

# **Can Rail Passengers and Freight Coexist?**

"Passenger and Freight Railroads Unite" Lou Thompson March 14, 2019

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# How Did We Get Here: A Little History?

- Late 1960s: rail industry financially unstable.
  Eastern bankruptcies: Western wobbles.
- Federal response over a decade:
  - Create Amtrak (Railpax)
  - Reorganize eastern railroads (Conrail)
  - Staggers and other deregulation
- Basic objective: save the freight rail industry



# Did it Save the Freight Railroads?

#### Yes

- Average freight tariff down by half (now 58%)
- Costs down even more
- Productivity up
- Income up
- ROI up
- Conrail privatized (lost \$ but so what?)
- Everybody won
- Most successful federal transportation initiative



## **But What About Passengers?**

- Prime objective was to save the freight railroads
- Secondary hope was to eliminate many losing services and give passenger service a chance on the rest
   "Save freights from passenger losses and save passengers from freight management"



## Basic Assumptions Underlying Amtrak

- Amtrak would be contracting with freights for most services – would ensure coordination
- Freights would (by law) give Amtrak trains priority
- Plenty of room for passenger trains so Amtrak would pay only avoidable cost for access and operating services
- Amtrak would NOT be an owner of infrastructure



#### **How's Amtrak Working Out For Us?**

- Well, it has been expensive: \$80 billion to date (2018\$).
- And Amtrak bought the NEC (for peanuts)
- Many Amtrak trains are slower, or no faster, than in 1972.
- The basic assumption that there was plenty of room for passenger trains, may have been OK then, now not so much.



# **Amtrak Funding to Date**

(2018 \$ millions)						
Operating Support	38,024					
Capital	21,125					
NEC (including NECIP)	10,200					
Other (Labor, 403(b), Jobs, Guaranteed Loans)	11,336					
TOTAL TO DATE	80,685					



Source: data furnished by FRA

### **Did Priority (by law) Work?** (No or sort of: see NEC OTP versus freight lines)

					Avg	
		1972	2018	Distance	Speed	OTP %
		Timetable	Timetable	(mi)	(2018)	2018
Chicago	LA	38:55	40:55	2265	55	55
	NO	16:55	19:42	934	47	70
	Seattle	44:20	44:10	2205	50	57
	NYC	21:50	18:10	959	53	42
LA	Seattle	31:20	35:15	1377	39	65
	NO	46:10	47:40	1995	42	49
	SD	2:55	2:53	128	44	77
NYC	DC	2:59	2:52	224	78	82
NYC	BOS					
	High-spee	3:44	3:42	231	62	82
	Conv.	4:35	4:07	231	56	80

Source: Amtrak Timetables



### Average Freight Train Speed (miles/hour)

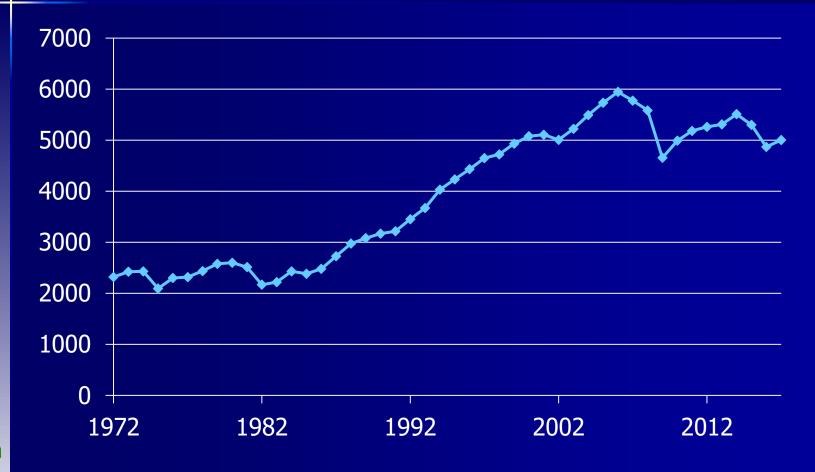


TGA Transport Concepts

Source: ICC/STB: Statistics of Class I Railroads

# **Freight Traffic Density**

#### (Train-Miles/Mile of Road excluding Trackage Rights)



Source: ICC/STB: Statistics of Class I Railroads

# Why is Access a Problem?

- Speed difference between freight and passenger trains (20 mph versus 50 mph or so).
- In 2017 avg. freight revenue/train-mile was \$150.
  With O/R of 68.2%, net operating revenue was \$47.70/freight train-mile
- Amtrak pays between \$5 and \$10 per train-mile for access (confidential), at best covering avoidable track maintenance.
- Question for business student: you are running an increasingly congested freight railroad, who gets preference?

Source: STB: Statistics of Class I Railroads, AAR Handbook and Author's research



# So What's the Solution?

- What we're doing isn't working keep trying? What did Einstein say?
- Amtrak could pay more (incentives that actually work)?:
  - NEC 10.2 million train-miles
  - Short Hauls 13.8 million train-miles
  - Long Hauls 14.1 million train miles
  - Different/selective approach for each?

Transport Concepts

- Amtrak could invest in targeted added capacity that helps both passenger and freight? (who pays, for what, \$ source)
- Amtrak could have exclusive tracks (NEC)? Even bigger \$, not much better OTP.
- Tax incentives for or direct public investment in critical shared lines?
- Consider impact on passenger services in freight mergers?
- How much is passenger service really worth to the taxpayer?

Source of Amtrak Train-miles: author's research based on Amtrak MPS reports

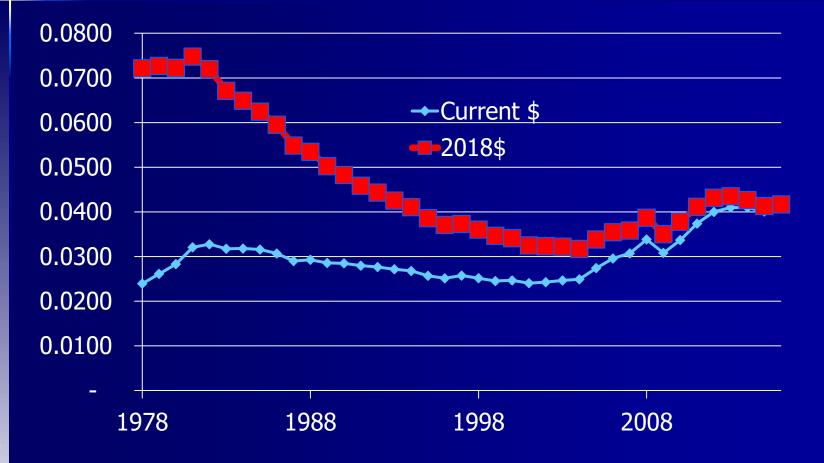
### What About the E.U. "Solution"?

#### There are three basic rail models

- Infra integrated with single operator
- Dominant operator integrated, tenants pay marginal cost access
- Separated infrastructure, all operators have full access and pay "non-discriminatory" access charges
- U.S. is #2 (Amtrak, NEC), E.U. is officially #3.
- U.S. has several multiple (not open) freight access areas (Conrail, terminal companies). They work, sort of.
- NEC would be a good candidate for separation, with multiple access and access charges
- Hard to see how this could work elsewhere in the U.S.
- E.U. railways are passenger dominant. Access charge issues are still not resolved.



# **Average Freight Rev/Ton-Mile**





Source: Statistics of Class I Railroads and Dept. of Commerce Implicit GDP Deflator