

Summary of Characteristics and Hourly Cost of Train Types
2019 Data
Data Sources: Surface Transportation Reports R-1; 2019 Stratification Reports; Association of American Railroads Weekly Traffic Reports; Railinc UMLER Freight Car Descriptive Records; USDOT-Bureau of Transportation Statistics -Weight and Value of Freight Shipments by Commodity.

Train Type	Train Characteristics						Summary - All Costs													
	Locomotives/Train	Length (Feet)	Weight (Tons)	Lading Tons per Loaded Car	Loaded Cars	Loaded Cars	Total Less Time Cost			Time Cost of Lading										
							Total	Locomotives	Freight Cars		Equipment	Crew								
NETWORK AVERAGE TRAINS																				
Average - All Trains, All Types, Delayed	2.82	74.8	5,479.6	6,856.5	91.7	41.1	6.3	\$ 1,863.59	\$ 545.00	\$ 190.84	\$ 183.60	\$ 14.00	\$ 157.46	\$ 517.69						
Average - All Trains, All Types, In Motion	2.82	74.8	5,479.6	6,856.5	91.7	41.1	6.1	\$ 1,276.51	\$ 758.92	\$ 403.75	\$ 183.60	\$ 14.00	\$ 157.46	\$ 517.69						
Average - Unit Trains, Loaded, Delayed	3.11	108.9	6,183.2	11,107.4	102.0	108.9	-	\$ 1,629.44	\$ 627.71	\$ 210.50	\$ 267.39	\$ -	\$ 149.83	\$ 1,001.73						
Average - Unit Trains, Loaded, In Motion	3.11	108.9	6,183.2	11,107.4	102.0	108.9	-	\$ 1,864.29	\$ 862.56	\$ 445.34	\$ 267.39	\$ -	\$ 149.83	\$ 1,001.73						
Average - Unit Trains, Empty, Delayed	3.11	108.9	6,183.2	-	-	-	-	\$ 627.71	\$ 627.71	\$ 210.50	\$ 267.39	\$ -	\$ 149.83	\$ -						
Average - Unit Trains, Empty, In Motion	3.11	108.9	6,183.2	-	-	-	-	\$ 862.56	\$ 862.56	\$ 445.34	\$ 267.39	\$ -	\$ 149.83	\$ -						
Average - Through Trains, Delayed	2.86	68.5	5,537.4	5,682.8	82.9	39.0	7.7	\$ 1,170.55	\$ 742.50	\$ 193.80	\$ 168.27	\$ 17.60	\$ 149.83	\$ 641.05						
Average - Through Trains, In Motion	2.86	68.5	5,537.4	5,682.8	82.9	39.0	7.7	\$ 1,386.77	\$ 757.00	\$ 410.03	\$ 168.27	\$ 17.60	\$ 149.83	\$ 641.05						
Average - Way Trains, Delayed	1.81	27.9	1,970.0	1,203.2	82.9	14.5	-	\$ 580.87	\$ 415.08	\$ 122.59	\$ 68.56	\$ -	\$ 224.74	\$ 164.98						
Average - Way Trains, In Motion	1.81	27.9	1,970.0	1,203.2	82.9	14.5	-	\$ 717.65	\$ 552.67	\$ 259.37	\$ 68.56	\$ -	\$ 224.74	\$ 164.98						
SPECIFIC PURPOSE TRAINS																				
Intermodal, Delayed	2.86	30.0	6,183.2	1,970.4	71.2	27.7	27.7	\$ 5,510.69	\$ 480.53	\$ 193.80	\$ 73.64	\$ 63.26	\$ 149.83	\$ 1,030.15						
Intermodal, In Motion	2.86	30.0	6,183.2	1,970.4	71.2	27.7	27.7	\$ 5,726.91	\$ 696.75	\$ 410.03	\$ 73.64	\$ 63.26	\$ 149.83	\$ 1,030.15						
Automotive, Delayed	2.86	59.0	5,537.4	1,256.6	30.8	40.8	-	\$ 1,228.66	\$ 488.59	\$ 193.80	\$ 149.83	\$ -	\$ 149.83	\$ 840.11						
Automotive, In Motion	2.86	59.0	5,537.4	1,256.6	30.8	40.8	-	\$ 1,544.88	\$ 704.77	\$ 410.03	\$ 149.83	\$ -	\$ 149.83	\$ 840.11						
Manifest, Delayed	2.86	89.7	5,537.4	3,968.8	86.2	46.0	-	\$ 1,057.45	\$ 563.80	\$ 193.80	\$ 220.17	\$ -	\$ 149.83	\$ 493.65						
Manifest, In Motion	2.86	89.7	5,537.4	3,968.8	86.2	46.0	-	\$ 1,273.67	\$ 620.87	\$ 410.03	\$ 220.17	\$ -	\$ 149.83	\$ 493.65						
Unit, Coal, Loaded, Delayed	3.11	117.1	6,183.2	13,290.3	113.5	117.1	-	\$ 722.32	\$ 647.83	\$ 210.50	\$ 287.50	\$ -	\$ 149.83	\$ 74.50						
Unit, Coal, Loaded, In Motion	3.11	117.1	6,183.2	13,290.3	113.5	117.1	-	\$ 997.17	\$ 647.83	\$ 445.34	\$ 287.50	\$ -	\$ 149.83	\$ 74.50						
Unit, Coal, Empty, Delayed	3.11	117.1	6,183.2	-	-	-	-	\$ 647.83	\$ 647.83	\$ 210.50	\$ 287.50	\$ -	\$ 149.83	\$ -						
Unit, Coal, Empty, In Motion	3.11	117.1	6,183.2	-	-	-	-	\$ 882.67	\$ 882.67	\$ 445.34	\$ 287.50	\$ -	\$ 149.83	\$ -						
Unit, Grain, Loaded, Delayed	3.11	103.2	6,183.2	10,265.8	99.5	103.2	-	\$ 777.27	\$ 613.74	\$ 210.50	\$ 253.42	\$ -	\$ 149.83	\$ 163.53						
Unit, Grain, Loaded, In Motion	3.11	103.2	6,183.2	10,265.8	99.5	103.2	-	\$ 1,012.12	\$ 848.59	\$ 445.34	\$ 253.42	\$ -	\$ 149.83	\$ 163.53						
Unit, Grain, Empty, Delayed	3.11	103.2	6,183.2	-	-	-	-	\$ 613.74	\$ 613.74	\$ 210.50	\$ 253.42	\$ -	\$ 149.83	\$ -						
Unit, Grain, Empty, In Motion	3.11	103.2	6,183.2	-	-	-	-	\$ 848.59	\$ 848.59	\$ 445.34	\$ 253.42	\$ -	\$ 149.83	\$ -						
Unit, Soda Ash, Loaded, Delayed	3.11	103.2	6,183.2	10,265.8	99.5	103.2	-	\$ 755.00	\$ 613.74	\$ 210.50	\$ 253.42	\$ -	\$ 149.83	\$ 141.35						
Unit, Soda Ash, Loaded, In Motion	3.11	103.2	6,183.2	10,265.8	99.5	103.2	-	\$ 989.94	\$ 848.59	\$ 445.34	\$ 253.42	\$ -	\$ 149.83	\$ 141.35						
Unit, Soda Ash, Empty, Delayed	3.11	103.2	6,183.2	-	-	-	-	\$ 613.74	\$ 613.74	\$ 210.50	\$ 253.42	\$ -	\$ 149.83	\$ -						
Unit, Soda Ash, Empty, In Motion	3.11	103.2	6,183.2	-	-	-	-	\$ 848.59	\$ 848.59	\$ 445.34	\$ 253.42	\$ -	\$ 149.83	\$ -						
Unit, Fertilizer, Loaded, Delayed	3.11	103.2	6,183.2	10,265.8	99.5	103.2	-	\$ 1,109.27	\$ 613.74	\$ 210.50	\$ 253.42	\$ -	\$ 149.83	\$ 462.85						
Unit, Fertilizer, Loaded, In Motion	3.11	103.2	6,183.2	10,265.8	99.5	103.2	-	\$ 1,311.43	\$ 848.59	\$ 445.34	\$ 253.42	\$ -	\$ 149.83	\$ 462.85						
Unit, Fertilizer, Empty, Delayed	3.11	103.2	6,183.2	-	-	-	-	\$ 613.74	\$ 613.74	\$ 210.50	\$ 253.42	\$ -	\$ 149.83	\$ -						
Unit, Fertilizer, Empty, In Motion	3.11	103.2	6,183.2	-	-	-	-	\$ 848.59	\$ 848.59	\$ 445.34	\$ 253.42	\$ -	\$ 149.83	\$ -						
Unit, Metallic Dues, Loaded, Delayed	3.11	171.3	5,537.4	17,435.5	101.8	171.3	-	\$ 1,268.84	\$ 780.88	\$ 210.50	\$ 420.56	\$ -	\$ 149.83	\$ 487.96						
Unit, Metallic Dues, Loaded, In Motion	3.11	171.3	5,537.4	17,435.5	101.8	171.3	-	\$ 1,501.08	\$ 1,015.73	\$ 445.34	\$ 420.56	\$ -	\$ 149.83	\$ 487.96						
Unit, Metallic Dues, Empty, Delayed	3.11	171.3	5,537.4	-	-	-	-	\$ 780.88	\$ 780.88	\$ 210.50	\$ 420.56	\$ -	\$ 149.83	\$ -						
Unit, Metallic Dues, Empty, In Motion	3.11	171.3	5,537.4	-	-	-	-	\$ 1,015.73	\$ 1,015.73	\$ 445.34	\$ 420.56	\$ -	\$ 149.83	\$ -						
Unit, DDG, Loaded, Delayed	3.11	103.2	6,183.2	10,265.8	99.5	103.2	-	\$ 1,109.14	\$ 613.74	\$ 210.50	\$ 253.42	\$ -	\$ 149.83	\$ 495.40						
Unit, DDG, Loaded, In Motion	3.11	103.2	6,183.2	10,265.8	99.5	103.2	-	\$ 1,343.99	\$ 848.59	\$ 445.34	\$ 253.42	\$ -	\$ 149.83	\$ 495.40						
Unit, DDG, Empty, Delayed	3.11	103.2	6,183.2	-	-	-	-	\$ 613.74	\$ 613.74	\$ 210.50	\$ 253.42	\$ -	\$ 149.83	\$ -						
Unit, DDG, Empty, In Motion	3.11	103.2	6,183.2	-	-	-	-	\$ 848.59	\$ 848.59	\$ 445.34	\$ 253.42	\$ -	\$ 149.83	\$ -						
Unit, Ethanol, Loaded, Delayed	3.11	104.2	6,183.2	9,026.5	86.6	104.2	-	\$ 1,223.31	\$ 616.23	\$ 210.50	\$ 255.91	\$ -	\$ 149.83	\$ 607.08						
Unit, Ethanol, Loaded, In Motion	3.11	104.2	6,183.2	9,026.5	86.6	104.2	-	\$ 1,458.16	\$ 851.08	\$ 445.34	\$ 255.91	\$ -	\$ 149.83	\$ 607.08						
Unit, Ethanol, Empty, Delayed	3.11	104.2	6,183.2	-	-	-	-	\$ 616.23	\$ 616.23	\$ 210.50	\$ 255.91	\$ -	\$ 149.83	\$ -						
Unit, Ethanol, Empty, In Motion	3.11	104.2	6,183.2	-	-	-	-	\$ 851.08	\$ 851.08	\$ 445.34	\$ 255.91	\$ -	\$ 149.83	\$ -						
Unit, Crude Petroleum, Loaded, Delayed	3.11	104.2	6,183.2	9,026.5	86.6	104.2	-	\$ 989.84	\$ 616.23	\$ 210.50	\$ 255.91	\$ -	\$ 149.83	\$ 373.61						
Unit, Crude Petroleum, Loaded, In Motion	3.11	104.2	6,183.2	9,026.5	86.6	104.2	-	\$ 1,224.69	\$ 851.08	\$ 445.34	\$ 255.91	\$ -	\$ 149.83	\$ 373.61						
Unit, Crude Petroleum, Empty, Delayed	3.11	104.2	6,183.2	-	-	-	-	\$ 616.23	\$ 616.23	\$ 210.50	\$ 255.91	\$ -	\$ 149.83	\$ -						
Unit, Crude Petroleum, Empty, In Motion	3.11	104.2	6,183.2	-	-	-	-	\$ 851.08	\$ 851.08	\$ 445.34	\$ 255.91	\$ -	\$ 149.83	\$ -						
Unit, Aggregates, Loaded, Delayed	3.11	103.9	5,537.4	11,553.1	111.2	103.9	-	\$ 638.30	\$ 616.23	\$ 210.50	\$ 255.09	\$ -	\$ 149.83	\$ 22.88						
Unit, Aggregates, Loaded, In Motion	3.11	103.9	5,537.4	11,553.1	111.2	103.9	-	\$ 873.15	\$ 850.26	\$ 445.34	\$ 255.09	\$ -	\$ 149.83	\$ 22.88						
Unit, Aggregates, Empty, Delayed	3.11	103.9	5,537.4	-	-	-	-	\$ 616.23	\$ 616.23	\$ 210.50	\$ 255.09	\$ -	\$ 149.83	\$ -						
Unit, Aggregates, Empty, In Motion	3.11	103.9	5,537.4	-	-	-	-	\$ 850.26	\$ 850.26	\$ 445.34	\$ 255.09	\$ -	\$ 149.83	\$ -						
Unit, MSW, Loaded, Delayed	2.86	63.1	5,537.4	6,197.3	98.2	63.1	-	\$ 712.91	\$ 498.59	\$ 193.80	\$ 154.96	\$ -	\$ 149.83	\$ 214.32						
Unit, MSW, Loaded, In Motion	2.86	63.1	5,537.4	6,197.3	98.2	63.1	-	\$ 923.13	\$ 801.26	\$ 410.03	\$ 154.96	\$ -	\$ 149.83	\$ 214.32						
Unit, MSW, Empty, Delayed	2.86	63.1	5,537.4	-	-	-	-	\$ 498.59	\$ 498.59	\$ 193.80	\$ 154.96	\$ -	\$ 149.83	\$ -						
Unit, MSW, Empty, In Motion	2.86	63.1	5,537.4	-	-	-	-	\$ 714.81	\$ 514.03	\$ 410.03	\$ 154.96	\$ -	\$ 149.83	\$ -						
Unit, Military Equipment, Loaded, Delayed	2.86	68.9	5,537.4	5,745.8	83.4	68.9	-	\$ 1,588.90	\$ 512.72	\$ 193.80	\$ 169.09	\$ -	\$ 149.83	\$ 1,076.18						
Unit, Military Equipment, Loaded, In Motion	2.86	68.9	5,537.4	5,745.8	83.4	68.9	-	\$ 1,805.13	\$ 728.95	\$ 410.03	\$ 169.09	\$ -								