

304141



ENTERED
Office of Proceedings
March 21, 2022
Part of
Public Record

Before the Surface Transportation Board In the Matter of Ex Parte 711 (Sub-No. 1) Reciprocal Switching

March 15, 2022

Panel of the Association of American Railroads

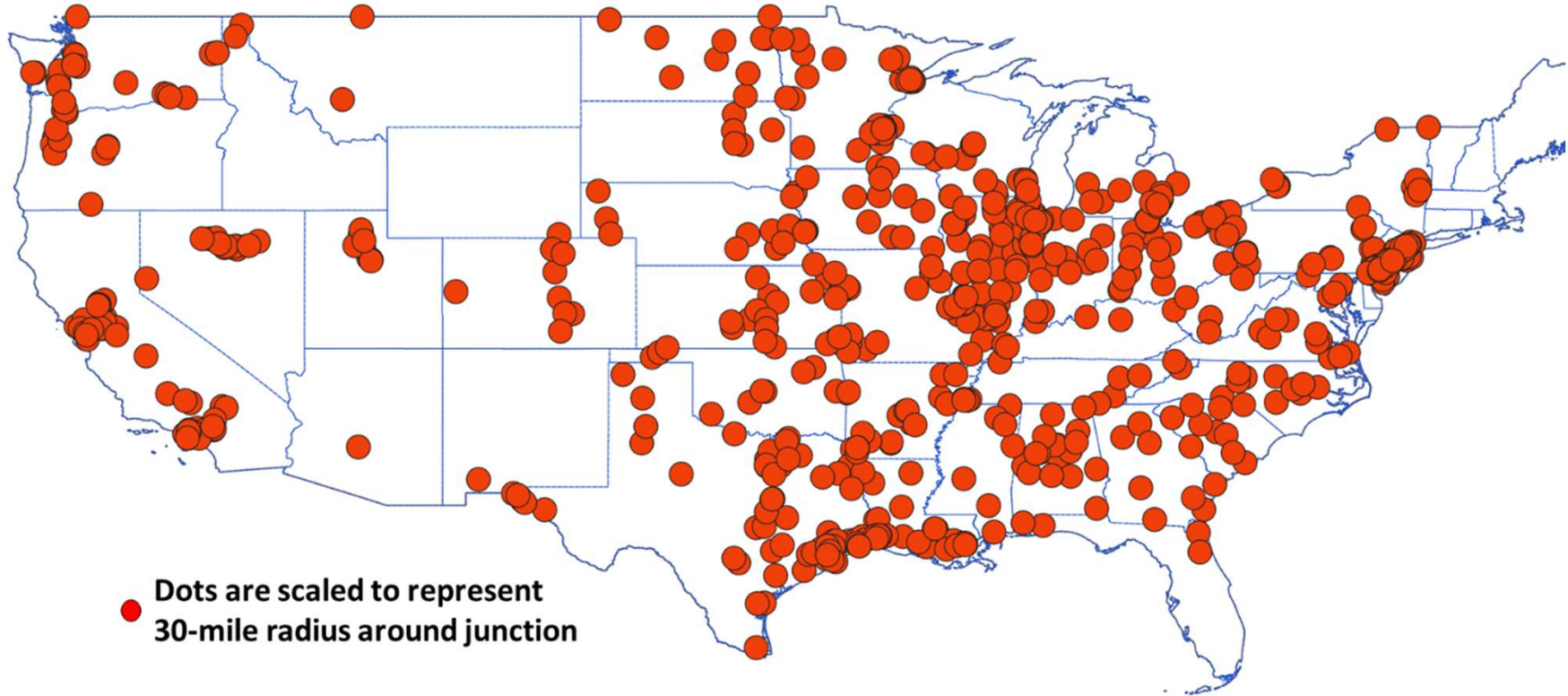
Testimony by:

- Ian Jefferies
- Benjamin J. Horwich
- Michael R. Baranowski
- Jonathan Orszag
- Mark Fagan
- Dr. Debra J. Aron



Testimony of Benjamin J. Horwich: Exhibits

Map of Junction Points That May Be Used by Potentially Affected Traffic at 30-Mile Rail Distance Threshold



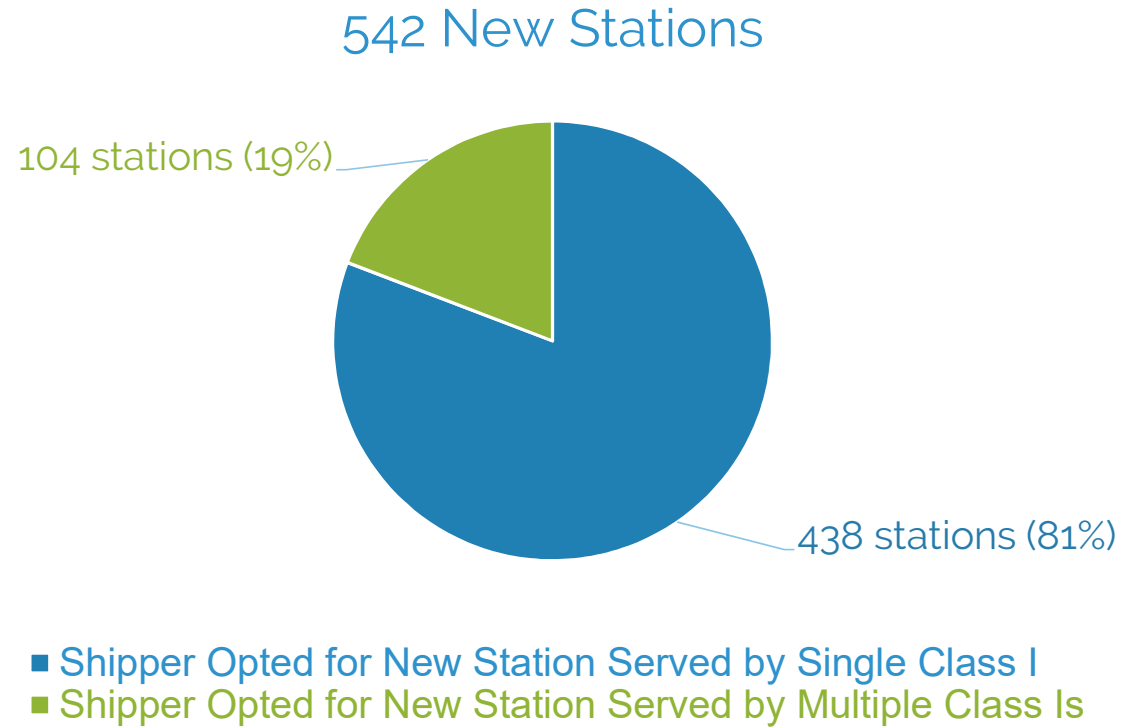


Testimony of Michael R. Baranowski: Exhibits

Percent of Traffic Originations and Terminations at Stations Served by Single Class I Carrier

Traffic	1992-1996 period	2015-2019 period	Difference
All Carload Traffic	55.6%	52.2%	-3.4%
Non-Exempt Carload Traffic	59.4%	53.7%	-5.8%
Non-Exempt Carload Traffic Above R/VC 180%	70.1%	61.4%	-8.7%

New Stations Served by a Single Class I Carrier



Summary of Carloads in 2019 CWS Potentially Affected by Proposed Rule's Competitive Access Pathway, Isolating Portion Not Historically Served by Multiple Class I Carriers

Distance to Junction	Potentially Affected Carloads Under the Competitive Access Pathway	Portion Not Historically Served by Multiple Class I Carriers	Percentage
Within 10-Rail Miles	973,525	919,877	94.5%
Within 15-Rail Miles	1,471,010	1,387,413	94.3%
Within 30-Rail Miles	2,252,862	2,089,125	92.7%

Summary of Carloads in 2019 CWS Potentially Affected by Proposed Rule's Competitive Access Pathway Identifying Portion Not Involving an Interchange

Distance to Junction	Potentially Affected Carloads Under the Competitive Access Pathway	Portion Not Involving an Interchange (i.e., Local Traffic) ⁸	Percentage
Within 10-Rail Miles	973,525	713,929	73%
Within 15-Rail Miles	1,471,010	1,082,255	74%
Within 30-Rail Miles	2,252,862	1,553,410	69%

⁸ This includes only non-rebilled traffic reporting the same origin and termination Class I railroad and no interchanges.

Summary of Carloads in 2019 CWS Potentially Affected by Proposed Rule's Competitive Access Pathway Identifying Portion Where No Possible Existing Local Interchange Operations Potentially Related to Forced Switch

Distance to Junction	Potentially Affected Carloads Under the Competitive Access Pathway	Portion With No Possible Existing Local Interchange Operations	Percentage
Within 10-Rail Miles	973,525	756,439	77.7%
Within 15-Rail Miles	1,471,010	1,197,422	81.4%
Within 30-Rail Miles	2,252,862	1,847,239	82.0%

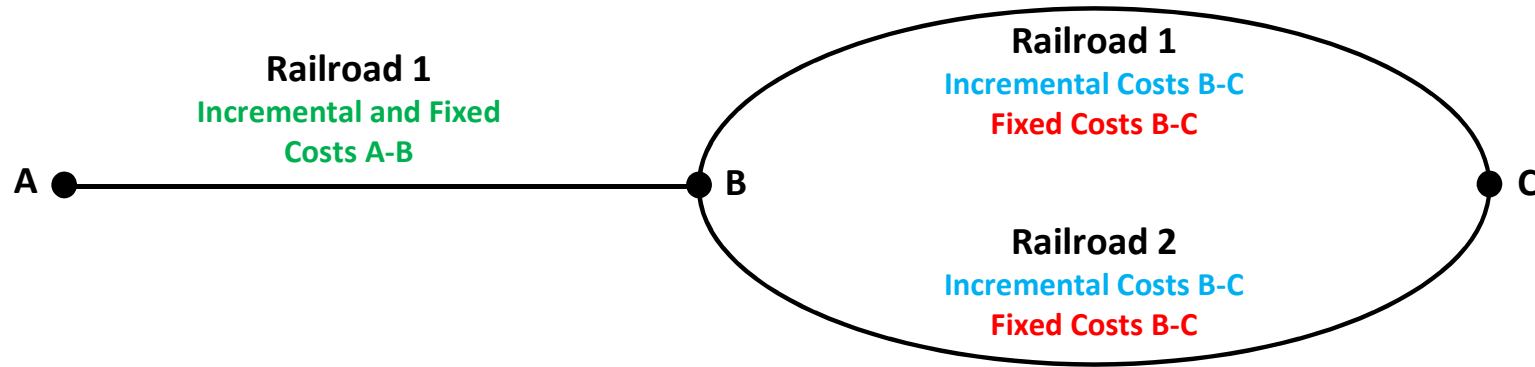
Summary of Carloads in 2019 CWS Potentially Affected by Proposed Rule's Competitive Access Pathway Identifying Interlined Portion Where There May Possibly Be an Existing Local Interchange Operation

Distance to Junction	Potentially Affected Carloads Under the Competitive Access Pathway	Interlined Portion Where There May Possibly be An Existing Local Interchange Operation	Percentage
Within 10-Rail Miles	973,525	66,170	6.8%
Within 15-Rail Miles	1,471,010	86,782	5.9%
Within 30-Rail Miles	2,252,862	151,653	6.7%



Testimony of Jonathan Orszag: Exhibits

The Proposed Rule Has Only Disadvantages Compared to Current Rate Setting

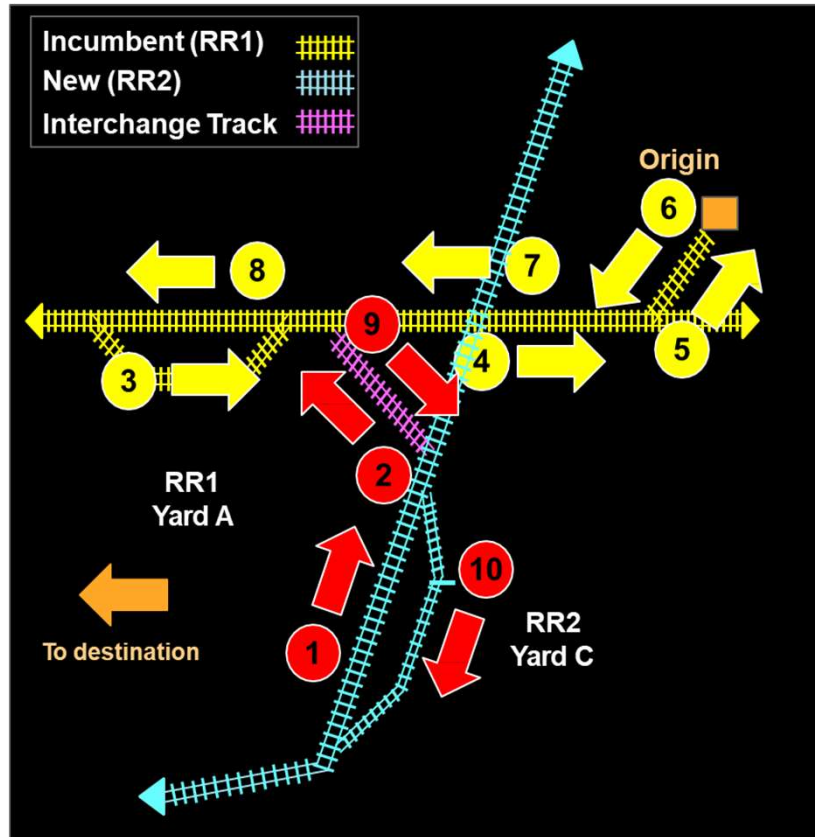


- Lower prices cannot be the only policy goal – must ensure *fixed costs* are recovered, not only *incremental costs*
- Rate regulation allows recovery of **Incremental and Fixed Costs A-B** plus **Incremental Costs B-C** plus **Fixed Costs B-C**
- The Proposed Rule might be set up to recover **Incremental and Fixed Costs A-B**, and prices on B-C and prices would trend towards **Incremental Costs B-C**. But what about **Fixed Costs B-C**?
- Regulation that artificially separates B-C from the network also needs to make sure **Fixed Costs B-C** are recovered – rules cannot focus on just A-B, because **Fixed Costs B-C** may not be recovered



Testimony of Mark Fagan: Exhibits

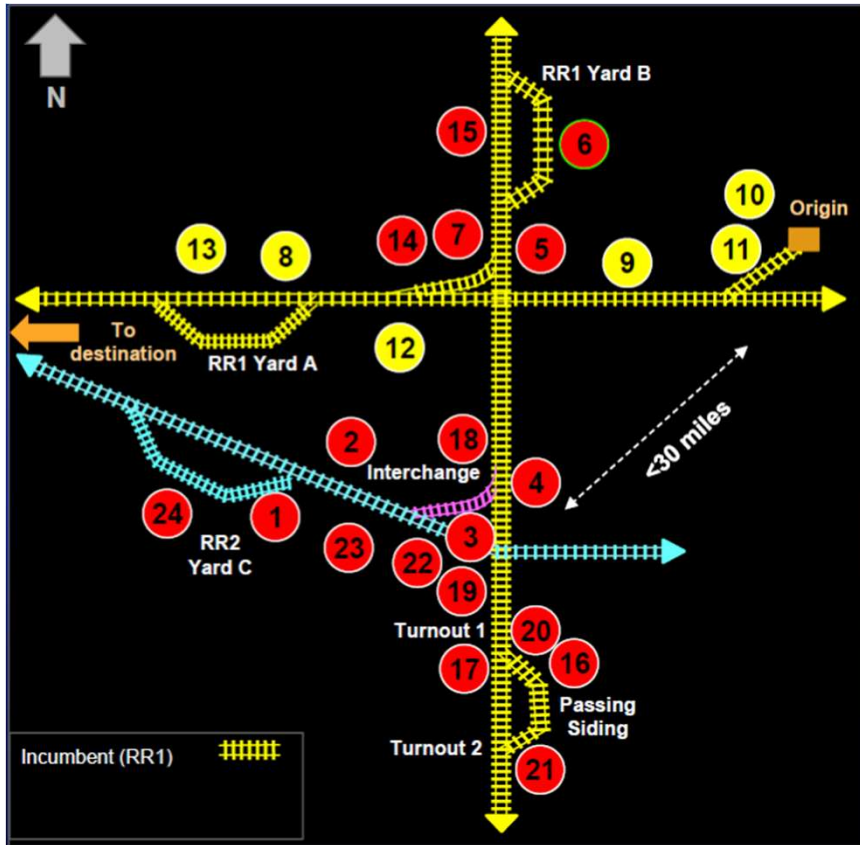
Several Additional Car Handlings Are Required for Even the Simplest Forced Switch



Step	Description
1	Yard switch Yard to move empty car to interchange train at Yard C
2	Interchange train moves empty car from Yard C to Yard A
3	Yard switch to move empty car to way train at Yard A
4	Way train moves empty car to Consignor
5	Industry switch to spot empty car at Consignor for loading
6	Industry switch to retrieve loaded car from Consignor
7	Local service way train moves loaded car to Yard A
8	Yard switch to move loaded car to interchange block at Yard A
9	Interchange train moves loaded car from Yard A to Yard C
10	Yard switch to move loaded car to outbound road train at Yard C



Many Forced Switches Will be Much More Complex



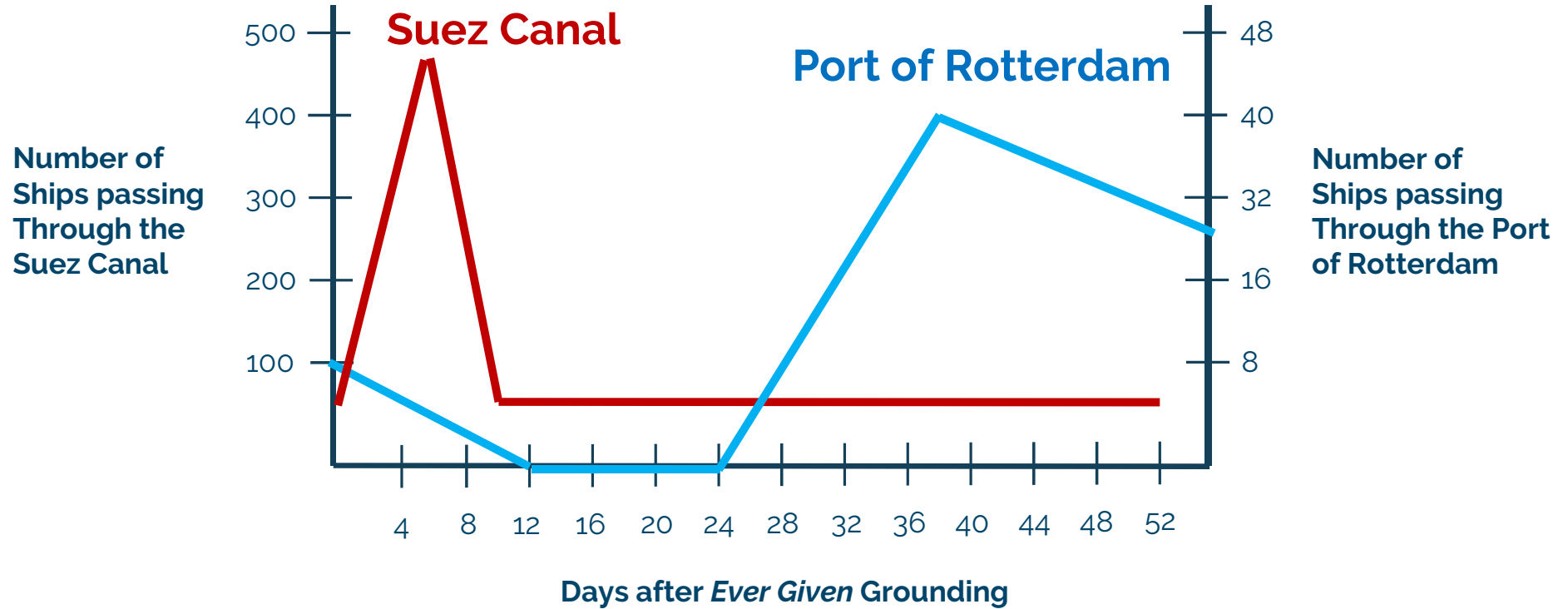
Step	Description
1	Yard switch to move empty car to way train at Yard C
2	Way train moves empty car to interchange track
3	Interchange switch to spot empty car on interch. track
4	Interchange switch to retrieve empty car from interchange track
5	Way train moves empty car to Yard B
6	Yard switch to move empty car to way train serving Yard A
7	Way train moves empty car via Connection to Yard A
8	Yard switch to move empty car to way train serving Consignor
9	Way train moves empty car to Consignor
10	Industry switch to place empty car into Consignor's siding
11	Industry switch to retrieve loaded car from Consignor's siding
12	Way train moves loaded car to Yard A
13	Yard switch to move loaded car to way train serving Yard B
14	Way train moves loaded car to Yard B
15	Yard switch to move loaded car to way train serving interchange
16	Way train moves loaded car to passing siding
17	Way train locomotive runs around train and couples to the end of the train
18	Way train moves to clearance point beyond Interchange
19	Interchange switch to spot loaded car on interch. track
20	Way train backs to passing siding
21	Way train locomotive runs around way train, couples to front and proceeds
22	Interchange switch to retrieve loaded car from interchange track
23	Way train moves loaded car to Yard C
24	Yard switch to move loaded car into outbound road train

EP 711, Testimony of William J. Rennie: Exhibits (Exhibit 4) (March 25, 2014); Opening Comments of the Association of American Railroads, Reciprocal Switching, STB Ex Parte No. 711 (Sub-No. 1) (Oct. 26, 2016)





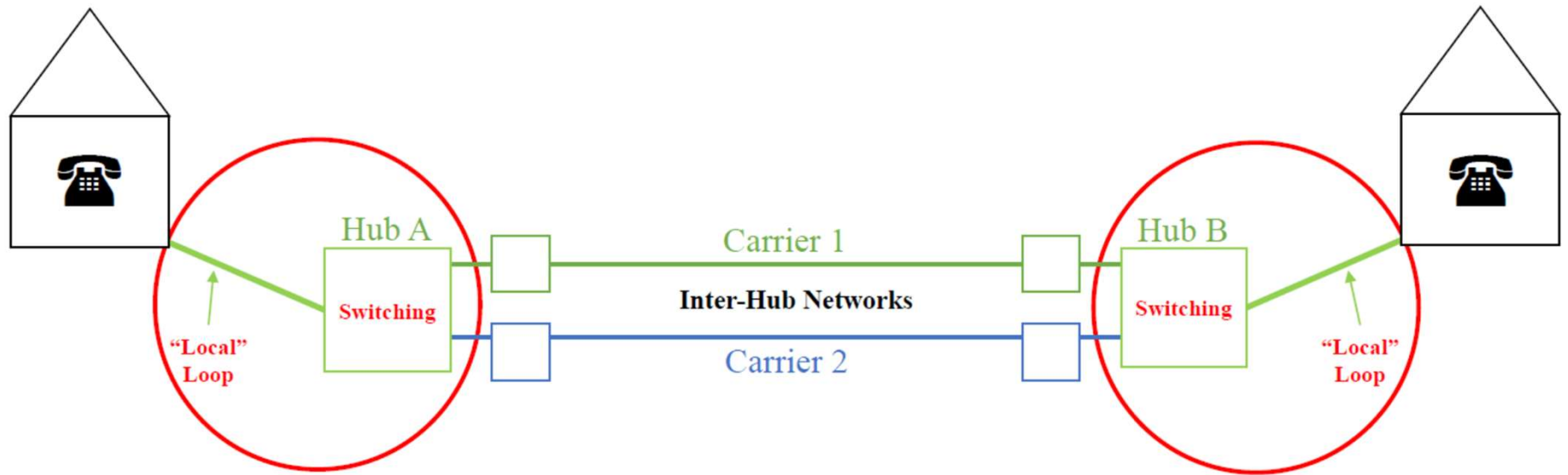
Stylized Timeline of Recovery from the Ever Given





Testimony of Dr. Debra J. Aron: Exhibits

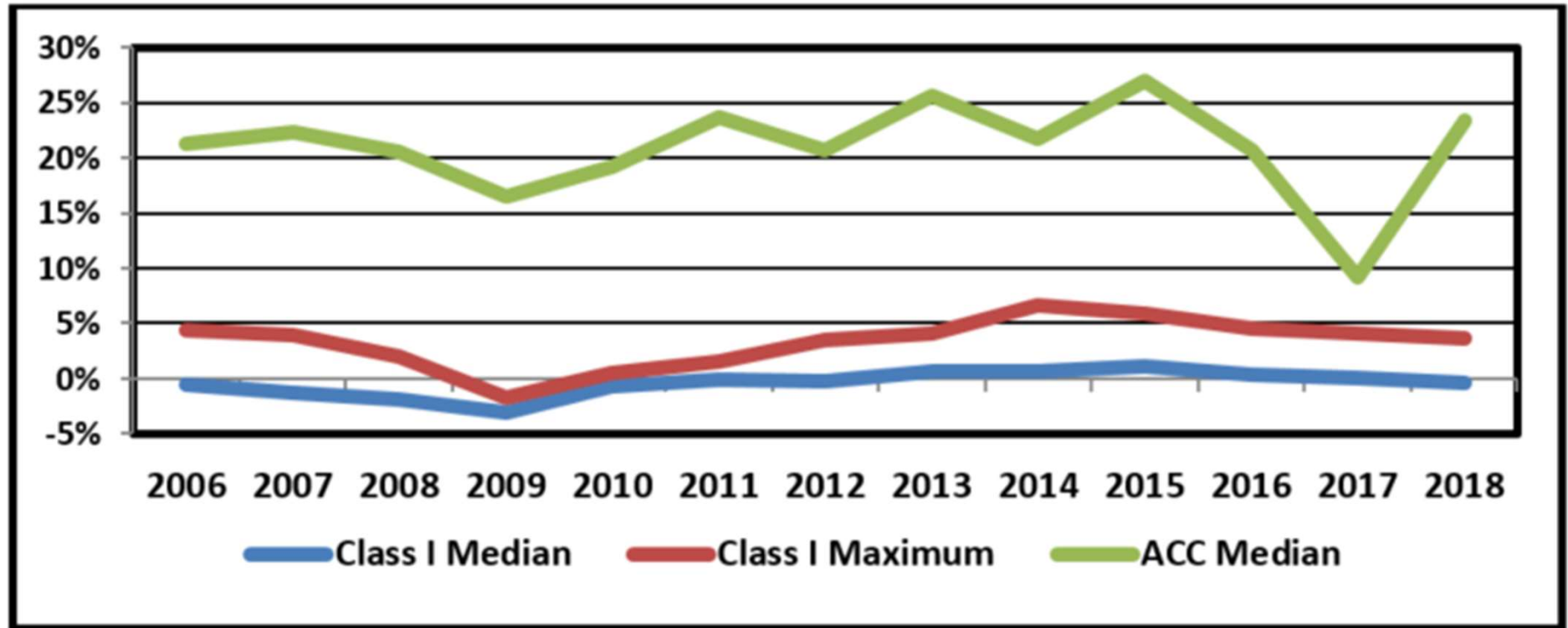
Simplified Schematic of the Transmission Path of a Call





Testimony of Benjamin J. Horwich: Exhibits

Railroads Compared to ACC Members — Return on Investment above Cost of Capital, 2006–2018





Questions?



Appendix



Baranowski & Zebrowski V.S.

See Supplemental Comments of the Association of American Railroads, *Reciprocal Switching*, STB Ex Parte No. 711 (Sub-No. 1) (Feb. 14, 2022)

Table 1: Summary of Carloads and Revenues in 2019 CWS Potentially Affected by Proposed Rule's Competitive Access Pathway

Distance to Junction	Potentially Affected Carloads	Percent of Total Non-Exempt Carloads With R/VC > 180%	Revenues for Potentially Affected Traffic (\$Millions)	Percent of Total Revenues for Non-Exempt Carloads With R/VC > 180%
Within 10 Rail Miles	973,525	16%	\$3,344	16%
Within 15 Rail Miles	1,471,010	24%	\$4,851	23%
Within 30 Rail Miles	2,252,862	36%	\$7,545	36%
Within 50 Rail Miles	3,214,393	52%	\$10,810	52%
Within 100 Rail Miles	4,169,895	67%	\$14,265	69%
Total Non-Exempt Carloads With R/VC > 180%	6,232,563	100%	\$20,696	100%

Table 2: Summary of Carloads and Revenues in 2019 CWS Potentially Affected by Proposed Rule's Public Interest Pathway

Distance to Junction	Potentially Affected Carloads	Percent of Total Non-Exempt Carloads (Including Boxcars)	Revenues for Potentially Affected Traffic (\$Millions)	Percent of Total Revenues for Non-Exempt Traffic
Within 10-Rail Miles	10,745,381	76%	\$33,821	80%
Within 15-Rail Miles	11,115,104	79%	\$34,798	82%
Within 30-Rail Miles	11,796,166	84%	\$36,797	87%
Within 50-Rail Miles	12,361,226	88%	\$38,697	92%
Within 100-Rail Miles	12,928,654	92%	\$40,663	96%
Total Non-Exempt Carloads (Including Boxcars)	14,082,047	100%	\$42,226	100%

Table 3: Summary of Carloads and Revenues in 2019 CWS Potentially Affected by Proposed Rule's Competitive Access Pathway Incorporating Effects of Revocations Being Considered in EP 704

Distance to Junction	Potentially Affected Carloads	Percent of Total Non-Exempt Carloads With R/VC > 180%	Revenues for Potentially Affected Traffic (\$Millions)	Percent of Total Revenues for Non-Exempt Carloads With R/VC > 180%
Within 10-Rail Miles	1,237,999	16%	\$4,010	16%
Within 15-Rail Miles	1,871,376	24%	\$5,829	24%
Within 30-Rail Miles	2,988,114	39%	\$9,216	38%
Within 50-Rail Miles	4,121,842	54%	\$12,869	53%
Within 100-Rail Miles	5,228,064	68%	\$16,669	68%
Total Non-Exempt Carloads With R/VC > 180%	7,689,226	100%	\$24,418	100%

Table 4: Summary of Carloads and Revenues in 2019 CWS Potentially Affected by Proposed Rule's Public Interest Pathway Incorporating Effects of Revocations Being Considered in EP 704

Distance to Junction	Potentially Affected Carloads	Percent of Total Non-Exempt Carloads (Including Boxcars)	Revenues for Potentially Affected Traffic (\$Millions)	Percent of Total Revenues for Non-Exempt Traffic
Within 10-Rail Miles	14,189,803	77%	\$44,895	81%
Within 15-Rail Miles	14,692,965	79%	\$46,240	83%
Within 30-Rail Miles	15,660,393	85%	\$48,908	88%
Within 50-Rail Miles	16,385,481	89%	\$51,199	92%
Within 100-Rail Miles	17,056,170	92%	\$53,529	96%
Total Non-Exempt Carloads (Including Boxcars)	18,504,311	100%	\$55,679	100%

Chart 1: Map of Regions With At Least 40 Potentially Affected Stations

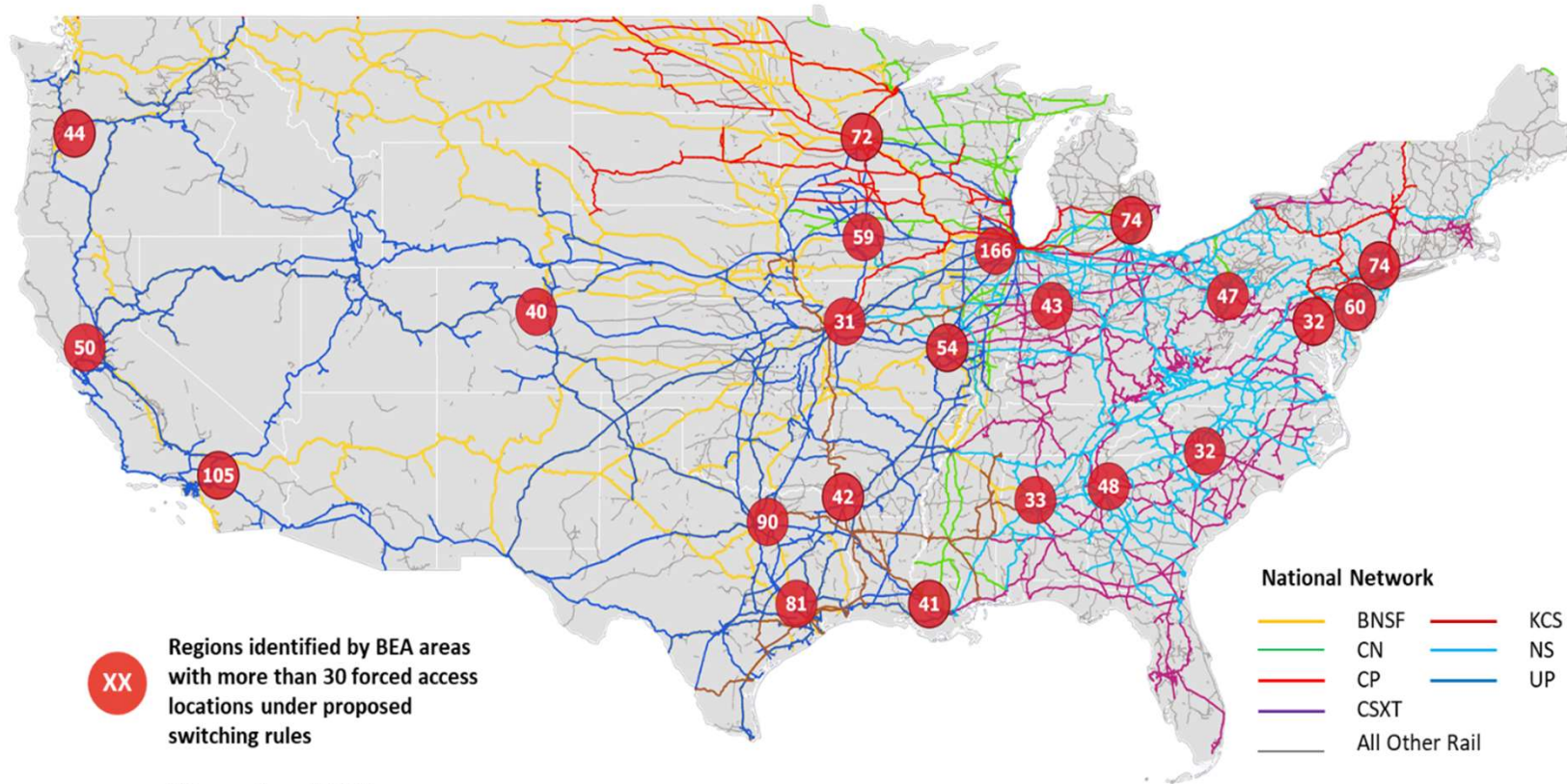


Chart 2: Map of Junction Points That May Be Used by Potentially Affected Traffic at 30-Mile Rail Distance Threshold

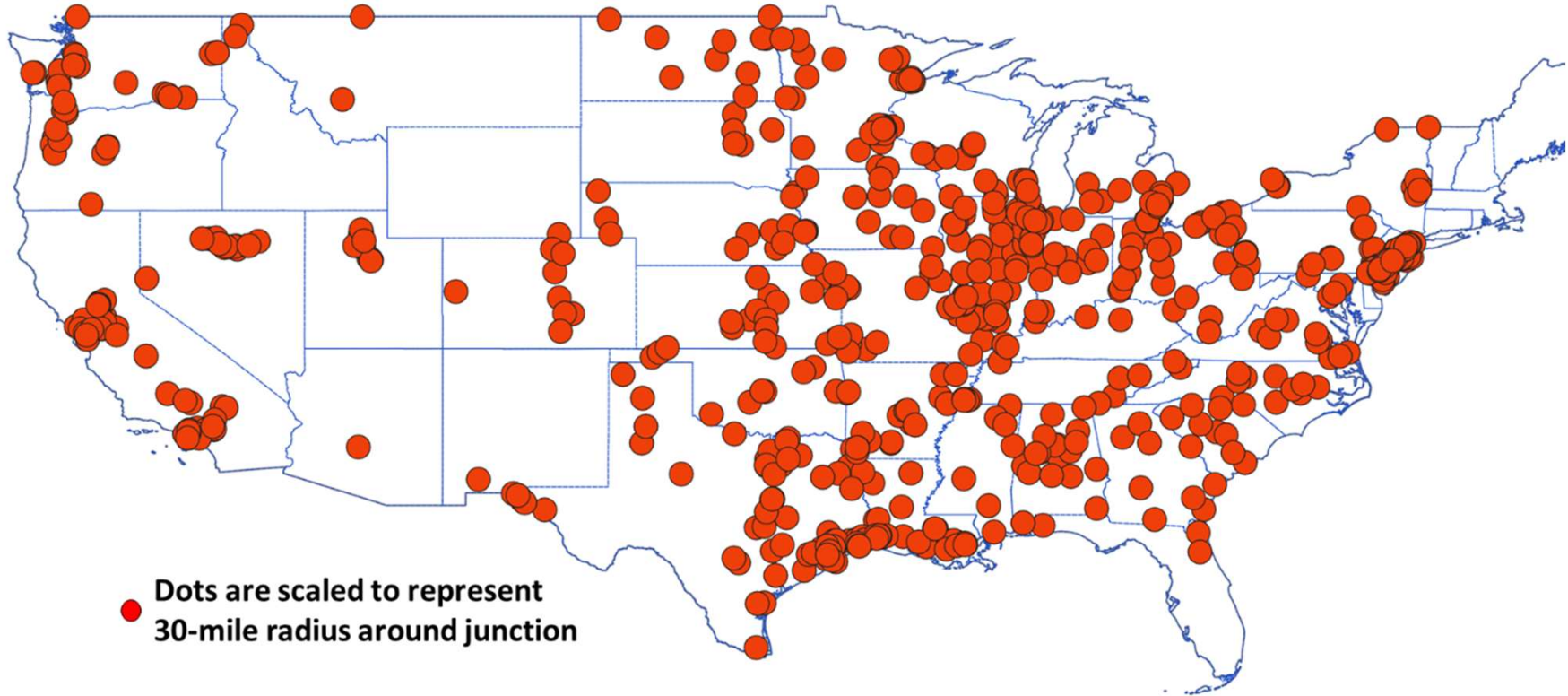


Table 5: Summary of Carloads in 2019 CWS Potentially Affected by Proposed Rule's Competitive Access Pathway Identifying Portion Not Involving an Interchange

Distance to Junction	Potentially Affected Carloads Under the Competitive Access Pathway	Portion Not Involving an Interchange (i.e., Local Traffic) ⁸	Percentage
Within 10-Rail Miles	973,525	713,929	73%
Within 15-Rail Miles	1,471,010	1,082,255	74%
Within 30-Rail Miles	2,252,862	1,553,410	69%

⁸ This includes only non-rebilled traffic reporting the same origin and termination Class I railroad and no interchanges.

Table 6: Summary of Carloads in 2019 CWS Potentially Affected by Proposed Rule's Competitive Access Pathway Identifying Portion Where No Possible Existing Local Interchange Operations Potentially Related to Forced Switch

Distance to Junction	Potentially Affected Carloads Under the Competitive Access Pathway	Portion With No Possible Existing Local Interchange Operations	Percentage
Within 10-Rail Miles	973,525	756,439	77.7%
Within 15-Rail Miles	1,471,010	1,197,422	81.4%
Within 30-Rail Miles	2,252,862	1,847,239	82.0%

Table 7: Summary of Carloads in 2019 CWS Potentially Affected by Proposed Rule's Competitive Access Pathway Identifying Interlined Portion Where There May Possibly Be an Existing Local Interchange Operation

Distance to Junction	Potentially Affected Carloads Under the Competitive Access Pathway	Interlined Portion Where There May Possibly be An Existing Local Interchange Operation	Percentage
Within 10-Rail Miles	973,525	66,170	6.8%
Within 15-Rail Miles	1,471,010	86,782	5.9%
Within 30-Rail Miles	2,252,862	151,653	6.7%

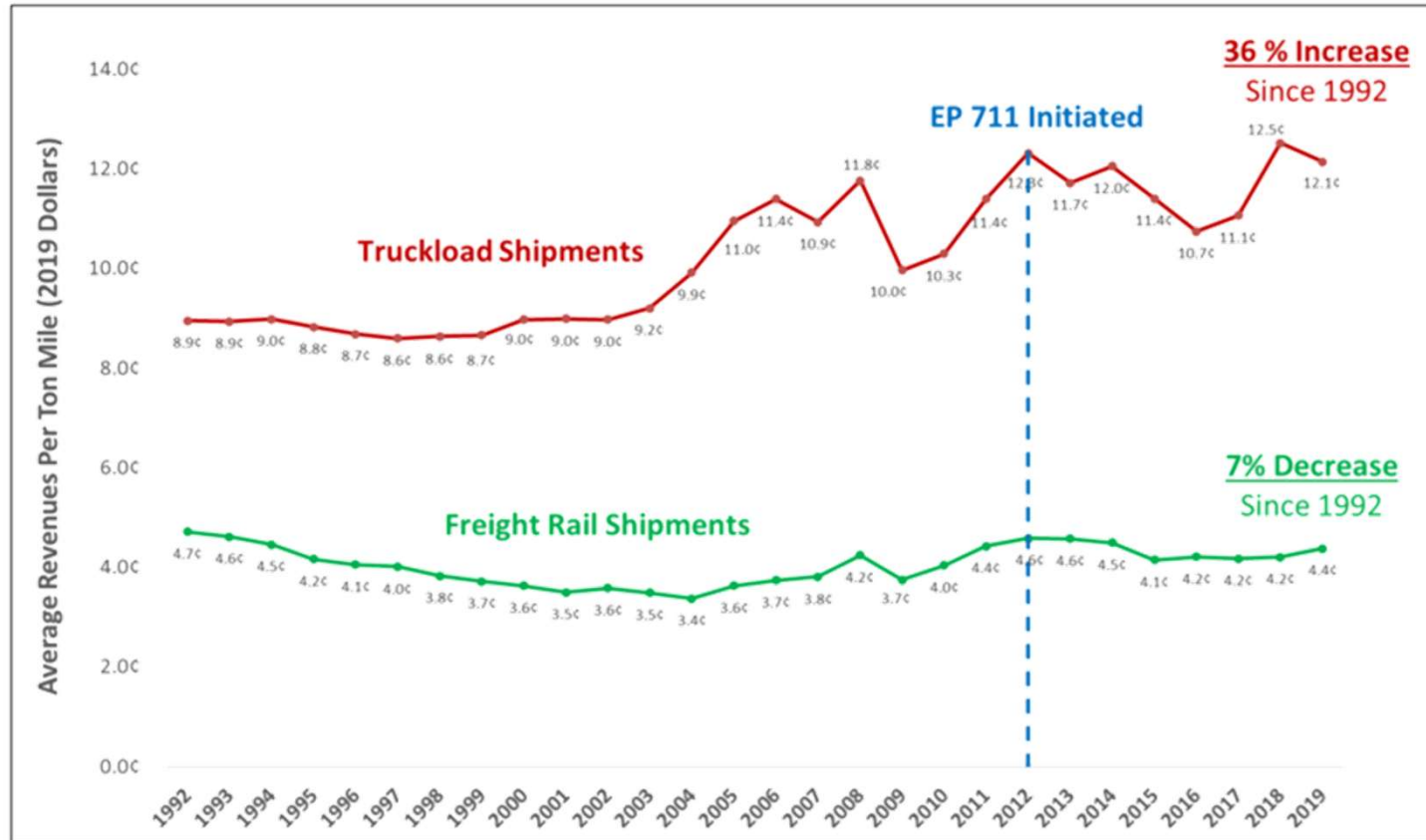
Table 8: Percent of Traffic Originations and Terminations at Stations Served by Single Class I Carrier

Traffic	1992-1996 period	2015-2019 period	Difference
All Carload Traffic	55.6%	52.2%	-3.4%
Non-Exempt Carload Traffic	59.4%	53.7%	-5.8%
Non-Exempt Carload Traffic Above R/VC 180%	70.1%	61.4%	-8.7%

Table 9: Summary of Carloads in 2019 CWS Potentially Affected by Proposed Rule's Competitive Access Pathway, Isolating Portion Not Historically Served by Multiple Class I Carriers

Distance to Junction	Potentially Affected Carloads Under the Competitive Access Pathway	Portion Not Historically Served by Multiple Class I Carriers	Percentage
Within 10-Rail Miles	973,525	919,877	94.5%
Within 15-Rail Miles	1,471,010	1,387,413	94.3%
Within 30-Rail Miles	2,252,862	2,089,125	92.7%

Chart 3: Comparison of Freight Rail and Long-Distance Truckload Average Real Revenues Per Ton-Mile: 1992 to 2019





Shapiro & Stuttgen V.S.

See Supplemental Comments of the Association of American Railroads, *Reciprocal Switching*, STB Ex Parte No. 711 (Sub-No. 1) (Feb. 14, 2022)

Figure 1: Number of Class I Railroads Deemed Revenue Adequate, 2000–2019

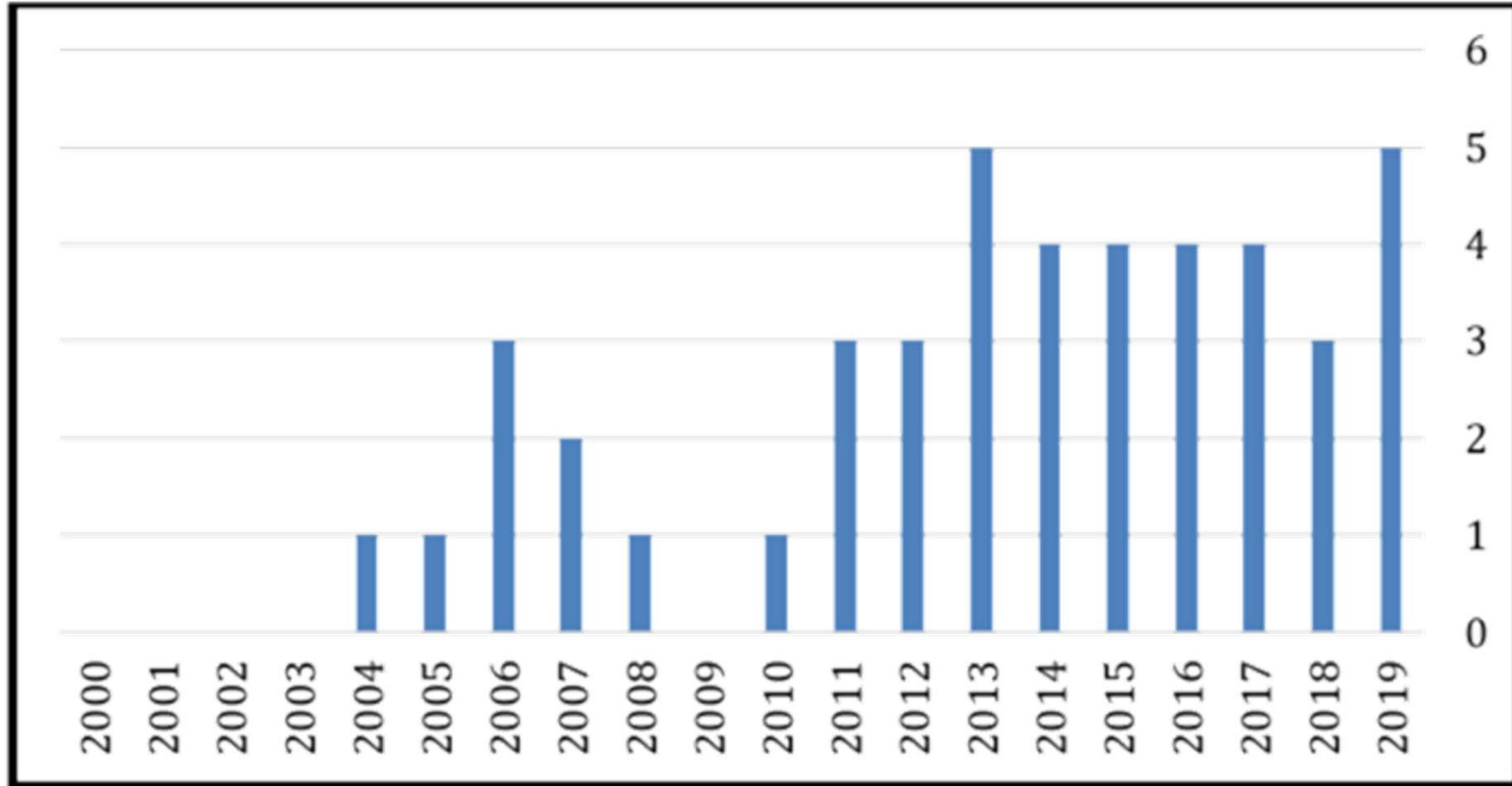


Figure 2: Median ROI–COC for Five Major Sectors of the S&P 500, 2006–2018

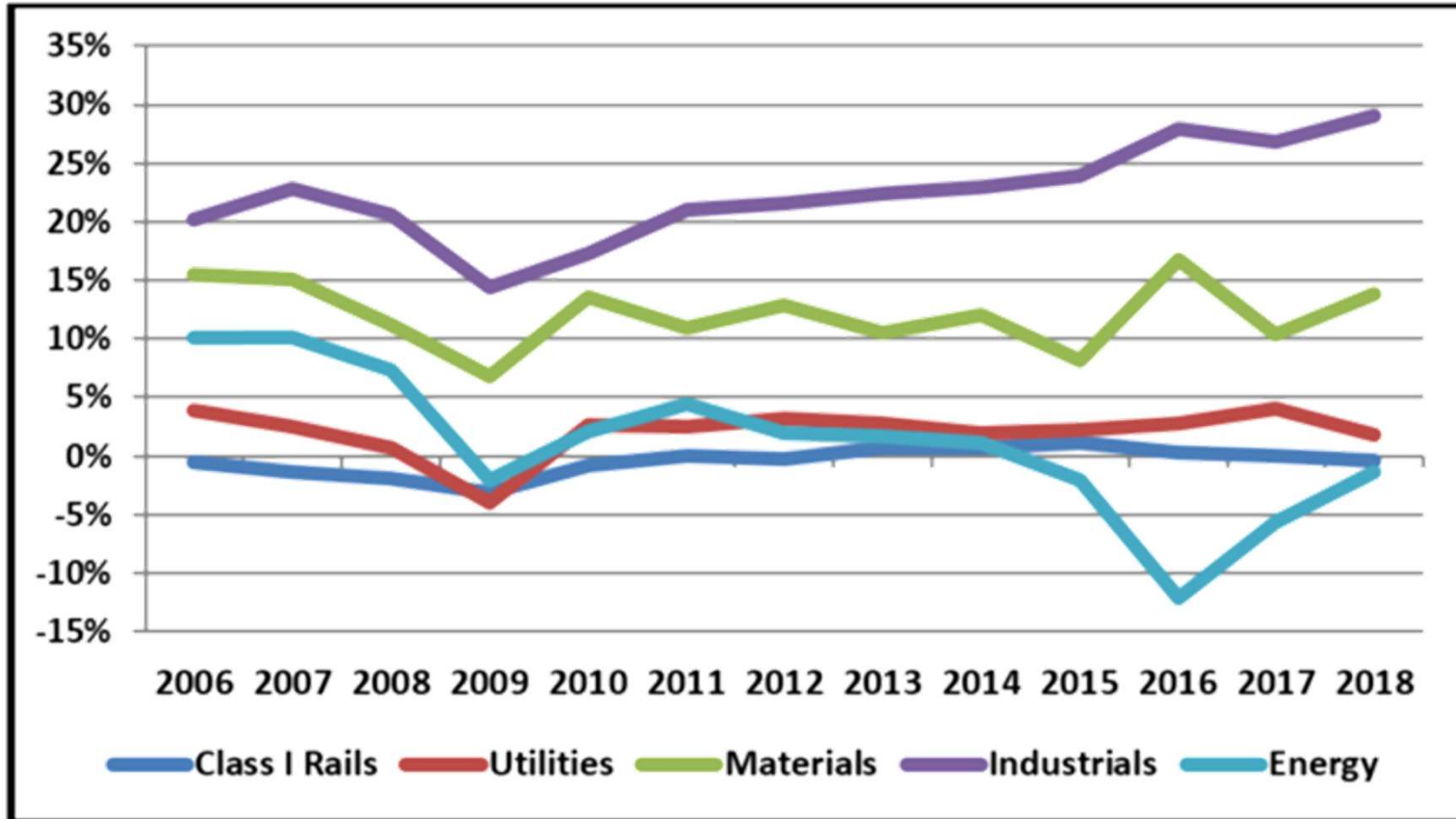


Table 1: Median ROI–COC for 10 Sectors of the S&P 500, 2016, 2017 and 2018

Sector	2016	2017	2018
Communication Services	70.0%	63.5%	93.5%
Information Technology	56.9%	48.1%	58.6%
Health Care	47.4%	38.0%	49.2%
Consumer Staples	36.0%	37.1%	40.0%
Industrials	27.9%	26.9%	29.0%
S&P 500	21.9%	19.8%	28.6%
Consumer Discretionary	14.3%	11.1%	14.0%
Materials	16.8%	10.4%	13.9%
Utilities	2.8%	4.0%	1.8%
Class I Railroads	0.3%	0.01%	-0.3%
Energy	-12.1%	-5.6%	-1.4%

Figure 3: Revenue Adequacy of Railroads vs. ACC Companies, 2006–2018



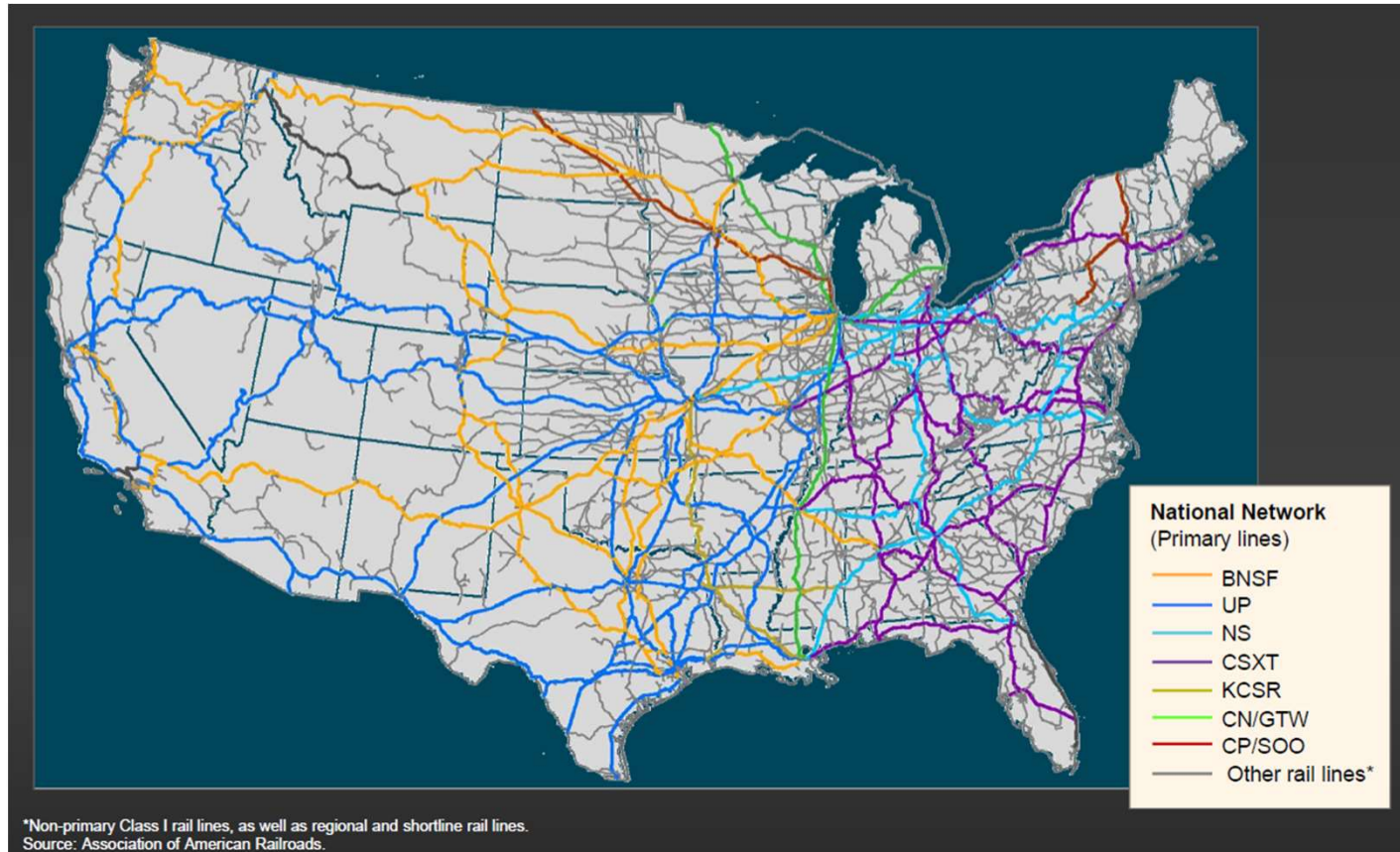
EP 711 – AAR, Phil C. Ireland & Rodney E. Case V.S. & Testimony Exhibits

See Opening Comments of the Association of American Railroads, *Reciprocal Switching*, STB Ex Parte No. 711 (Sub-No. 1) (Oct. 26, 2016)

Canadian Rail Network



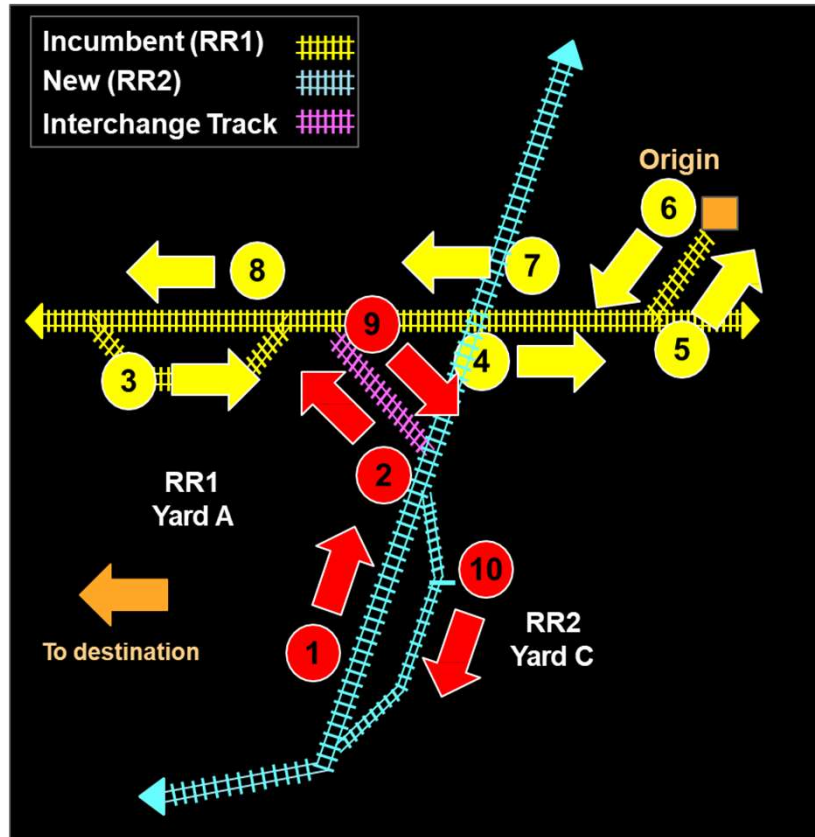
U.S. Rail Network



EP 711 – AAR, William J. Rennicke V.S. & Testimony Exhibits

See Opening Comments of the Association of American Railroads, *Reciprocal Switching*, STB Ex Parte No. 711 (Sub-No. 1) (Oct. 26, 2016)

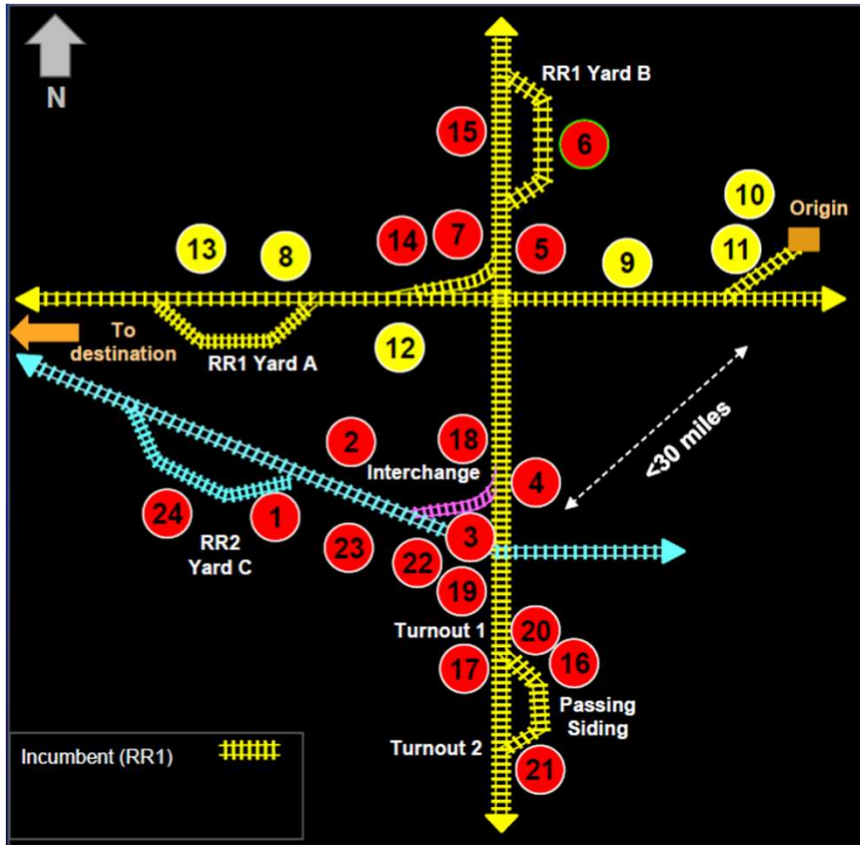
Several Additional Car Handlings Are Required for Even the Simplest Forced Switch



Step	Description
1	Yard switch Yard to move empty car to interchange train at Yard C
2	Interchange train moves empty car from Yard C to Yard A
3	Yard switch to move empty car to way train at Yard A
4	Way train moves empty car to Consignor
5	Industry switch to spot empty car at Consignor for loading
6	Industry switch to retrieve loaded car from Consignor
7	Local service way train moves loaded car to Yard A
8	Yard switch to move loaded car to interchange block at Yard A
9	Interchange train moves loaded car from Yard A to Yard C
10	Yard switch to move loaded car to outbound road train at Yard C



Many Forced Switches Will be Much More Complex



Step	Description
1	Yard switch to move empty car to way train at Yard C
2	Way train moves empty car to interchange track
3	Interchange switch to spot empty car on interch. track
4	Interchange switch to retrieve empty car from interchange track
5	Way train moves empty car to Yard B
6	Yard switch to move empty car to way train serving Yard A
7	Way train moves empty car via Connection to Yard A
8	Yard switch to move empty car to way train serving Consignor
9	Way train moves empty car to Consignor
10	Industry switch to place empty car into Consignor's siding
11	Industry switch to retrieve loaded car from Consignor's siding
12	Way train moves loaded car to Yard A
13	Yard switch to move loaded car to way train serving Yard B
14	Way train moves loaded car to Yard B
15	Yard switch to move loaded car to way train serving interchange
16	Way train moves loaded car to passing siding
17	Way train locomotive runs around train and couples to the end of the train
18	Way train moves to clearance point beyond Interchange
19	Interchange switch to spot loaded car on interch. track
20	Way train backs to passing siding
21	Way train locomotive runs around way train, couples to front and proceeds
22	Interchange switch to retrieve loaded car from interchange track
23	Way train moves loaded car to Yard C
24	Yard switch to move loaded car into outbound road train

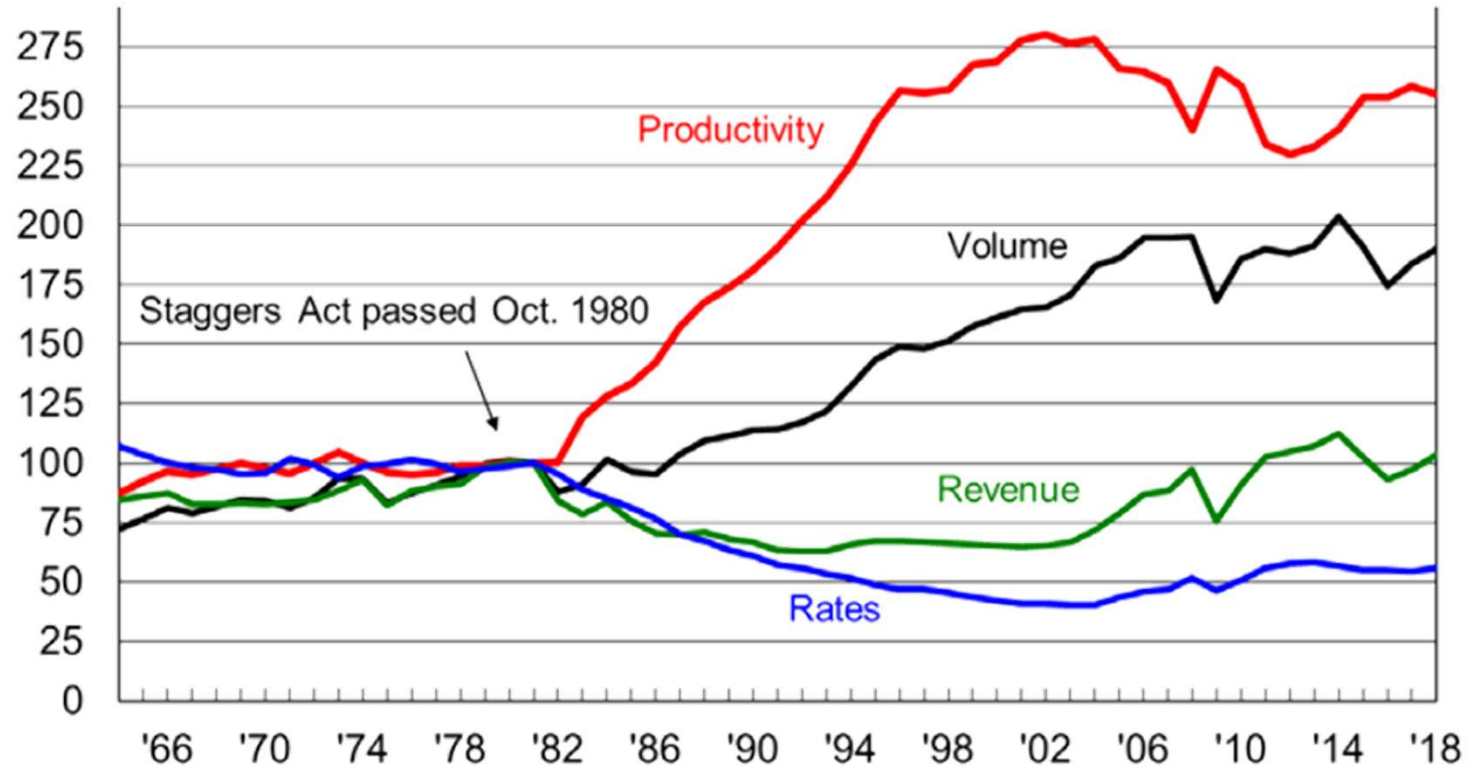
EP 711, Testimony of William J. Rennie: Exhibits (Exhibit 4) (March 25, 2014); Opening Comments of the Association of American Railroads, Reciprocal Switching, STB Ex Parte No. 711 (Sub-No. 1) (Oct. 26, 2016)



EP 761 & 722 - AAR Comments, Written Testimony of Joseph P. Kalt

See Supplemental Comments of the Association of American Railroads, *Reciprocal Switching*, STB Ex Parte No. 711 (Sub-No. 1) (Feb. 14, 2022)

Figure 1: RAIL RATES, PRODUCTIVITY, VOLUMES & REVENUE: 1964-2018
(1981=100)



"Rates" are inflation-adjusted revenue per ton-mile. "Volume" is ton-miles. "Productivity" is revenue ton-miles per constant dollar operating expense. Source: AAR

Figure 2: Median IROI/COC Of Select Industries

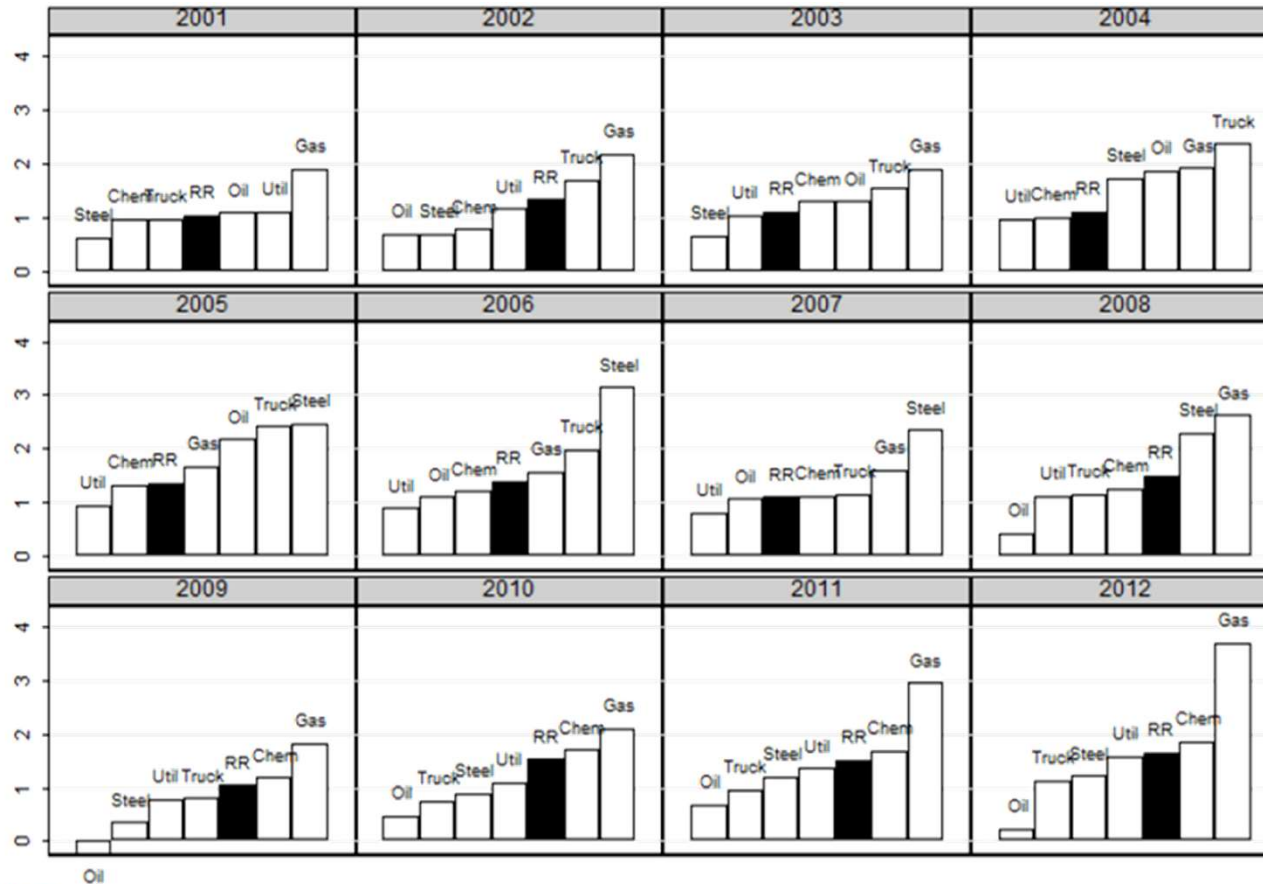


Figure 3: Weighted Average Cost of Capital and ROIC by Industry, 10 Year Average(2004-2013)

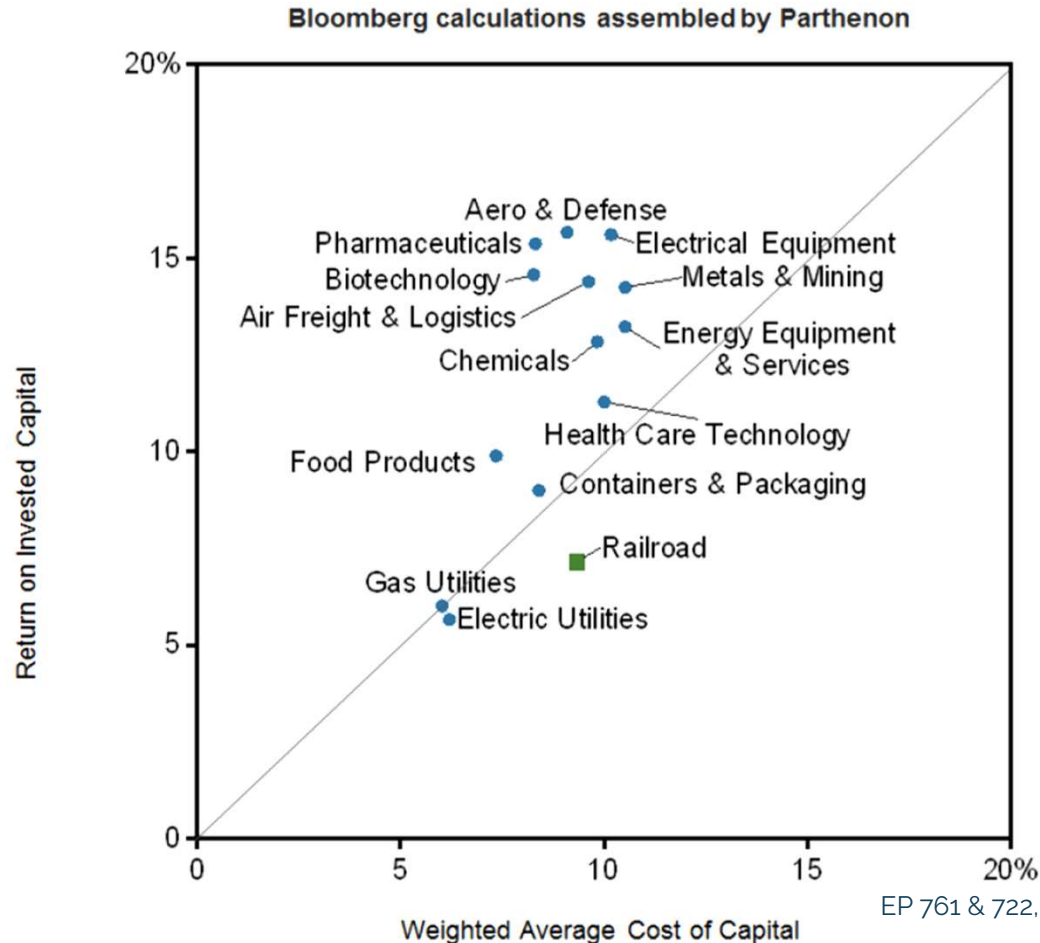
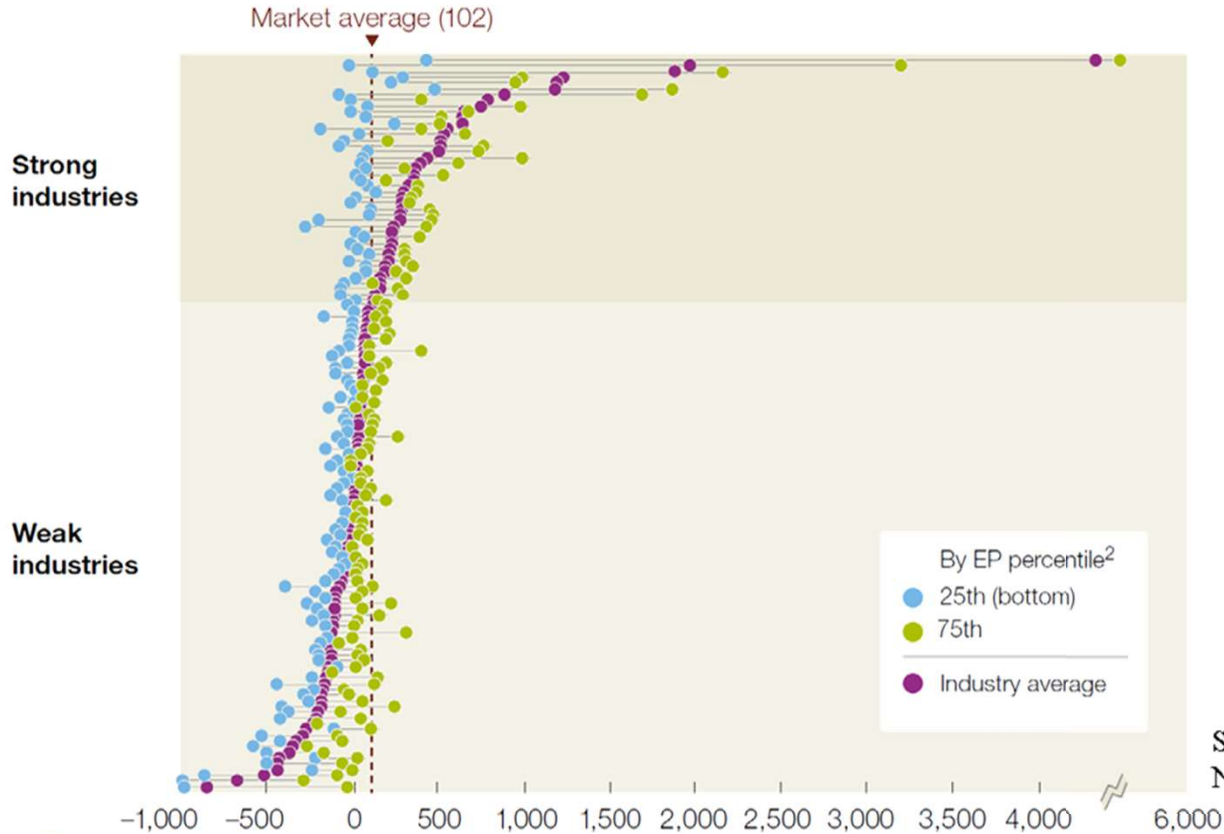


Figure 4: Distribution of Company Profit with Industry



Top 5 industries (no. of companies)

- Diversified metals and mining (46)
- Wireless telecom services (45)
- Pharmaceuticals (40)
- Integrated oil and gas (39)
- Communications equipment (18)

Bottom 5 industries (no. of companies)

- Electric utilities (102)
- Airlines (45)
- Multi-utilities³ (42)
- Independent power producers and energy traders (30)
- Railroads (26)

Source: Bradley *et al.* at Figure 7.

Note: Economic Profit equal zero corresponds to ROI equal COC.