Distributed (Head and Rear)	55	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5532.10	5670.00
Unit Aluminum Hoppers	Empty	100	Distributed (Head and Rear)	55	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	4868.01	5565.00
Unit Aluminum Hoppers	Empty	100	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5247.15	5815.00
Unit Aluminum Hoppers	Empty	100	Distributed (Head and Rear)	60	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	1.00%	3985.15	4057.00
Unit Aluminum Hoppers	Empty	100	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	4596.46	4790.00
Unit Aluminum Hoppers	Empty	100	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	711.08	915.00
Unit Aluminum Hoppers	Empty	100	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	21.00%	347.58	428.00
Unit Aluminum Hoppers	Empty	100	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	891.38	1373.00
Unit Aluminum Hoppers	Empty	100	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	683.23	792.00
Unit Aluminum Hoppers	Empty	100	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3440.87	3647.00
Unit Aluminum Hoppers	Empty	100	Head end only	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	11.00%	966.65	1041.00

Train Type	Train Load	Train Length (No. Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Hoppers													
Unit Aluminum Hoppers	Empty	100	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3279.09	3443.00
Unit Aluminum Hoppers	Empty	100	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	2459.27	2863.00
Unit Aluminum Hoppers	Empty	100	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1678.13	1884.00
Unit Aluminum Hoppers	Empty	100	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3037.34	3371.00
Unit Aluminum Hoppers	Empty	100	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	1941.59	2059.00
Unit Aluminum Hoppers	Empty	100	Head end only	52	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	3636.48	3710.00
Unit Aluminum Hoppers	Empty	100	Head end only	55	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6717.79	7007.00
Unit Aluminum Hoppers	Empty	100	Head end only	55	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	5988.04	6211.00
Unit Aluminum Hoppers	Empty	100	Head end only	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6272.93	6911.00
Unit Aluminum Hoppers	Empty	100	Head end only	60	0.50%	Incline	<0.1%	0.00	0.00	< 10%	0.00%	4685.66	4832.00
Unit Aluminum Hoppers	Empty	100	Head end only	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	5441.89	5610.00
Unit Aluminum Hoppers	Loaded	100	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	19.00%	535.60	570.00
Unit Aluminum Hoppers	Loaded	100	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	92.00%	314.06	384.00
Unit Aluminum Hoppers	Loaded	100	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	865.99	946.00
Unit Aluminum Hoppers	Loaded	100	Distributed (Head and Rear)	10	1.50%	Incline	> 25%	9.86	35.00	< 0.1%	100.00%	175.65	200.00
Unit Aluminum Hoppers	Loaded	100	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	99.00%	380.45	431.00
Unit Aluminum Hoppers	Loaded	100	Distributed (Head and Rear)	14	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	100.00%	595.49	632.00

Train Type	Train Load	Train Length (No. Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Aluminum Hoppers	Loaded	100	Distributed (Head and Rear)	15	1.70%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	17.00%	1051.35	1437.00
Unit Aluminum Hoppers	Loaded	100	Distributed (Head and Rear)	15	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1941.16	2068.00
Unit Aluminum Hoppers	Loaded	100	Distributed (Head and Rear)	23	1.00%	Trough	<0.1%	0.00	0.00	< 10%	23.00%	1470.62	1537.00
Unit Aluminum Hoppers	Loaded	100	Distributed (Head and Rear)	26	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	100.00%	1310.24	1376.00
Unit Aluminum Hoppers	Loaded	100	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	27.00%	2460.38	2554.00
Unit Aluminum Hoppers	Loaded	100	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	100.00%	2105.18	2297.00
Unit Aluminum Hoppers	Loaded	100	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	100.00%	1941.70	2016.00
Unit Aluminum Hoppers	Loaded	100	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	100.00%	4793.87	5040.00
Unit Aluminum Hoppers	Loaded	100	Distributed (Head and Rear)	50	0.50%	Decline	<0.1%	0.00	0.00	> 50%	53.00%	5693.09	5908.00
Unit Aluminum Hoppers	Loaded	100	Distributed (Head and Rear)	50	0.00%	Flat	<0.1%	0.00	0.00	> 25%, < 50%	100.00%	4591.61	4729.00
Unit Aluminum Hoppers	Loaded	100	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	759.66	809.00
Unit Aluminum Hoppers	Loaded	100	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	55.00%	377.44	428.00
Unit Aluminum Hoppers	Loaded	100	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1440.32	1554.00
Unit Aluminum Hoppers	Loaded	100	Head end only	10	1.50%	Incline	> 1.0%	4.60	8.00	< 0.1%	85.00%	190.24	215.00
Unit Aluminum Hoppers	Loaded	100	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	98.00%	482.04	514.00
Unit Aluminum Hoppers	Loaded	100	Head end only	14	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	89.00%	735.12	782.00
Unit Aluminum Hoppers	Loaded	100	Head end only	15	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2120.16	2366.00
Unit Aluminum Hoppers	Loaded	100	Head end only	15	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4064.57	4324.00

Train Type	Train Load	Train Length (No. Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Hoppers													
Unit Aluminum Hoppers	Loaded	100	Head end only	23	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	2017.98	2105.00
Unit Aluminum Hoppers	Loaded	100	Head end only	26	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	96.00%	1573.62	1644.00
Unit Aluminum Hoppers	Loaded	100	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	3278.53	3403.00
Unit Aluminum Hoppers	Loaded	100	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	3142.13	3433.00
Unit Aluminum Hoppers	Loaded	100	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	88.00%	2432.83	2529.00
Unit Aluminum Hoppers	Loaded	100	Head end only	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	5.00%	6625.68	7064.00
Unit Aluminum Hoppers	Loaded	100	Head end only	50	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7287.05	7551.00
Unit Aluminum Hoppers	Loaded	100	Head end only	50	0.00%	Flat	<0.1%	0.00	0.00	< 10%	87.00%	5492.65	5717.00
MultiLevel													
Unit MultiLevel	Empty	100	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 10%	2.00%	828.80	1006.00
Unit MultiLevel	Empty	100	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	26.00%	336.26	391.00
Unit MultiLevel	Empty	100	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1122.53	1161.00
Unit MultiLevel	Empty	100	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	30.00%	474.40	644.00
Unit MultiLevel	Empty	100	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4699.65	5020.00
Unit MultiLevel	Empty	100	Distributed (Head and Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	11.00%	876.29	916.00
Unit MultiLevel	Empty	100	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4375.18	4753.00
Unit MultiLevel	Empty	100	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	2918.83	3227.00
Unit MultiLevel	Empty	100	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	10.00%	1986.42	2089.00
Unit MultiLevel	Empty	100	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3741.14	4009.00
Unit MultiLevel	Empty	100	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	22.00%	2250.14	2349.00
Unit MultiLevel	Empty	100	Distributed (Head and Rear)	34	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	45.00%	2496.85	2592.00
Unit MultiLevel	Empty	100	Distributed (Head and Rear)	50	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	12.00%	3943.43	4020.00
Unit MultiLevel	Empty	100	Distributed (Head and Rear)	55	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	8535.96	8794.00

Train Type	Train Load	Train Length (No. Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit MultiLevel	Empty	100	Distributed (Head and Rear)	55	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	7157.17	7289.00
Unit MultiLevel	Empty	100	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7627.89	7927.00
Unit MultiLevel	Empty	100	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 10%, < 25%	4.00%	6174.86	6279.00
Unit MultiLevel	Empty	100	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	1120.45	1324.00
Unit MultiLevel	Empty	100	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	405.47	480.00
Unit MultiLevel	Empty	100	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1760.90	1950.00
Unit MultiLevel	Empty	100	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	1.00%	639.93	815.00
Unit MultiLevel	Empty	100	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7071.95	7804.00
Unit MultiLevel	Empty	100	Head end only	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	987.30	1051.00
Unit MultiLevel	Empty	100	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6724.34	7320.00
Unit MultiLevel	Empty	100	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	< 10%	3.00%	3816.64	4158.00
Unit MultiLevel	Empty	100	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	17.00%	2310.76	2396.00
Unit MultiLevel	Empty	100	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5343.99	5716.00
Unit MultiLevel	Empty	100	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	46.00%	2827.92	2944.00
Unit MultiLevel	Empty	100	Head end only	34	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	60.00%	2986.90	3080.00
Unit MultiLevel	Empty	100	Head end only	50	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	11.00%	4751.59	4865.00
Unit MultiLevel	Empty	100	Head end only	55	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	11179.75	11967.00
Unit MultiLevel	Empty	100	Head end only	55	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	9489.75	9869.00
Unit MultiLevel	Empty	100	Head end only	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	4.00%	9545.29	9808.00
Unit MultiLevel	Empty	100	Head end only	60	0.00%	Flat	<0.1%	0.00	0.00	< 10%	12.00%	7828.89	7989.00
Unit MultiLevel	Loaded	100	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	798.82	872.00
Unit MultiLevel	Loaded	100	Distributed (Head and Rear)	10	0.50%	Incline	> 1.0%	5.00	5.00	< 0.1%	35.00%	390.62	442.00
Unit MultiLevel	Loaded	100	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1407.04	1485.00
Unit MultiLevel	Loaded	100	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	79.00%	500.67	532.00
Unit MultiLevel	Loaded	100	Distributed (Head and Rear)	13	1.50%	Incline	> 1.0%	6.55	14.00	< 0.1%	56.00%	319.59	360.00
Unit MultiLevel	Loaded	100	Distributed (Head and Rear)	15	2.20%	Decline	<0.1%	0.00	0.00	> 50%	2.00%	2677.76	4355.00
Unit MultiLevel	Loaded	100	Distributed (Head and Rear)	19	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	50.00%	1222.21	1324.00
Unit MultiLevel	Loaded	100	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	77.00%	2786.10	3124.00

Train Type	Train Load	Train Length (No. Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit MultiLevel	Loaded	100	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	15.00%	3278.79	3406.00
Unit MultiLevel	Loaded	100	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 10%	100.00%	2377.03	2568.00
Unit MultiLevel	Loaded	100	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	100.00%	2523.14	2579.00
Unit MultiLevel	Loaded	100	Distributed (Head and Rear)	33	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	19.00%	3644.32	3778.00
Unit MultiLevel	Loaded	100	Distributed (Head and Rear)	34	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	100.00%	2479.66	2563.00
Unit MultiLevel	Loaded	100	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	100.00%	5167.21	5581.00
Unit MultiLevel	Loaded	100	Distributed (Head and Rear)	50	0.50%	Decline	<0.1%	0.00	0.00	> 50%	7.00%	7005.36	7202.00
Unit MultiLevel	Loaded	100	Distributed (Head and Rear)	50	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	100.00%	5645.64	5788.00
Unit MultiLevel	Loaded	100	Head end only	10	0.50%	Decline	< 0.5%	5.00	5.00	< 10%	34.00%	1203.88	1406.00
Unit MultiLevel	Loaded	100	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	406.41	450.00
Unit MultiLevel	Loaded	100	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2350.84	2553.00
Unit MultiLevel	Loaded	100	Head end only	10	0.00%	Flat	> 1.0%	15.62	31.00	< 0.1%	35.00%	665.27	788.00
Unit MultiLevel	Loaded	100	Head end only	13	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	350.72	392.00
Unit MultiLevel	Loaded	100	Head end only	15	2.20%	Decline	<0.1%	0.00	0.00	> 50%	2.00%	5535.80	8646.00
Unit MultiLevel	Loaded	100	Head end only	19	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	95.00%	1490.60	1595.00
Unit MultiLevel	Loaded	100	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4419.97	5220.00
Unit MultiLevel	Loaded	100	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	76.00%	4408.12	4689.00
Unit MultiLevel	Loaded	100	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	70.00%	3363.28	3850.00
Unit MultiLevel	Loaded	100	Head end only	30	0.00%	Flat	< 0.5%	2.00	2.00	< 0.1%	99.00%	3188.41	3274.00
Unit MultiLevel	Loaded	100	Head end only	33	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	5397.02	5756.00
Unit MultiLevel	Loaded	100	Head end only	34	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	100.00%	2961.14	3058.00
Unit MultiLevel	Loaded	100	Head end only	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	96.00%	6792.69	7637.00
Unit MultiLevel	Loaded	100	Head end only	50	0.50%	Decline	<0.1%	0.00	0.00	> 50%	27.00%	9262.33	10010.00
Unit MultiLevel	Loaded	100	Head end only	50	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	99.00%	7042.85	7346.00
Unit Refrigerated Box	Empty	100	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 10%	1.00%	794.74	925.00
Unit Refrigerated Box	Empty	100	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	34.00%	305.15	390.00
Unit Refrigerated Box	Empty	100	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	989.99	1066.00
Unit Refrigerated Box	Empty	100	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	15.00%	448.42	626.00

Train Type	Train Load	Train Length (No. Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Refrigerated Box	Empty	100	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4307.90	4698.00
Unit Refrigerated Box	Empty	100	Distributed (Head and Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	12.00%	851.72	909.00
Unit Refrigerated Box	Empty	100	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3966.39	4271.00
Unit Refrigerated Box	Empty	100	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2701.29	2902.00
Unit Refrigerated Box	Empty	100	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	6.00%	1890.80	1966.00
Unit Refrigerated Box	Empty	100	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3490.53	3885.00
Unit Refrigerated Box	Empty	100	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	3.00%	2120.26	2269.00
Unit Refrigerated Box	Empty	100	Distributed (Head and Rear)	34	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	5.00%	2349.14	2445.00
Unit Refrigerated Box	Empty	100	Distributed (Head and Rear)	50	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	2.00%	3745.93	3807.00
Unit Refrigerated Box	Empty	100	Distributed (Head and Rear)	55	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	8078.11	8366.00
Unit Refrigerated Box	Empty	100	Distributed (Head and Rear)	55	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	6770.74	6893.00
Unit Refrigerated Box	Empty	100	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7198.75	7406.00
Unit Refrigerated Box	Empty	100	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	5901.50	6013.00
Unit Refrigerated Box	Empty	100	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	1083.38	1232.00
Unit Refrigerated Box	Empty	100	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	408.05	461.00
Unit Refrigerated Box	Empty	100	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1616.05	1761.00
Unit Refrigerated Box	Empty	100	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	577.01	753.00
Unit Refrigerated Box	Empty	100	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6379.98	6744.00
Unit Refrigerated Box	Empty	100	Head end only	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	968.19	1013.00
Unit Refrigerated Box	Empty	100	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5996.02	6433.00
Unit Refrigerated Box	Empty	100	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	3559.07	3942.00
Unit Refrigerated Box	Empty	100	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	11.00%	2236.71	2414.00
Unit Refrigerated Box	Empty	100	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4851.59	5434.00
Unit Refrigerated Box	Empty	100	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	9.00%	2679.06	2783.00
Unit Refrigerated Box	Empty	100	Head end only	34	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	8.00%	2855.59	2945.00
Unit Refrigerated Box	Empty	100	Head end only	50	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	2.00%	4547.63	4629.00
Unit Refrigerated Box	Empty	100	Head end only	55	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	10408.63	10987.00
Unit Refrigerated Box	Empty	100	Head end only	55	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	8906.15	9441.00

Train Type	Train Load	Train Length (No. Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Refrigerated Box	Empty	100	Head end only	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	8951.08	9288.00
Unit Refrigerated Box	Empty	100	Head end only	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	7308.86	7426.00
Unit Refrigerated Box	Loaded	100	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	9.00%	733.80	820.00
Unit Refrigerated Box	Loaded	100	Distributed (Head and Rear)	10	0.50%	Incline	> 1.0%	10.33	14.00	< 0.1%	59.00%	374.77	409.00
Unit Refrigerated Box	Loaded	100	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1238.37	1314.00
Unit Refrigerated Box	Loaded	100	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	90.00%	468.41	503.00
Unit Refrigerated Box	Loaded	100	Distributed (Head and Rear)	11	1.50%	Incline	> 1.0%	11.00	11.00	< 0.1%	19.00%	225.69	253.00
Unit Refrigerated Box	Loaded	100	Distributed (Head and Rear)	15	1.70%	Decline	<0.1%	0.00	0.00	> 50%	7.00%	1220.67	1411.00
Unit Refrigerated Box	Loaded	100	Distributed (Head and Rear)	15	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2111.39	2513.00
Unit Refrigerated Box	Loaded	100	Distributed (Head and Rear)	16	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	62.00%	863.31	1026.00
Unit Refrigerated Box	Loaded	100	Distributed (Head and Rear)	26	1.00%	Trough	<0.1%	0.00	0.00	> 50%	6.00%	2286.66	2502.00
Unit Refrigerated Box	Loaded	100	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 10%	10.00%	3073.17	3182.00
Unit Refrigerated Box	Loaded	100	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	100.00%	1930.59	1995.00
Unit Refrigerated Box	Loaded	100	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	99.00%	2332.51	2590.00
Unit Refrigerated Box	Loaded	100	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	100.00%	2387.21	2478.00
Unit Refrigerated Box	Loaded	100	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	100.00%	5144.99	5508.00
Unit Refrigerated Box	Loaded	100	Distributed (Head and Rear)	50	0.50%	Decline	<0.1%	0.00	0.00	> 50%	1.00%	6735.24	6939.00
Unit Refrigerated Box	Loaded	100	Distributed (Head and Rear)	50	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	100.00%	5377.07	5501.00
Unit Refrigerated Box	Loaded	100	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	< 10%	2.00%	944.35	1197.00
Unit Refrigerated Box	Loaded	100	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	413.47	456.00
Unit Refrigerated Box	Loaded	100	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2075.37	2315.00
Unit Refrigerated Box	Loaded	100	Head end only	10	0.00%	Flat	> 1.0%	12.92	38.00	< 0.1%	50.00%	605.57	698.00
Unit Refrigerated Box	Loaded	100	Head end only	11	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	241.20	268.00
Unit Refrigerated Box	Loaded	100	Head end only	15	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2425.19	2914.00
Unit Refrigerated Box	Loaded	100	Head end only	15	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4446.80	4823.00
Unit Refrigerated Box	Loaded	100	Head end only	16	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	94.00%	1062.19	1228.00
Unit Refrigerated Box	Loaded	100	Head end only	26	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	3201.56	3439.00
Unit Refrigerated Box	Loaded	100	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	63.00%	4186.40	4418.00

Train Type	Train Load	Train Length (No. Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Refrigerated Box	Loaded	100	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	99.00%	2281.23	2364.00
Unit Refrigerated Box	Loaded	100	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	49.00%	3432.32	3914.00
Unit Refrigerated Box	Loaded	100	Head end only	30	0.00%	Flat	> 1.0%	40.50	57.00	< 0.1%	99.00%	3036.37	3178.00
Unit Refrigerated Box	Loaded	100	Head end only	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	46.00%	7124.03	7878.00
Unit Refrigerated Box	Loaded	100	Head end only	50	0.50%	Decline	<0.1%	0.00	0.00	> 50%	16.00%	8836.37	9283.00
Unit Refrigerated Box	Loaded	100	Head end only	50	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	100.00%	6692.58	6836.00
Unit Tank	Empty	100	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	564.60	673.00
Unit Tank	Empty	100	Distributed (Head and Rear)	10	0.50%	Incline	> 1.0%	4.40	10.00	< 0.1%	99.00%	230.78	281.00
Unit Tank	Empty	100	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	521.70	571.00
Unit Tank	Empty	100	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	58.00%	326.40	480.00
Unit Tank	Empty	100	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2306.39	2388.00
Unit Tank	Empty	100	Distributed (Head and Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	20.00%	771.86	789.00
Unit Tank	Empty	100	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2209.25	2343.00
Unit Tank	Empty	100	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	1803.97	2049.00
Unit Tank	Empty	100	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	49.00%	1291.33	1463.00
Unit Tank	Empty	100	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2177.88	2255.00
Unit Tank	Empty	100	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	45.00%	1453.17	1605.00
Unit Tank	Empty	100	Distributed (Head and Rear)	47	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	7.00%	2517.63	2574.00
Unit Tank	Empty	100	Distributed (Head and Rear)	55	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5472.81	5585.00
Unit Tank	Empty	100	Distributed (Head and Rear)	55	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	4803.15	4921.00
Unit Tank	Empty	100	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5048.24	5366.00
Unit Tank	Empty	100	Distributed (Head and Rear)	60	0.50%	Incline	<0.1%	0.00	0.00	< 10%	23.00%	3778.66	3836.00
Unit Tank	Empty	100	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	4607.85	4757.00
Unit Tank	Empty	100	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	671.57	842.00
Unit Tank	Empty	100	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	79.00%	282.86	379.00
Unit Tank	Empty	100	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	792.89	852.00
Unit Tank	Empty	100	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	33.00%	435.25	638.00
Unit Tank	Empty	100	Head end only	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3194.72	3290.00

Train Type	Train Load	Train Length (No. Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Tank	Empty	100	Head end only	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	1.00%	940.47	988.00
Unit Tank	Empty	100	Head end only	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3075.26	3229.00
Unit Tank	Empty	100	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2276.01	2517.00
Unit Tank	Empty	100	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	9.00%	1556.19	1805.00
Unit Tank	Empty	100	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2868.38	2995.00
Unit Tank	Empty	100	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	1842.67	2169.00
Unit Tank	Empty	100	Head end only	47	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	3009.00	3096.00
Unit Tank	Empty	100	Head end only	55	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6645.75	6828.00
Unit Tank	Empty	100	Head end only	55	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	5932.54	6108.00
Unit Tank	Empty	100	Head end only	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6149.40	6545.00
Unit Tank	Empty	100	Head end only	60	0.50%	Incline	<0.1%	0.00	0.00	< 10%	0.00%	4452.58	4585.00
Unit Tank	Empty	100	Head end only	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	5284.46	5492.00
Unit Tank	Loaded	100	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	41.00%	464.22	495.00
Unit Tank	Loaded	100	Distributed (Head and Rear)	10	0.50%	Incline	> 1.0%	8.00	12.00	< 0.1%	99.00%	292.59	373.00
Unit Tank	Loaded	100	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	712.30	762.00
Unit Tank	Loaded	100	Distributed (Head and Rear)	10	1.50%	Incline	> 25%	11.83	29.00	< 0.1%	100.00%	157.68	199.00
Unit Tank	Loaded	100	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	100.00%	329.11	363.00
Unit Tank	Loaded	100	Distributed (Head and Rear)	15	1.00%	Crest	> 1.0%	22.50	30.00	< 0.1%	100.00%	592.64	645.00
Unit Tank	Loaded	100	Distributed (Head and Rear)	15	2.20%	Decline	<0.1%	0.00	0.00	> 50%	25.00%	1758.50	2450.00
Unit Tank	Loaded	100	Distributed (Head and Rear)	20	1.70%	Decline	<0.1%	0.00	0.00	> 50%	95.00%	1623.82	2262.00
Unit Tank	Loaded	100	Distributed (Head and Rear)	25	1.00%	Trough	<0.1%	0.00	0.00	< 10%	24.00%	1573.25	1654.00
Unit Tank	Loaded	100	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	89.00%	2232.29	2338.00
Unit Tank	Loaded	100	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	100.00%	1510.18	1567.00
Unit Tank	Loaded	100	Distributed (Head and Rear)	30	1.10%	Decline	> 1.0%	100.33	159.00	< 0.1%	100.00%	2022.24	2149.00
Unit Tank	Loaded	100	Distributed (Head and Rear)	30	0.00%	Flat	> 1.0%	10.50	20.00	< 0.1%	100.00%	1785.04	1869.00
Unit Tank	Loaded	100	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	100.00%	4640.35	4868.00
Unit Tank	Loaded	100	Distributed (Head and Rear)	50	0.50%	Decline	<0.1%	0.00	0.00	> 50%	100.00%	5314.38	5517.00
Unit Tank	Loaded	100	Distributed (Head and Rear)	50	0.00%	Flat	> 1.0%	80.57	270.00	< 0.1%	100.00%	4305.46	4479.00

Train Type	Train Load	Train Length (No. Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Tank	Loaded	100	Head end only	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	1.00%	668.56	709.00
Unit Tank	Loaded	100	Head end only	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	76.00%	343.11	421.00
Unit Tank	Loaded	100	Head end only	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1168.91	1236.00
Unit Tank	Loaded	100	Head end only	10	1.50%	Incline	> 1.0%	6.91	22.00	< 0.1%	75.00%	185.45	226.00
Unit Tank	Loaded	100	Head end only	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	99.00%	432.55	469.00
Unit Tank	Loaded	100	Head end only	15	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	100.00%	759.88	820.00
Unit Tank	Loaded	100	Head end only	15	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3497.62	4760.00
Unit Tank	Loaded	100	Head end only	20	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2928.70	3848.00
Unit Tank	Loaded	100	Head end only	25	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	2203.87	2328.00
Unit Tank	Loaded	100	Head end only	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	9.00%	2959.26	3084.00
Unit Tank	Loaded	100	Head end only	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	100.00%	1806.60	1874.00
Unit Tank	Loaded	100	Head end only	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	18.00%	2964.95	3138.00
Unit Tank	Loaded	100	Head end only	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	100.00%	2238.14	2352.00
Unit Tank	Loaded	100	Head end only	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	54.00%	6273.36	6623.00
Unit Tank	Loaded	100	Head end only	50	0.50%	Decline	<0.1%	0.00	0.00	> 50%	3.00%	6750.36	6927.00
Unit Tank	Loaded	100	Head end only	50	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	100.00%	5109.99	5297.00
Unit Steel Hoppers	Empty	135	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	696.68	915.00
Unit Steel Hoppers	Empty	135	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	95.00%	265.09	418.00
Unit Steel Hoppers	Empty	135	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	749.81	789.00
Unit Steel Hoppers	Empty	135	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	26.00%	457.83	657.00
Unit Steel Hoppers	Empty	135	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3368.62	3603.00
Unit Steel Hoppers	Empty	135	Distributed (Head and Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	18.00%	902.24	944.00
Unit Steel Hoppers	Empty	135	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3010.21	3129.00
Unit Steel Hoppers	Empty	135	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	2279.99	2620.00
Unit Steel Hoppers	Empty	135	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	18.00%	1540.36	1740.00
Unit Steel Hoppers	Empty	135	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2763.16	2874.00
Unit Steel Hoppers	Empty	135	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	5.00%	1778.78	1986.00
Unit Steel Hoppers	Empty	135	Distributed (Head and Rear)	50	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	3.00%	3269.42	3320.00

Train Type	Train Load	Train Length (No. Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Steel Hoppers	Empty	135	Distributed (Head and Rear)	55	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6480.30	6628.00
Unit Steel Hoppers	Empty	135	Distributed (Head and Rear)	55	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	5606.34	5704.00
Unit Steel Hoppers	Empty	135	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5918.68	6354.00
Unit Steel Hoppers	Empty	135	Distributed (Head and Rear)	60	0.50%	Incline	<0.1%	0.00	0.00	< 10%	0.00%	4373.02	4466.00
Unit Steel Hoppers	Empty	135	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	5309.33	5407.00
Unit Steel Hoppers	Empty	135	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	582.83	777.00
Unit Steel Hoppers	Empty	135	Distributed (Head, Mid, Rear)	10	0.50%	Incline	> 1.0%	6.50	10.00	< 0.1%	78.00%	261.62	425.00
Unit Steel Hoppers	Empty	135	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	606.09	883.00
Unit Steel Hoppers	Empty	135	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	78.00%	333.17	563.00
Unit Steel Hoppers	Empty	135	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2777.34	2965.00
Unit Steel Hoppers	Empty	135	Distributed (Head, Mid, Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	8.00%	843.49	867.00
Unit Steel Hoppers	Empty	135	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2509.53	2664.00
Unit Steel Hoppers	Empty	135	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	1992.19	2282.00
Unit Steel Hoppers	Empty	135	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	17.00%	1371.30	1579.00
Unit Steel Hoppers	Empty	135	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	2371.30	2454.00
Unit Steel Hoppers	Empty	135	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	1.00%	1594.59	1704.00
Unit Steel Hoppers	Empty	135	Distributed (Head, Mid, Rear)	50	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	3018.61	3102.00
Unit Steel Hoppers	Empty	135	Distributed (Head, Mid, Rear)	55	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5852.40	5976.00
Unit Steel Hoppers	Empty	135	Distributed (Head, Mid, Rear)	55	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	4962.57	5054.00
Unit Steel Hoppers	Empty	135	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5399.01	5904.00

Train Type	Train Load	Train Length (No. Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Steel Hoppers	Empty	135	Rear) Distributed (Head, Mid, Rear)	60	0.50%	Incline	<0.1%	0.00	0.00	< 10%	1.00%	3978.31	4140.00
Unit Steel Hoppers	Empty	135	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	4800.71	4958.00
Unit Steel Hoppers	Loaded	135	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	12.00%	629.13	668.00
Unit Steel Hoppers	Loaded	135	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	88.00%	368.27	431.00
Unit Steel Hoppers	Loaded	135	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1065.76	1124.00
Unit Steel Hoppers	Loaded	135	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	100.00%	418.67	460.00
Unit Steel Hoppers	Loaded	135	Distributed (Head and Rear)	11	1.50%	Incline	> 1.0%	7.37	27.00	< 0.1%	100.00%	210.77	237.00
Unit Steel Hoppers	Loaded	135	Distributed (Head and Rear)	15	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3179.91	3338.00
Unit Steel Hoppers	Loaded	135	Distributed (Head and Rear)	16	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	100.00%	807.77	850.00
Unit Steel Hoppers	Loaded	135	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3361.24	3679.00
Unit Steel Hoppers	Loaded	135	Distributed (Head and Rear)	27	1.00%	Trough	<0.1%	0.00	0.00	> 25%, < 50%	2.00%	2197.10	2300.00
Unit Steel Hoppers	Loaded	135	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	32.00%	2796.88	2913.00
Unit Steel Hoppers	Loaded	135	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	100.00%	1810.87	1879.00
Unit Steel Hoppers	Loaded	135	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	100.00%	2433.37	2593.00
Unit Steel Hoppers	Loaded	135	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	100.00%	2171.93	2313.00
Unit Steel Hoppers	Loaded	135	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	100.00%	5385.33	5676.00
Unit Steel Hoppers	Loaded	135	Distributed (Head and Rear)	50	0.50%	Decline	<0.1%	0.00	0.00	> 50%	37.00%	6386.49	6566.00
Unit Steel Hoppers	Loaded	135	Distributed (Head and Rear)	50	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	100.00%	4963.83	5180.00
Unit Steel Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	26.00%	521.93	557.00
Unit Steel Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	10	0.50%	Incline	< 0.5%	6.00	6.00	< 0.1%	88.00%	309.07	393.00
Unit Steel Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	863.59	914.00
Unit Steel Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	100.00%	359.15	402.00
Unit Steel Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	11	1.50%	Incline	> 25%	9.92	38.00	< 0.1%	99.00%	206.31	238.00

Train Type	Train Load	Train Length (No. Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Steel Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	15	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3110.47	3268.00
Unit Steel Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	16	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	100.00%	731.32	773.00
Unit Steel Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	1.00%	3209.67	3630.00
Unit Steel Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	27	1.00%	Trough	<0.1%	0.00	0.00	> 10%, < 25%	20.00%	1836.92	1929.00
Unit Steel Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	37.00%	2465.89	2552.00
Unit Steel Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	100.00%	1629.67	1702.00
Unit Steel Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	100.00%	2318.04	2468.00
Unit Steel Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	100.00%	1937.10	2018.00
Unit Steel Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	100.00%	5211.37	5467.00
Unit Steel Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	50	0.50%	Decline	<0.1%	0.00	0.00	> 50%	49.00%	5825.60	6052.00
Unit Steel Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	50	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	100.00%	4533.17	4727.00
Unit Covered Hoppers	Empty	135	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	841.31	1022.00
Unit Covered Hoppers	Empty	135	Distributed (Head and Rear)	10	0.50%	Incline	< 0.5%	8.00	8.00	< 0.1%	87.00%	293.10	445.00
Unit Covered Hoppers	Empty	135	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	891.78	951.00
Unit Covered Hoppers	Empty	135	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	10.00%	491.02	751.00
Unit Covered Hoppers	Empty	135	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3805.35	3879.00
Unit Covered Hoppers	Empty	135	Distributed (Head and Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	4.00%	945.56	969.00
Unit Covered Hoppers	Empty	135	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3479.60	3566.00
Unit Covered Hoppers	Empty	135	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2678.89	2930.00
Unit Covered Hoppers	Empty	135	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	2.00%	1681.31	1901.00
Unit Covered Hoppers	Empty	135	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3089.60	3228.00

Train Type	Train Load	Train Length (No. Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Covered Hoppers	Empty	135	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	1988.09	2126.00
Unit Covered Hoppers	Empty	135	Distributed (Head and Rear)	47	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	3370.08	3394.00
Unit Covered Hoppers	Empty	135	Distributed (Head and Rear)	55	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7116.91	7236.00
Unit Covered Hoppers	Empty	135	Distributed (Head and Rear)	55	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	6095.79	6192.00
Unit Covered Hoppers	Empty	135	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6426.68	6887.00
Unit Covered Hoppers	Empty	135	Distributed (Head and Rear)	60	0.50%	Incline	<0.1%	0.00	0.00	< 10%	0.00%	4619.19	4707.00
Unit Covered Hoppers	Empty	135	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	5661.98	5764.00
Unit Covered Hoppers	Empty	135	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	652.01	802.00
Unit Covered Hoppers	Empty	135	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	82.00%	266.24	370.00
Unit Covered Hoppers	Empty	135	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	718.57	759.00
Unit Covered Hoppers	Empty	135	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	55.00%	359.04	616.00
Unit Covered Hoppers	Empty	135	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3182.56	3304.00
Unit Covered Hoppers	Empty	135	Distributed (Head, Mid, Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	3.00%	887.07	926.00
Unit Covered Hoppers	Empty	135	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2882.49	2984.00
Unit Covered Hoppers	Empty	135	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	2200.34	2503.00
Unit Covered Hoppers	Empty	135	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	1.00%	1481.58	1726.00
Unit Covered Hoppers	Empty	135	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2630.70	2747.00
Unit Covered Hoppers	Empty	135	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	1749.95	1854.00
Unit Covered Hoppers	Empty	135	Distributed (Head, Mid, Rear)	47	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	3094.03	3125.00
Unit Covered Hoppers	Empty	135	Distributed (Head, Mid, Rear)	55	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6366.24	6463.00

Train Type	Train Load	Train Length (No. Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Covered Hoppers	Empty	135	Distributed (Head, Mid, Rear)	55	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	5306.62	5452.00
Unit Covered Hoppers	Empty	135	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5828.46	6186.00
Unit Covered Hoppers	Empty	135	Distributed (Head, Mid, Rear)	60	0.50%	Incline	<0.1%	0.00	0.00	> 10%, < 25%	1.00%	4265.46	4327.00
Unit Covered Hoppers	Empty	135	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	5121.63	5299.00
Unit Covered Hoppers	Loaded	135	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	1.00%	726.64	768.00
Unit Covered Hoppers	Loaded	135	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	95.00%	338.17	452.00
Unit Covered Hoppers	Loaded	135	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1266.10	1331.00
Unit Covered Hoppers	Loaded	135	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	100.00%	461.67	500.00
Unit Covered Hoppers	Loaded	135	Distributed (Head and Rear)	11	1.50%	Incline	> 1.0%	5.10	10.00	< 0.1%	99.00%	227.88	258.00
Unit Covered Hoppers	Loaded	135	Distributed (Head and Rear)	15	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	100.00%	809.13	865.00
Unit Covered Hoppers	Loaded	135	Distributed (Head and Rear)	15	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3227.98	3496.00
Unit Covered Hoppers	Loaded	135	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3477.94	3905.00
Unit Covered Hoppers	Loaded	135	Distributed (Head and Rear)	27	1.00%	Trough	<0.1%	0.00	0.00	> 25%, < 50%	1.00%	2374.79	2473.00
Unit Covered Hoppers	Loaded	135	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	1.00%	3082.91	3209.00
Unit Covered Hoppers	Loaded	135	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	96.00%	1951.23	2018.00
Unit Covered Hoppers	Loaded	135	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	99.00%	2541.05	2746.00
Unit Covered Hoppers	Loaded	135	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	99.00%	2374.88	2456.00
Unit Covered Hoppers	Loaded	135	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	100.00%	5546.03	5880.00
Unit Covered Hoppers	Loaded	135	Distributed (Head and Rear)	50	0.50%	Decline	<0.1%	0.00	0.00	> 50%	7.00%	6862.92	7056.00
Unit Covered Hoppers	Loaded	135	Distributed (Head and Rear)	50	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	99.00%	5365.15	5561.00
Unit Covered Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	1.00%	594.64	638.00
Unit Covered Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	55.00%	356.60	413.00
Unit Covered Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	998.72	1061.00
Unit Covered Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	100.00%	396.25	429.00

Train Type	Train Load	Train Length (No. Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Covered Hoppers	Loaded	135	Rear) Distributed (Head, Mid, Rear)	11	1.50%	Incline	> 1.0%	10.89	25.00	< 0.1%	100.00%	215.69	244.00
Unit Covered Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	15	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	98.00%	730.49	769.00
Unit Covered Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	15	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3133.75	3289.00
Unit Covered Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3302.43	3495.00
Unit Covered Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	27	1.00%	Trough	<0.1%	0.00	0.00	< 10%	22.00%	2021.00	2095.00
Unit Covered Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	6.00%	2687.00	2793.00
Unit Covered Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	98.00%	1750.94	1826.00
Unit Covered Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	100.00%	2385.95	2643.00
Unit Covered Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	100.00%	2101.27	2169.00
Unit Covered Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	100.00%	5332.26	5537.00
Unit Covered Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	50	0.50%	Decline	<0.1%	0.00	0.00	> 50%	8.00%	6194.87	6377.00
Unit Covered Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	50	0.00%	Flat	<0.1%	0.00	0.00	< 10%	100.00%	4821.20	5029.00
Unit Aluminum Hoppers	Empty	135	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	772.80	963.00
Unit Aluminum Hoppers	Empty	135	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	62.00%	316.88	568.00
Unit Aluminum Hoppers	Empty	135	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	800.33	1008.00
Unit Aluminum Hoppers	Empty	135	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 10%	3.00%	622.83	782.00
Unit Aluminum Hoppers	Empty	135	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3390.24	3534.00

Train Type	Train Load	Train Length (No. Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Aluminum Hoppers	Empty	135	Distributed (Head and Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	10.00%	958.50	1064.00
Unit Aluminum Hoppers	Empty	135	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3061.89	3199.00
Unit Aluminum Hoppers	Empty	135	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	2385.50	2756.00
Unit Aluminum Hoppers	Empty	135	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1604.88	1846.00
Unit Aluminum Hoppers	Empty	135	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2826.52	3409.00
Unit Aluminum Hoppers	Empty	135	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	1860.97	2039.00
Unit Aluminum Hoppers	Empty	135	Distributed (Head and Rear)	55	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6440.79	6596.00
Unit Aluminum Hoppers	Empty	135	Distributed (Head and Rear)	55	1.00%	Crest	<0.1%	0.00	0.00	< 10%	0.00%	3870.20	4007.00
Unit Aluminum Hoppers	Empty	135	Distributed (Head and Rear)	55	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	5543.95	5951.00
Unit Aluminum Hoppers	Empty	135	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6060.81	6553.00
Unit Aluminum Hoppers	Empty	135	Distributed (Head and Rear)	60	0.50%	Incline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	4470.03	4623.00
Unit Aluminum Hoppers	Empty	135	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	5280.12	5466.00
Unit Aluminum Hoppers	Empty	135	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	743.19	900.00
Unit Aluminum Hoppers	Empty	135	Distributed (Head, Mid, Rear)	10	0.50%	Incline	< 0.5%	7.00	7.00	< 0.1%	64.00%	261.85	393.00
Unit Aluminum Hoppers	Empty	135	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	643.02	981.00
Unit Aluminum Hoppers	Empty	135	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	3.00%	520.16	674.00
Unit Aluminum Hoppers	Empty	135	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2745.83	2945.00
Unit Aluminum Hoppers	Empty	135	Distributed (Head, Mid, Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	2.00%	909.44	1003.00

Train Type	Train Load	Train Length (No. Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Hoppers			Rear)										
Unit Aluminum Hoppers	Empty	135	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2564.83	2699.00
Unit Aluminum Hoppers	Empty	135	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	2008.13	2537.00
Unit Aluminum Hoppers	Empty	135	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	1.00%	1428.37	1628.00
Unit Aluminum Hoppers	Empty	135	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	2400.58	2820.00
Unit Aluminum Hoppers	Empty	135	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	1644.34	1861.00
Unit Aluminum Hoppers	Empty	135	Distributed (Head, Mid, Rear)	55	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5759.81	5905.00
Unit Aluminum Hoppers	Empty	135	Distributed (Head, Mid, Rear)	55	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	3544.99	3678.00
Unit Aluminum Hoppers	Empty	135	Distributed (Head, Mid, Rear)	55	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	4919.04	5715.00
Unit Aluminum Hoppers	Empty	135	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5445.42	5855.00
Unit Aluminum Hoppers	Empty	135	Distributed (Head, Mid, Rear)	60	0.50%	Incline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	4050.48	4151.00
Unit Aluminum Hoppers	Empty	135	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	4707.23	4878.00
Unit Aluminum Hoppers	Loaded	135	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	670.47	711.00
Unit Aluminum Hoppers	Loaded	135	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	53.00%	388.62	438.00
Unit Aluminum Hoppers	Loaded	135	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1155.87	1223.00
Unit Aluminum Hoppers	Loaded	135	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	96.00%	437.29	469.00
Unit Aluminum Hoppers	Loaded	135	Distributed (Head and Rear)	11	1.50%	Incline	> 1.0%	5.33	15.00	< 0.1%	98.00%	215.15	249.00
Unit Aluminum Hoppers	Loaded	135	Distributed (Head and Rear)	15	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	92.00%	774.71	837.00

Train Type	Train Load	Train Length (No. Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Aluminum Hoppers	Loaded	135	Distributed (Head and Rear)	15	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3177.55	3382.00
Unit Aluminum Hoppers	Loaded	135	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3397.97	3620.00
Unit Aluminum Hoppers	Loaded	135	Distributed (Head and Rear)	27	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	2265.27	2355.00
Unit Aluminum Hoppers	Loaded	135	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	1.00%	2920.99	3030.00
Unit Aluminum Hoppers	Loaded	135	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	90.00%	1874.17	1952.00
Unit Aluminum Hoppers	Loaded	135	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	99.00%	2463.01	2714.00
Unit Aluminum Hoppers	Loaded	135	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	95.00%	2254.14	2338.00
Unit Aluminum Hoppers	Loaded	135	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	100.00%	5462.42	5721.00
Unit Aluminum Hoppers	Loaded	135	Distributed (Head and Rear)	50	0.50%	Decline	<0.1%	0.00	0.00	> 50%	1.00%	6601.83	6783.00
Unit Aluminum Hoppers	Loaded	135	Distributed (Head and Rear)	50	0.00%	Flat	<0.1%	0.00	0.00	> 25%, < 50%	98.00%	5147.86	5344.00
Unit Aluminum Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	1.00%	551.42	585.00
Unit Aluminum Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	60.00%	333.63	399.00
Unit Aluminum Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	918.14	973.00
Unit Aluminum Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	99.00%	378.36	423.00
Unit Aluminum Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	11	1.50%	Incline	> 1.0%	8.00	19.00	< 0.1%	100.00%	210.49	238.00
Unit Aluminum Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	15	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	99.00%	678.65	726.00
Unit Aluminum Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	15	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3112.69	3335.00
Unit Aluminum Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3228.37	3415.00

Train Type	Train Load	Train Length (No. Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Hoppers			Rear)										
Unit Aluminum Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	27	1.00%	Trough	<0.1%	0.00	0.00	> 10%, < 25%	25.00%	1902.03	1986.00
Unit Aluminum Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	5.00%	2562.60	2651.00
Unit Aluminum Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	97.00%	1689.17	1749.00
Unit Aluminum Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	100.00%	2335.71	2494.00
Unit Aluminum Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	100.00%	2002.76	2128.00
Unit Aluminum Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	100.00%	5285.53	5501.00
Unit Aluminum Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	50	0.50%	Decline	<0.1%	0.00	0.00	> 50%	3.00%	5982.86	6183.00
Unit Aluminum Hoppers	Loaded	135	Distributed (Head, Mid, Rear)	50	0.00%	Flat	<0.1%	0.00	0.00	> 25%, < 50%	100.00%	4663.25	4894.00
Unit MultiLevel	Empty	135	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	1075.18	1181.00
Unit MultiLevel	Empty	135	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	4.00%	396.95	507.00
Unit MultiLevel	Empty	135	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1566.71	2107.00
Unit MultiLevel	Empty	135	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	1.00%	598.72	814.00
Unit MultiLevel	Empty	135	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6840.74	7432.00
Unit MultiLevel	Empty	135	Distributed (Head and Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	13.00%	1002.24	1044.00
Unit MultiLevel	Empty	135	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5872.58	6274.00
Unit MultiLevel	Empty	135	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	3669.13	3854.00
Unit MultiLevel	Empty	135	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	11.00%	2224.92	2382.00
Unit MultiLevel	Empty	135	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4774.21	5598.00
Unit MultiLevel	Empty	135	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	2.00%	2636.93	2769.00
Unit MultiLevel	Empty	135	Distributed (Head and Rear)	36	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	8.00%	3220.72	3285.00
Unit MultiLevel	Empty	135	Distributed (Head and Rear)	53	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	4930.80	4982.00
Unit MultiLevel	Empty	135	Distributed (Head and Rear)	55	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	10235.22	10547.00

Train Type	Train Load	Train Length (No. Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit MultiLevel	Empty	135	Distributed (Head and Rear)	55	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	8231.16	8439.00
Unit MultiLevel	Empty	135	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	8865.59	9175.00
Unit MultiLevel	Empty	135	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	3.00%	7335.21	7494.00
Unit MultiLevel	Empty	135	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	887.05	1041.00
Unit MultiLevel	Empty	135	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	35.00%	328.51	417.00
Unit MultiLevel	Empty	135	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1166.94	1273.00
Unit MultiLevel	Empty	135	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	7.00%	542.86	714.00
Unit MultiLevel	Empty	135	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5624.86	5960.00
Unit MultiLevel	Empty	135	Distributed (Head, Mid, Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	926.18	972.00
Unit MultiLevel	Empty	135	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4617.31	4829.00
Unit MultiLevel	Empty	135	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2959.03	3211.00
Unit MultiLevel	Empty	135	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	2063.65	2163.00
Unit MultiLevel	Empty	135	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3841.42	4002.00
Unit MultiLevel	Empty	135	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2308.71	2452.00
Unit MultiLevel	Empty	135	Distributed (Head, Mid, Rear)	36	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	2921.76	3017.00
Unit MultiLevel	Empty	135	Distributed (Head, Mid, Rear)	53	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	4458.19	4540.00
Unit MultiLevel	Empty	135	Distributed (Head, Mid, Rear)	55	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	8923.28	9107.00
Unit MultiLevel	Empty	135	Distributed (Head, Mid, Rear)	55	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	6966.77	7085.00
Unit MultiLevel	Empty	135	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7805.73	8202.00

Train Type	Train Load	Train Length (No. Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit MultiLevel	Empty	135	Rear) Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	6421.57	6537.00
Unit MultiLevel	Loaded	135	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	10.00%	404.81	453.00
Unit MultiLevel	Loaded	135	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2004.27	2248.00
Unit MultiLevel	Loaded	135	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	57.00%	609.12	719.00
Unit MultiLevel	Loaded	135	Distributed (Head and Rear)	14	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	10.00%	380.88	445.00
Unit MultiLevel	Loaded	135	Distributed (Head and Rear)	15	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3504.05	4184.00
Unit MultiLevel	Loaded	135	Distributed (Head and Rear)	21	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	13.00%	1631.54	1843.00
Unit MultiLevel	Loaded	135	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	16.00%	3532.07	4168.00
Unit MultiLevel	Loaded	135	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4012.37	4232.00
Unit MultiLevel	Loaded	135	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 10%	98.00%	2701.94	3203.00
Unit MultiLevel	Loaded	135	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	97.00%	2982.14	3099.00
Unit MultiLevel	Loaded	135	Distributed (Head and Rear)	37	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	99.00%	3243.92	3312.00
Unit MultiLevel	Loaded	135	Distributed (Head and Rear)	37	1.00%	Trough	<0.1%	0.00	0.00	> 50%	1.00%	5196.97	5434.00
Unit MultiLevel	Loaded	135	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	99.00%	5797.58	6195.00
Unit MultiLevel	Loaded	135	Distributed (Head and Rear)	50	0.50%	Decline	<0.1%	0.00	0.00	> 50%	2.00%	8266.53	8535.00
Unit MultiLevel	Loaded	135	Distributed (Head and Rear)	50	0.00%	Flat	<0.1%	0.00	0.00	< 10%	100.00%	6507.48	6641.00
Unit MultiLevel	Loaded	135	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	5.00%	818.86	932.00
Unit MultiLevel	Loaded	135	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	7.00%	422.34	483.00
Unit MultiLevel	Loaded	135	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1493.09	1579.00
Unit MultiLevel	Loaded	135	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	64.00%	517.51	549.00
Unit MultiLevel	Loaded	135	Distributed (Head, Mid, Rear)	14	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	23.00%	370.85	416.00
Unit MultiLevel	Loaded	135	Distributed (Head, Mid, Rear)	15	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3093.01	3686.00
Unit MultiLevel	Loaded	135	Distributed (Head, Mid, Rear)	21	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	19.00%	1467.74	1638.00

Train Type	Train Load	Train Length (No. Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit MultiLevel	Loaded	135	Rear) Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	30.00%	3187.27	3619.00
Unit MultiLevel	Loaded	135	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	1.00%	3423.20	3671.00
Unit MultiLevel	Loaded	135	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	99.00%	2504.72	2746.00
Unit MultiLevel	Loaded	135	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	58.00%	2602.44	2679.00
Unit MultiLevel	Loaded	135	Distributed (Head, Mid, Rear)	37	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	76.00%	2895.24	2981.00
Unit MultiLevel	Loaded	135	Distributed (Head, Mid, Rear)	37	1.00%	Trough	<0.1%	0.00	0.00	> 25%, < 50%	15.00%	4339.36	4464.00
Unit MultiLevel	Loaded	135	Distributed (Head, Mid, Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	100.00%	5443.29	5777.00
Unit MultiLevel	Loaded	135	Distributed (Head, Mid, Rear)	50	0.50%	Decline	<0.1%	0.00	0.00	> 50%	3.00%	7301.45	7501.00
Unit MultiLevel	Loaded	135	Distributed (Head, Mid, Rear)	50	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	93.00%	5774.41	5923.00
Unit Refrigerated Box	Empty	135	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	997.80	1099.00
Unit Refrigerated Box	Empty	135	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	12.00%	357.08	418.00
Unit Refrigerated Box	Empty	135	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1358.27	1413.00
Unit Refrigerated Box	Empty	135	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	580.64	764.00
Unit Refrigerated Box	Empty	135	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6225.79	6708.00
Unit Refrigerated Box	Empty	135	Distributed (Head and Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	1.00%	984.34	1017.00
Unit Refrigerated Box	Empty	135	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5345.34	5867.00
Unit Refrigerated Box	Empty	135	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3434.97	3620.00
Unit Refrigerated Box	Empty	135	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	2176.20	2290.00
Unit Refrigerated Box	Empty	135	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4381.50	4960.00
Unit Refrigerated Box	Empty	135	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2492.82	2614.00
Unit Refrigerated Box	Empty	135	Distributed (Head and Rear)	35	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	2974.71	3062.00
Unit Refrigerated Box	Empty	135	Distributed (Head and Rear)	52	0.50%	Incline	<0.1%	0.00	0.00	< 10%	0.00%	4634.81	4754.00

Train Type	Train Load	Train Length (No. Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Refrigerated Box	Empty	135	Distributed (Head and Rear)	55	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	9596.54	9839.00
Unit Refrigerated Box	Empty	135	Distributed (Head and Rear)	55	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	7832.71	8003.00
Unit Refrigerated Box	Empty	135	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	8403.05	8750.00
Unit Refrigerated Box	Empty	135	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	6789.82	6887.00
Unit Refrigerated Box	Empty	135	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	833.15	978.00
Unit Refrigerated Box	Empty	135	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	20.00%	309.93	372.00
Unit Refrigerated Box	Empty	135	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1034.73	1122.00
Unit Refrigerated Box	Empty	135	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	2.00%	486.19	683.00
Unit Refrigerated Box	Empty	135	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5067.07	5560.00
Unit Refrigerated Box	Empty	135	Distributed (Head, Mid, Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	914.95	972.00
Unit Refrigerated Box	Empty	135	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4152.62	4385.00
Unit Refrigerated Box	Empty	135	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	2815.86	3123.00
Unit Refrigerated Box	Empty	135	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1945.93	2049.00
Unit Refrigerated Box	Empty	135	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3545.57	3746.00
Unit Refrigerated Box	Empty	135	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2187.00	2279.00
Unit Refrigerated Box	Empty	135	Distributed (Head, Mid, Rear)	35	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	2619.05	2751.00
Unit Refrigerated Box	Empty	135	Distributed (Head, Mid, Rear)	52	0.50%	Incline	<0.1%	0.00	0.00	< 10%	0.00%	4066.83	4136.00
Unit Refrigerated Box	Empty	135	Distributed (Head, Mid, Rear)	55	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	8327.54	8468.00
Unit Refrigerated Box	Empty	135	Distributed (Head, Mid, Rear)	55	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	6685.08	6822.00

Train Type	Train Load	Train Length (No. Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Refrigerated Box	Empty	135	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7484.64	7794.00
Unit Refrigerated Box	Empty	135	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	6141.49	6199.00
Unit Refrigerated Box	Loaded	135	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 10%	17.00%	961.85	1065.00
Unit Refrigerated Box	Loaded	135	Distributed (Head and Rear)	10	0.50%	Incline	> 1.0%	7.50	10.00	< 0.1%	31.00%	421.66	474.00
Unit Refrigerated Box	Loaded	135	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1803.76	1997.00
Unit Refrigerated Box	Loaded	135	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	63.00%	561.76	600.00
Unit Refrigerated Box	Loaded	135	Distributed (Head and Rear)	12	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	1.00%	262.75	313.00
Unit Refrigerated Box	Loaded	135	Distributed (Head and Rear)	15	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3544.21	4480.00
Unit Refrigerated Box	Loaded	135	Distributed (Head and Rear)	17	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	1142.93	1312.00
Unit Refrigerated Box	Loaded	135	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	2.00%	3848.92	4231.00
Unit Refrigerated Box	Loaded	135	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3764.15	4033.00
Unit Refrigerated Box	Loaded	135	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 10%	89.00%	2749.44	3227.00
Unit Refrigerated Box	Loaded	135	Distributed (Head and Rear)	30	1.00%	Trough	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	3475.18	3653.00
Unit Refrigerated Box	Loaded	135	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	99.00%	2817.88	2895.00
Unit Refrigerated Box	Loaded	135	Distributed (Head and Rear)	31	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	99.00%	2354.06	2427.00
Unit Refrigerated Box	Loaded	135	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	96.00%	5918.45	6323.00
Unit Refrigerated Box	Loaded	135	Distributed (Head and Rear)	50	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	8017.75	8363.00
Unit Refrigerated Box	Loaded	135	Distributed (Head and Rear)	50	0.00%	Flat	<0.1%	0.00	0.00	< 10%	100.00%	6236.41	6339.00
Unit Refrigerated Box	Loaded	135	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	7.00%	761.39	867.00
Unit Refrigerated Box	Loaded	135	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	6.00%	403.39	431.00
Unit Refrigerated Box	Loaded	135	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1375.03	1437.00
Unit Refrigerated Box	Loaded	135	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	56.00%	482.44	515.00
Unit Refrigerated Box	Loaded	135	Distributed (Head, Mid, Rear)	12	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	19.00%	273.64	310.00
Unit Refrigerated Box	Loaded	135	Distributed (Head, Mid, Rear)	15	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3276.55	3569.00

Train Type	Train Load	Train Length (No. Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Refrigerated Box	Loaded	135	Rear) Distributed (Head, Mid, Rear)	17	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	1.00%	1003.55	1138.00
Unit Refrigerated Box	Loaded	135	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3556.29	3881.00
Unit Refrigerated Box	Loaded	135	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	3231.03	3332.00
Unit Refrigerated Box	Loaded	135	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	94.00%	2557.62	2760.00
Unit Refrigerated Box	Loaded	135	Distributed (Head, Mid, Rear)	30	1.00%	Trough	<0.1%	0.00	0.00	< 10%	0.00%	2813.50	3121.00
Unit Refrigerated Box	Loaded	135	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	59.00%	2460.31	2532.00
Unit Refrigerated Box	Loaded	135	Distributed (Head, Mid, Rear)	31	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	69.00%	2116.11	2191.00
Unit Refrigerated Box	Loaded	135	Distributed (Head, Mid, Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	100.00%	5622.38	6041.00
Unit Refrigerated Box	Loaded	135	Distributed (Head, Mid, Rear)	50	0.50%	Decline	<0.1%	0.00	0.00	> 50%	1.00%	7096.45	7298.00
Unit Refrigerated Box	Loaded	135	Distributed (Head, Mid, Rear)	50	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	88.00%	5585.30	5708.00
Unit Tank	Empty	135	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	580.59	826.00
Unit Tank	Empty	135	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	64.00%	298.65	455.00
Unit Tank	Empty	135	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	678.95	727.00
Unit Tank	Empty	135	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	18.00%	419.84	600.00
Unit Tank	Empty	135	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3080.27	3218.00
Unit Tank	Empty	135	Distributed (Head and Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	41.00%	836.59	886.00
Unit Tank	Empty	135	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2808.99	2937.00
Unit Tank	Empty	135	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	2111.81	2451.00
Unit Tank	Empty	135	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	8.00%	1492.77	1638.00
Unit Tank	Empty	135	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2601.11	2680.00
Unit Tank	Empty	135	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	1.00%	1705.63	1821.00

Train Type	Train Load	Train Length (No. Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Tank	Empty	135	Distributed (Head and Rear)	48	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	2979.32	3031.00
Unit Tank	Empty	135	Distributed (Head and Rear)	55	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6254.14	6364.00
Unit Tank	Empty	135	Distributed (Head and Rear)	55	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	5452.23	5589.00
Unit Tank	Empty	135	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5756.80	6196.00
Unit Tank	Empty	135	Distributed (Head and Rear)	60	0.50%	Incline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	4232.02	4316.00
Unit Tank	Empty	135	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	5065.36	5280.00
Unit Tank	Empty	135	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	506.01	683.00
Unit Tank	Empty	135	Distributed (Head, Mid, Rear)	10	0.50%	Incline	> 1.0%	4.00	6.00	< 0.1%	73.00%	245.70	321.00
Unit Tank	Empty	135	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	558.31	606.00
Unit Tank	Empty	135	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	59.00%	327.56	531.00
Unit Tank	Empty	135	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2602.77	2799.00
Unit Tank	Empty	135	Distributed (Head, Mid, Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	5.00%	798.93	844.00
Unit Tank	Empty	135	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2361.82	2496.00
Unit Tank	Empty	135	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	1862.12	2173.00
Unit Tank	Empty	135	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	6.00%	1319.20	1465.00
Unit Tank	Empty	135	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	2237.03	2335.00
Unit Tank	Empty	135	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	1.00%	1504.97	1619.00
Unit Tank	Empty	135	Distributed (Head, Mid, Rear)	48	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	2758.53	2828.00
Unit Tank	Empty	135	Distributed (Head, Mid, Rear)	55	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5702.06	5818.00
Unit Tank	Empty	135	Distributed (Head, Mid, Rear)	55	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	4842.59	4979.00

Train Type	Train Load	Train Length (No. Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Tank	Empty	135	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5227.24	5584.00
Unit Tank	Empty	135	Distributed (Head, Mid, Rear)	60	0.50%	Incline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	3930.33	3979.00
Unit Tank	Empty	135	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	4563.15	4773.00
Unit Tank	Loaded	135	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	12.00%	573.43	612.00
Unit Tank	Loaded	135	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	94.00%	310.90	408.00
Unit Tank	Loaded	135	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	960.87	1028.00
Unit Tank	Loaded	135	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	100.00%	391.05	415.00
Unit Tank	Loaded	135	Distributed (Head and Rear)	12	1.50%	Incline	> 1.0%	5.08	15.00	< 0.1%	100.00%	247.52	284.00
Unit Tank	Loaded	135	Distributed (Head and Rear)	15	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2755.04	2910.00
Unit Tank	Loaded	135	Distributed (Head and Rear)	17	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	100.00%	814.79	861.00
Unit Tank	Loaded	135	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	4.00%	3066.06	3250.00
Unit Tank	Loaded	135	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	40.00%	2629.11	2738.00
Unit Tank	Loaded	135	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	100.00%	2292.25	2474.00
Unit Tank	Loaded	135	Distributed (Head and Rear)	30	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	0.00%	2543.10	2664.00
Unit Tank	Loaded	135	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	100.00%	2064.93	2172.00
Unit Tank	Loaded	135	Distributed (Head and Rear)	31	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	100.00%	1830.94	1896.00
Unit Tank	Loaded	135	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	100.00%	5167.58	5346.00
Unit Tank	Loaded	135	Distributed (Head and Rear)	50	0.50%	Decline	<0.1%	0.00	0.00	> 50%	23.00%	6052.71	6212.00
Unit Tank	Loaded	135	Distributed (Head and Rear)	50	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	100.00%	4752.01	4954.00
Unit Tank	Loaded	135	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	26.00%	482.23	519.00
Unit Tank	Loaded	135	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	92.00%	280.70	380.00
Unit Tank	Loaded	135	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	769.71	825.00
Unit Tank	Loaded	135	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	99.00%	337.41	396.00
Unit Tank	Loaded	135	Distributed (Head, Mid, Rear)	12	1.50%	Incline	> 1.0%	10.48	29.00	< 0.1%	100.00%	240.65	273.00

Train Type	Train Load	Train Length (No. Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Tank	Loaded	135	Rear) Distributed (Head, Mid, Rear)	15	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2703.04	2830.00
Unit Tank	Loaded	135	Distributed (Head, Mid, Rear)	17	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	100.00%	735.02	784.00
Unit Tank	Loaded	135	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	11.00%	2924.79	3233.00
Unit Tank	Loaded	135	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	46.00%	2333.59	2417.00
Unit Tank	Loaded	135	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	100.00%	2197.86	2354.00
Unit Tank	Loaded	135	Distributed (Head, Mid, Rear)	30	1.00%	Trough	<0.1%	0.00	0.00	< 0.1%	25.00%	2187.57	2282.00
Unit Tank	Loaded	135	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	100.00%	1838.47	1925.00
Unit Tank	Loaded	135	Distributed (Head, Mid, Rear)	31	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	100.00%	1650.60	1717.00
Unit Tank	Loaded	135	Distributed (Head, Mid, Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	100.00%	4985.54	5195.00
Unit Tank	Loaded	135	Distributed (Head, Mid, Rear)	50	0.50%	Decline	<0.1%	0.00	0.00	> 50%	62.00%	5549.35	5735.00
Unit Tank	Loaded	135	Distributed (Head, Mid, Rear)	50	0.00%	Flat	> 1.0%	199.50	336.00	< 0.1%	100.00%	4356.75	4603.00
Unit Steel Hoppers	Empty	200	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	921.96	1067.00
Unit Steel Hoppers	Empty	200	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	61.00%	344.63	443.00
Unit Steel Hoppers	Empty	200	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1064.24	1335.00
Unit Steel Hoppers	Empty	200	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	21.00%	530.70	813.00
Unit Steel Hoppers	Empty	200	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4007.15	4083.00
Unit Steel Hoppers	Empty	200	Distributed (Head and Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	9.00%	1039.15	1100.00
Unit Steel Hoppers	Empty	200	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3796.68	3945.00
Unit Steel Hoppers	Empty	200	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3022.69	3184.00
Unit Steel Hoppers	Empty	200	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1828.88	2024.00

Train Type	Train Load	Train Length (No. Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Steel Hoppers	Empty	200	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3489.41	3611.00
Unit Steel Hoppers	Empty	200	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2145.14	2221.00
Unit Steel Hoppers	Empty	200	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5835.40	6201.00
Unit Steel Hoppers	Empty	200	Distributed (Head and Rear)	45	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	3509.74	3588.00
Unit Steel Hoppers	Empty	200	Distributed (Head and Rear)	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	4587.34	4686.00
Unit Steel Hoppers	Empty	200	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6943.54	7442.00
Unit Steel Hoppers	Empty	200	Distributed (Head and Rear)	60	0.50%	Incline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	5034.81	5132.00
Unit Steel Hoppers	Empty	200	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	5904.48	5980.00
Unit Steel Hoppers	Empty	200	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	723.73	906.00
Unit Steel Hoppers	Empty	200	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	50.00%	306.90	397.00
Unit Steel Hoppers	Empty	200	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	825.41	890.00
Unit Steel Hoppers	Empty	200	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	23.00%	419.70	660.00
Unit Steel Hoppers	Empty	200	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3040.87	3086.00
Unit Steel Hoppers	Empty	200	Distributed (Head, Mid, Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	13.00%	929.59	1027.00
Unit Steel Hoppers	Empty	200	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3149.80	3210.00
Unit Steel Hoppers	Empty	200	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	2341.97	2676.00
Unit Steel Hoppers	Empty	200	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1610.86	1760.00
Unit Steel Hoppers	Empty	200	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2926.52	3019.00
Unit Steel Hoppers	Empty	200	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	1880.90	1993.00
Unit Steel Hoppers	Empty	200	Distributed (Head, Mid, Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5104.26	5222.00
Unit Steel Hoppers	Empty	200	Distributed (Head, Mid, Rear)	45	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	0.00%	3189.86	3263.00

Train Type	Train Load	Train Length (No. Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Steel Hoppers	Empty	200	Rear) Distributed (Head, Mid, Rear)	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	3979.66	4463.00
Unit Steel Hoppers	Empty	200	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6171.13	6358.00
Unit Steel Hoppers	Empty	200	Distributed (Head, Mid, Rear)	60	0.50%	Incline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	4533.58	4629.00
Unit Steel Hoppers	Empty	200	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	5211.98	5322.00
Unit Steel Hoppers	Loaded	200	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	858.78	902.00
Unit Steel Hoppers	Loaded	200	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	64.00%	405.40	485.00
Unit Steel Hoppers	Loaded	200	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1592.05	1671.00
Unit Steel Hoppers	Loaded	200	Distributed (Head and Rear)	10	1.50%	Incline	> 1.0%	6.83	18.00	< 0.1%	59.00%	204.73	238.00
Unit Steel Hoppers	Loaded	200	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	96.00%	534.02	575.00
Unit Steel Hoppers	Loaded	200	Distributed (Head and Rear)	15	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	78.00%	935.86	1065.00
Unit Steel Hoppers	Loaded	200	Distributed (Head and Rear)	15	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	9059.24	9317.00
Unit Steel Hoppers	Loaded	200	Distributed (Head and Rear)	20	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6060.00	6206.00
Unit Steel Hoppers	Loaded	200	Distributed (Head and Rear)	27	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	87.00%	1826.06	1882.00
Unit Steel Hoppers	Loaded	200	Distributed (Head and Rear)	27	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	2678.37	2757.00
Unit Steel Hoppers	Loaded	200	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 10%	0.00%	3563.91	3679.00
Unit Steel Hoppers	Loaded	200	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5367.37	5496.00
Unit Steel Hoppers	Loaded	200	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	89.00%	2675.88	2771.00
Unit Steel Hoppers	Loaded	200	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	10054.64	10336.00
Unit Steel Hoppers	Loaded	200	Distributed (Head and Rear)	50	0.50%	Decline	<0.1%	0.00	0.00	> 50%	2.00%	7525.80	7698.00
Unit Steel Hoppers	Loaded	200	Distributed (Head and Rear)	50	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	88.00%	5950.80	6062.00
Unit Steel Hoppers	Loaded	200	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	711.80	762.00
Unit Steel Hoppers	Loaded	200	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	76.00%	352.62	428.00
Unit Steel Hoppers	Loaded	200	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1261.93	1323.00

Train Type	Train Load	Train Length (No. Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Steel Hoppers	Loaded	200	Distributed (Head, Mid, Rear)	10	1.50%	Incline	> 1.0%	7.40	19.00	< 0.1%	70.00%	188.54	218.00
Unit Steel Hoppers	Loaded	200	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	96.00%	462.16	513.00
Unit Steel Hoppers	Loaded	200	Distributed (Head, Mid, Rear)	15	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	73.00%	804.50	882.00
Unit Steel Hoppers	Loaded	200	Distributed (Head, Mid, Rear)	15	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	8514.64	8706.00
Unit Steel Hoppers	Loaded	200	Distributed (Head, Mid, Rear)	20	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5457.36	5656.00
Unit Steel Hoppers	Loaded	200	Distributed (Head, Mid, Rear)	27	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	93.00%	1641.59	1691.00
Unit Steel Hoppers	Loaded	200	Distributed (Head, Mid, Rear)	27	1.00%	Trough	<0.1%	0.00	0.00	> 50%	1.00%	2214.68	2300.00
Unit Steel Hoppers	Loaded	200	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	3042.60	3136.00
Unit Steel Hoppers	Loaded	200	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4640.05	4803.00
Unit Steel Hoppers	Loaded	200	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	90.00%	2343.47	2424.00
Unit Steel Hoppers	Loaded	200	Distributed (Head, Mid, Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	9210.61	9506.00
Unit Steel Hoppers	Loaded	200	Distributed (Head, Mid, Rear)	50	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6713.69	6836.00
Unit Steel Hoppers	Loaded	200	Distributed (Head, Mid, Rear)	50	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	92.00%	5355.11	5484.00
Unit Aluminum Hoppers	Empty	200	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1002.28	1203.00
Unit Aluminum Hoppers	Empty	200	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	29.00%	380.20	631.00
Unit Aluminum Hoppers	Empty	200	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1153.82	1875.00
Unit Aluminum Hoppers	Empty	200	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	686.48	922.00
Unit Aluminum Hoppers	Empty	200	Distributed (Head and Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3066.44	3092.00

Train Type	Train Load	Train Length (No. Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Hoppers													
Unit Aluminum Hoppers	Empty	200	Distributed (Head and Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	5.00%	986.66	1068.00
Unit Aluminum Hoppers	Empty	200	Distributed (Head and Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3333.00	3363.00
Unit Aluminum Hoppers	Empty	200	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2871.88	3114.00
Unit Aluminum Hoppers	Empty	200	Distributed (Head and Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1887.79	2170.00
Unit Aluminum Hoppers	Empty	200	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	4141.38	4400.00
Unit Aluminum Hoppers	Empty	200	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	2201.37	2369.00
Unit Aluminum Hoppers	Empty	200	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5883.83	6278.00
Unit Aluminum Hoppers	Empty	200	Distributed (Head and Rear)	45	1.00%	Crest	<0.1%	0.00	0.00	> 50%	0.00%	3729.47	3810.00
Unit Aluminum Hoppers	Empty	200	Distributed (Head and Rear)	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	4731.37	5003.00
Unit Aluminum Hoppers	Empty	200	Distributed (Head and Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6932.80	7155.00
Unit Aluminum Hoppers	Empty	200	Distributed (Head and Rear)	60	0.50%	Incline	<0.1%	0.00	0.00	> 50%	0.00%	5055.27	5119.00
Unit Aluminum Hoppers	Empty	200	Distributed (Head and Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	5976.16	6208.00
Unit Aluminum Hoppers	Empty	200	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	833.79	1050.00
Unit Aluminum Hoppers	Empty	200	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	30.00%	329.12	547.00
Unit Aluminum Hoppers	Empty	200	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	901.40	1411.00
Unit Aluminum Hoppers	Empty	200	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 10%	1.00%	581.68	771.00
Unit Aluminum Hoppers	Empty	200	Distributed (Head, Mid, Rear)	20	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3052.14	3094.00

Train Type	Train Load	Train Length (No. Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Aluminum Hoppers	Empty	200	Distributed (Head, Mid, Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	986.15	1139.00
Unit Aluminum Hoppers	Empty	200	Distributed (Head, Mid, Rear)	25	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3184.59	3252.00
Unit Aluminum Hoppers	Empty	200	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	2543.56	2903.00
Unit Aluminum Hoppers	Empty	200	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	0.00%	1654.26	1985.00
Unit Aluminum Hoppers	Empty	200	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3082.37	3626.00
Unit Aluminum Hoppers	Empty	200	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	0.00%	1914.65	2017.00
Unit Aluminum Hoppers	Empty	200	Distributed (Head, Mid, Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	5099.59	5273.00
Unit Aluminum Hoppers	Empty	200	Distributed (Head, Mid, Rear)	45	1.00%	Crest	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	3394.26	3457.00
Unit Aluminum Hoppers	Empty	200	Distributed (Head, Mid, Rear)	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	4081.91	4530.00
Unit Aluminum Hoppers	Empty	200	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6067.52	6451.00
Unit Aluminum Hoppers	Empty	200	Distributed (Head, Mid, Rear)	60	0.50%	Incline	<0.1%	0.00	0.00	> 50%	0.00%	4643.88	4733.00
Unit Aluminum Hoppers	Empty	200	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	5401.90	5619.00
Unit Aluminum Hoppers	Loaded	200	Distributed (Head and Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	920.28	972.00
Unit Aluminum Hoppers	Loaded	200	Distributed (Head and Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	41.00%	379.64	487.00
Unit Aluminum Hoppers	Loaded	200	Distributed (Head and Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1713.98	1786.00
Unit Aluminum Hoppers	Loaded	200	Distributed (Head and Rear)	10	1.50%	Incline	> 1.0%	3.00	4.00	< 0.1%	64.00%	201.45	224.00
Unit Aluminum Hoppers	Loaded	200	Distributed (Head and Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	43.00%	559.94	592.00
Unit Aluminum Hoppers	Loaded	200	Distributed (Head and Rear)	14	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	6.00%	925.24	1025.00

Train Type	Train Load	Train Length (No. Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Hoppers													
Unit Aluminum Hoppers	Loaded	200	Distributed (Head and Rear)	15	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2929.90	3113.00
Unit Aluminum Hoppers	Loaded	200	Distributed (Head and Rear)	20	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2678.43	3018.00
Unit Aluminum Hoppers	Loaded	200	Distributed (Head and Rear)	25	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	2454.36	2536.00
Unit Aluminum Hoppers	Loaded	200	Distributed (Head and Rear)	26	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	3.00%	1778.98	1848.00
Unit Aluminum Hoppers	Loaded	200	Distributed (Head and Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3750.47	3834.00
Unit Aluminum Hoppers	Loaded	200	Distributed (Head and Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 0.1%	46.00%	2813.47	3065.00
Unit Aluminum Hoppers	Loaded	200	Distributed (Head and Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	2.00%	2773.48	2862.00
Unit Aluminum Hoppers	Loaded	200	Distributed (Head and Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	98.00%	5859.47	6213.00
Unit Aluminum Hoppers	Loaded	200	Distributed (Head and Rear)	50	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7877.89	8111.00
Unit Aluminum Hoppers	Loaded	200	Distributed (Head and Rear)	50	0.00%	Flat	<0.1%	0.00	0.00	> 10%, < 25%	3.00%	6063.59	6166.00
Unit Aluminum Hoppers	Loaded	200	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	< 0.1%	0.00%	750.82	792.00
Unit Aluminum Hoppers	Loaded	200	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	34.00%	351.98	440.00
Unit Aluminum Hoppers	Loaded	200	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1362.48	1423.00
Unit Aluminum Hoppers	Loaded	200	Distributed (Head, Mid, Rear)	10	1.50%	Incline	> 1.0%	4.50	8.00	< 0.1%	78.00%	193.43	217.00
Unit Aluminum Hoppers	Loaded	200	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	35.00%	482.90	514.00
Unit Aluminum Hoppers	Loaded	200	Distributed (Head, Mid, Rear)	14	1.00%	Crest	<0.1%	0.00	0.00	< 0.1%	23.00%	741.59	833.00
Unit Aluminum Hoppers	Loaded	200	Distributed (Head, Mid, Rear)	15	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2820.13	2972.00

Train Type	Train Load	Train Length (No. Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Aluminum Hoppers	Loaded	200	Distributed (Head, Mid, Rear)	20	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2465.93	2699.00
Unit Aluminum Hoppers	Loaded	200	Distributed (Head, Mid, Rear)	25	1.00%	Trough	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	2026.46	2129.00
Unit Aluminum Hoppers	Loaded	200	Distributed (Head, Mid, Rear)	26	0.50%	Incline	<0.1%	0.00	0.00	< 0.1%	7.00%	1602.74	1654.00
Unit Aluminum Hoppers	Loaded	200	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	3162.81	3223.00
Unit Aluminum Hoppers	Loaded	200	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	< 10%	86.00%	2632.72	2798.00
Unit Aluminum Hoppers	Loaded	200	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	< 0.1%	10.00%	2431.92	2516.00
Unit Aluminum Hoppers	Loaded	200	Distributed (Head, Mid, Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	100.00%	5594.72	5887.00
Unit Aluminum Hoppers	Loaded	200	Distributed (Head, Mid, Rear)	50	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	7043.70	7185.00
Unit Aluminum Hoppers	Loaded	200	Distributed (Head, Mid, Rear)	50	0.00%	Flat	<0.1%	0.00	0.00	< 10%	3.00%	5447.92	5585.00
Unit Steel Hoppers	Empty	260	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1734.94	1749.00
Unit Steel Hoppers	Empty	260	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	> 25%, < 50%	0.00%	756.15	1227.00
Unit Steel Hoppers	Empty	260	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2434.35	2449.00
Unit Steel Hoppers	Empty	260	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	1559.16	1665.00
Unit Steel Hoppers	Empty	260	Distributed (Head, Mid, Rear)	20	2.20%	Decline	1	1096.04	1540.00	< 0.1%	0.00%	-87.34	-59.00
Unit Steel Hoppers	Empty	260	Distributed (Head, Mid, Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	> 50%	0.00%	1634.72	1686.00
Unit Steel Hoppers	Empty	260	Distributed (Head, Mid, Rear)	25	1.70%	Decline	1	1416.11	1726.00	< 0.1%	0.00%	-107.94	-72.00
Unit Steel Hoppers	Empty	260	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 50%	100.00%	4097.70	4131.00
Unit Steel Hoppers	Empty	260	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	> 50%	0.00%	3603.51	3637.00

Train Type	Train Load	Train Length (No. Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Steel Hoppers	Empty	260	Rear) Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	100.00%	5003.98	5038.00
Unit Steel Hoppers	Empty	260	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	4202.15	4233.00
Unit Steel Hoppers	Empty	260	Distributed (Head, Mid, Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	21905.66	21993.00
Unit Steel Hoppers	Empty	260	Distributed (Head, Mid, Rear)	45	1.00%	Crest	<0.1%	0.00	0.00	> 50%	17.00%	5008.98	5045.00
Unit Steel Hoppers	Empty	260	Distributed (Head, Mid, Rear)	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	100.00%	5305.77	5342.00
Unit Steel Hoppers	Empty	260	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	100.00%	7700.41	7757.00
Unit Steel Hoppers	Empty	260	Distributed (Head, Mid, Rear)	60	0.50%	Incline	<0.1%	0.00	0.00	> 50%	100.00%	6609.68	6660.00
Unit Steel Hoppers	Empty	260	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	100.00%	6405.11	6463.00
Unit Steel Hoppers	Loaded	260	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2232.97	2247.00
Unit Steel Hoppers	Loaded	260	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	> 50%	0.00%	1262.29	1407.00
Unit Steel Hoppers	Loaded	260	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	9762.31	10008.00
Unit Steel Hoppers	Loaded	260	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	2028.12	2053.00
Unit Steel Hoppers	Loaded	260	Distributed (Head, Mid, Rear)	12	1.50%	Incline	<0.1%	0.00	0.00	> 10%, < 25%	0.00%	727.87	768.00
Unit Steel Hoppers	Loaded	260	Distributed (Head, Mid, Rear)	15	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6490.78	6682.00
Unit Steel Hoppers	Loaded	260	Distributed (Head, Mid, Rear)	17	1.00%	Crest	<0.1%	0.00	0.00	> 50%	0.00%	2685.34	2705.00
Unit Steel Hoppers	Loaded	260	Distributed (Head, Mid, Rear)	20	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	8464.24	18069.00
Unit Steel Hoppers	Loaded	260	Distributed (Head, Mid, Rear)	28	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	4618.19	4644.00

Train Type	Train Load	Train Length (No. Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Steel Hoppers	Loaded	260	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 50%	90.00%	5903.63	5933.00
Unit Steel Hoppers	Loaded	260	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	19228.16	19612.00
Unit Steel Hoppers	Loaded	260	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	5102.29	5131.00
Unit Steel Hoppers	Loaded	260	Distributed (Head, Mid, Rear)	31	0.50%	Incline	<0.1%	0.00	0.00	> 50%	0.00%	4596.32	4625.00
Unit Steel Hoppers	Loaded	260	Distributed (Head, Mid, Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	15137.44	16496.00
Unit Steel Hoppers	Loaded	260	Distributed (Head, Mid, Rear)	50	0.50%	Decline	<0.1%	0.00	0.00	> 50%	100.00%	8970.12	9014.00
Unit Steel Hoppers	Loaded	260	Distributed (Head, Mid, Rear)	50	0.00%	Flat	<0.1%	0.00	0.00	> 50%	36.00%	8981.38	9015.00
Unit Aluminum Hoppers	Empty	260	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	1982.28	1998.00
Unit Aluminum Hoppers	Empty	260	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	> 50%	0.00%	952.56	1344.00
Unit Aluminum Hoppers	Empty	260	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	3435.09	3448.00
Unit Aluminum Hoppers	Empty	260	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	1739.80	1812.00
Unit Aluminum Hoppers	Empty	260	Distributed (Head, Mid, Rear)	20	2.20%	Decline	1	975.37	1392.00	< 0.1%	0.00%	-85.82	-58.00
Unit Aluminum Hoppers	Empty	260	Distributed (Head, Mid, Rear)	25	1.50%	Incline	<0.1%	0.00	0.00	> 50%	0.00%	1714.42	1798.00
Unit Aluminum Hoppers	Empty	260	Distributed (Head, Mid, Rear)	25	1.70%	Decline	1	1383.59	1725.00	< 0.1%	0.00%	-110.43	-73.00
Unit Aluminum Hoppers	Empty	260	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 50%	100.00%	3550.34	3583.00
Unit Aluminum Hoppers	Empty	260	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	> 50%	0.00%	3251.87	3281.00
Unit Aluminum Hoppers	Empty	260	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	100.00%	5009.72	5033.00
Unit Aluminum Hoppers	Empty	260	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	3752.10	3781.00

Train Type	Train Load	Train Length (No. Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Hoppers			Rear)										
Unit Aluminum Hoppers	Empty	260	Distributed (Head, Mid, Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	20307.78	23030.00
Unit Aluminum Hoppers	Empty	260	Distributed (Head, Mid, Rear)	45	1.00%	Crest	<0.1%	0.00	0.00	> 50%	100.00%	4753.61	4796.00
Unit Aluminum Hoppers	Empty	260	Distributed (Head, Mid, Rear)	45	1.00%	Trough	<0.1%	0.00	0.00	> 50%	100.00%	4960.07	4994.00
Unit Aluminum Hoppers	Empty	260	Distributed (Head, Mid, Rear)	60	0.50%	Decline	<0.1%	0.00	0.00	> 50%	100.00%	9350.04	9408.00
Unit Aluminum Hoppers	Empty	260	Distributed (Head, Mid, Rear)	60	0.50%	Incline	<0.1%	0.00	0.00	> 50%	100.00%	6762.54	6807.00
Unit Aluminum Hoppers	Empty	260	Distributed (Head, Mid, Rear)	60	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	9057.28	9106.00
Unit Aluminum Hoppers	Loaded	260	Distributed (Head, Mid, Rear)	10	0.50%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	2284.21	2297.00
Unit Aluminum Hoppers	Loaded	260	Distributed (Head, Mid, Rear)	10	0.50%	Incline	<0.1%	0.00	0.00	> 50%	0.00%	1230.19	1416.00
Unit Aluminum Hoppers	Loaded	260	Distributed (Head, Mid, Rear)	10	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	10764.86	11030.00
Unit Aluminum Hoppers	Loaded	260	Distributed (Head, Mid, Rear)	10	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	2080.63	2098.00
Unit Aluminum Hoppers	Loaded	260	Distributed (Head, Mid, Rear)	11	1.50%	Incline	<0.1%	0.00	0.00	< 10%	0.00%	649.30	708.00
Unit Aluminum Hoppers	Loaded	260	Distributed (Head, Mid, Rear)	15	2.20%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	6826.25	7686.00
Unit Aluminum Hoppers	Loaded	260	Distributed (Head, Mid, Rear)	16	1.00%	Crest	<0.1%	0.00	0.00	> 50%	0.00%	2835.63	2863.00
Unit Aluminum Hoppers	Loaded	260	Distributed (Head, Mid, Rear)	20	1.70%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	10171.29	18495.00
Unit Aluminum Hoppers	Loaded	260	Distributed (Head, Mid, Rear)	27	1.00%	Trough	<0.1%	0.00	0.00	> 50%	0.00%	4172.96	4198.00
Unit Aluminum Hoppers	Loaded	260	Distributed (Head, Mid, Rear)	30	0.50%	Decline	<0.1%	0.00	0.00	> 50%	100.00%	5352.64	5380.00
Unit Aluminum Hoppers	Loaded	260	Distributed (Head, Mid, Rear)	30	0.50%	Incline	<0.1%	0.00	0.00	> 50%	0.00%	4152.64	4183.00

Train Type	Train Load	Train Length (No. Cars)	Power Arrangement	Train Speed (mph)	Percent Grade	Track Grade	Probability of Overshoot (P<x)	Average Overshoot (ft relative to target)	Maximum Overshoot (ft relative to target)	Probability of Undershoot (>500ft if v<30mph, >1200ft if v>=30mph)	Percent Enforcements Resulting in Emergency	Average Enforcement Location (ft relative to target)	Earliest Enforcement Location (ft relative to target)
Unit Aluminum Hoppers	Loaded	260	Distributed (Head, Mid, Rear)	30	1.10%	Decline	<0.1%	0.00	0.00	> 50%	0.00%	20618.75	20722.00
Unit Aluminum Hoppers	Loaded	260	Distributed (Head, Mid, Rear)	30	0.00%	Flat	<0.1%	0.00	0.00	> 50%	0.00%	4853.78	4886.00
Unit Aluminum Hoppers	Loaded	260	Distributed (Head, Mid, Rear)	45	1.10%	Decline	<0.1%	0.00	0.00	> 50%	39.00%	13730.81	15524.00
Unit Aluminum Hoppers	Loaded	260	Distributed (Head, Mid, Rear)	50	0.50%	Decline	<0.1%	0.00	0.00	> 50%	100.00%	9015.93	9065.00
Unit Aluminum Hoppers	Loaded	260	Distributed (Head, Mid, Rear)	50	0.00%	Flat	<0.1%	0.00	0.00	> 50%	100.00%	7279.26	7317.00

