# Can Rail Passengers and Freight Coexist? 

"Passenger and Freight Railroads Unite"
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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 |
|  | 21,125 |
| Capital | 10,200 |
| NEC (including NECIP) |  |
| Other (Labor, 403(b), Jobs, Guaranteed Loans) | 11,336 |
| TOTAL TO DATE |  |

## Did Priority (by law) Work?

 (No or sort of: see NEC OTP versus freight lines)|  |  | 1972 <br> Timetable | 2018 <br> Timetable | Distance <br> $(\mathrm{mi})$ | Avg <br> Speed <br> $(2018)$ | OTP \% <br> 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-spe | $3: 44$ | $3: 42$ | 231 | 62 | 82 |
|  | Conv. | $4: 35$ | $4: 07$ | 231 | 56 | 80 |

Source: Amtrak Timetables

## Average Freight Train Speed <br> (miles/hour)



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?


## 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?
- 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?


## 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

