



EP 711 (Sub-No. 1) Hearing

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CAMBRIDGE SYSTEMATICS



Purpose & Approach

High level examination of the freight marketplace, and the degree to which competition is inter- vs. intra-modal, and how this may affect consideration of the reciprocal switching scheme that is being debated in EP 711 (Sub-No. 1).

We examined modal market share across major commodities and by length of haul to assess the level of modal competition across the primary modes – highway, rail, and water – for freight shipments handled within the US.

Focus on originated tonnage, since shippers and markets are concerned with volumes shipped, not transportation system production that is most commonly measured through ton-miles.

Analysis utilized S & P Global Market Intelligence Transearch for the year 2019, an industry standard freight flow database that reports commodities consistent with STB and rail industry usage.

US Domestic Shipments Originated Tonnage by Mode, All Commodities, 2019

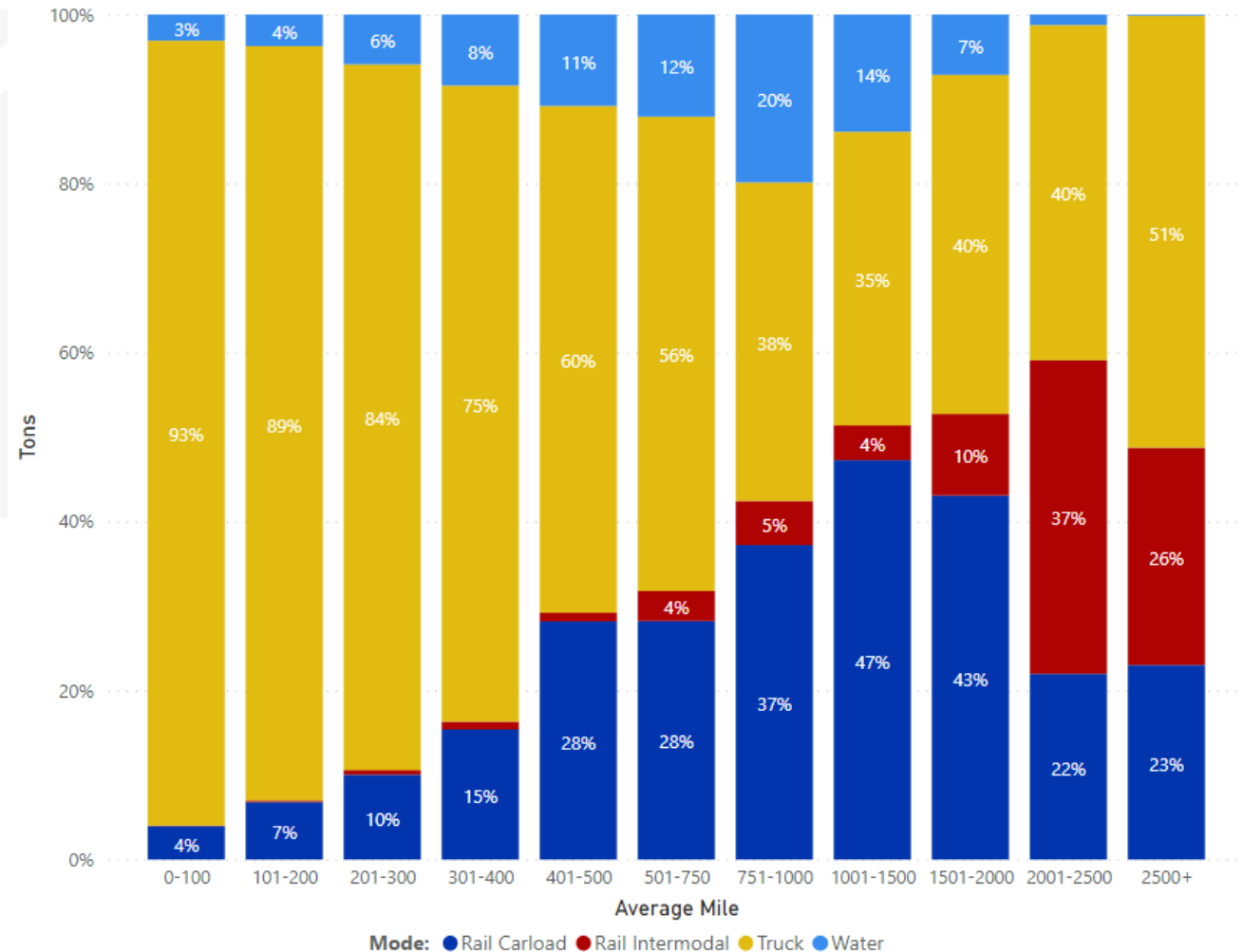
Mode ^a	Tons		Ton-Miles		Average Length of Haul (miles)
	Amount (billions)	% of modal total	Amount (trillions)	% of modal total	
Truck	8.8	78.5%	1.86	53%	211
Rail	1.63	14.5%	1.27	36%	784
Carload	1.45	13%	1.03	30%	712
Intermodal	0.18	1.5%	0.24	7%	1,380
Water	0.8	7%	0.35	10%	449
Total	11.0	100%	3.48	100%	311

^aExcludes air and pipeline. Air constitutes a negligible portion of domestic freight tonnage, and pipeline volumes are only partially reported in Transearch, and thus were not included in analysis.

Source: S & P Global Transearch

Domestic Tonnage by Distance All Commodities, 2019

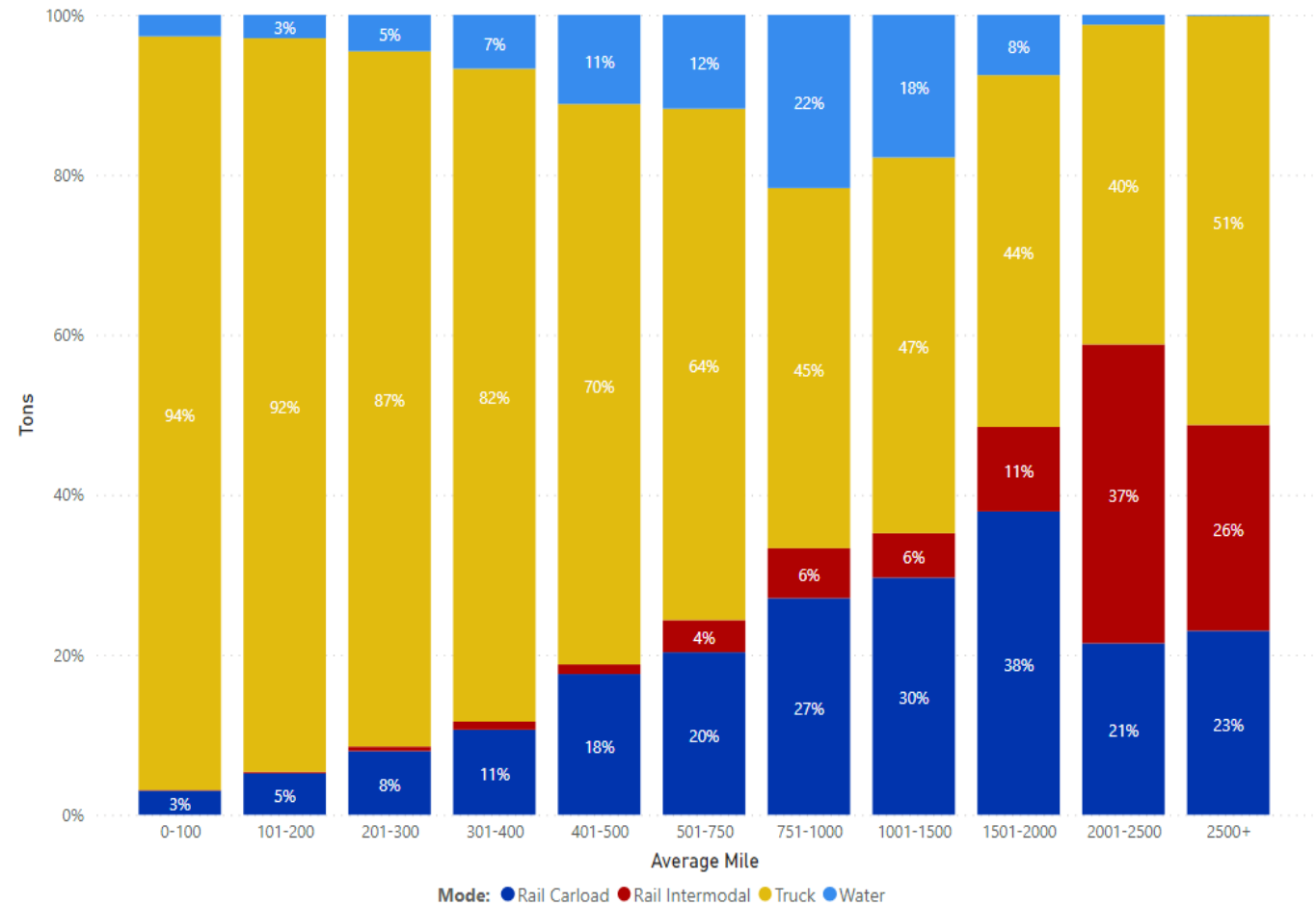
- *Modal share for rail carload service exceeds highway only in the 1,001-1,500 and 1,501-2,000 mile bands.*
- *Rail carload and highway share are roughly equal for the 751-1,000 mile bands.*
- *This is directly related to the high volumes of coal coming out of the Powder River Basin headed to destinations in the south and east.*
- *For all other distance bands, highway mode share exceeds carload rail significantly.*



Note: Excludes crude petroleum, shipping containers and hazmat products due to incomplete reporting
Source: S&P Global Transearch

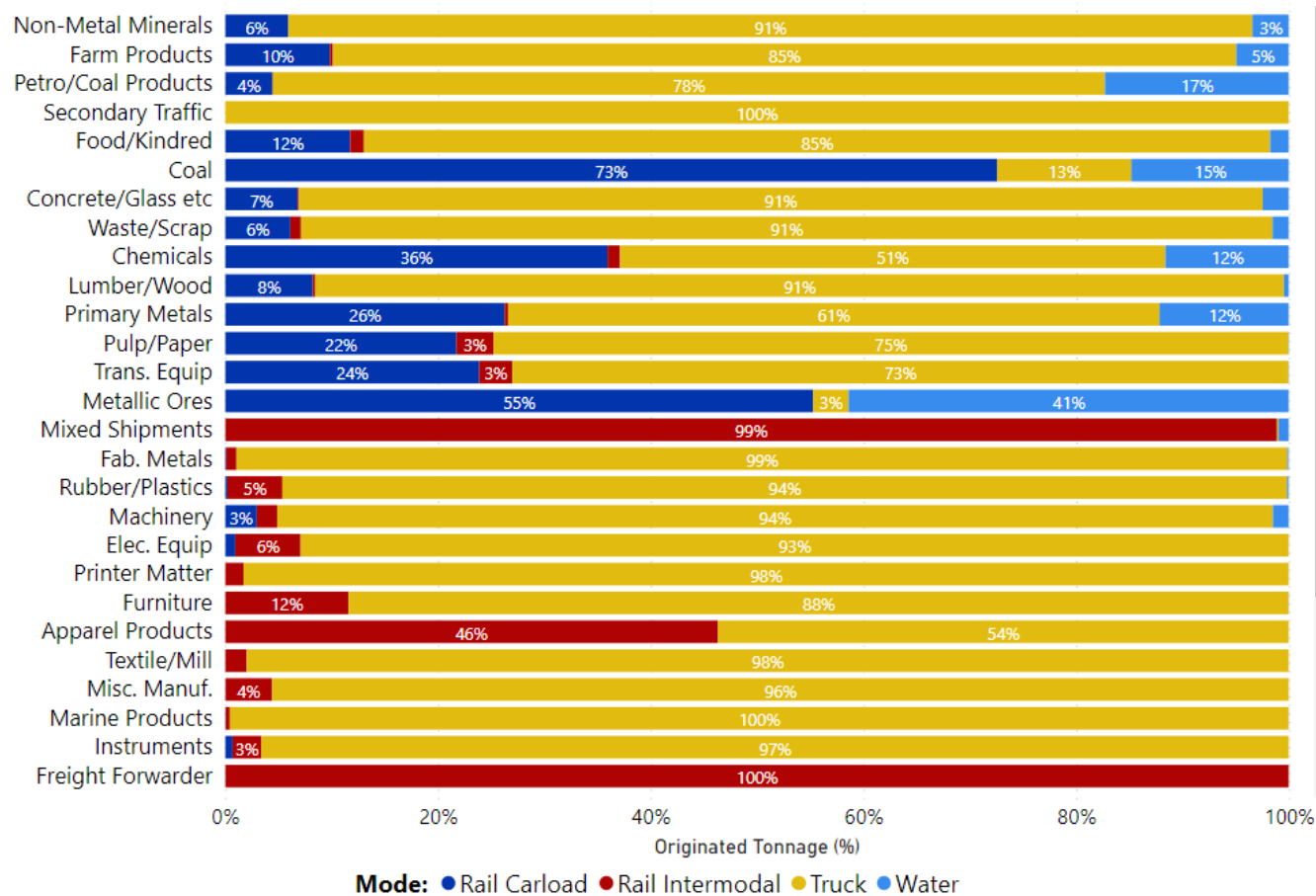
- A clearer picture of modal competitiveness across distance emerges when coal, with its particular characteristics that are not representative of most rail-competitive markets, is excluded.
- Excluding coal, there are no distance ranges where mode share for carload rail exceeds highway. The closest is in the 1,501-2,000 mile range, where carload rail tonnage accounted for 38% vs. 44% for highway.
- Even in distances exceeding 750 miles where carload rail tends to be most competitive, highway still outperforms rail.

Domestic Tonnage by Distance Excluding Coal, 2019



Note: Excludes crude petroleum, shipping containers and hazmat products due to incomplete reporting
Source: S&P Global Transearch

Domestic Originated Tonnage by Mode



- *Commodities with carload rail mode share exceeding 25%: coal, chemicals, primary metals, and metallic ores.*
- *Commodities with carload rail mode share exceeding 50%: coal and metallic ores.*

Note: Excludes crude petroleum, shipping containers and hazmat products due to incomplete reporting
Source: S&P Global Transearch