

Comparative Analysis

Presentation to West Virginia MARC Funding Committee

December 18, 2018





Presentation Overview

- General Observations
- MARC Discussion
- 6 Rail Systems Compared
 - SEPTA Philadelphia to Newark DE
 - Connecticut DOT MetroNorth Cost Sharing
 - RI DOT MBTA Service
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- Considerations Looking Forward
- Questions/Discussion



General Observations

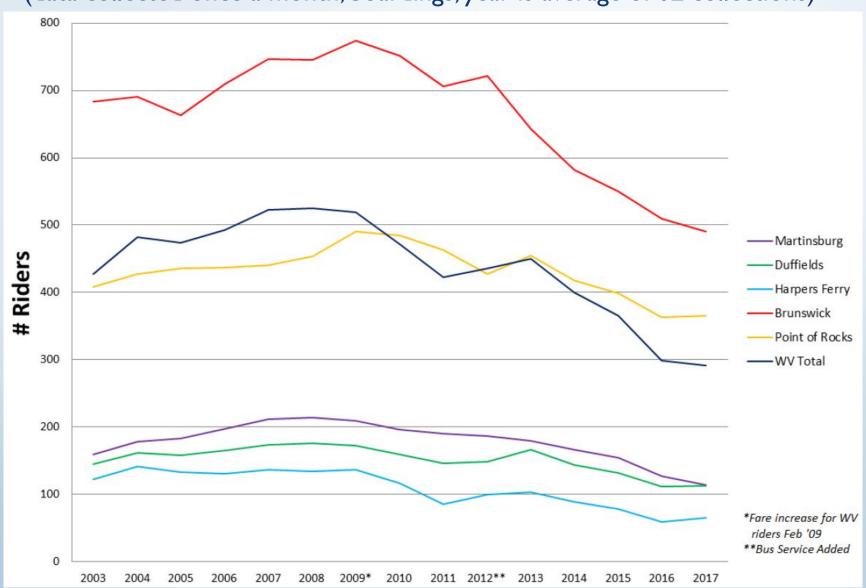
- Agreements vary by railroad
- Generally pay for incremental operating costs
- Federal funds are generally not used in operating agreements
- Ridership is stable and/or growing

- 24 miles of service in WV
- Three Stations
 - Martinsburg
 - Duffields
 - Harpers Ferry
- Level of Service
 - 3 AM trains
 - 3 PM Trains
 - 2 PM connecting bus Services



MARC Riders 2003-2017

(data collected once a month, boardings; year is average of 12 collections)

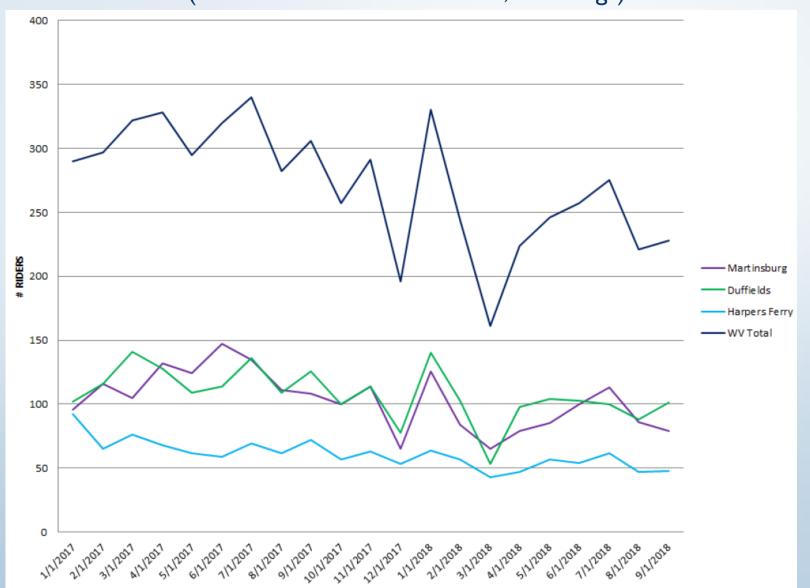


MARC Riders 2009-2017

Station	Ridership Growth 2009-2017				
	#	%			
Martinsburg	-95	-45%			
Duffields	-60	-35%			
Harpers Ferry	-72	-53%			
Brunswick	-284	-37%			
Point of Rocks	-125	-26%			

MARC Riders: Jan. 2017 - Sept. 2018

(data collected once a month, boardings)



MARC RIDERS: JAN'17-SEP'18

(data collected once a month, boardings)

MARTINSBURG

2017 2018 +/-

Jan	96	126	30
Feb	116	84	-32
Mar	105	65	-40
Apr	132	79	-53
May	124	85	-39
Jun	147	100	-47
Jul	135	113	-22
Aug	111	86	-25
Sep	108	79	-29

Total 1,074 817 -257

DUFFIELDS

2017 2018 +/-

Jan	102	140	38
Feb	116	103	-13
Mar	141	53	-88
Apr	128	98	-30
May	109	104	-5
Jun	114	103	-11
Jul	136	100	-36
Aug	109	88	-21
Sep	126	101	-25

Total 1,081 890 -191

HARPERS FERRY

2017 2018 +/-

Jan	92	64	-28
Feb	65	57	-8
Mar	76	43	-33
Apr	68	47	-21
May	62	57	-5
Jun	59	54	-5
Jul	69	62	-7
Aug	62	47	-15
Sep	72	48	-24

Total 625 479 -146

WV TOTAL

2017 2018 +/-

Jan	290	330	40
Feb	297	244	-53
Mar	322	161	-161
Apr	328	224	-104
May	295	246	-49
Jun	320	257	-63
Jul	340	275	-65
Aug	282	221	-61

Total 2,780 2,186 -594

MARC Rider Ticket Costs

	Martinsburg to	Duffields to	Harpers Ferry to	Brunswick to
	Union Station	Union Station	Union Station	Union Station
One Way (One Time)	\$13.00	\$12.00	\$12.00	\$9.00
Weekly (Mon-Fri - One Time)	\$102.50	\$95.00	\$95.00	\$67.50
Unlimited Weekly (One Time)	\$130.00	\$120.00	\$120.00	\$90.00
Unlimited Monthly (One Time)	\$377.00	\$350.00	\$350.00	\$243.00
One Way (One Time) vs. Brunswick	-\$4.00	-\$3.00	-\$3.00	-
Weekly (Mon-Fri - One Time) vs. Brunswick	-\$35.00	-\$27.50	-\$27.50	-
Unlimited Weekly (One Time) vs. Brunswick	-\$40.00	-\$30.00	-\$30.00	-
Unlimited Monthly (One Time) vs. Brunswick	-\$134.00	-\$107.00	-\$107.00	-

MARC -- Federal Funding

- 5337 Rail State of Good Repair
 - Used for Rolling Stock Repairs and Overhaul/Purchases
- 5307 Transit Capital -- Capital Projects Not used in operations
- No capital equipment or depreciation costs added to operating costs
- Expect in the Future that CSX implementation of Positive Train Control (PTC) will cause increase in operating costs. Per mile charge.





CSX Access Charges

- CSX charges covers
 - CSX maintenance
 - Liability
 - Opportunity cost
- MARC maintains the MARC specific Equipment

SEPTA – Philadelphia to Newark Service

 Operates service commuter rail service between Philadelphia and Newark, DE

 Operated on the Northeast Corridor owned by AMTRAK

- Bi-directional commute weighted toward
 Philadelphia
- Ridership has been strong and growing



SEPTA Service Cost Sharing

- SEPTA pays for the service to Marcus Hook in PA
- SEPTA charges DE for the incremental cost of operating service beyond
 Marcus Hook
- Delaware pays SEPTA the subsidy net of fare revenue for the service in Delaware
- Delaware has its own agreement with AMTRAK for access charges for service in DE
- SEPTA pays AMTRAK for access for the service in PA







SEPTA Service cont.

- Federal 5307 and 5337 funds are split at the region level and go to DELDOT for the Delaware service
- The federal funds in DE are used to pay for capital:
 - Stations
 - NEC projects with Amtrak
 - Rail cars and equipment
- SEPTA and DE have a contract that is renewed annually for service
- SEPTA provides the engines and most of the rail cars.
- DE owns some cars



Connecticut DOT

- MetroNorth operates rail service into Connecticut under a cost sharing agreement with CTDOT
- CT owns the rail lines and the platforms and most station buildings
- Some station buildings are owned by local governments
- CT owns about half of the parking spaces in CT;
 The remainder are owned and run by locals





Connecticut DOT Rail service

- There is the mainline and three branch lines that service is provided on with a combination of electrified and diesel service
- CT owns about 65% of the rail cars with the rest being provided by MetroNorth for service on the mainline
- CT owns all the rail cars for the service on the branch lines
- Across all the services they carry about 40 million passengers per year
- Most of the service in inbound commute to Grand Central Station in NYC but there is a limited reverse commute to Stamford and New Haven



Connecticut DOT Rail service

- CT pays 65% of mainline costs and receives
 65% of the revenue from the mainline.
- CT pays 100% of the branch line costs and receives 100% of the branch line revenue
- CT pays 100% of capital costs in CT
- There are some shared systems costs that CT has to pay for example CT pays 20% of the ticket vending machine costs in Grand Central Station





Connecticut DOT Rail service

- CT pays 65% of the station operating costs and MetroNorth pays the remainder in both CT and NY
- Been shifting smaller station responsibility to municipalities
- On NY side, there is a law that requires municipalities to pay for station expenses so 100% of station expenses are paid for in NY by municipalities, however, CT still is charged for 65% of the station expenses in NY as well.
- The service is provided under contract. The contracts are renewed every 5 years but it is basically perpetual with limited to no changes.



RI DOT

- The service is provided by MBTA going back to 1988 and is operated on the Northeast Corridor owned by Amtrak
- RIDOT in 1986 paid about \$10 million for track and platform improvements at New Providence
- MBTA began service in 1988 with 5 round trips per weekday
- Since then have added service
- Commute pattern is primarily outbound from RI with limited reverse commute







RI DOT

- RIDOT has an annual contract with MBTA
- RIDOT does not pay for operating expenses of the service
- RIDOT contributes to capital but not on a formula basis. They do have a contract with MBTA but it is based upon funding projects from MBTA's capital plan in RI
- RIDOT receives the FTA 5337 funds and then MBTA is a subrecipient under RIDOT for projects in RI.
- RI does not provide any State funds for capital. RI does provide some soft match through toll credits or MBTA matches the federal funds with MBTA dollars



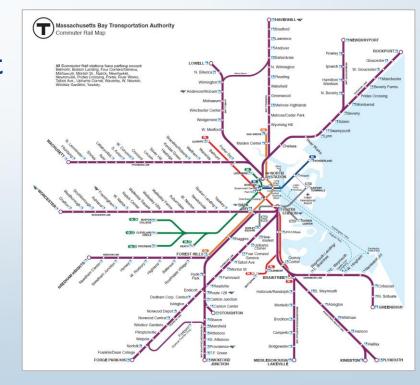


RI DOT

 RIDOT federal capital contributions have gone to help pay for rail cars and rail yard improvements as well as stations.



- The 5307 funds generated from the service are retained by the local transit agency in RI to support bus purchases.
- RI pays for insurance required to operate on the Amtrak line directly to Amtrak south of Wickford Junction station.
- The Wickford Junction Station is owned by RIDOT
- TF Greene Airport Station is owned by the Airport Authority.



Metra Service to Wisconsin

- Metra operates II rail lines
- Experiencing funding difficulties
- Serves one station in Wisconsin adjacent to Kenosha Railyard
- It is incidental service
- Currently no contribution required from Wisconsin or local government
- Metra is funded about 50% from the farebox and the remainder from sales tax.
- Metra is considering charging communities outside its sales tax district for service due to funding challenges.

Metra continued

- The state of Indiana charges Metra station access fees so Metra can serve
 Egewisch station in the state of Indiana on the Southshore RR
- In another location Southshore RR operates on Metra owned railroad and Southshore pays Metra for trackage rights.

Southshore Line Rail Service

- Fare box is 40% to 50% recovery
- State of Indiana pays from the following sources:
 - \$18 million per year from sales tax and another \$5 million per year from their public transportation fund
 - A tax on rail cars pays bonds
 - An electric rail service fund pays several hundred thousand per year

Virginia Railway Express

- VRE operates service on two lines
 - The Fredericksburg line operates from Spotsylvania, VA to Union station in Washington DC
 - The Manassas Line operates from Broad Run VA to Union Station
- Washington DC is a destination station,
 Washington DC does not contribute to
 VRE service costs

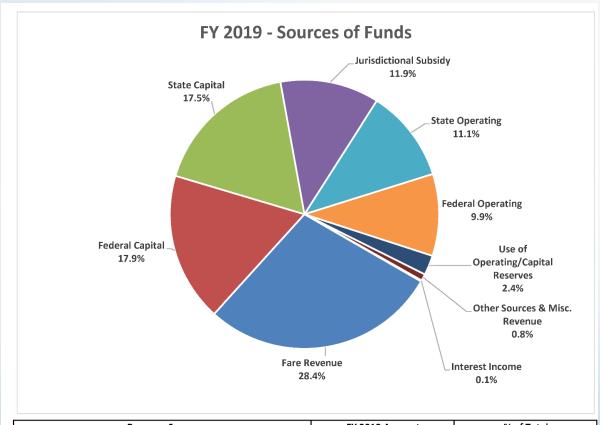


- VRE operates on tracks owned by Amtrak, Norfolk Southern and CSX railroads
- They pay access fees to each as follows:

Railroad	Description	Fees paid
Amtrak	Access to Union Station and use of Union yards	\$6.6 M
Norfolk Southern	Access to use railroad	\$2.94 M
CSX	Access to use railroad	\$7.3 M

They also buy maintenance services from Amtrak for \$4.4 m

- VRE has a unique operating revenue support
- They use federal 5307 to cover some preventative maintenance/capital cost of contracting
- Some STP/Flex funds are used to pay access fees
- They receive funds from Virginia Department of Rail and Public Transportation to contribute to the operating budget
- By their master agreement they must have 50% fare box recovery so they adjust fares every other year to maintain fare revenue growth
- The remainder of their deficit is split between their local funding partners by a ridership formula. The ridership of each station is estimated. VRE performs ridership surveys several annually at each station to verify the ridership estimates. The ridership by station is converted to a percentage of total ridership and is then multiplied by the remaining deficit.
- The local funding contribution part of VRE's charter. Each of the local funding partners are part of VRE's governance structure.



Revenue Source		FY 2019 Amount	% of Total	
Fare Revenue	\$	42,400,000	28.4%	
Federal Capital	\$	26,773,570	17.9%	
State Capital	\$	26,187,824	17.5%	
Jurisdictional Subsidy	\$	17,767,748	11.9%	
State Operating	\$	16,632,508	11.1%	
Federal Operating	\$	14,738,543	9.9%	
Use of Operating/Capital Reserves	\$	3,550,000	2.4%	
Other Sources & Misc. Revenue	\$	1,215,000	0.8%	
Interest Income	\$	200,000	0.1%	
	Total Sources of Funds \$	149,465,194	100.0%	

	FY 20	17	FY 20	18	FY 20	19	Change FY	17 to FY19	Change FY	18 to FY19
Jurisdiction	Subsidy	Percent	Subsidy	Percent	Subsidy	Percent	Net +/-	% Change	Net +/-	% Change
Fairfax County	\$5,160,910	30%	\$6,099,300	35%	\$5,385,794	30%	\$224,884	4.36%	(\$713,506)	-11.70%
Prince William County	5,968,406	35%	5,363,372	31%	6,183,745	35%	215,339	3.61%	820,373	15.30%
Stafford County	2,647,222	15%	2,344,514	14%	2,475,127	14%	(172,095)	-6.50%	130,613	5.57%
Spotsylvania County	1,382,749	8%	1,520,191	9%	1,632,635	9%	249,886	18.07%	112,444	7.40%
Manassas	749,371	4%	684,586	4%	785,898	4%	36,527	4.87%	101,312	14.80%
Manassas Park	511,777	3%	474,718	3%	511,311	3%	(466)	-0.09%	36,593	7.71%
Fredericksburg	483,524	3%	417,278	2%	436,568	2%	(46,956)	-9.71%	19,290	4.62%
Arlington	205,692	1%	205,692	1%	211,863	1%	6,171	3.00%	6,171	3.00%
Alexandria	140,589	1%	140,589	1%	144,807	1%	4,218	3.00%	4,218	3.00%
	\$17,250,240	100%	\$17,250,240	100%	\$17,767,748	100%	\$517,508	3.00%	\$517,508	3.00%

	October	2015	October	2016	October 2017 Chan		October 2017 Change Oct. 15 to		15 to Oct. 17	17 Change Oct. 16 to Oct. 17	
Jurisdiction	Riders	Percent	Riders	Percent	Riders	Percent	Net+/-	% Change	Net +/-	% Change	
Fairfax County	2,163	22%	2,777	27%	2,122	22%	(41)	-1.90%	(655)	-23.60%	
Prince William County	3,095	32%	3,061	29%	2,995	31%	(100)	-3.24%	(66)	-2.15%	
Stafford County	1,603	17%	1,610	15%	1,517	16%	(86)	-5.36%	(93)	-5.77%	
Spotsylvania County	990	10%	1,183	11%	1,159	12%	169	17.09%	(24)	-2.06%	
Manassas	428	4%	418	4%	416	4%	(12)	-2.79%	(2)	-0.41%	
Manassas Park	280	3%	294	3%	264	3%	(16)	-5.67%	(30)	-10.15%	
Fredericksburg	359	4%	337	3%	359	4%	(0)	-0.09%	22	6.44%	
Other	777	8%	778	7%	759	8%	(18)	-2.32%	(19)	-2.44%	
	9,695	100%	10,458	100%	9,591	100%	(104)	-1.08%	(867)	-8.29%	

- Station improvements are the responsibility of the local jurisdiction
 - Locals may pay to cover costs
 - Locals may take responsibility to construct projects
- VRE does take lead to apply for grants for those projects on behalf of local jurisdictions

Considerations Looking Forward

- Need to pursue understanding the level of federal funding generated by service in WV as part of negotiating agreement with MARC
- Need to understand why ridership has dropped and pursue ridership growth strategies – consider dropping fare surcharge for WV to grow ridership and revenue
- Actively participate with MARC on Capital Improvement Plan for service in WV including stations.
- Consider use of other federal funds to pay CSX access fees directly or as part of MARC contract
- May be able to negotiate entire contribution as federal funds (FTA/STP/CMAQ) for capital in lieu of operating to MARC or MTA

Questions/Discussion