

Attachment C

Above-the-Rail Operations and Below-the-Rail Infrastructure - Cost Analysis

This need to parse these distinctions is best seen when Amtrak reports a Total Assigned Cost of around \$74.4 per train-mile for today's smaller long-distance passenger trains. Yet a 1969 ICCⁱ report to Congressⁱⁱ determined the long-run avoidable cost to average but \$6.5 (\$48.4 in \$2020) per train-mile in an era of longer trains, running twice daily, inclusive of infrastructure and the era's taxed private terminals. UIC research for western European republics suggest an Above-the-Rail cost function of \$29.8 per train-mileⁱⁱⁱ at similar average speeds for a modern 8-car long-distance train configurable^{iv} for a few dollars extra for US operations.

These values largely differ by the degree to which Below-the-Rail infrastructure is included and the scale.

But Amtrak has long fought to survive within a federal policy blind to highway trust fund leveraging, generating Route level Operational Earnings that largely exclude 1 ½ Billion^v of NEC infrastructure costs^{vi} though federal law requires allocation^{vii}. Thus to downgrade amenities costing millions on some routes to fund infrastructure on others is counterproductive as a consumer's "time" can be bought nearly interchangeably through faster infrastructure or amenities that allow for increased Time-Utility while en-route for mobile work, dining, or rest to steer one to the safer option. Instead public investment should occur for Below-the-Rail infrastructure as in other Western republics^{viii} but at a US specific metric as automobile fuel taxes here are but a tenth elsewhere.

Current passenger railroad practice in the United States is far removed from such a Vehicle Operations and Infrastructure division as is used in highways and aviation. Instead accounts are sub-divided by Capital and Expense format whose results combine differently for different types of services. Some of this is an artifact of then Transportation Secretary Volpe's original 1970 plan for Amtrak^{ix} of future federal capital to offset operational costs - a sleight of hand^x needed for the era's politics.

But without actual legislation to require such account level divisions confusion exists, as Amtrak reports a Short-term Operating Loss which is actually just the difference between the total Adjusted Allocated Operating Uses and Adjusted Allocated Operating Sources that is in fact a fully allocated operating loss as it even includes Corporate Common costs as well as good bit of fixed infrastructure and terminal costs in the Route Variable Costs. This is concerning as Public Law 99-272 from 1986 would have rested on the ICC/STB definition that excluded infrastructure in short-term evaluations as a way for legislatures to figure out public service levels and even up until 2009 the FRA had such an understanding^{xi} but has since shifted tack in rulemaking.

What follows is the analysis of various types of passenger rail operations should they be reorganized between public Below-the-Rail costs and an Operator covering Above-the-Rail costs from consumer revenue with the possibility of a profit motive to drive timely delivery, cost containment, and true resource efficiency.

Endnotes:

ⁱ The ICC is the Interstate Commerce Commission, predecessor to the Surface Transportation Board (STB)

ⁱⁱ Interstate Commerce Commission. "Investigation of Costs of Intercity Rail Passenger Service." 1969.

<<https://babel.hathitrust.org/cgi/pt?id=mdp.39015004568708;view=1up;seq=49>>

ⁱⁱⁱ The Direct Costs (Above-the-Rail) of an 8-Car EMU in \$2020 is \$29.8 per train-mile = $\{ [5.5273814 - (0.0192545 \times S) + (0.0000427 \times S^2) \text{ €-ct/seat-km}] \times [\$0.014 (\$2020) \text{ to €-ct (2010)}] \} \times 328 \text{ seats} \times 1.61 \text{ km/mile}$ where: S = 100 (km/h) average speed, UIC, Relationship Between Rail Service Operating Direct Costs and Speed, 2010, <<https://www.shop-ETF.com/en/relationship-between-rail-service-operating-direct-costs-and-speed>>

^{iv} For example a articulated 9-segment Alstom Avelia Horizon, a taller non-tilting cousin of Amtrak's new Acela Avelia Liberty, could transport in its duplex arrangement 280 persons (144 coach passengers in a two-level spaced out 2-1 seating configuration, 56 single person pod coach sleepers, and 40 bedrooms for two) with a central food car and end of consist lounges while earning \$42 per mile at average 187 person occupancy all with the high-speed political optics of its faster cousin. The Above-the-Rail cost might be \$5 above the UIC \$29.8 cost for extra onboard personnel and diesel propulsion while using the NEC terminal maintenance facilities off cycle to nighttime Acela servicing. Combining three of these articulated sets and express cars, generating perhaps a total of \$150 per train-mile of revenue versus about \$115 in Above-the-Rail costs, into one train would be highly efficient way to serve multiple routes in a high-volume star-shaped network where sets interchange overnight at the mid-point of the route and the crews reverse toward home base if the intersecting routes were shorter to allow for schedule pad prior to interchange.

^v The infrastructure cost for just the NEC and NEC Branches is roughly \$1.5 billion annually of Amtrak's \$1.9 billion in Below-the-Rail infrastructure costs, comprised of Infrastructure Asset Line - Steady State Program costs of \$374 million for Track, \$424 million for Bridge and Building, \$97 million for Electric Traction, and \$111 million for Communication and Signaling from: Amtrak, Five Year Infrastructure Asset Line Plan, FY2020 to FY2024, 2019,

<<https://www.amtrak.com/content/dam/projects/dotcom/english/public/documents/corporate/businessplanning/Amtrak-Infrastructure-Asset-Line-Plan-FY20-24.pdf>>, To this value is added an estimated \$500 million NEC portion of facilities infrastructure support, station, risk, policing, and environmental that is logically Below-the-Rail infrastructure from the APT breakdown in Appendix C.

^{vi} "Part of the reason that services on the Northeast Corridor appear more profitable... is Amtrak treats a significant portion (60 percent) of the cost to maintain track in the Northeast Corridor as fixed cost and therefore excludes them for the measures of avoidable (Ed. Operations) costs." US Government Accountability Office, "Financial and Operating Conditions Threaten Amtrak's Long-Term Viability", 1995, <<https://www.gao.gov/products/RCED-95-71>>

^{vii} US CODE TITLE 49—TRANSPORTATION, SUBTITLE V—RAIL PROGRAMS, PART C—PASSENGER TRANSPORTATION, §24318. Costs and revenues (a) Allocation.—Not later than 180 days after the date of enactment of the Passenger Rail Reform and Investment Act of 2015, Amtrak shall establish and maintain internal controls to ensure Amtrak's costs, revenues, and other compensation are appropriately allocated to the Northeast Corridor, including train services or infrastructure, or the National Network, including proportional shares of common and fixed costs. <<https://uscode.house.gov/view.xhtml?req=granuleid%3AUSC-prelim-title49-chapter243&edition=prelim>>

^{viii} Recommended by European Union Directive 91/440 - States to be responsible for Infrastructure (Below-the-Rail) while Operations (Above-the-Rail) are to be run on a commercial basis. Erik Vandenbroele, "Railway Transport Policy in Europe," Japan Railway and Transport Review, #2, June 1994, referenced in Congressional Research Service, Amtrak: Overview and Options - RL30659, January 25, 2001

^{ix} Library of Congress - Congressional Research Service. "Amtrak Profitability: An Analysis of Congressional Expectations at Amtrak's Creation." 2002, <<http://research.policyarchive.org/1446.pdf>>

^x EBITDA is currently in vogue - earnings before Interest, Taxes, Depreciation, and Amortization - but is somewhat misleading when infrastructure is involved as it strips out the cost of capital investments like property, plant, and equipment when owned but not when expensed to operations hence the call for a clear division between infrastructure and operations to find a balance between capital and expense work

^{xi} Short Run - cost that no longer will be incurred one year after a route is eliminated, FRA, 2009, <https://rosap.ntl.bts.gov/view/dot/6273/dot_6273_DS1.pdf>

Table B-2. Fully Allocated Costs by Subfamily, Pre-Audit FY2018 Dollars (Millions)

This table provides the allocated costs of each APT Subfamily.

APT Average Costs FY2018 Dollars (Millions) - Responsibility for Infrastructure and Operations parsed per Highway and Aviation Divisions

Family	Family Name	Subfamily Number	Subfamily Name	Operating Costs (Millions)	Percent of Amtrak Fully Allocated Costs	Operating and Capital Costs (Millions)	% of Operating and Capital
FM_MOW	Maintenance of Way	FM_101	Central Div MoW	\$19.90	0.5%	\$26.30	0.5%
		FM_102	MidAtlantic Div MoW	\$93.20	2.2%	\$150.30	2.7%
		FM_103	New England Div MoW	\$59.10	1.4%	\$85.30	1.5%
		FM_104	New York Div MoW	\$110.10	2.6%	\$140.10	2.5%
		FM_105	MoW Support	\$113.80	2.7%	\$572.60	10.4%
		FM_106	System Gangs	\$8.60	0.2%	\$114.00	2.1%
		FM_107	West Div MoW	\$11.10	0.3%	\$11.20	0.2%
		FM_108	Empire District	\$10.70	0.3%	\$14.70	0.3%
		FM_109	Michigan Line	\$10.30	0.2%	\$10.40	0.2%
FM_MOE	Maintenance of Equipment	FM_201	MoE Turnaround	\$163.00	3.9%	\$163.30	3.0%
		FM_202	MoE Loco Maintenance	\$88.30	2.1%	\$88.50	1.6%
		FM_203	MoE Car Maintenance	\$38.00	0.9%	\$38.00	0.7%
		FM_204	MoE Support	\$39.10	0.9%	\$44.00	0.8%
		FM_205	MoE Multiple	\$186.60	4.4%	\$344.00	6.2%
		FM_206	MoE HSR Maintenance	\$57.60	1.4%	\$58.20	1.1%
		FM_207	MoE Back Shop	\$18.00	0.4%	\$79.10	1.4%
		FM_208	MoE Material Control	\$10.60	0.3%	\$10.60	0.2%
FM_OPS_TRANS	Ops - Transportation	FM_301	On Board Services (OBS)	\$262.70	6.2%	\$262.70	4.8%
		FM_302	T&E	\$438.40	10.4%	\$438.40	7.9%
		FM_303	Yard	\$71.00	1.7%	\$71.20	1.3%
		FM_304	Fuel	\$128.10	3.0%	\$128.10	2.3%
		FM_305	Transportation - Multiple	\$11.50	0.3%	\$11.50	0.2%
FM_OPS_TRANS	Ops - Transportation	FM_306	Train Movement	\$86.70	2.0%	\$86.80	1.6%
		FM_307	Train Movement - Host RR	\$152.30	3.6%	\$160.10	2.9%
		FM_308	Transportation Support	\$77.60	1.8%	\$149.80	2.7%
		FM_309	Power - Electric Traction	\$81.10	1.9%	\$81.10	1.5%
		FM_310	Stations	\$196.90	4.7%	\$196.90	3.6%
FM_SALES_MKTG	Sales and Marketing	FM_401	Sales	\$10.30	0.2%	\$10.30	0.2%
		FM_402	Information & Reservations	\$73.00	1.7%	\$73.00	1.3%
		FM_403	Marketing	\$54.90	1.3%	\$77.40	1.4%
		FM_404	Station and On-Board Technology	\$5.00	0.1%	\$5.00	0.1%
FM_G_A	General and Administrative	FM_601	Corporate Administration	\$144.10	3.4%	\$190.30	3.4%
		FM_602	Centralized Services	\$237.20	5.6%	\$296.40	5.4%
		FM_603	Qualified Mgmt	\$971.50	23.0%	\$1,015.60	18.4%
		FM_604	Direct Customer (Non-NTS)	\$49.40	1.2%	\$154.10	2.8%
		FM_605	Subsidiary	\$39.20	0.9%	\$39.20	0.7%
FM_UTILITIES	Utilities	FM_801	Utilities	\$5.80	0.1%	\$5.80	0.1%
FM_POLIC_E_SAFETY	Police, Environmental & Safety	FM_901	Police	\$58.90	1.4%	\$60.90	1.1%
		FM_902	Emergency Mgmt & Corp Security	\$28.40	0.7%	\$34.40	0.6%
		FM_903	Environmental & Safety	\$7.40	0.2%	\$22.30	0.4%
Grand Total				\$4,229.10	100%	\$5,521.60	100%

Below-the-Rail Infrastructure Investment (Mostly Fixed with Respect to Train Movements)	Above-the-Rail Operations (Mostly Variable with Respect to Train Movements)
X \$26.30	
X \$150.30	
X \$85.30	
X \$140.10	
X \$572.60	
X \$114.00	
X \$11.20	
X \$14.70	
X \$10.40	
	X \$163.30
	X \$88.50
	X \$38.00
	X \$44.00
	X \$344.00
	X \$58.20
	X \$79.10
	X \$10.60
	X \$262.70
	X \$438.40
X \$71.20	
	X \$128.10
	X \$11.50
X \$86.80	
X \$160.10	
X \$149.80	
	X \$81.10
X \$196.90	
	X \$10.30
	X \$73.00
	X \$77.40
	X \$5.00
	X \$190.30
	X \$296.40
	X \$1,015.60
	X \$154.10
X \$39.20	
X \$5.80	
X \$60.90	
	X \$34.40
X \$22.30	
\$1,917.90	\$3,604.00

Reconciliation of APT Formula to Actual FY2018 Costs and Revenues

FY2018 Federal Government Investment after FRA withholding ¹		\$1,924.90	
Below-the-Rail Infrastructure Remaining to be Covered by Operations		(\$7.00)	\$7.00
Actual FY2018 Total Operating, Capital, Interest, Pensions, Tax, and Net Change in Cash ¹	\$5,063.70		
APT Formulaic Cost Above Actual FY2018 Costs	\$457.90	9.0%	\$
Total Above-the-Rail Operations Cost + Remaining Infrastructure Cost			\$ (457.90)
Actual FY2018 Total Revenues (Tickets, State Contributions, Ancillary, and Other Core) ¹			\$ 3,153.10
			\$ 3,386.70

1. Consolidated Financial Statements National Railroad Passenger Corporation and Subsidiaries (Amtrak) for FY2018

Table B-2. Fully Allocated Costs by Subfamily, Pre-Audit FY2019 Dollars (Millions)
 This table provides the allocated costs of each APT Subfamily.

APT Average Costs FY2019 Dollars (Millions) -
 Responsibility for Infrastructure and Operations
 parsed per Highway and Aviation Divisions

Family	Family Name	Subfamily Number	Subfamily Name	Operating Costs (Millions)	Percent of Amtrak Fully Allocated Costs	Operating and Capital Costs (Millions)	% of Operating and Capital
FM_MOW	Maintenance of Way	FM_101	Central Div	\$19.00	0.4%	\$24.60	0.4%
		FM_102	MidAtlantic Div	\$92.10	2.1%	\$156.10	2.7%
		FM_103	New England Div MoW	\$67.30	1.5%	\$93.70	1.6%
		FM_104	New York Div MoW	\$112.30	2.6%	\$156.80	2.7%
		FM_105	MoW	\$117.20	2.7%	\$573.60	9.9%
		FM_106	System	\$5.60	0.1%	\$116.30	2.0%
		FM_107	West Div	\$9.00	0.2%	\$9.20	0.2%
		FM_108	Empire	\$9.90	0.2%	\$13.80	0.2%
		FM_109	Michigan	\$16.10	0.4%	\$16.20	0.3%
FM_MOE	Maintenance of Equipment	FM_201	MoE	\$228.80	5.2%	\$229.10	4.0%
		FM_202	MoE Loco Maintenan	\$90.30	2.1%	\$89.80	1.5%
		FM_203	MoE Car Maintenan	\$45.80	1.0%	\$46.00	0.8%
		FM_204	MoE	\$43.60	1.0%	\$47.90	0.8%
		FM_205	MoE	\$142.30	3.2%	\$367.20	6.3%
		FM_206	MoE HSR Maintenan	\$58.90	1.3%	\$59.40	1.0%
		FM_207	MoE Back	\$21.70	0.5%	\$79.60	1.4%
		FM_208	MoE Material	\$11.30	0.3%	\$11.30	0.2%
FM_OPS_TRANS	Ops - Transportation	FM_301	On Board Services (OBS)	\$277.70	6.3%	\$277.70	4.8%
		FM_302	T&E	\$463.00	10.5%	\$463.20	8.0%
		FM_303	Yard	\$74.60	1.7%	\$74.90	1.3%
		FM_304	Fuel	\$120.30	2.7%	\$120.30	2.1%
		FM_305	Transportation Support	\$4.00	0.1%	\$4.00	0.1%
FM_OPS_TRANS	Ops - Transportation	FM_306	Train	\$91.10	2.1%	\$91.20	1.6%
		FM_307	Train Movement -	\$150.50	3.4%	\$175.60	3.0%
		FM_308	Transportation Support	\$75.90	1.7%	\$132.40	2.3%
		FM_309	Power - Electric	\$80.80	1.8%	\$80.80	1.4%
		FM_310	Stations	\$241.70	5.5%	\$241.80	4.2%
FM_SALES_MKTG	Sales and Marketing	FM_401	Sales	\$12.60	0.3%	\$12.60	0.2%
		FM_402	Information & Marketing	\$70.50	1.6%	\$70.50	1.2%
		FM_403	Marketing	\$61.40	1.4%	\$77.20	1.3%
		FM_404	Station and On-Board	\$0.00	0.0%	\$0.00	0.0%
		FM_405	Service Line Mgmt.	\$35.20	0.8%	\$89.30	1.5%
FM_G_A	General and Administrative	FM_601	Corporate Administrative	\$68.20	1.6%	\$75.70	1.3%
		FM_602	Centralized Services	\$265.90	6.1%	\$408.60	7.0%
		FM_603	Qualified	\$19.70	0.4%	\$64.40	1.1%
		FM_604	Direct Customer	\$24.70	0.6%	\$24.70	0.4%
		FM_605	Claims	\$25.50	0.6%	\$25.50	0.4%
		FM_801	Centralized Expense	\$1,046.70	23.8%	\$1,089.90	18.8%
FM_POLICE_SAFETY	Police, Environmental & Safety	FM_901	Police	\$58.80	1.3%	\$60.40	1.0%
		FM_902	Emergency Mgmt & Safety	\$21.70	0.5%	\$25.50	0.4%
		FM_903	Environmental & Safety	\$8.90	0.2%	\$24.00	0.4%
Grand Total				\$4,229.10	100%	\$5,521.60	100%

Below-the-Rail Infrastructure Investment (Mostly Fixed with Respect to Train Movements)	Above-the-Rail Operations (Mostly Variable with Respect to Train Movements)
X \$24.60	
X \$156.10	
X \$93.70	
X \$156.80	
X \$573.60	
X \$116.30	
X \$9.20	
X \$13.80	
X \$16.20	
	X \$229.10
	X \$89.80
	X \$46.00
	X \$47.90
	X \$367.20
	X \$59.40
	X \$79.60
	X \$11.30
	X \$277.70
	X \$463.20
X \$74.90	
	X \$120.30
	X \$4.00
X \$91.20	
X \$175.60	
X \$132.40	
	X \$80.80
X \$241.80	
	X \$12.60
	X \$70.50
	X \$77.20
	X \$0.00
	X \$89.30
	X \$75.70
	X \$408.60
	X \$64.40
	X \$24.70
X \$25.50	
	X \$1,089.90
X \$60.40	
	X \$25.50
X \$24.00	
\$1,986.10	\$3,814.70

2015 Amtrak North East Corridor (NEC) Future Cost Analysis - Reformatted for Below / Above-the-Rail Costs Divisions

Revenue	INTERCITY SERVICES						REGIONAL SVCS		Total NEC
	Intercity-Express	per Train-Mile	Metropolitan	per Train-Mile	Intercity-Corridor	per Train-Mile	Commuter RRs	per Train-Mile	
Ticket Revenue	\$927,000,000	\$279.73		\$0.00	\$899,400,000	\$159.01	0	\$0.00	\$1,826,400,000
Food & Beverage Revenue	\$37,100,000	\$11.20		\$0.00	\$36,000,000	\$6.36	0	\$0.00	\$73,100,000
<i>(Assumed 4% of ticket revenue)</i>		\$0.00		\$0.00		\$0.00		\$0.00	
Train-Miles	3,313,867	\$1.00		\$1.00	5,656,296	\$1.00	10,114,260	\$1.00	
TOTALREVENUE	\$964,100,000	\$290.93		\$0.00	\$935,400,000	\$165.37	0	\$0.00	\$1,899,500,000
Infrastructure and Operations Costs	Intercity-Express		Metropolitan		Intercity-Corridor		Commuter RRs		Total NEC
Below-the-Rail Infrastructure Costs									
Maintenance-of-Way	\$29,700,000	\$8.96		\$0.00	\$50,700,000	\$8.96	\$107,800,000	\$10.66	\$188,200,000
Maintenance-of-Way - New		\$0.00		\$0.00		\$0.00		\$0.00	—
Police - Road, Yard, & Station	\$5,400,000	\$1.63		\$0.00	\$11,600,000	\$2.05	\$3,800,000	\$0.38	\$20,800,000
Power Directors	\$1,500,000	\$0.45		\$0.00	\$2,500,000	\$0.44	\$2,500,000	\$0.25	\$6,500,000
Electric Propulsion	\$18,300,000	\$5.52		\$0.00	\$31,200,000	\$5.52	\$31,400,000	\$3.10	\$80,900,000
Train Dispatching	\$1,800,000	\$0.54		\$0.00	\$3,000,000	\$0.53	\$25,700,000	\$2.54	\$30,500,000
Station Maintenance & Services	\$38,100,000	\$11.50		\$0.00	\$90,400,000	\$15.98	\$0	\$0.00	\$128,500,000
Yard	\$6,600,000	\$1.99		\$0.00	\$19,100,000	\$3.38	\$0	\$0.00	\$25,700,000
Police, Security, Environmental	\$7,600,000	\$2.29		\$0.00	\$10,000,000	\$1.77	\$0	\$0.00	\$17,600,000
Variable Below-the-Rail Cost	\$109,000,000	\$32.89	\$0	\$0.00	\$218,500,000	\$38.63	\$171,200,000	\$16.93	\$498,700,000
Allocated Remaining - Fixed Below-the-Rail Cost	\$508,214,441	\$153.36	\$0	\$0.00	\$493,085,559	\$87.17	\$0	\$0.00	\$1,001,300,000
Long-Run Below-the-Rail Average Cost - Derived from APT cost centers and Amtrak Infrastructure Asset Line - Steady State Program Totals	\$617,214,441	\$186.25	\$0	\$0.00	\$711,585,559	\$125.80	\$171,200,000	\$16.93	\$1,500,000,000
Above-the-Rail Operations Costs									
Regional Transportation Ops		\$0.00		\$0.00		\$0.00	\$494,100,000	\$48.85	\$494,100,000
Maintenance of Equipment	\$72,600,000	\$21.91		\$0.00	\$101,200,000	\$17.89	\$0	\$0.00	\$173,800,000
Equipment Depreciation	\$104,374,682	\$31.50		\$0.00	\$0	\$0.00	\$0	\$0.00	\$50,700,000
Onboard Services	\$32,000,000	\$9.66		\$0.00	\$18,700,000	\$3.31	\$0	\$0.00	\$50,700,000
Trainmen & Enginemen	\$18,600,000	\$5.61		\$0.00	\$59,300,000	\$10.48	\$0	\$0.00	\$77,900,000
Fuel	\$200,000	\$0.06		\$0.00	\$1,800,000	\$0.32	\$0	\$0.00	\$2,000,000
Other Transportation Ops	\$5,900,000	\$1.78		\$0.00	\$13,700,000	\$2.42	\$0	\$0.00	\$19,600,000
Sales & Marketing, National Ops Costs									
Sales & Marketing	\$58,600,000	\$17.68		\$0.00	\$48,200,000	\$8.52	\$0	\$0.00	\$106,800,000
G&A Costs				\$0.00					
G&A	\$61,400,000	\$18.53		\$0.00	\$86,900,000	\$15.36	\$0	\$0.00	\$148,300,000
Above-the-Rail Subtotal	\$353,674,682	\$106.73	\$0	\$0.00	\$329,800,000	\$58.31	\$494,100,000	\$48.85	\$629,800,000
* Stated Route Operations Cost *									
Route Cost & Allocated Long-Run Average Infrastructure Costs	\$358,300,000	\$108.12		\$0.00	\$548,300,000	\$96.94	\$665,300,000	\$65.78	\$1,571,900,000
	\$970,889,122	\$292.98		\$0.00	\$1,041,385,559	\$184.11	\$665,300,000	\$65.78	\$3,071,900,000
Net Contribution Cost Definition	Intercity-Express		Metropolitan		Intercity-Corridor		Commuter RRs		Total NEC
ABOVE-THE-RAIL NET CONTRIBUTION	\$610,425,318	\$184.20		\$0.00	\$605,600,000	\$107.07	-\$494,100,000	(\$48.85)	\$721,925,318
TOTAL NET CONTRIBUTION	-\$6,789,122	-\$2.05		\$0.00	-\$105,985,559	(\$18.74)	-\$665,300,000	(\$65.78)	-\$778,074,682

Source Data : Table 10: No Action Alternative O&M Cost Summary and Contribution Analysis, Page 31, NEC FUTURE team, 2015 & Amtrak APT Cost Center Reports

FY2017 National Transportation Database Analysis of Commuter Rail Operations by Train-Mile

Name	City	State	NTD ID	Organization Type	Primary UZA			TOS	Vehicle Operations	Vehicle Maintenance	Facility Maintenance	General Administration	Total	Vehicle Revenue		Passenger Cars per Train-Mile	Vehicle Operations and Maintenance per Train-Mile	Vehicle Operations and Maintenance per Car-Mile
					Population	Mode	CR							Hours	Train-Miles			
Central Puget Sound Regional Transit Authority	Seattle	WA	00040	Independent Pu	3,059,393	CR	PT	\$15,520,339	\$11,460,893	\$10,048,568	\$8,472,362	\$45,502,162	63,935	340,503	5.8	\$79.24	\$13.65	
Massachusetts Bay Transportation Authority	Boston	MA	10003	Independent Pu	4,181,019	CR	PT	\$257,361,456	\$114,094,542	\$4,307,122	\$23,277,345	\$399,040,465	799,152	4,841,871	5.3	\$76.72	\$14.48	
Connecticut Department of Transportation	Newington	CT	10102	State Governme	924,859	CR	PT	\$12,834,471	\$8,439,686	\$4,241,839	\$4,630,331	\$30,146,327	38,230	608,171	3.5	\$34.98	\$10.07	
Northern New England Passenger Rail Authority	Portland	ME	10115	Independent Pu	203,914	CR	PT	\$9,988,116	\$7,825,358	\$1,937,119	\$2,045,771	\$21,796,364	69,698	451,371	4.9	\$39.47	\$8.12	
Metro-North Commuter Railroad Company, dba: MTA	New York	NY	20078	Subsidiary Unit	18,351,295	CR	DO	\$408,076,528	\$281,229,165	\$317,272,869	\$213,654,739	\$1,220,233,301	2,099,132	10,722,397	7.2	\$64.29	\$8.97	
New Jersey Transit Corporation	Newark	NJ	20080	Other Publicly-C	18,351,295	CR	DO	\$459,325,398	\$228,355,827	\$140,118,603	\$143,475,789	\$971,275,617	1,881,455	9,602,851	6.8	\$71.61	\$10.57	
MTA Long Island Rail Road	Jamaica	NY	20100	Subsidiary Unit	18,351,295	CR	DO	\$481,179,011	\$438,547,959	\$261,361,580	\$180,863,778	\$1,361,952,328	2,125,167	8,644,444	8.8	\$106.40	\$12.13	
Southeastern Pennsylvania Transportation Authority	Philadelphia	PA	30019	Independent Pu	5,441,567	CR	DO	\$147,837,067	\$40,873,107	\$52,296,779	\$28,639,262	\$269,646,215	917,500	5,273,736	3.9	\$35.78	\$9.20	
Maryland Transit Administration	Baltimore	MD	30034	State Governme	2,203,663	CR	PT	\$78,621,564	\$28,466,291	\$6,183,081	\$29,320,829	\$142,591,765	169,957	1,297,422	5.3	\$82.54	\$15.46	
Pennsylvania Department of Transportation	Harrisburg	PA	30057	State Governme	5,441,567	CR	PT	\$13,869,116	\$14,444,601	\$3,621,417	\$19,309,427	\$51,244,561	74,436	844,474	5.0	\$33.53	\$6.71	
Virginia Railway Express	Alexandria	VA	30073	Independent Pu	4,586,770	CR	PT	\$36,099,622	\$10,803,769	\$5,122,457	\$21,953,812	\$73,979,660	74,767	404,459	6.5	\$115.97	\$17.79	
Delaware Transit Corporation	Dover	DE	30075	Independent Pu	5,441,567	CR	PT	\$0	\$0	\$0	\$65,250	\$65,250	0	404,459	6.5	\$0.00	\$0.00	
South Florida Regional Transportation Authority	Pompano Bea	FL	40077	Independent Pu	5,502,379	CR	PT	\$31,930,913	\$19,335,445	\$24,982,353	\$14,677,076	\$90,925,787	121,880	1,167,777	3.1	\$43.90	\$14.13	
Regional Transportation Authority	Nashville	TN	40159	Independent Pu	969,587	CR	PT	\$921,388	\$1,346,561	\$459,198	\$1,525,513	\$4,252,660	7,890	89,434	2.6	\$25.36	\$9.92	
Central Florida Commuter Rail	Sanford	FL	40232	State Governme	1,510,516	CR	PT	\$6,798,760	\$8,865,562	\$12,033,975	\$6,410,086	\$34,108,383	25,678	308,267	2.2	\$50.81	\$23.04	
Metro Transit	Minneapolis	MN	50027	Subsidiary Unit	2,650,890	CR	PT	\$4,751,704	\$3,015,993	\$1,992,879	\$5,501,224	\$15,261,800	14,482	148,780	3.8	\$52.21	\$13.66	
Northern Indiana Commuter Transportation District	Chesterton	IN	50104	Independent Pu	8,608,208	CR	DO	\$21,898,294	\$13,039,580	\$3,745,889	\$9,774,508	\$48,458,271	115,659	795,717	5.7	\$43.91	\$7.76	
Northeast Illinois Regional Commuter Railroad Corpora	Chicago	IL	50118	Independent Pu	8,608,208	CR	DO	\$310,063,192	\$171,032,990	\$141,792,010	\$119,832,130	\$742,720,322	1,437,803	7,201,311	6.4	\$66.81	\$10.52	
Fort Worth Transportation Authority	Fort Worth	TX	60007	Independent Pu	5,121,892	CR	PT	\$322,785	\$5,513	\$335,275	\$1,525,816	\$2,189,389	0	0	6.4	\$0.00	\$0.00	
Dallas Area Rapid Transit	Dallas	TX	60056	Independent Pu	5,121,892	CR	PT	\$10,816,263	\$4,518,374	\$7,183,110	\$5,749,751	\$28,267,498	72,469	585,899	2.8	\$26.17	\$9.19	
Rio Metro Regional Transit District	Albuquerque	NM	60111	Independent Pu	741,318	CR	PT	\$8,850,436	\$5,990,425	\$7,136,469	\$6,453,532	\$28,430,862	35,706	485,839	2.9	\$30.55	\$10.68	
Utah Transit Authority	Salt Lake City	UT	80001	Independent Pu	1,021,243	CR	DO	\$12,042,361	\$6,841,622	\$5,348,535	\$10,206,211	\$34,438,729	154,744	1,343,424	4.0	\$14.06	\$3.51	
Denver Regional Transportation District	Denver	CO	80006	Independent Pu	2,374,203	CR	PT	\$26,379,241	\$5,856,777	\$3,070,656	\$3,929,438	\$39,236,112	71,128	1,327,258	2.0	\$24.29	\$12.14	
North County Transit District	Oceanside	CA	90030	Independent Pu	2,956,746	CR	PT	\$4,816,130	\$4,276,976	\$2,976,825	\$5,980,021	\$18,049,952	34,422	287,990	5.0	\$31.57	\$6.30	
Peninsula Corridor Joint Powers Board dba: Caltrain	San Carlos	CA	90134	Independent Pu	3,281,212	CR	PT	\$43,818,371	\$23,147,609	\$15,730,174	\$44,613,645	\$127,309,799	217,327	1,390,674	5.4	\$48.15	\$8.94	
Southern California Regional Rail Authority dba: Metro	Los Angeles	CA	90151	Independent Pu	12,150,996	CR	PT	\$76,243,620	\$38,562,545	\$36,726,147	\$70,487,364	\$222,019,676	359,520	2,816,066	4.8	\$40.77	\$8.55	
Altamont Corridor Express	Stockton	CA	90182	Independent Pu	370,583	CR	PT	\$6,713,804	\$3,045,413	\$3,754,736	\$8,070,154	\$21,584,107	28,013	183,300	6.2	\$53.24	\$8.52	
								\$2,487,079,950	\$1,493,422,583	\$1,073,779,665	\$990,445,164	Train-Miles 61,567,894		Average	\$64.65			
								Costs:						Diesel Powered Long-Route (Low Three Average)		\$21.86		
Note: In some cases Vehicle Operations includes Infrastructure Access								Total Vehicle Operations and Maintenance				\$3,980,502,533						
								Total Facilities and Administration				\$2,064,224,829						
								Revenues and Investments:				Percent of Total						
								Passenger Fares				\$3,200,533,321		53%				
								Proposed Federal Investment (\$17.2/TM)				\$953,070,999		16%		Estimated routes over 50 miles are 90% of Train-miles		
								Proposed Remaining Local Sponsor Share				\$1,891,123,042		31%				

Above-the-Rail and Below-the-Rail Financial Analysis

AAF/Brightline SEC Filing (Made Parametric) Likely Higher than Actual	Parametric	Benchmark
Miami to Orlando One-way Route (Miles)	235	235
Average Schedule Speed (MPH)	74.4	74.4
Utilization Miles per Hour - Full Schedule Cycle	58.9	58.9
Est. Cycles per Day per each Equipment Set	1.5	1.5
Trip Time (Hours)	3.16	3.16
Departure Terminal Dwell (Hours)	1.08	1.08
Turning Terminal Dwell (Hours)	0.58	0.58
Total Round Trip Cycle Time	8.0	8.0
Average Trainset Miles per Day at Given Cycles per Day	706	706
Train-Miles (Millions)	2.747	2.747
Train-Hours	23,329	23,329
Seats per Train-Mile	572	348
Seat-Miles (Millions)	1,571.101	955.845
Car-Miles (Millions)	32.960	19.227
Equipment Sets	10	10
Annual Train-miles per Set (Millions)	0.275	0.275
Locomotives per Set	2	2
First Class Coaches per Set	4	2
Seats per Car	50	50
Business Class Coaches per Set	6	4
Seats per Car	62	62
Café Cars per Set	2	1
Total Car per Set	12	7
Stated Total Operating Labor		\$45.9
<u>Corporate, Station, and Parking Garage Operating Expense</u>		
Est. Station and Parking Garage Operating Labor Portion	\$14.0	\$14.0
Est. Corporate Operating Labor Portion	\$10.6	\$10.6
Marketing & Advertising	\$2.2	\$2.2
Station Expense	\$3.6	\$3.6
Information Technology	\$7.9	\$7.9
Parking Garage	\$5.6	\$5.6
Other G & A	\$2.8	\$2.8
Total	\$46.7	\$46.7
<u>Above-the-Rail Operating and Maintenance Expense</u>		
Est. Rail Operations Labor	\$27.8	\$21.3
Maintenance of Equipment	\$16.4	\$11.3
Fuel	\$22.3	\$16.4
Maintenance Facility	\$3.5	\$3.5
Est. Equipment Development & Testing	\$172.5	
Est. Equipment Cost Variable wrt Pieces	\$525.0	
Est. Total Equipment Cost	\$697.5	\$549.0
Est. Bond Equiv. Interest	6.50%	6.50%
Depreciation Length (Years)	30	30
Est. Equipment Lease Annual Payment/ Depreciation	\$54.2	\$42.7
Est. VMA - Heavy Maintenance and Parts Contract	\$24.0	\$14.0
Total	\$148.3	\$109.2

<u>Sales and Consumables Expense</u>		
Credit Card Fees (Revised to be 2.6% of Above-the-Rail & Consumables)	\$5.7	\$4.5
Passenger Meal Costs (Est. 30% Variable)	\$17.9	\$12.0
Complimentary Meal Costs (Est. 30% Variable)	\$7.6	\$5.1
Total	\$31.3	\$21.6
<u>Below-the-Rail Infrastructure Maintenance & Risk Expense</u>		
Maintenance of Way	\$18.5	\$18.5
Insurance (Risk of Infrastructure Use)	\$7.7	\$7.7
Total	\$26.2	\$26.2
<u>Below-the-Rail Infrastructure Capital Depreciation</u>		
Est. Bond Equiv. Interest	4.00%	4.00%
Depreciation Length (Years)	50	50
Railway Track and Signal	\$2,567.0	\$2,567.0
Railway Track and Signal Depreciation (Annually)	\$119.5	\$119.5
Land Lease - Right of Way	\$8.3	\$8.3
Total	\$127.8	\$127.8
<u>Above-the-Rail Train Operations and Common Expense Analysis (Long-run Average Cost)</u>		
Above-the-Rail - Train Operating and Equipment Expense (Train-mile)	\$53.99	\$39.75
per Average Car-Mile	\$4.50	\$5.68
per Incremental Car-Mile	\$2.85	
per Average Seat-Mile	\$0.094	\$0.114
Above-the-Rail - Sales and Consumables Expense (Train-mile)	\$11.38	\$7.86
Common - Parking, Station Ops., and Corporate Expense (Train-mile)	\$17.00	\$17.00
only Est. Parking Garage Costs per (Train-mile)	\$3.31	\$3.31
Total Operating, Sales, Consumables, and Common (Train-mile)	\$82.37	\$64.61
per Average Car-Mile	\$6.86	\$9.23
per Incremental Car-Mile	\$3.55	
per Average Seat-mile	\$0.144	\$0.186
per Person-Mile at 60% Occupancy incl. Parking	\$0.240	\$0.309
<u>Below-the-Rail Infrastructure Investment Analysis (Long-run Average Cost)</u>		
Below-the-Rail Infrastructure Maintenance (Train-mile)	\$9.54	\$9.54
Below-the-Rail Infrastructure Capital Depreciation (Train-mile)	\$46.53	\$46.53
per Person-mile at 60% Occupancy	\$0.163	\$0.269
<u>Combined All Transportation Business Analysis (Long-run Average Cost)</u>		
Required Total Revenue per Average Person-mile at 60% Occupancy	\$0.403	\$0.578
Projected - All Business Total Annual Cost Including Infrastructure	\$380.25	\$331.47
Projected - All Business Total Annual Revenue	\$656.75	\$399.56
<u>Analysis with Public Investment for Below-the-Rail Infrastructure Equivalent to Highway Revenue Gap</u>		
<u>Proposed Below-the-Rail Tax Credits for Infrastructure Investment Equivalent to Highway Revenue Gap</u>		
Proposed Federal Tax Credit per Passenger Train-Mile	\$17.20	\$17.20
Proposed Federal Tax Credit per Intermodal Freight Train-Mile	\$21.00	\$21.00
<u>Remaining Below-the-rail Infrastructure to be covered by Direct Consumer Revenue after Tax Credit</u>		
Remaining Below-the-Rail Infrastructure Investment (Train-mile)	\$17.87	\$17.87
per Person-mile at 60% Occupancy	\$0.052	\$0.086
Required Total Revenue per Average Person-mile at 60% Occupancy	\$0.292	\$0.395

Southwest Chief Route - Chicago to Los Angeles:

Number of Runs per Day per Direction	1
Revenue Passenger Cars per Train-mile	6
Total Passenger Cars per Train-mile	8
Baggage / Express Pallet Cars per Train-mile	1
Trailer Express Cars per Train-mile	0
Total Equivalent Cars per Train-mile	9

Capital Assumptions:

Infrastructure Interest Rate - Federally Secured RRIF Note	4.4%
Infrastructure Term (Years)	30
Equipment Bond Interest Rate - Owner Equity Backing	4.4%
Equipment Bond Term (Years)	24
Owner Equity Assumed Rate	20.0%
Owner Equity Percentage of Equipment Borrowing	10%
Owner Equity Repayment Term (Years)	15

Below-The-Rail Infrastructure:

Mid-Segment Route Recapitalization	\$50,000,000
Intermediate Station Platform Work	\$2,000,000
Infrastructure Capital Total	<u>\$52,000,000</u>
Infrastructure Repayment (Yearly)	\$3,021,939
Base Infrastructure Access Fee/Lease for Route (Yearly)	\$7,440,525
Additional Mid-Segment Infrastructure Access Fee/Lease (Yearly)	\$3,000,000
Infrastructure Access Fee/Lease for Shared Passenger Terminal Trackage (Yearly)	\$4,320,000
Infrastructure Access Fee/Lease for Passenger Terminal Platforms, ADA, & Security (Yearly)	\$6,480,000
Large Loss Insurance Subscription (\$0.007/PSG-MI) (Yearly)	\$2,133,764

Total Infrastructure Lease (Yearly)	\$26,396,228	per Train-mile	\$15.96
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Equipment Capital Depreciation/Reinvestment:

Complete Consist Equipment Sets Required - For Schedule and Daily Turns	5.0
Complete Consist Equipment Sets Required - 120% for Availability Coverage of Daily Runs	6.0
Depreciated Locomotive	\$600,000
Total Required	2
New 125 MPH/200 KPH Capable Locomotive	\$6,500,000
Total Required	0
New 93 MPH/150 KPH Capable Locomotive	\$4,500,000
Total Required	0
Depreciated Sleeper - Crew Dorm	\$600,000
Total Required	1
Depreciated Sleeper	\$600,000
Total Required	2
New Uprated Sleeper	\$3,500,000
Total Required	0
Depreciated Coach	\$600,000
Total Required	3
New Uprated Coach	\$3,300,000
Total Required	0
Depreciated Food Service / Lounge	\$600,000
Total Required	2
Baggage / Pallet Express	\$1,800,000
Total Required	1
Express Trailer Intermodal (Articulated Railcar holding 2 Conventional Truck Trailers)	\$375,000

This configuration is to check values against a FY18 fiscal baseline and average train consist

Total Required		0		
Equipment Capital Total		\$46,800,000		
Equipment Bond Repayment (Yearly)		\$2,755,560		
Equipment Equity Payment (Yearly)		\$834,140		
Equipment Repayment (Yearly)		\$3,589,701	per Train-mile	\$2.17
Operations:				
Trip Length (Miles)		2,265		
Trip Length (Hours)		44.0		
Train miles (Yearly)		1,653,450		
Fuel Use per Trainmile (Gallons)		2.15		
Cost of Diesel		\$3.00		
Total Diesel Cost (Yearly)		\$10,664,753	per Train-mile	\$6.45
T&E Crew - Type II 12 Hour Segments - Engineer, Asst. Eng., Conductor, two Asst. Cond.				
Total Route Type II Crew Calls		7.5		
T&E Total Cost per Crew Call with Burden and Per Diem		\$2,125		
Total T&E Costs - Type II Segments		\$11,643,257		
T&E Crew - Type I 6 Hour Turn back Segments - Engineer, Conductor, two Asst. Conductors				
Total Route Type I Crew Calls (Turn back)		3.0		
T&E Total Cost per Crew Call with Burden and Pier Diem		\$1,140		
Total T&E Costs - Type II Segments		\$2,499,269	per Train-mile	\$8.55
OBS Crew - Los Angeles Base				
Total Crew Members per Crew Tour		9		
Total Crew Tours		365		
Total OBS Cost per Round Trip Crew Tour with Burden and Per Diem		\$2,555		
Total OBS Costs		\$7,932,511	per Train-mile	\$4.80
Mechanical Daily Turns and Inspection Crew - Chicago and Los Angeles				
Mechanical Cost per Employee Hour with Burden and Supervision		\$63		
Mechanical Hours per Turn per Passenger Car		5.0		
Mechanical Hours per Turn per Express Car		0.5		
Mechanical Daily Turn Total Labor Cost		\$2,084,538		
Mechanical Carbody Parts per Passenger Car (Yearly)		\$30,000		
Total Carbody Parts (Yearly)		\$1,620,000		
Mechanical Yard Tools, Utilities, and Tool Amortization		\$300,000		
Holsters and Yard Operations		\$584,000		
Total Mechanical Costs - Daily Terminal Running Maintenance Only		\$4,588,538	per Train-mile	\$2.78
Car Cleaning and Consumables - Chicago and Los Angeles				
Cleaning Cost per Employee Hour with Burden and Supervision		\$41		
Cleaning Hours per Turn per Passenger Car		3.0		
Cleaning Total Labor Cost		\$712,663		
Cleaning Supplies and Expendables		\$525,600		
Food Cost of Goods Sold		\$6,472,351		
Total Cleaning and Consumable Costs		\$7,710,614	per Train-mile	\$4.66
Locomotive Heavy Reliability Centered Maintenance per Mile				
Car Running Gear Heavy Reliability Centered Maintenance per Mile		\$0.27		
Prorated Heavy Reliability Centered Maintenance (Fleet Per Year)		\$7,457,060	per Train-mile	\$4.51
Passenger Car Interior and Systems Overhaul (1 Million Miles)				
Locomotive Exterior and Systems Overhaul (1 Million Miles)		\$250,000		
Prorated Car Overhaul (Fleet per Year)		\$6,779,145	per Train-mile	\$4.10

Express Trailer Intermodal Terminal				
Trailer Check-In and Loading Crew (1 Crew per day 10 hour shift)	\$369,200			
Loading Equipment Lease, Fuel, and Utilities	\$304,000			
(2) 1.5 Acre Loading Yards (40 Trailer Total Capacity) Yearly Ground Lease and Improvements	\$1,140,000			
	\$0		per Train-mile	\$0.00

Route Costs:

Route Management Office - Operations, Maintenance, and Planning	\$1,100,000			
Road Foremen Offices -T&E Bases	\$630,000			
Reservation Website - Fee for Phone Assistance	\$1,200,000			
Small Loss Insurance, Legal Costs, and Claims	\$1,800,000			
Staffed Intermediate Station Agents and Contract Local Police	\$2,464,000			
Advertising, Inconvenience, and Promotional Rate Write-off	\$800,000			
Passenger Credit Card Processing Fees at Est. 2.1% (Yearly)	\$1,126,133			
Mail & Express Agent at 1.5%	\$0			
	\$9,120,133		per Train-mile	\$5.52

Total Projected Revenue	\$53,625,365	PCT	per Train-mile	\$32.43
Total Short-Term Direct Cost (Operations, Consumables, and No Re-Investment)	\$78,835,803	68%	per Train-mile	\$47.68
Total Above-the-Rail Cost (Operations, Consumables, and Equipment Re-Investment)	\$71,984,979	74%	per Train-mile	\$43.54
Total Below-the-Rail Costs (Infrastructure - Leases, Risk, and Re-Investment)	\$26,396,228		per Train-mile	\$15.96

Passenger Revenue:

<u>Current Coach - To be Rebranded CoachPlus (2:2 Seating)</u>				
	\$0.100	\$0.10 to \$0.14, Priced per Person		
Passenger Car Seating Capacity	74			
Assumed Occupancy Rate	59%			
Average Passengers per Car	43.7			
Total Train Revenue Cars in this Service	3.0			
Revenue from Service Type	\$21,656,888		per Train-mile	\$13.10
 <u>Uprated Club Coach (2:1 Seating) (AVME)</u>				
	\$0.220	\$0.17 to \$0.25, 1 or 2 People per Party		
Passenger Car Seating Capacity	64			
Assumed Occupancy Rate	59%			
Imputed Number of Travel Parties per Car	27.2			
Total Train Revenue Cars in this Service	0.0			
Revenue from Service Type	\$0		per Train-mile	\$0.00
 <u>Current Sleeper / Crew Dorm</u>				
	\$0.330	\$0.30 to \$0.50, 1 or 2 People per Party		
Roomette Average Fare (AVME)				
Number of Roomettes per Car	8.0			
Assumed Room Occupancy Rate	80%			
Imputed Number of Travel Parties per Car	6.4			
Total Train Revenue Cars in this Service	1.0			
Revenue from Service Type	\$3,492,086		per Train-mile	\$2.11
 <u>Current Sleeping Car</u>				
	\$0.330	\$0.30 to \$0.50, 1 or 2 People per Party		
Roomette Average Fare (AVME)				
Number of Roomettes per Car	13.0			
'Bedroom Average Fare (AVME)	\$0.680	Obsv. Constrained Supply Market Rate		
Number of Bedrooms per Car	5.0			
Accessible / Family Bedrooms average Fare (AVME)	\$0.500	\$0.46 to \$0.54, 1 or 3 People per Party		
Number of Accessible / Family Bedrooms per Car	2.0			
Assumed Room Occupancy Rate	80%			
Imputed Number of Travel Parties per Car	16.0			
Total Train Revenue Cars in this Service	2.0			
Revenue from Service Type	\$22,989,569		per Train-mile	\$13.90

Uprated Sleeping Car

Bedroom Average Fare (AVME)	\$0.600	\$0.54 to \$0.68, 1 or 3 People per Party	
Number of Bedrooms per Car	6.0		
Compartment Average Fare (AVME)	\$0.650	\$0.54 to \$0.70, 1 or 2 People per Party	
Number of Compartments per Car	8.0		
Accessible / Family Bedrooms average Fare (AVME)	\$0.500	\$0.46 to \$0.54, 1 or 3 People per Party	
Number of Accessible / Family Bedrooms per Car	2.0		
Assumed Room Occupancy Rate	80%		
Imputed Number of Travel Parties per Car	12.8		
Total Train Revenue Cars in this Service	0.0		
Revenue from Service Type	\$0	per Train-mile	\$0.00
 <u>Food Service Revenue</u>			
Revenue from Service Type	\$5,486,822	per Train-mile	\$3.32
 <u>Mail & Express Revenue:</u>			
Trailer Capacity by STB Train Length Limit Decision	42		
Trailer Capacity by Equipment Operated	0		
Market Single Driver OTR Rate (Average-2019 Nationwide Contract Rate)	\$2.20		
Market Team Driver OTR Rate (Estimated Average-2019 Nationwide Contract Rate)	\$2.50		
Assumed Sell Rate	85%		
Backhaul Discount	30%		
Assumed Truck Drayage Cost - Each End	\$500		
Intermodal Conversion Difference - May Actually be a Premium with Time Difference	\$200		
Average Express Trip Rate	\$2,733		
Average Express Rate Per-Mile	\$1.21		
Revenue from Service Type	\$0	per Train-mile	\$0.00
Total Revenue	\$53,625,365	per Train-mile	\$32.43
Passenger Miles per Train-mile - Coach (From Revenue Calculations)	131		
Passenger Miles per Train-mile - Sleeper (From Revenue Calculations)	53		
Passenger Miles per Trainmile - Total	184		
Total Passenger Miles (From Revenue Calculations)	304,823,428		
Assumed Passengers per Travel Party	1.39		
"Quant" rate of Equivalent Interstate Highway Investment per Person-Mile	\$0.096		
Earned Equivalent "Quant" rate	\$29,263,049	per Train-mile	\$17.70
Earned Equivalent is Greater than Proposed Below-the-Rail Investment Level			YES

Southwest Chief Route - Chicago to Los Angeles:

Number of Runs per Day per Direction	1
Revenue Passenger Cars per Train-mile	9
Total Passenger Cars per Train-mile	11
Baggage / Express Pallet Cars per Train-mile	1
Trailer Express Cars per Train-mile	0
Total Equivalent Cars per Train-mile	12

Capital Assumptions:

Infrastructure Interest Rate - Federally Secured RRIF Note	4.4%
Infrastructure Term (Years)	30
Equipment Bond Interest Rate - Owner Equity Backing	4.4%
Equipment Bond Term (Years)	24
Owner Equity Assumed Rate	20.0%
Owner Equity Percentage of Equipment Borrowing	10%
Owner Equity Repayment Term (Years)	15

Below-The-Rail Infrastructure:

Mid-Segment Route Recapitalization	\$50,000,000
Intermediate Station Platform Work	\$2,000,000
Infrastructure Capital Total	<u>\$52,000,000</u>
Infrastructure Repayment (Yearly)	\$3,021,939
Base Infrastructure Access Fee/Lease for Route (Yearly)	\$7,440,525
Additional Mid-Segment Infrastructure Access Fee/Lease (Yearly)	\$3,000,000
Infrastructure Access Fee/Lease for Shared Passenger Terminal Trackage (Yearly)	\$4,320,000
Infrastructure Access Fee/Lease for Passenger Terminal Platforms, ADA, & Security (Yearly)	\$6,480,000
Large Loss Insurance Subscription (\$0.007/PSG-MI) (Yearly)	\$2,914,371

Total Infrastructure Lease (Yearly)	\$27,176,835	per Train-mile	\$16.44
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Equipment Capital Depreciation/Reinvestment:

Complete Consist Equipment Sets Required - For Schedule and Daily Turns	5.0
Complete Consist Equipment Sets Required - 120% for Availability Coverage of Daily Runs	6.0
Depreciated Locomotive	\$600,000
Total Required	0
New 125 MPH/200 KPH Capable Locomotive	\$6,500,000
Total Required	2
New 93 MPH/150 KPH Capable Locomotive	\$4,500,000
Total Required	0
Depreciated Sleeper - Crew Dorm	\$600,000
Total Required	1
Depreciated Sleeper	\$600,000
Total Required	2
New Uprated Sleeper	\$3,500,000
Total Required	2
Depreciated Coach	\$600,000
Total Required	2
New Uprated Coach	\$3,300,000
Total Required	2
Depreciated Food Service / Lounge	\$600,000
Total Required	2
Baggage / Pallet Express	\$1,800,000
Total Required	1
Express Trailer Intermodal (Articulated Railcar holding 2 Conventional Truck Trailers)	\$375,000

This configuration is to check values against a FY18 fiscal baseline and a partially refurbished and expanded train consist

Total Required		0		
Equipment Capital Total		\$195,600,000		
Equipment Bond Repayment (Yearly)		\$11,516,829		
Equipment Equity Payment (Yearly)		\$3,486,279		
Equipment Repayment (Yearly)		\$15,003,108	per Train-mile	\$9.07
Operations:				
Trip Length (Miles)		2,265		
Trip Length (Hours)		44.0		
Train miles (Yearly)		1,653,450		
Fuel Use per Trainmile (Gallons)		2.6		
Cost of Diesel		\$3.00		
Total Diesel Cost (Yearly)		\$12,896,910	per Train-mile	\$7.80
T&E Crew - Type II 12 Hour Segments - Engineer, Asst. Eng., Conductor, two Asst. Cond.				
Total Route Type II Crew Calls		7.5		
T&E Total Cost per Crew Call with Burden and Per Diem		\$2,125		
Total T&E Costs - Type II Segments		\$11,643,257		
T&E Crew - Type I 6 Hour Turn back Segments - Engineer, Conductor, two Asst. Conductors				
Total Route Type I Crew Calls (Turn back)		3.0		
T&E Total Cost per Crew Call with Burden and Pier Diem		\$1,140		
Total T&E Costs - Type II Segments		\$2,499,269	per Train-mile	\$8.55
OBS Crew - Los Angeles Base				
Total Crew Members per Crew Tour		11		
Total Crew Tours		365		
Total OBS Cost per Round Trip Crew Tour with Burden and Per Diem		\$2,555		
Total OBS Costs		\$10,265,602	per Train-mile	\$6.21
Mechanical Daily Turns and Inspection Crew - Chicago and Los Angeles				
Mechanical Cost per Employee Hour with Burden and Supervision		\$63		
Mechanical Hours per Turn per Passenger Car		5.0		
Mechanical Hours per Turn per Express Car		0.5		
Mechanical Daily Turn Total Labor Cost		\$2,779,384		
Mechanical Carbody Parts per Passenger Car (Yearly)		\$30,000		
Total Carbody Parts (Yearly)		\$2,160,000		
Mechanical Yard Tools, Utilities, and Tool Amortization		\$300,000		
Holsters and Yard Operations		\$584,000		
Total Mechanical Costs - Daily Terminal Running Maintenance Only		\$5,823,384	per Train-mile	\$3.52
Car Cleaning and Consumables - Chicago and Los Angeles				
Cleaning Cost per Employee Hour with Burden and Supervision		\$41		
Cleaning Hours per Turn per Passenger Car		3.0		
Cleaning Total Labor Cost		\$979,911		
Cleaning Supplies and Expendables		\$722,700		
Food Cost of Goods Sold		\$8,145,081		
Total Cleaning and Consumable Costs		\$9,847,692	per Train-mile	\$5.96
Locomotive Heavy Reliability Centered Maintenance per Mile				
Car Running Gear Heavy Reliability Centered Maintenance per Mile		\$0.27		
Prorated Heavy Reliability Centered Maintenance (Fleet Per Year)		\$5,357,178	per Train-mile	\$3.24
Passenger Car Interior and Systems Overhaul (1 Million Miles)				
Locomotive Exterior and Systems Overhaul (1 Million Miles)		\$250,000		
Prorated Car Overhaul (Fleet per Year)		\$7,936,560	per Train-mile	\$4.80

Express Trailer Intermodal Terminal				
Trailer Check-In and Loading Crew (1 Crew per day 10 hour shift)	\$369,200			
Loading Equipment Lease, Fuel, and Utilities	\$304,000			
(2) 1.5 Acre Loading Yards (40 Trailer Total Capacity) Yearly Ground Lease and Improvements	\$1,140,000			
	\$0		per Train-mile	\$0.00

Route Costs:

Route Management Office - Operations, Maintenance, and Planning	\$1,100,000			
Road Foremen Offices -T&E Bases	\$630,000			
Reservation Website - Fee for Phone Assistance	\$1,200,000			
Small Loss Insurance, Legal Costs, and Claims	\$1,800,000			
Staffed Intermediate Station Agents and Contract Local Police	\$2,464,000			
Advertising, Inconvenience, and Promotional Rate Write-off	\$800,000			
Passenger Credit Card Processing Fees at Est. 2.1% (Yearly)	\$1,976,166			
Mail & Express Agent at 1.5%	\$0			
	\$9,970,166		per Train-mile	\$6.03

Total Projected Revenue	\$94,103,140	PCT	per Train-mile	\$56.91
Total Short-Term Direct Cost (Operations, Consumables, and No Re-Investment)	\$86,680,542	109%	per Train-mile	\$52.42
Total Above-the-Rail Cost (Operations, Consumables, and Equipment Re-Investment)	\$91,243,125	103%	per Train-mile	\$55.18
Total Below-the-Rail Costs (Infrastructure - Leases, Risk, and Re-Investment)	\$27,176,835		per Train-mile	\$16.44

Passenger Revenue:

<u>Current Coach - To be Rebranded CoachPlus (2:2 Seating)</u>	\$0.100	\$0.10 to \$0.14, Priced per Person		
Passenger Car Seating Capacity	74			
Assumed Occupancy Rate	59%			
Average Passengers per Car	43.7			
Total Train Revenue Cars in this Service	2.0			
Revenue from Service Type	\$14,437,925		per Train-mile	\$8.73
<u>Uprated Club Coach (2:1 Seating) (AVME)</u>	\$0.220	\$0.17 to \$0.25, 1 or 2 People per Party		
Passenger Car Seating Capacity	64			
Assumed Occupancy Rate	59%			
Imputed Number of Travel Parties per Car	27.2			
Total Train Revenue Cars in this Service	2.0			
Revenue from Service Type	\$19,763,367		per Train-mile	\$11.95
<u>Current Sleeper / Crew Dorm</u>				
Roomette Average Fare (AVME)	\$0.330	\$0.30 to \$0.50, 1 or 2 People per Party		
Number of Roomettes per Car	8.0			
Assumed Room Occupancy Rate	80%			
Imputed Number of Travel Parties per Car	6.4			
Total Train Revenue Cars in this Service	1.0			
Revenue from Service Type	\$3,492,086		per Train-mile	\$2.11
<u>Current Sleeping Car</u>				
Roomette Average Fare (AVME)	\$0.330	\$0.30 to \$0.50, 1 or 2 People per Party		
Number of Roomettes per Car	13.0			
'Bedroom Average Fare (AVME)	\$0.680	Obsv. Constrained Supply Market Rate		
Number of Bedrooms per Car	5.0			
Accessible / Family Bedrooms average Fare (AVME)	\$0.500	\$0.46 to \$0.54, 1 or 3 People per Party		
Number of Accessible / Family Bedrooms per Car	2.0			
Assumed Room Occupancy Rate	80%			
Imputed Number of Travel Parties per Car	16.0			
Total Train Revenue Cars in this Service	2.0			
Revenue from Service Type	\$22,989,569		per Train-mile	\$13.90

Uprated Sleeping Car

Bedroom Average Fare (AVME)	\$0.600	\$0.54 to \$0.68, 1 or 3 People per Party	
Number of Bedrooms per Car	6.0		
Compartment Average Fare (AVME)	\$0.650	\$0.54 to \$0.70, 1 or 2 People per Party	
Number of Compartments per Car	8.0		
Accessible / Family Bedrooms average Fare (AVME)	\$0.500	\$0.46 to \$0.54, 1 or 3 People per Party	
Number of Accessible / Family Bedrooms per Car	2.0		
Assumed Room Occupancy Rate	80%		
Imputed Number of Travel Parties per Car	12.8		
Total Train Revenue Cars in this Service	2.0		
Revenue from Service Type	\$25,926,096	per Train-mile	\$15.68
 <u>Food Service Revenue</u>			
Revenue from Service Type	\$7,494,097	per Train-mile	\$4.53
 <u>Mail & Express Revenue:</u>			
Trailer Capacity by STB Train Length Limit Decision	36		
Trailer Capacity by Equipment Operated	0		
Market Single Driver OTR Rate (Average-2019 Nationwide Contract Rate)	\$2.20		
Market Team Driver OTR Rate (Estimated Average-2019 Nationwide Contract Rate)	\$2.50		
Assumed Sell Rate	85%		
Backhaul Discount	30%		
Assumed Truck Drayage Cost - Each End	\$500		
Intermodal Conversion Difference - May Actually be a Premium with Time Difference	\$200		
Average Express Trip Rate	\$2,733		
Average Express Rate Per-Mile	\$1.21		
Revenue from Service Type	\$0	per Train-mile	\$0.00
Total Revenue	\$94,103,140	per Train-mile	\$56.91
Passenger Miles per Train-mile - Coach (From Revenue Calculations)	163		
Passenger Miles per Train-mile - Sleeper (From Revenue Calculations)	89		
Passenger Miles per Trainmile - Total	252		
Total Passenger Miles (From Revenue Calculations)	416,338,710		
Assumed Passengers per Travel Party	1.39		
"Quant" rate of Equivalent Interstate Highway Investment per Person-Mile	\$0.096		
Earned Equivalent "Quant" rate	\$39,968,516	per Train-mile	\$24.17
Earned Equivalent is Greater than Proposed Below-the-Rail Investment Level			YES

Consolidated Operating Profit & Loss

FY 2018–FY 2023

(\$s in Millions)	Plan	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Total
	FY 2018						
Ticket Revenue (Adjusted)	\$ 2,251.4	\$ 2,345.0	\$ 2,431.3	\$ 2,517.1	\$ 2,654.7	\$ 2,769.8	\$ 14,969.2
Food & Beverage	137.0	139.8	142.6	145.4	148.3	151.3	864.4
State Supported Train Revenue	244.7	256.3	265.7	274.5	280.6	287.7	1,609.5
Subtotal Passenger Related Revenue	2,633.1	2,741.1	2,839.6	2,936.9	3,083.6	3,208.7	17,443.1
Other Core Revenue	263.2	267.7	273.1	278.5	284.1	289.8	1,656.3
Ancillary Revenue	354.9	368.7	378.9	391.6	418.3	441.9	2,354.3
Total Revenue	3,251.2	3,377.6	3,491.5	3,607.0	3,786.0	3,940.4	21,453.6
Salaries, Wages & Benefits	2,046.5	2,073.5	2,134.8	2,203.6	2,314.7	2,426.4	13,199.5
Train Operations	309.5	312.0	312.0	312.0	322.0	328.5	1,896.1
Fuel, Power & Utilities	244.8	271.7	286.9	297.8	314.6	329.0	1,744.8
Materials	118.9	118.9	118.9	118.9	118.9	119.4	713.7
Facility, Communication & Office	162.3	162.3	162.3	162.3	162.3	162.3	973.7
Advertising and Sales	95.7	99.5	99.5	99.5	104.8	109.4	608.5
Casualty and Other Claims	72.2	72.2	72.2	72.2	72.7	72.7	434.1
Professional Fees & Data Processing	230.0	230.0	221.9	221.9	223.0	223.0	1,349.9
All Other Expense	126.8	129.3	124.8	124.8	125.7	125.7	757.1
Transfer to Capital & Ancillary	(239.6)	(248.7)	(265.2)	(278.3)	(293.7)	(311.6)	(1,637.1)
Core Expense	3,167.0	3,220.7	3,268.1	3,334.7	3,465.1	3,584.8	20,040.5
Ancillary Expense	284.2	288.3	295.8	305.7	330.3	351.1	1,855.4
Total Expense	3,451.2	3,509.1	3,563.9	3,640.4	3,795.4	3,935.9	21,895.8
Adjusted Operating Earnings (Includes STI)	\$ (200.0)	(131.5)	(72.4)	(33.4)	(9.4)	\$ 4.5	\$ (442.2)

(\$s in Millions)	Growth Inc/(Dec) - %				
	'18 to '19	'19 to '20	'20 to '21	'21 to '22	'22 to '23
Ticket Revenue (Adjusted)	4.2%	3.7%	3.5%	5.5%	4.3%
Food & Beverage	2.0%	2.0%	2.0%	2.0%	2.0%
State Supported Train Revenue	4.8%	3.7%	3.3%	2.2%	2.5%
Subtotal Passenger Related Revenue	4.1%	3.6%	3.4%	5.0%	4.1%
Other Core Revenue	1.7%	2.0%	2.0%	2.0%	2.0%
Ancillary Revenue	3.9%	2.7%	3.4%	6.8%	5.6%
Total Revenue	3.9%	3.4%	3.3%	5.0%	4.1%
Salaries, Wages & Benefits	1.3%	3.0%	3.2%	5.0%	4.8%
Train Operations	0.8%	0.0%	0.0%	3.2%	2.0%
Fuel, Power & Utilities	11.0%	5.6%	3.8%	5.6%	4.6%
Materials	0.0%	0.0%	0.0%	0.0%	0.5%
Facility, Communication & Office	0.0%	0.0%	0.0%	0.0%	0.0%
Advertising and Sales	4.0%	0.0%	0.0%	5.3%	4.4%
Casualty and Other Claims	0.0%	0.0%	0.0%	0.8%	0.0%
Professional Fees & Data Processing	0.0%	(3.5%)	0.0%	0.5%	0.0%
All Other Expense	2.0%	(3.5%)	0.0%	0.8%	0.0%
Transfer to Capital & Ancillary	(3.8%)	(6.7%)	(5.0%)	(5.5%)	(6.1%)
Core Expense	1.7%	1.5%	2.0%	3.9%	3.5%
Ancillary Expense	1.5%	2.6%	3.3%	8.0%	6.3%
Total Expense	1.7%	1.6%	2.1%	4.3%	3.7%
Adjusted Operating Earnings (Includes STI)	34.2%	44.9%	53.9%	71.8%	147.7%

Consolidated Account Structure: Northeast Corridor

FY 2018–FY 2023

(\$s in Thousands)	FY 2018	FY 2019	FY2020	FY 2021	FY 2022	FY 2023	Total
Financial Sources:							
Passenger Related Revenue							
<i>Ticket Revenue (Adjusted)</i>	1,244,783	1,274,925	1,324,059	1,374,350	1,480,950	1,564,069	8,263,136
<i>Charter/Special Trains</i>	2,298	2,344	2,391	2,439	2,487	2,537	14,495
<i>Food and Beverage</i>	40,671	41,484	42,314	43,160	44,023	44,904	256,556
Contractual Contribution (Operating)							
<i>PRIIA 209 Operating Payments</i>	-	-	-	-	-	-	-
<i>PRIIA 212 Operating Payments</i>	134,535	137,225	139,970	142,769	145,625	148,537	848,660
<i>Commuter Operations</i>	65,237	66,542	67,873	69,230	70,615	72,027	411,523
<i>Reimbursable Contracts</i>	80,350	87,969	92,464	99,436	110,904	120,734	591,857
<i>Access Revenue</i>	65,095	66,397	67,725	69,080	70,461	71,870	410,629
Commercial Revenue (incl. Pipe/Wire, Real Estate, Parking)	72,771	74,226	75,711	77,225	88,249	97,625	485,806
All Other Revenue (incl. Insurance Revenue, Cobranded Commissions)	16,036	16,357	16,684	17,017	17,358	17,705	101,157
Operating Sources Subtotal	1,721,775	1,767,469	1,829,189	1,894,705	2,030,672	2,140,008	11,383,818
Contractual Contribution (Capital)							
<i>PRIIA 209 Capital Payments</i>	-	-	-	-	-	-	-
<i>PRIIA 212 Capital Payments</i>	132,585	174,428	178,626	173,227	184,838	187,485	1,031,189
<i>Other State/Local Mutual Benefit</i>	85,520	38,849	23,443	166,431	315,918	281,338	911,499
Financing Proceeds Applied	185,539	349,015	618,063	546,940	127,761	-	1,827,319
Other Capital and Special Grants (incl., state/local sources)	-	3,169	3,169	3,169	3,169	2,519	15,195
Capital Sources Subtotal	403,644	565,462	823,301	889,767	631,686	471,342	3,785,201
Federal Grants to Amtrak							
<i>Prior Year Carryover Capital Grant Funds</i>	441,097	-	-	-	-	-	441,097
<i>Current Year FAST Sec 11101 Grants</i>							
<i>Operating</i>	-	-	-	-	-	-	-
<i>Capital</i>	313,400	535,279	629,962	749,962	822,077	956,460	4,007,140
<i>Other Federal Grants (incl., FRA/OST, FTA, DHS)</i>	12,370	10,225	9,544	9,544	9,544	9,544	60,773
Federal Grants to Amtrak Subtotal	766,867	545,504	639,506	759,506	831,621	966,004	4,509,010
Total Financial Sources	2,892,286	2,878,435	3,291,997	3,543,978	3,493,979	3,577,355	19,678,029
Financial Uses (Operating):							
Service Line Management	5,492	5,449	5,625	5,879	6,663	7,246	36,354
Transportation	334,751	349,561	356,982	363,646	379,092	392,448	2,176,480
Equipment	233,285	231,908	238,925	248,888	278,511	301,018	1,532,534
Infrastructure	241,847	240,230	247,682	258,490	278,435	295,830	1,562,514
Stations	55,227	54,977	56,561	58,768	64,451	68,747	358,731
National Assets and Corporate Services	447,611	444,018	456,543	474,168	530,526	572,671	2,925,536
Total Operating Uses	1,318,212	1,326,143	1,362,318	1,409,839	1,537,678	1,637,960	8,592,150
Operating Surplus/Deficit <i>(Operating Sources - Operating Uses)</i>	403,563	441,325	466,871	484,866	492,994	502,049	2,791,669
Financial Uses (Debt Service Payments):							
RRIF debt repayments	22,600	34,867	44,377	92,031	137,375	172,484	503,734
Total Debt Service Payments	22,600	34,867	44,377	92,031	137,375	172,484	503,734
Available for Capital Uses <i>(Capital Sources + Federal Grants to Amtrak + Operating Surplus/Deficit - Debt Service Payments)</i>	1,551,474	1,517,424	1,885,302	2,042,108	1,818,926	1,766,911	10,582,145
Financial Uses (Capital):							
Service Line Management	65,357	71,577	11,517	1,968	1,968	1,968	154,355
Transportation	66,872	35,628	392,775	422,087	151,332	100,772	1,169,467
Equipment	262,948	370,936	297,616	307,010	123,349	119,729	1,481,586
Infrastructure	717,465	696,361	809,865	989,168	1,320,610	1,327,335	5,860,804
Stations	128,474	150,507	192,939	198,487	134,496	134,853	939,757
National Assets and Corporate Services	185,195	57,597	56,922	50,038	49,598	51,055	450,405
Capital Expenditures	1,426,312	1,382,605	1,761,633	1,968,759	1,781,352	1,735,712	10,056,373
Legacy Debt Repayments	145,234	147,769	141,885	97,264	63,806	56,227	652,184
Total Capital Uses	1,571,546	1,530,374	1,903,518	2,066,023	1,845,158	1,791,939	10,708,558
Remaining Carryover Balance	\$ (20,072)	\$ (12,950)	\$ (18,216)	\$ (23,915)	\$ (26,232)	\$ (25,028)	\$ (126,413)

Consolidated Account Structure: National Network

FY 2018–FY 2023

(\$s in Thousands)	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Total
Financial Sources:							
Passenger Related Revenue							
<i>Ticket Revenue (Adjusted)</i>	1,000,797	1,064,151	1,101,189	1,136,516	1,167,411	1,199,247	6,669,311
<i>Charter/Special Trains</i>	3,534	3,605	3,677	3,750	3,825	3,902	22,292
<i>Food and Beverage</i>	96,352	98,279	100,245	102,250	104,295	106,381	607,801
Contractual Contribution (Operating)							
<i>PRIIA 209 Operating Payments</i>	244,701	256,341	265,698	274,453	280,590	287,692	1,609,474
<i>PRIIA 212 Operating Payments</i>	-	-	-	-	-	-	-
<i>Commuter Operations</i>	55,353	56,460	57,589	58,741	59,915	61,114	349,171
<i>Reimbursable Contracts</i>	77,742	79,297	80,883	82,501	84,151	85,834	490,409
<i>Access Revenue</i>	12,210	12,454	12,703	12,958	13,217	13,481	77,023
Commercial Revenue (incl. Pipe/Wire, Real Estate, Parking)	14,905	15,203	15,507	15,817	16,133	16,456	94,021
All Other Revenue (incl. Insurance Revenue, Cobranded Commissions)	23,830	24,307	24,793	25,288	25,794	26,310	150,322
Operating Sources Subtotal	1,529,424	1,610,096	1,662,284	1,712,274	1,755,331	1,800,416	10,069,824
Contractual Contribution (Capital)							
<i>PRIIA 209 Capital Payments</i>	67,780	58,343	71,454	85,540	85,540	85,540	454,197
<i>PRIIA 212 Capital Payments</i>	14,676	19,521	19,845	19,454	22,229	23,723	119,448
<i>Other State/Local Mutual Benefit</i>	133,770	47,021	31,214	32,045	45,085	40,494	329,630
Financing Proceeds Applied	9,178	13,623	8,113	3,040	786	-	34,740
Other Capital and Special Grants (incl., state/local sources)	-	-	-	-	-	-	-
Capital Sources Subtotal	225,405	138,508	130,627	140,080	153,640	149,756	938,015
Federal Grants to Amtrak							
<i>Prior Year Carryover Capital Grant Funds</i>	323,311	-	-	-	-	-	323,311
<i>Current Year FAST Sec 11101 Grants</i>							
<i>Operating</i>	609,819	572,826	584,780	565,175	551,041	548,050	3,431,690
<i>Capital</i>	482,681	576,395	569,258	568,363	609,861	577,990	3,384,549
<i>Other Federal Grants (incl., FRA/OST, FTA, DHS)</i>	3,146	3,014	2,972	2,972	2,972	2,972	18,047
Federal Grants to Amtrak Subtotal	1,418,957	1,152,235	1,157,010	1,136,510	1,163,874	1,129,012	7,157,597
Total Financial Sources	3,173,785	2,900,839	2,949,920	2,988,863	3,072,844	3,079,185	18,165,436
Financial Uses (Operating):							
Service Line Management	10,933	11,116	11,171	11,287	11,168	11,195	66,871
Transportation	952,632	984,088	998,873	1,014,218	1,053,985	1,088,965	6,092,762
Equipment	407,073	413,023	414,347	418,531	414,658	416,300	2,483,933
Infrastructure	93,302	93,800	93,983	95,510	94,971	95,255	566,820
Stations	156,825	159,986	161,742	164,405	160,935	162,354	966,248
National Assets and Corporate Services	512,182	520,909	521,439	526,589	522,008	523,895	3,127,022
Total Operating Uses	2,132,948	2,182,922	2,201,556	2,230,540	2,257,724	2,297,965	13,303,655
Operating Surplus/Deficit <i>(Operating Sources - Operating Uses)</i>	(603,524)	(572,826)	(539,273)	(518,266)	(502,394)	(497,549)	(3,233,831)
Financial Uses (Debt Service Payments):							
RRIF debt repayments	-	-	-	-	-	-	-
Total Debt Service Payments	-	-	-	-	-	-	-
Available for Capital Uses <i>(Capital Sources + Federal Grants to Amtrak + Operating Surplus/Deficit - Debt Service Payments)</i>	1,040,837	717,917	748,364	758,323	815,120	781,220	4,861,781
Financial Uses (Capital):							
Service Line Management	3,745	3,384	1,183	732	732	732	10,508
Transportation	89,807	71,028	58,098	36,261	26,989	25,913	308,097
Equipment	322,732	283,532	317,601	338,734	399,091	395,804	2,057,494
Infrastructure	217,286	145,329	145,164	169,482	198,501	189,653	1,065,415
Stations	132,150	98,504	110,749	112,512	102,537	82,906	639,360
National Assets and Corporate Services	199,643	65,739	63,574	49,133	50,955	52,185	481,229
Capital Expenditures	965,362	667,517	696,370	706,854	778,806	747,194	4,562,103
Legacy Debt Repayments	38,416	37,450	33,778	27,555	10,082	8,998	156,279
Total Capital Uses	1,003,778	704,967	730,148	734,409	788,888	756,192	4,718,381
Remaining Carryover Balance	\$ 37,059	\$ 12,950	\$ 18,216	\$ 23,915	\$ 26,232	\$ 25,028	\$ 143,400

Consolidated Account Structure: Total Amtrak

FY 2018–FY 2023

(\$s in Thousands)	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Total
Financial Sources:							
Passenger Related Revenue							
<i>Ticket Revenue (Adjusted)</i>	2,245,580	2,339,076	2,425,249	2,510,866	2,648,361	2,763,316	14,932,447
<i>Charter/Special Trains</i>	5,832	5,948	6,067	6,189	6,312	6,439	36,787
<i>Food and Beverage</i>	137,023	139,763	142,559	145,410	148,318	151,284	864,357
Contractual Contribution (Operating)							
<i>PRR/IA 209 Operating Payments</i>	244,701	256,341	265,698	274,453	280,590	287,692	1,609,474
<i>PRR/IA 212 Operating Payments</i>	134,535	137,225	139,970	142,769	145,625	148,537	848,660
<i>Commuter Operations</i>	120,590	123,001	125,461	127,971	130,530	133,141	760,694
<i>Reimbursable Contracts</i>	158,092	167,266	173,347	181,937	195,055	206,568	1,082,265
<i>Access Revenue</i>	77,305	78,852	80,429	82,037	83,678	85,351	487,652
Commercial Revenue (incl. Pipe/Wire, Real Estate, Parking)	87,675	89,429	91,218	93,042	104,382	114,081	579,827
All Other Revenue (incl. Insurance Revenue, Cobranded Commissions)	39,866	40,663	41,476	42,306	43,152	44,015	251,479
Operating Sources Subtotal	3,251,199	3,377,565	3,491,473	3,606,979	3,786,003	3,940,424	21,453,642
Contractual Contribution (Capital)							
<i>PRR/IA 209 Capital Payments</i>	67,780	58,343	71,454	85,540	85,540	85,540	454,197
<i>PRR/IA 212 Capital Payments</i>	147,260	193,949	198,472	192,681	207,067	211,208	1,150,637
<i>Other State/Local Mutual Benefit</i>	219,291	85,870	54,657	198,476	361,003	321,832	1,241,129
Financing Proceeds Applied	194,717	362,638	626,176	549,980	128,547	-	1,862,059
Other Capital and Special Grants (incl., state/local sources)	-	3,169	3,169	3,169	3,169	2,519	15,195
Capital Sources Subtotal	629,048	703,970	953,928	1,029,846	785,325	621,099	4,723,216
Federal Grants to Amtrak							
<i>Prior Year Carryover Capital Grant Funds</i>	764,408	-	-	-	-	-	764,408
<i>Current Year FAST Sec 11101 Grants</i>							
<i>Operating</i>	609,819	572,826	584,780	565,175	551,041	548,050	3,431,690
<i>Capital</i>	796,081	1,111,674	1,199,220	1,318,325	1,431,938	1,534,450	7,391,689
<i>Other Federal Grants (incl., FRA/OST, FTA, DHS)</i>	15,516	13,239	12,516	12,516	12,516	12,516	78,820
Federal Grants to Amtrak Subtotal	2,185,824	1,697,739	1,796,516	1,896,016	1,995,495	2,095,016	11,666,607
Total Financial Sources	6,066,071	5,779,274	6,241,917	6,532,841	6,566,823	6,656,539	37,843,465
Financial Uses (Operating):							
Service Line Management	16,424	16,565	16,796	17,166	17,831	18,441	103,224
Transportation	1,287,383	1,333,650	1,355,855	1,377,864	1,433,077	1,481,413	8,269,241
Equipment	640,358	644,930	653,272	667,419	693,169	717,318	4,016,467
Infrastructure	335,149	334,030	341,665	354,000	373,406	391,085	2,129,334
Stations	212,052	214,963	218,303	223,173	225,387	231,102	1,324,979
National Assets and Corporate Services	959,793	964,927	977,983	1,000,757	1,052,533	1,096,566	6,052,558
Total Operating Uses	3,451,159	3,509,065	3,563,874	3,640,379	3,795,402	3,935,924	21,895,805
Operating Surplus/Deficit <i>(Operating Sources - Operating Uses)</i>	(199,961)	(131,500)	(72,401)	(33,400)	(9,400)	4,500	(442,162)
Financial Uses (Debt Service Payments):							
RRIF debt repayments	22,600	34,867	44,377	92,031	137,375	172,484	503,734
Total Debt Service Payments	22,600	34,867	44,377	92,031	137,375	172,484	503,734
Available for Capital Uses <i>(Capital Sources + Federal Grants to Amtrak + Operating Surplus/Deficit - Debt Service Payments)</i>	2,592,311	2,235,341	2,633,666	2,800,431	2,634,046	2,548,131	15,443,926
Financial Uses (Capital):							
Service Line Management	69,102	74,961	12,700	2,700	2,700	2,700	164,863
Transportation	156,679	106,656	450,873	458,349	178,321	126,685	1,477,563
Equipment	585,679	654,468	615,217	645,744	522,440	515,533	3,539,080
Infrastructure	934,751	841,690	955,029	1,158,650	1,519,111	1,516,988	6,926,219
Stations	260,624	249,011	303,688	310,999	237,033	217,760	1,579,116
National Assets and Corporate Services	384,838	123,336	120,496	99,171	100,552	103,241	931,634
Capital Expenditures	2,391,674	2,050,122	2,458,003	2,675,613	2,560,158	2,482,906	14,618,476
Legacy Debt Repayments	183,650	185,219	175,663	124,818	73,888	65,224	808,463
Total Capital Uses	2,575,324	2,235,341	2,633,666	2,800,431	2,634,046	2,548,131	15,426,939
Remaining Carryover Balance	\$ 16,987	\$ 0	\$ (0)	\$ (0)	\$ (0)	\$ (0)	\$ 16,987

Fiscal Year 2018 Budget

(\$s in Thousands)	Northeast Corridor (NEC) Account					NEC Account Total
	NEC	Infrastructure Access	Ancillary - NEC			
			Commuter Operations	Reimbursable	Real Estate/ Commercial	
Financial Sources:						
Passenger Related Revenue						
<i>Ticket Revenue (Adjusted)</i>	1,234,793	-	-	9,990	-	1,244,783
<i>Charter/Special Trains</i>	2,298	-	-	-	-	2,298
<i>Food and Beverage</i>	40,671	-	-	-	-	40,671
Contractual Contribution (Operating)						
<i>PRIIA 209 Operating Payments</i>	-	-	-	-	-	-
<i>PRIIA 212 Operating Payments</i>	-	134,535	-	-	-	134,535
<i>Commuter Operations</i>	-	-	65,237	-	-	65,237
<i>Reimbursable Contracts</i>	109	17,445	-	62,725	71	80,350
<i>Access Revenue</i>	-	65,095	-	-	-	65,095
Commercial Revenue (incl. Pipe/Wire, Real Estate, Parking)	-	-	-	-	72,771	72,771
All Other Revenue (incl. Insurance Revenue, Cobranded Commissions)	13,848	201	-	1,987	-	16,036
Operating Sources Subtotal	1,291,719	217,276	65,237	74,701	72,842	1,721,775
Contractual Contribution (Capital)						
<i>PRIIA 209 Capital Payments</i>	-	-	-	-	-	-
<i>PRIIA 212 Capital Payments</i>	-	132,585	-	-	-	132,585
<i>Other State/Local Mutual Benefit</i>	27,137	58,383	-	-	-	85,520
Financing Proceeds Applied	185,539	-	-	-	-	185,539
Other Capital and Special Grants (incl., state/local sources)	-	-	-	-	-	-
Capital Sources Subtotal	212,676	190,968	-	-	-	403,644
Federal Grants to Amtrak						
<i>Prior Year Carryover Capital Grant Funds</i>	360,802	80,295	-	-	-	441,097
<i>Current Year FAST Sec 11101 Grants</i>						
<i>Operating</i>	-	-	-	-	-	-
<i>Capital</i>	-	313,400	-	-	-	313,400
<i>Other Federal Grants (incl., FRA/OST, FTA, DHS)</i>	10,447	1,923	-	-	-	12,370
Federal Grants to Amtrak Subtotal	371,250	395,618	-	-	-	766,867
Total Financial Sources	1,875,645	803,861	65,237	74,701	72,842	2,892,286
Financial Uses (Operating):						
Service Line Management	5,190	145	157	-	-	5,492
Transportation	251,568	54,118	28,120	945	0	334,751
Equipment	185,699	15,035	19,468	12,936	147	233,285
Infrastructure	66,173	72,742	791	101,125	1,015	241,847
Stations	37,826	16,651	368	-	381	55,227
National Assets and Corporate Services	337,313	65,673	11,212	21,306	12,107	447,611
Total Operating Uses	883,770	224,363	60,116	136,312	13,651	1,318,212
Operating Surplus/Deficit <i>(Operating Sources - Operating Uses)</i>	407,949	(7,088)	5,121	(61,610)	59,191	403,563
Financial Uses (Debt Service Payments):						
RRIF debt repayments	22,600	-	-	-	-	22,600
Total Debt Service Payments	22,600	-	-	-	-	22,600
Available for Capital Uses <i>(Capital Sources + Federal Grants to Amtrak + Operating Surplus/Deficit - Debt Service Payments)</i>	969,275	579,498	5,121	(61,610)	59,191	1,551,474
Financial Uses (Capital):						
Service Line Management	26,339	39,019	-	-	-	65,357
Transportation	31,078	35,794	-	-	-	66,872
Equipment	233,083	29,865	-	-	-	262,948
Infrastructure	368,461	349,004	-	-	-	717,465
Stations	90,234	38,240	-	-	-	128,474
National Assets and Corporate Services	184,344	851	-	-	-	185,195
Capital Expenditures	933,539	492,772	-	-	-	1,426,312
Legacy Debt Repayments	135,409	7,124	-	-	2,701	145,234
Total Capital Uses	1,068,948	499,897	-	-	2,701	1,571,546
Remaining Carryover Balance	\$ (99,673)	\$ 79,601	\$ 5,121	\$ (61,610)	\$ 56,489	\$ (20,072)

FY 2018

State Supported	National Network Account					National Network Account Total Amtrak	Total Amtrak
	Long Distance	Infrastructure Access	Ancillary - National Network				
			Commuter Operations	Reimbursable	Real Estate/ Commercial		
523,162	477,635	-	-	-	-	1,000,797	2,245,580
3,534	-	-	-	-	-	3,534	5,832
26,666	69,686	-	-	-	-	96,352	137,023
244,701	-	-	-	-	-	244,701	244,701
-	-	-	-	-	-	-	134,535
-	-	-	55,353	-	-	55,353	120,590
521	34	-	-	77,173	15	77,742	158,092
-	-	12,210	-	-	-	12,210	77,305
-	-	-	-	-	14,905	14,905	87,675
10,914	7,525	11	-	5,381	-	23,830	39,866
809,497	554,880	12,221	55,353	82,553	14,919	1,529,424	3,251,199
67,780	-	-	-	-	-	67,780	67,780
-	-	14,676	-	-	-	14,676	147,260
68,361	10,448	54,961	-	-	-	133,770	219,291
4,951	4,227	-	-	-	-	9,178	194,717
-	-	-	-	-	-	-	-
141,093	14,675	69,637	-	-	-	225,405	629,048
150,871	163,502	8,938	-	-	-	323,311	764,408
84,102	521,675	4,042	-	-	-	609,819	609,819
168,083	314,598	-	-	-	-	482,681	796,081
1,387	1,759	-	-	-	-	3,146	15,516
404,443	1,001,533	12,980	-	-	-	1,418,957	2,185,824
1,355,033	1,571,088	94,838	55,353	82,553	14,919	3,173,785	6,066,071
5,370	5,129	27	232	174	-	10,933	16,424
388,682	510,509	9,363	43,141	938	0	952,632	1,287,383
182,365	214,472	617	13,325	(3,735)	30	407,073	640,358
26,600	20,552	16,030	81	29,832	208	93,302	335,149
83,819	71,868	1,061	-	-	78	156,825	212,052
206,765	254,026	22,791	11,744	14,377	2,480	512,182	959,793
893,600	1,076,555	49,888	68,523	41,586	2,796	2,132,948	3,451,159
(84,102)	(521,675)	(37,667)	(13,170)	40,967	12,123	(603,524)	(199,961)
-	-	-	-	-	-	-	22,600
-	-	-	-	-	-	-	22,600
461,433	494,534	44,950	(13,170)	40,967	12,123	1,040,837	2,592,311
408	3,336	-	-	-	-	3,745	69,102
31,679	42,295	15,833	-	-	-	89,807	156,679
128,304	193,883	544	-	-	-	322,732	585,679
100,821	61,148	55,316	-	-	-	217,286	934,751
66,291	54,238	10,847	-	-	775	132,150	260,624
111,065	88,578	-	-	-	-	199,643	384,838
438,568	443,479	82,540	-	-	775	965,362	2,391,674
14,606	23,665	-	-	-	145	38,416	183,650
453,174	467,144	82,540	-	-	920	1,003,778	2,575,324
\$ 8,260	\$ 27,390	\$ (37,590)	\$ (13,170)	\$ 40,967	\$ 11,203	\$ 37,059	\$ 16,987

Exhibit 6-2 – Five Year Projected Operating Results, Long-Distance

<i>\$ millions</i>	FY2014	FY2015	FY2016	FY2017	FY2018
Revenue					
Ticket Revenue, net	\$507.0	\$524.4	\$550.9	\$568.1	\$587.3
Food and Beverage Revenue	61.6	62.4	64.8	65.6	66.6
Reimbursable Revenue	0.1	0.1	0.1	0.1	0.1
Other Transportation	2.0	2.0	2.0	2.0	2.0
Freight Access Fees & Other	6.4	6.4	6.5	6.5	6.6
Total Operating Revenue	577.1	595.4	624.3	642.4	662.7
Direct Costs					
Direct Labor					
Train & Engine Crew Labor	136.3	142.3	148.2	154.3	161.0
On Board Service Labor and Support	119.9	121.8	126.3	130.9	135.9
Total Direct Labor	256.2	264.1	274.5	285.2	296.9
Other Direct Costs					
Host Railroad Maintenance of Way	42.4	42.1	42.2	42.2	42.3
Host Railroad Performance Incentives	14.0	10.0	9.3	8.7	8.0
Fuel and Power	142.6	140.7	141.8	141.8	141.8
Commissary Provisions and Management	58.4	58.6	59.0	59.4	59.8
Car & Locomotive Maintenance and Turnaround	129.2	130.6	132.4	134.3	136.3
Commissions	15.1	15.1	15.3	15.3	15.3
Reservations and Call Centers	35.9	37.3	38.7	40.1	41.6
Connecting Motor Coach	5.7	5.7	5.7	5.7	5.7
Stations - Route	20.3	20.9	21.6	22.2	22.9
Total Other Direct Costs	463.7	461.1	465.9	469.7	473.7
Total Direct Costs	719.9	725.2	740.4	754.9	770.6
Contribution/(Loss) after Direct Costs	(142.8)	(129.9)	(116.1)	(112.5)	(108.0)
Shared Costs					
Stations - Shared	55.0	56.6	58.2	59.8	61.6
MoE Supervision Training and Overhead	114.4	116.3	119.6	122.7	126.6
MoW Support	37.5	37.7	38.0	38.4	38.8
Yard Operations	23.5	24.6	25.3	26.0	26.8
Marketing and Distribution	26.3	26.2	26.5	26.8	27.1
Police/Environmental and Safety	25.9	26.6	27.4	28.1	29.0
T&E Overhead and Operations Management	48.2	49.8	51.7	53.7	55.9
Utilities	0.6	0.6	0.6	0.6	0.6
Casualty, FELA, and other Claims	23.4	26.4	26.4	26.4	26.4
Data Processing Services	41.1	41.1	41.1	41.1	41.1
Communication	12.1	12.1	12.1	12.1	12.1
Property Insurance	18.5	21.4	21.6	21.6	21.6
Other General and Administrative	81.2	86.8	108.0	109.0	111.1
Total Shared Costs	507.7	526.3	556.5	566.4	578.7
SubTotal Direct and Shared Costs	1,227.6	1,251.5	1,296.9	1,321.3	1,349.3
Net Operating Income/(Loss) - GAAP	(650.5)	(656.2)	(672.6)	(678.9)	(686.7)
Adjustments to GAAP ^[a]	28.3	29.9	28.4	26.1	24.4
Adjusted Net Operating Income/(Loss) ^[b] - Long-Distance Routes	(622.1)	(626.3)	(644.1)	(652.8)	(662.3)
Profit/(Loss) of Managed Commuter Operations	7.4	7.9	8.8	9.6	10.5
Profit/(Loss) of Managed Reimbursable Operations	0.0	0.0	0.0	0.0	0.0
Adjusted Net Operating Income/(Loss) ^[b]	(\$614.7)	(\$618.3)	(\$635.3)	(\$643.1)	(\$651.8)

[a] Adjustments to GAAP are made to exclude costs and revenue that do not impact Amtrak's need for Federal operating support. Items excluded are costs for Amtrak's Office of the Inspector General (funded independently), non-capitalizable costs and certain contributions associated with capital projects (funded by capital appropriation), net interest expense (funded by debt service appropriation), depreciation (non-cash expense), and accruals for estimated future post-retirement employee benefits (non-cash expense).

[b] Adjusted Net Operating Income/(Loss) represents cash contributions or need for Federal operating support

Exhibit 6-3 – Five Year Projected Capital Investment by Program, Long-Distance

<i>\$ millions</i>	FY2014	FY2015	FY2016	FY2017	FY2018	5 Year Total
SOGR Base	\$9.6	\$10.9	\$30.0	\$25.2	\$25.3	\$100.9
Major Projects	2.5	1.0	1.1	6.3	8.4	19.3
Safety / Mandates	1.7	0.2	0.2	0.2	0.3	2.6
Support Equipment and Vehicles	0.1		10.0	1.1		11.2
Improvements	0.3	0.6	2.2	2.0	1.5	6.6
Amtrak Support		0.0				0.0
Infrastructure Renewal	14.2	12.8	43.5	34.8	35.4	140.7
SOGR Base	2.3	3.0	12.1	11.5	11.7	40.6
Major Projects	0.3			8.3	8.3	17.0
Safety / Mandates	0.1					0.1
Improvements	1.2	3.0	37.0	40.2	35.0	116.5
Amtrak Support	0.0		1.4	2.4	18.8	22.7
NEC Master Planning	0.0	0.5	2.0	1.7	0.4	4.6
Support Equipment and Vehicles	0.1					0.1
Stations and Facilities	4.1	6.5	52.5	64.2	74.2	201.5
Amfleet Programs	11.4	0.7	31.0	17.5	18.2	79.0
Superliners	54.7	57.5	49.9	53.7	62.6	278.3
Locomotives	18.9	20.3	22.5	23.0	18.5	103.3
Horizon/Surfliner Programs	1.2	0.1	0.2	0.4	0.1	2.1
Viewliner Programs	7.5	7.8	8.7	8.9	8.5	41.5
General Safety & Reliability	0.4	0.6	0.6	0.6	0.6	3.0
Mandatory Projects	0.1	0.5	0.5	0.5	0.5	2.3
Heritage Programs	0.6					0.6
Wrecks		0.5	0.5	0.5	0.5	2.2
Fleet Overhauls	94.9	88.1	114.2	105.3	109.7	512.2
Software	3.9	0.5	2.6	2.8	1.7	11.4
Operations Foundation						
Hardware	1.2	0.1	11.2	11.0	1.0	24.4
Back Office Support	0.0	0.1	0.0	0.0	0.0	0.2
Technology Systems	5.1	0.6	13.8	13.8	2.7	36.0
Special Programs	1.2					1.2
Gateway Program	1.2					1.2
Safety / Mandates	2.5	1.3				3.8
Environmental Remediation	2.5	1.3				3.8
Special Programs	74.0	135.5	4.0			213.5
Amtrak Support	0.1					0.1
Rolling Stock Acquisition	74.1	135.5	4.0			213.6
ADA Stations	38.3	50.0	56.3	56.3	56.3	257.1
Safety / Mandates	0.4		0.7	0.7	0.7	2.6
ADA Compliance	38.7	50.0	57.0	57.0	57.0	259.6
General Capital - Long Distance	234.9	294.9	285.0	275.0	279.0	1,368.7
Department of Homeland Security	2.9	1.5	1.0	1.1	1.1	7.6
Hudson Yards Concrete Encasement Grant	2.5	1.3				3.7
NY-NJ High Speed Rail Grant	2.8	5.9	4.8	1.3		14.8
Sandy Capital Relief Appropriation	0.2					0.2
State, Local, and Other Funds	14.4	11.1	8.7	8.7	4.6	47.5
Total Capital - Long Distance	\$257.6	\$314.6	\$299.5	\$286.1	\$284.7	\$1,442.5

Exhibit 4-2 – Five Year Projected Operating Results, NEC

\$ millions	FY2014	FY2015	FY2016	FY2017	FY2018
Revenue					
Ticket Revenue, net	\$1,143.8	\$1,178.9	\$1,223.7	\$1,262.7	\$1,306.1
Food and Beverage Revenue	37.5	38.1	38.8	39.2	39.8
Other Transportation	0.1	0.1	0.1	0.1	0.1
Freight Access Fees & Other	10.1	10.1	10.1	10.2	10.2
Total Operating Revenue	1,191.5	1,227.2	1,272.7	1,312.1	1,356.2
Direct Costs					
Direct Labor					
Train & Engine Crew Labor	81.4	82.5	83.7	84.8	86.1
On Board Service Labor and Support	24.8	25.7	26.7	27.7	28.8
Total Direct Labor	106.2	108.3	110.4	112.5	114.9
Other Direct Costs					
Host Railroad Maintenance of Way	2.7	2.7	2.7	2.7	2.7
Host Railroad Performance Incentives	0.8	0.8	0.7	0.7	0.7
Fuel and Power	55.3	55.4	59.2	62.5	66.4
Commissary Provisions and Management	23.6	23.7	23.9	24.1	24.3
Car & Locomotive Maintenance and Turnaround	125.1	128.6	132.2	135.9	140.0
Commissions	25.7	25.7	25.7	25.7	25.7
Reservations and Call Centers	19.9	20.5	21.1	21.7	22.4
Connecting Motor Coach	0.6	0.6	0.6	0.6	0.6
Stations - Route	1.8	1.8	1.8	1.8	1.9
Total Other Direct Costs	255.5	259.9	268.2	276.1	285.0
Total Direct Costs	361.7	368.2	378.5	388.6	399.9
Contribution/(Loss) after Direct Costs	829.8	859.0	894.2	923.6	956.3
Shared Costs					
Stations - Shared	35.5	36.7	37.8	39.0	40.2
MoE Supervision Training and Overhead	49.9	50.8	52.3	53.7	55.4
MoW Support	93.6	94.6	96.2	98.0	100.0
Yard Operations	20.1	21.0	21.8	22.7	23.7
Marketing and Distribution	42.4	42.1	42.6	43.0	43.5
Police/Environmental and Safety	23.5	24.4	25.3	26.2	27.2
T&E Overhead and Operations Management	38.6	38.9	40.8	42.3	44.0
Utilities	6.2	6.2	6.2	6.3	6.3
Casualty, FELA, and other Claims	14.1	15.6	16.2	16.7	17.3
Data Processing Services	25.0	25.0	26.1	26.9	28.0
Communication	7.4	7.4	7.4	7.4	7.4
Property Insurance	11.0	12.4	12.9	13.3	13.8
Other General and Administrative	50.3	59.2	69.4	78.6	89.5
Total Shared Costs	417.6	434.3	455.0	474.1	496.4
SubTotal Direct and Shared Costs	779.3	802.5	833.5	862.7	896.3
Net Operating Income/(Loss) - GAAP	412.2	424.7	439.2	449.4	459.9
Adjustments to GAAP ^[a]	18.0	18.9	18.1	16.7	15.7
Adjusted Net Operating Income/(Loss) ^[b] - NEC Routes	430.2	443.6	457.3	466.2	475.6
Payment of RRIF Loan for Electric Locomotives	(11.2)	(27.2)	(32.4)	(34.3)	(36.3)
Profit/(Loss) of NEC Infrastructure Operations	(99.8)	(92.8)	(93.3)	(94.1)	(95.1)
Profit/(Loss) of Managed Commuter Operations	3.3	4.5	5.7	7.0	8.3
Profit/(Loss) of Managed Reimbursable Operations	(36.3)	(38.5)	(38.5)	(38.5)	(38.5)
Adjusted Net Operating Income/(Loss) ^[b]	\$286.3	\$289.6	\$298.8	\$306.3	\$314.0

[a] Adjustments to GAAP are made to exclude costs and revenue that do not impact Amtrak's need for Federal operating support. Items excluded are costs for Amtrak's Office of the Inspector General (funded independently), non-capitalizable costs and certain contributions associated with capital projects (funded by capital appropriation), net interest expense (funded by debt service appropriation), depreciation (non-cash expense), and accruals for estimated future post-retirement employee benefits (non-cash expense).

[b] Adjusted Net Operating Income/(Loss) represents cash contributions or need for Federal operating support

Exhibit 4-3 – Five Year Projected Capital Investment by Program, NEC

<i>\$ millions</i>	FY2014	FY2015	FY2016	FY2017	FY2018	5 Year Total
SOGR Base	\$187.5	\$320.5	\$467.1	\$493.9	\$523.6	\$1,992.6
Major Projects	26.1	25.5	225.3	425.0	474.9	1,176.8
Safety / Mandates	43.6	10.9	8.3	5.6	6.5	74.9
Support Equipment and Vehicles Improvements	7.6	2.6	4.0	4.5		18.6
Amtrak Support	2.2	3.3	1.8	0.1	0.1	7.4
		0.3				0.3
Infrastructure Renewal	266.9	363.0	706.4	929.0	1,005.2	3,270.6
SOGR Base	43.3	114.3	202.2	216.1	208.0	784.0
Major Projects	23.4	7.9	257.7	251.3	51.0	591.3
Safety / Mandates	1.2	0.2	0.2			1.6
Improvements	10.1	17.6	35.9	29.6	26.4	119.6
Amtrak Support	0.2		0.2			0.4
NEC Master Planning	2.1	10.5	31.7	27.2	9.1	80.7
Support Equipment and Vehicles	0.6					0.6
Stations and Facilities	80.7	150.5	528.0	524.2	294.6	1,578.1
Amfleet Programs	38.8	41.8	32.0	26.7	33.1	172.4
Acela Programs	62.9	52.7	46.8			162.3
Superliners	0.0	0.9	0.8	0.0	0.0	1.7
Locomotives	1.2	0.4	0.5	0.5	0.5	3.1
Horizon/Surfliner Programs	1.6	0.1	0.1	0.1	0.2	2.1
Viewliner Programs	0.0	0.0	0.0	0.0	0.0	0.0
General Safety & Reliability	8.4	11.8	9.1	4.9	4.9	39.2
Mandatory Projects	1.0	4.1	4.1	4.1	4.1	17.5
Wrecks		4.1	4.1	4.1	4.1	16.5
Fleet Overhauls	113.9	115.9	97.5	40.5	47.0	414.8
Software	55.3	39.2	91.8	60.8	41.5	288.5
Operations Foundation	11.8	27.2	24.2	25.3	11.1	99.5
Hardware	11.3	3.1	16.7	10.5	12.1	53.7
Back Office Support	0.1	0.6	0.3	0.3	0.3	1.7
Technology Systems	78.6	70.0	133.0	96.8	65.1	443.5
Special Programs	13.0	19.0	79.0	72.0	205.0	388.0
Gateway Program	13.0	19.0	79.0	72.0	205.0	388.0
Safety / Mandates	6.0	9.8				15.8
Environmental Remediation	6.0	9.8				15.8
Special Programs	4.8		8.7	8.9	12.7	35.0
Rolling Stock Acquisition	4.8		8.7	8.9	12.7	35.0
ADA Stations			15.0	15.0	15.0	45.0
Safety / Mandates	9.4	6.5	5.5	5.5	5.5	32.5
ADA Compliance	9.4	6.5	20.5	20.5	20.5	77.5
General Capital / Amtrak Operating Profits - NEC [a]	573.4	734.9	1,573.0	1,692.0	1,650.0	6,223.3
Department of Homeland Security	21.9	8.5	5.9	6.0	6.0	48.2
Hudson Yards Concrete Encasement Grant	115.7	60.7				176.4
NY-NJ High Speed Rail Grant	64.1	134.7	107.6	29.3		335.7
Railroad Rehabilitation & Improvement Financing	89.7	198.1	179.3	120.6	100.0	687.8
Sandy Capital Relief Appropriation	5.2					5.2
State, Local, and Other Funds	125.6	249.3	283.4	307.4	134.9	1,100.6
Total Capital - Northeast Corridor	\$995.6	\$1,386.2	\$2,149.2	\$2,155.3	\$1,890.9	\$8,577.2

NOTE:

[a] Fund Sources for these Programs are:

General Capital	573.4	445.3	1,274.2	1,385.7	1,336.0	5,014.6
Amtrak Operating Profits - NEC		289.6	298.8	306.3	314.0	1,208.7
General Capital / Amtrak Operating Profits - NEC	\$573.4	\$734.9	\$1,573.0	\$1,692.0	\$1,650.0	\$6,223.3