## CH. 8

## RAILROAD OPERATION

Average Situation

Contract Rates

• Paperwork Path (EDI)

• Demurrage

- Bill of Lading
  - Open
  - Order
- Waybill
- Interchange
- Destination



- Switching charges / Interline Settlements

Equal Access

Switching

- Intra-plant

- Intra-terminal

- Inter-terminal

#### • Public Loading Facilities (Team, BIDS, etc.)



Captive Shortline

Class and Commodity Rates

Incentive Rates

## CH. 9

# CAR TYPES AND CARLOADINGS

• Type Car – Standardization / Flexibility

• Preferred, Protection, Ideal / Practical

 DF – Special Loading Devices – Prevent Damage to Lading



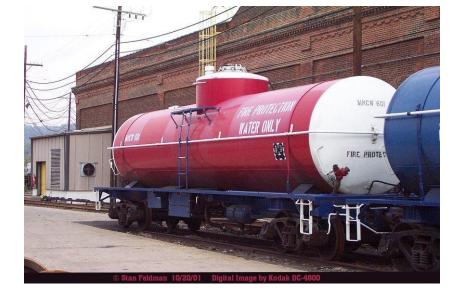
Many Types of Cars











• <u>U.S. Car fleet 1996</u>

Туре	Total	Class I Railroads	Other Railroads	Car Companies and Shippers		
Boxcars:	156,284	97,022	28,363	30,899		
Plain Box Equipped Box	39,155 117,129	10,941 86,081	9,299 19,064	18,915 11,984		
Covered Hoppers	350,611	151,583	15,885	183,143		
Flatcars	131,840	81,187	6,878	43,775		
Refrigerator Cars	31,103	25,478	2,713	2,912		
Gondolas	179,046	103,918	15,624	59,504		
Hoppers	166,980	105,718	16,087	45,175		
Tank Cars	215,482	,985	,024	214,473		
Others	9,227	4,974	1,790	2,463		
TOTAL	1,240,573	570,865	87,364	582,344		

• <u>U.S. Car fleet 2007</u>

Car Type	Total All Owners	Class 1 railroads	Other railroads	Car Companies and Shippers	
Boxcars	132,094	74,346	41,197	16,551	
Plain Box	20,103	1,211	5,671	13,221	
Equipped Box	111,991	173,135	35,526	3,330	
Covered Hoppers	393,803	03 112,773 20,191		260,839	
Flatcars	171,455	95,666	22,344	53,445	
Gondolas	206,666	100,699	21,435	84,532	
Hoppers	159,324	72,131	11,622	75,571	
Refrigerator Cars	23,492	17,577	2,895	3,020	
Tank Cars	254,778	1,053	38	253,687	
Others	4,895	1,170	966	2,759	
Total	1,346,507	475,415	120,688	750,404	

#### **Car Statistics**

Carloadings per Year	Tons Originated	Gross Revenue	AAR Mechanical Designation	Preferred Cars	Туре	Carloadings per Year	Tons Originated	Gross Revenue	AAR Mechanical Designation	Preferred Cars
Coal 7.20 million 804.14 million \$9.39 billion (23.1%) (42.4%) (20.1%)	\$9.39 billion	HT/GT	Unit-Train bottom- dump hauler and rotary-dump gondola	Metals and Products	716,000 (2.3%)	57.85 million (3.0%)	\$1.79 million (3.8%)	GBSR	Coil Steel Car	
	1			Petroleum 660,000 and Coke (2.1%)	55.61 million (2.9%)	\$1.42 billion (3.0%)	HTC (coke), DOT Class 112A	Pressure Tank Car, Coke hopper		
				(/			(petroleum)			
(4.7%)	(7.7%)	(2.8%)	LO	hopper	Stone, Glass, and Clay	603,000	55.23 million	\$1.51 billion	GB,XL	Gondola (stone), DF boxcar (glass and
Chemicals and Allied Products1.97 million (6.3%)167.20 million (8.8%)\$5.51 billion (11.8%)	167.20 million	57.20 million \$5.51 billion	-		Products	(1.9%)	(2.9%)	(3.2%)		clay)
	I Chemical Tank Car	Lumber	611,000 (2.0%)	47.60 million (2.5%)	\$1.51 billion (3.2%)	FMS	Center-Beam Bulkhead Flatcar			
Farm Products1.51 million140.44 million\$3.63 million(Grain and Other)(4.9%)(7.4%)(7.8%)	n \$3.63 million	n RP	Mechanical Refrigerator	Waste and Scrap	706,000 (2.3%)	47.35 million (2.5%)	\$1.07 billion (2.3%)	GB	Gondola	
	(7.8%)				679,000	38.24 million (2.0%)	\$1.95 billion (4.2%)	XL	Equipped Boxcar	
Kindred	\$3.25 million		Insulated Refrigerator Car		(2.2%)					
	(7.0%)			Motor Vehicles	1.79 million (5.8%)	35.59 million (1.9%)	\$3.80 billion (8.1%)	FA	Enclosed Tri-Level Autotrack	
662,000 (2.1%)	59.94 million (3.2%)	\$485 million (1.0%)	НМА	Ore Hopper	Other (except	2.71 million (8.7%)	21.81 million (1.1%)	\$2.37 billion (5.1%)	XM,FM	Assorted
	per Year 7.20 million (23.1%) 1.49 million (4.7%) 1.97 million (6.3%) 1.51 million (4.9%) 1.49 million (4.8%)	per Year Originated   7.20 million (23.1%) 804.14 million (42.4%)   1.49 million (4.7%) 169.70 million (7.7%)   1.97 million (6.3%) 167.20 million (8.8%)   1.51 million (4.9%) 140.44 million (7.4%)   1.49 million (4.8%) 102.19 million (5.4%)	per Year Originated Revenue   7.20 million (23.1%) 804.14 million (42.4%) \$9.39 billion (20.1%)   1.49 million (4.7%) 169.70 million (7.7%) \$1.29 billion (2.8%)   1.97 million (6.3%) 167.20 million (8.8%) \$5.51 billion (11.8%)   1.51 million (4.9%) 140.44 million (7.4%) \$3.63 million (7.8%)   1.49 million (4.8%) 102.19 million (5.4%) \$3.25 million (7.0%)	Carloadings per YearTons OriginatedGross RevenueMechanical Designation7.20 million (23.1%)804.14 million (42.4%)\$9.39 billion (20.1%)HT/GT1.49 million (4.7%)169.70 million (7.7%)\$1.29 billion (2.8%)LO1.97 million (6.3%)167.20 million (8.8%)\$5.51 billion (11.8%)T1.51 million (4.9%)140.44 million (7.4%)\$3.63 million (7.8%)RP1.49 million (4.8%)102.19 million (5.4%)\$3.25 million (7.0%)RB662 000 (2.1%)59.94 million (5.4%)\$485 million (7.0%)HMA	Carloadings per YearTons OriginatedGross RevenueMechanical DesignationPreferred Cars7.20 million (23.1%)804.14 million (42.4%)\$9.39 billion (20.1%)HT/GTUnit-Train bottom- dump hauler and rotary-dump gondola1.49 million (4.7%)169.70 million (7.7%)\$1.29 billion (2.8%)LOSmall-Cube covered hopper1.97 million (6.3%)167.20 million (8.8%)\$5.51 billion (11.8%)TChemical Tank Car1.51 million (4.9%)140.44 million (7.4%)\$3.63 million (7.8%)RPMechanical Refrigerator1.49 million (4.8%)102.19 million (5.4%)\$3.25 million (7.0%)RBInsulated Refrigerator Car	Carloadings per YearTons OriginatedGross RevenueMechanical DesignationPreferred Cars DesignationType7.20 million (23.1%)804.14 million (42.4%)\$9.39 billion (20.1%)HT/GTUnit-Train bottom- dump hauler and rotary-dump gondolaMetals and Products1.49 million (4.7%)169.70 million (7.7%)\$1.29 billion (2.8%)LOSmall-Cube covered hopperStone, Glass, and Clay Products1.97 million (6.3%)167.20 million (8.8%)\$5.51 billion (11.8%)TChemical Tank CarLumber1.51 million (4.9%)140.44 million (7.4%)\$3.63 million (7.8%)RPMechanical RefrigeratorWaste and Scrap1.49 million (4.8%)102.19 million (5.4%)\$3.25 million (7.0%)RBInsulated Refrigerator CarMotor Vehicles662 000 (2 1%)59.94 million (5.4%)\$485 millionHMAOre HopperOther	Carloadings per YearTonsGross RevenueMechanical DesignationPreferred CarsTypeCarloadings per Year7.20 million (23.1%)804.14 million (42.4%)\$9.39 billion (20.1%)HT/GTUnit-Train bottom- dump hauler and rotary-dump gondolaMetals and Products716,000 (2.3%)1.49 million (4.7%)169.70 million (7.7%)\$1.29 billion (2.8%)LOSmall-Cube covered hopperMetalss, and Clay Petroleum660,000 (2.1%)1.97 million (6.3%)167.20 million (8.8%)\$5.51 billion (11.8%)TChemical Tank Car RefStone, Glass, and Clay Products603,000 (1.9%)1.51 million (4.9%)\$3.63 million (7.4%)RPMechanical RefrigeratorWaste and Scrap706,000 (2.3%)1.49 million (4.8%)102.19 million (5.4%)\$3.25 million (7.0%)RBInsulated Refrigerator CarMotor (2.2%)1.49 million (4.8%)\$9.94 million (3.2%)\$485 million (1.0%)HMAOre HopperOther (2.71 million (2.74)	Carloadings per YearTons OriginatedGross RevenueMechanical DesignationPreferred CarsTypeCarloadings per YearTons Originated7.20 million (23.1%)804.14 million (42.4%)\$9.39 billion (20.1%)HT/GTUnit-Train bottom- dump hauler and rotary-dump gondolaMetals and Products716,000 (2.3%)\$7.85 million (3.0%)1.49 million (4.7%)169.70 million (7.7%)\$1.29 billion (2.8%)LOSmall-Cube covered hopper660,000 and Cab (2.1%)\$5.61 million (2.9%)1.97 million (6.3%)167.20 million (1.8%)\$5.51 billion (1.1.8%)TChemical Tank Car RefEdme, Glass, Refrigerator603,000 (2.9%)\$5.23 million (2.9%)1.51 million (4.9%)102.19 million (5.4%)\$3.63 million (7.9%)TMechanical RefrigeratorMechanical Refrigerator CarFulp, Paper, (2.3%)679,000 (2.3%)\$3.59 million (2.9%)1.49 million (4.8%)102.19 million (5.4%)\$3.25 million (7.9%)RBInsulated Refrigerator CarMotor (2.2%)1.79 million (2.9%)35.59 million (2.9%)1.49 million (4.8%)102.19 million (5.4%)\$485 million (1.0%)HMAOre HopperOther (2.71 million (2.2%)2.181 million (1.9%)	Carloadings per YearTonsGross RevenueMechanical DesignationPreferred CarsTypeCarloadings per YearTonsGross Revenue7.20 million (23.1%)804.14 million (42.4%)\$9.39 billion (20.1%)HT/GTUnit-Train bottom- dump hauler and rotary-dump gondolaMetals and products716,000 (2.3%)57.85 million (3.0%)\$1.79 million (3.0%)\$1.79 million (3.0%)1.49 million (4.7%)169.70 million (2.8%)\$1.29 billion (2.8%)LOSmall-Cube covered hopperMetals and products716,000 (2.3%)55.61 million (2.9%)\$1.42 billion (3.0%)1.97 million (6.3%)167.20 million (1.8%)\$1.29 billion (11.8%)LOSmall-Cube covered hopperStone, Glass, and Clay Products603,000 (1.9%)\$5.23 million (2.9%)\$1.51 billion (3.2%)1.97 million (6.3%)167.20 million (1.8%)\$5.51 billion (1.8%)TChemical Tank CarLumber601,000 (2.9%)\$5.23 million (2.9%)\$1.51 billion (2.9%)1.51 million (4.9%)140.44 million (7.4%)\$3.63 million (7.0%)RPMechanical RefrigeratorWaste and Refrigerator Car706,000 (2.3%)47.35 million (2.5%)\$1.95 billion (2.3%)1.49 million (4.8%)102.19 million (5.4%)\$3.25 million (7.0%)RBInsulated Refrigerator CarMotor (2.8%)1.79 million (2.8%)\$3.80 billion (4.2%)1.49 million (4.8%)102.19 million (5.4%)\$485 million <b< td=""><td>Carloadings per YearTons OriginatedGross RevenueMechanical DesignationPreferred Cars DesignationTypeCarloadings per YearTons OriginatedGross RevenueMechanical Designation7.20 million (23.1%)804.14 million (42.4%)\$9.39 billion (20.1%)HT/GTUnit-Train bottom- dump hauler and rotary-dump gondolaMetals and products716,000 (2.3%)57.85 million (3.0%)\$1.79 million (3.8%)\$1.79 million (3.8%)GBSR1.49 million (4.7%)169.70 million (7.7%)\$1.29 billion (2.8%)LOSmall-Cube covered hopper660,000 (2.1%)\$5.51 million (2.9%)\$1.51 billion (2.9%)\$1.51 billion (3.2%)HTC (coke), DOT Class 112A (petroleum)1.97 million (6.3%)167.20 million (7.7%)\$5.51 billion (7.8%)TChemical Tank Car603,000 Refrigerator\$5.52 million (2.9%)\$1.51 billion (2.9%)\$1.51 billion (2.9%)\$60,000 (3.2%)\$1.51 billion (2.9%)\$60,000 (3.2%)\$1.51 billion (2.9%)\$60,000 (2.5%)\$1.51 billion (2.9%)\$60,000 (2.5%)\$1.51 billion (2.9%)\$60,000 (2.5%)\$1.51 billion (2.9%)\$60,000 (2.5%)\$1.51 billion (2.9%)\$60,000 (2.5%)\$1.51 billion (2.9%)\$60,000 (2.5%)\$1.51 billion (2.9%)\$60,000 (2.5%)\$1.51 billion (2.9%)\$60,000 (2.5%)\$1.51 billion (2.9%)\$1.51 billion (2.9%)\$1.51 billion (2.9%)\$1.51 billion (2.9%)\$1.51 billion (2.9%)\$1.51 billion</td></b<>	Carloadings per YearTons OriginatedGross RevenueMechanical DesignationPreferred Cars DesignationTypeCarloadings per YearTons OriginatedGross RevenueMechanical Designation7.20 million (23.1%)804.14 million (42.4%)\$9.39 billion (20.1%)HT/GTUnit-Train bottom- dump hauler and rotary-dump gondolaMetals and 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## Intermodal Car

Trailer on Flat Car

Container on Flat Car



• Automotive Car



