

Railroad Update

Rail Energy Transportation Advisory Committee

April 26, 2023



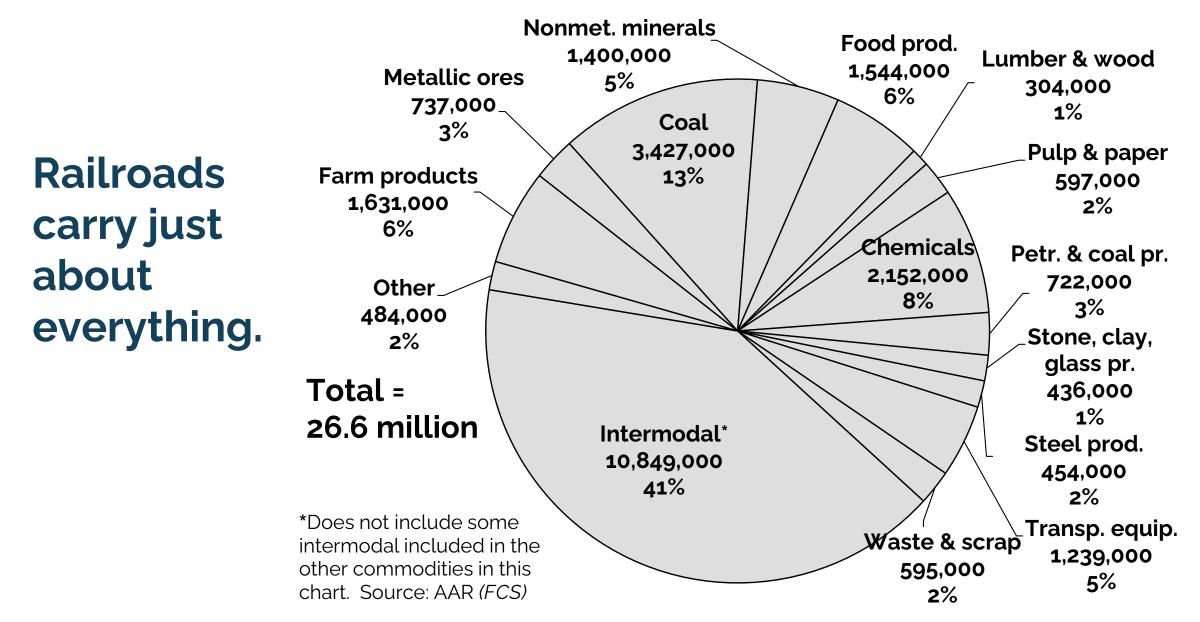
Topics for Today



- Update on overall rail traffic trends
- Coal
- Other energy-related products
- Questions/comments



Originated Units by Class I RRs in 2022

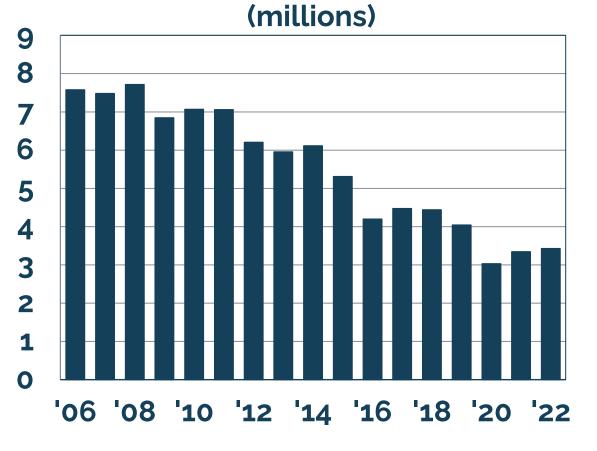


Long Decline for Coal



% Share U.S. Electricity									
Fuel	2000	2010	2020	2022					
Coal	52%	45%	19%	20%					
Natural Gas	16%	24%	40%	40%					
Nuclear	20%	20%	20%	18%					
Renewable	2%	4%	13%	15%					
Hydro	7%	6%	7%	6%					
Other	3%	1%	1%	1%					
Source: Energy Information Administration									

Source: Energy Information Administration



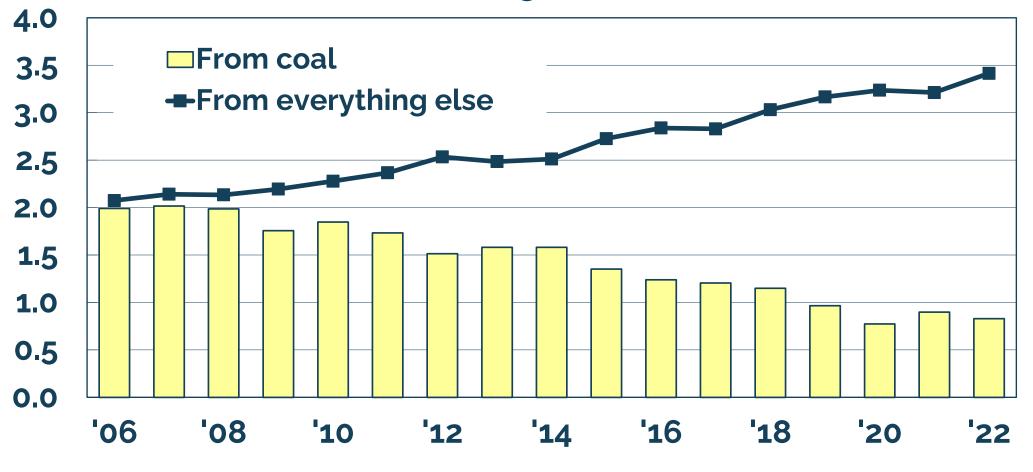
Rail Carloads of Coal

Data are Class I originations. Source: AAR

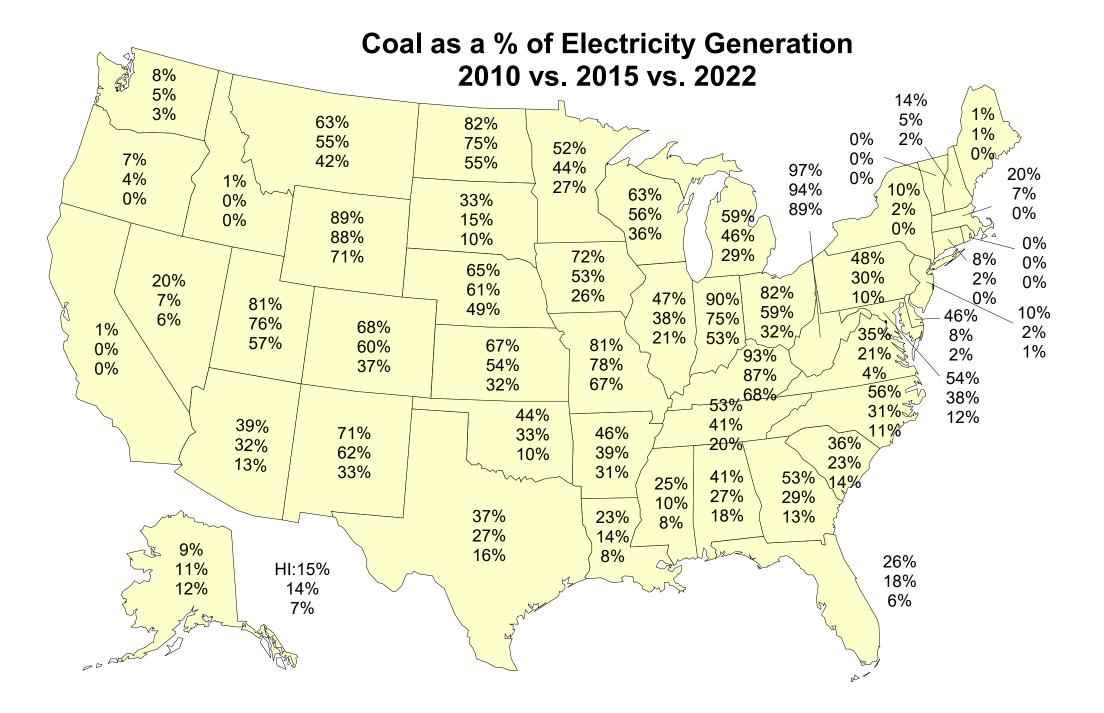
U.S. Electricity Generation



(billion megawatthours)



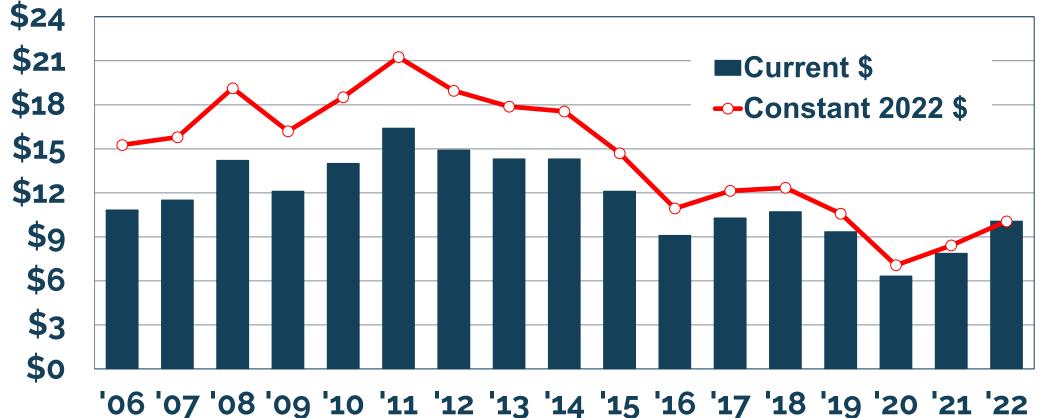
Source: Energy Information Administration



U.S. Rail Revenue From Coal



(\$ billions)

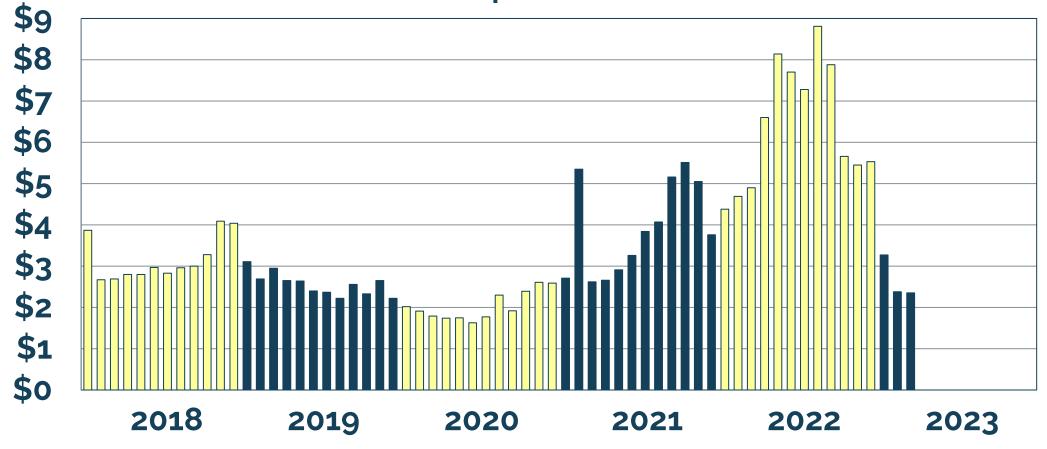


Figures are gross revenue for Class I railroads. Inflation adjustment made using GDP implicit price deflator. Source: AAR *Freight Commodity Statistics*

Volatile Natural Gas Prices



(dollars per million BTU*)

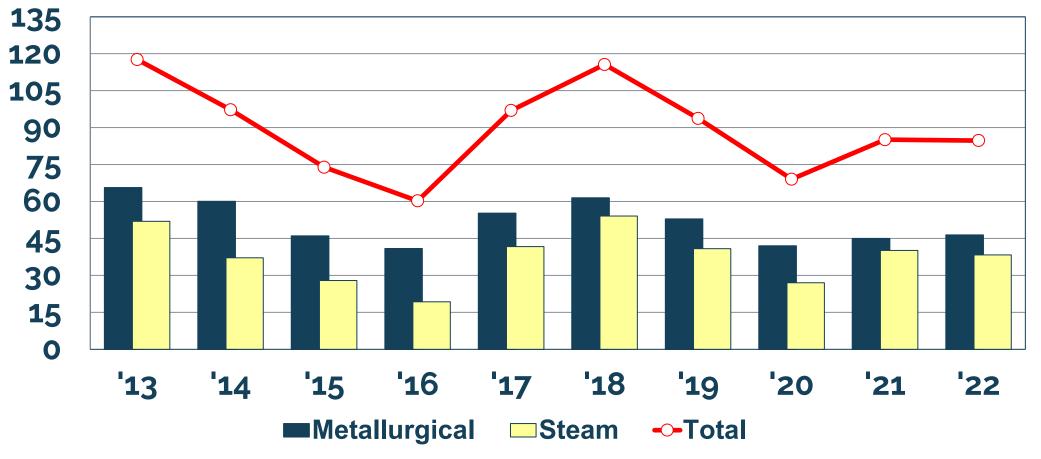


*Henry Hub spot price. Source: Energy Information Administration

U.S. Coal Exports



(millions of tons)



Source: Energy Information Administration

Challenges Ahead



% Share U.S. Electricity Generation									
Fuel	2000	2010	2020	2022	2023	2024			
Coal	52%	45%	19%	20%	17%	17%			
Natural Gas	16%	24%	40%	40%	39%	37%			
Nuclear	20%	20%	20%	18%	20%	20%			
Renewables	2%	4%	13%	15%	16%	18%			
Hydro	7%	6%	7%	6%	7%	7%			
Other	3%	1%	1%	1%	1%	1%			

Source: Energy Information Administration 2023 and 2024 are EIA estimates



U.S. Rail Carloads of Crude Oil



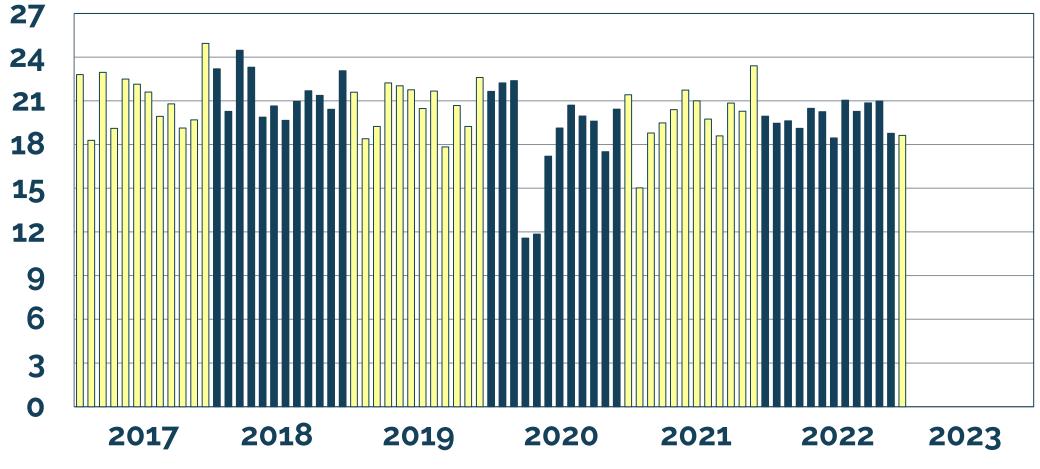


Data are for Class I railroads. Source: AAR Freight Commodity Statistics

U.S. Ethanol Shipments by Rail



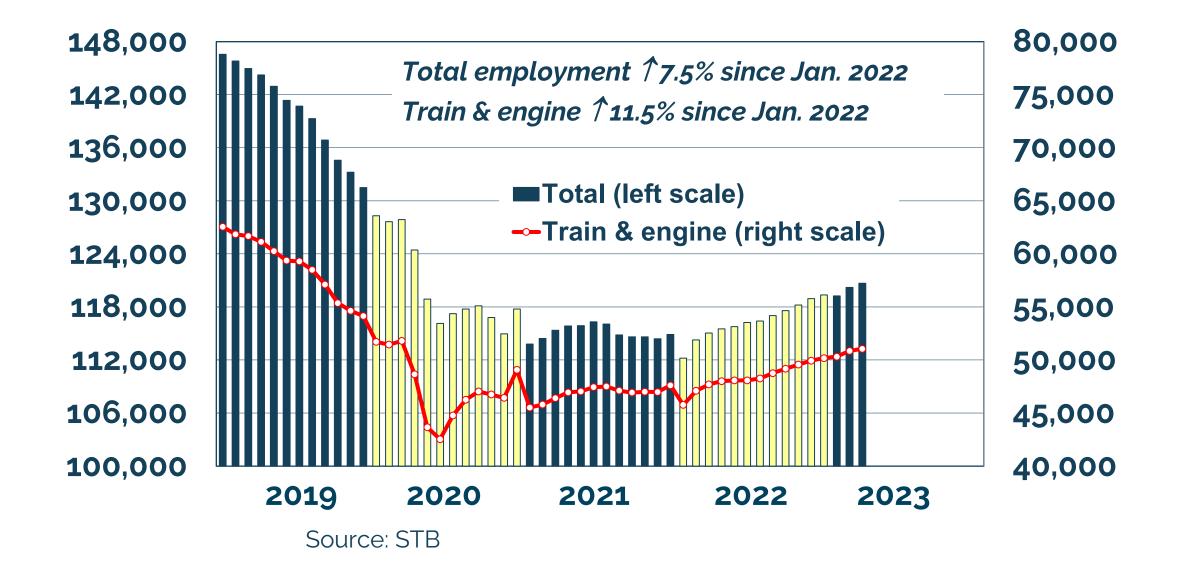
(million barrels)



Source: Energy Information Administration

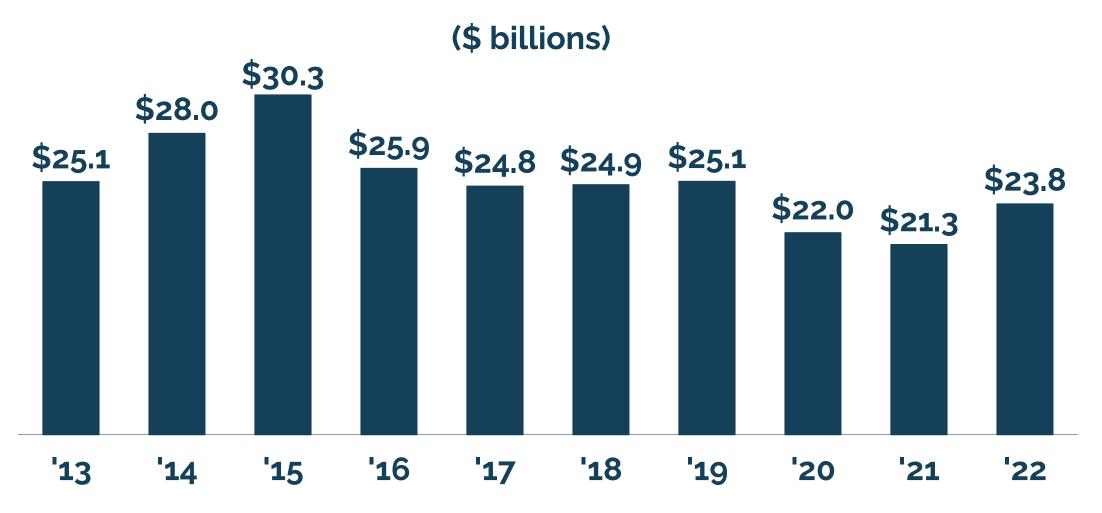
Gains in Freight Rail Employment





Class I Railroad Spending on Infrastructure & Equipment*





*Capital spending + maintenance expenses. Source: AAR