

# WVSWP RAIL ANALYSIS

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## WVDOT'S LONG-RANGE MULTI-MODAL TRANSPORTATION PLAN

Submitted to:



**West Virginia Department of Transportation  
State Rail Authority**

By:

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## INTRODUCTION

This report is part of the West Virginia Statewide Transportation Plan. This document outlines the various passenger services currently in operation in West Virginia. This includes intercity rail, commuter rail, and various tourist railroads. The following sections describe the routes, levels of service, stations, ridership, parking, and transit connections of the above mentioned rail services. In addition, the report also includes the future demand analysis and proposed service expansion of these rail services.

## EXISTING SERVICES

### **Amtrak**

Amtrak, also known as the National Railroad Passenger Corporation, is a government owned corporation that operates passenger rail service throughout the country serving 46 states, the District of Columbia and three Canadian provinces traversing about 21,000 route miles. It is an intercity passenger rail service, carrying more than 70,000 people on up to 315 trains each day. Amtrak services that cater to the State of West Virginia are the *Capitol Limited* and the *Cardinal*. These services are not supported by West Virginia state funding.

### *Capitol Limited*

The *Capitol Limited* is considered part of Amtrak's long-distance service. In order to be categorized as long-distance service by Amtrak, a route needs to be over 750 miles long, and each train on the route has to have sleeper cars and a dining car. The *Capitol Limited* meets all of the qualifications for a long-distance service. It is one of the two routes connecting Washington, D.C. to Chicago, and runs 764 miles via Cleveland, Ohio (the other route one is the *Cardinal* discussed below). The route crosses into West Virginia in the very northwest corner of the state (known as the "northern panhandle"). There are two stations in West Virginia served by the *Capitol Limited* – Harpers Ferry and Martinsburg. Figure 1 below shows the route of the Amtrak Capitol Limited.

Figure 1: Capitol Limited Route



Source: Amtrak



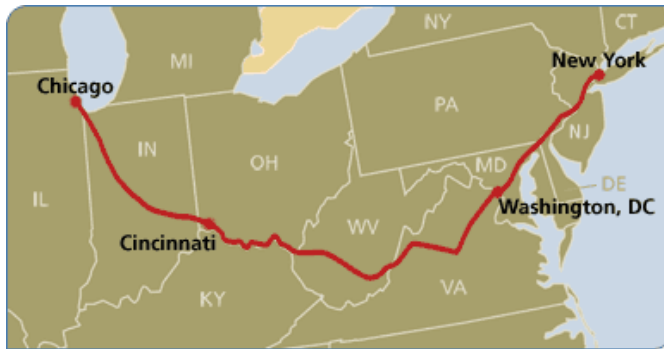
The City of Martinsburg owns the Martinsburg station, and the United States National Park Service owns the Harpers Ferry station.

### Cardinal

The *Cardinal* is also part of Amtrak's long-distance service. The route runs between New York City and Chicago via Washington, D.C. and Cincinnati, Ohio. The route is 1,147 miles long and travels across the lower southern third of West Virginia. The *Cardinal* serves eight stations within the state – White Sulphur Springs, Alderson, Hinton, Prince, Thurmond, Montgomery, Charleston, and Huntington.

Figure 2 below shows the route of Amtrak *Cardinal*.

Figure 2: Cardinal Route



Source: Amtrak

Ownership of the eight stations on the *Cardinal* route is as follows:

According to the Charles Hill of the West Virginia Department of Rail, Amtrak owns the station at Huntington, and CSX Corporation, a major freight railroad, owns the other seven stations (White Sulphur Springs, Alderson, Hinton, Prince, Thurmond, Montgomery, and Charleston). In addition, according to Drew Galloway, Amtrak's Assistant Vice-President of Strategic Partnerships - Eastern Region, a more detailed ownership picture for the eight Amtrak stations (station structure, parking facilities, and platforms) on the *Cardinal* route are described in Table 1 on the following page



Table 1: Station and Parking Ownership

Station Name	Station Structure Owner	Parking Owner	Platform Owner
Alderson, WV	City of Alderson <sup>(1)</sup>	City of Alderson <sup>(1)</sup>	CSX
Charleston, WV	Susan Lee Haddad	Susan Lee Haddad	CSX
Harpers Ferry, WV	National Park Service	National Park Service	CSX <sup>(4)</sup>
Hinton, WV	CSX	CSX	CSX
Huntington, WV	CSX	CSX	CSX
Montgomery, WV	N/A <sup>(2)</sup>	Montgomery Parking Authority	CSX
Martinsburg, WV	City of Martinsburg	City of Martinsburg	CSX
Prince, WV	CSX	CSX	CSX
Thurmond, WV	National Park Service	National Park Service	CSX
White Sulphur Springs, WV	Old White Development Company/CSX <sup>(3)</sup>	Old White Development Company/CSX <sup>(3)</sup>	CSX

Source: Amtrak

Notes:

(1) Pursuant to information provided by CSX this station was sold to the City in December 2004.

(2) There is no structure; station consists of a platform only.

(3) Ownership information could not be confirmed with the Office of the Tax Assessor for Greenbrier County, WV absent parcel ID#.

(4) West Virginia State Rail Authority maintains CSX owned platforms and tracks under contract with CSX.

### Level of Service

*Capitol Limited:* Trains run once daily seven days per week in both directions. Westbound trains leave Washington, D.C.'s Union Station at 4:05 p.m. (Eastern) every day with stops at Harpers Ferry at 5:16 p.m. (Eastern) and Martinsburg at 5:45 p.m. (Eastern). Eastbound trains leave Chicago's Union Station at 7:05 p.m. (Central) and arrive the following day at Martinsburg at 11:20 a.m. (Eastern) and Harpers Ferry at 11:45 a.m. (Eastern).

*Cardinal:* Three trains per week run on this route. Westbound departures from New York City's Penn Station are in the morning on Wednesdays, Fridays and Sundays with all eight West Virginia stations served in the evening (5 p.m. through 9:35 p.m. Eastern) on the same day as departure. Eastbound departures from Chicago's Union Station are in the evening on Tuesdays, Thursdays and Saturdays with all eight West Virginia stations served in the morning the next day (Wednesdays, Fridays and Sundays from 7:09 a.m. through 11:25 a.m. Eastern).

### Stations: Parking, Transit Connections and Ridership

The following tables describe the 10 Amtrak stations in West Virginia: Parking capacity per station (Table 2); Transit connections to stations (Table 3), and Ridership/station boardings (Table 4 and Table 5).



Table 2: Stations – Parking Capacity

Code	Station Name	Staffed	Parking	Parking Attendant	Parking Short-Term Spaces	Parking Long-Term Spaces	Parking Location	Parking Rate	Additional Parking Rate
ALD	Alderson	N	Y	N	10	10	Adjacent to Station in open lot	Short-term and Long-term parking is free for passengers	
CHW	Charleston	Y	Y	N	3	5	Adjacent to the station	Short-term and Long-term parking free to Amtrak passengers	Limited Long-term parking spaces at Station
HFY	Harpers Ferry	N	Y	N	5	120	Adjacent to station in open lot	Short-term and Long-term parking free for Amtrak passengers	
HIN	Hinton	N	Y	N	5	5	Adjacent to Station in open lot	Short-term and Long-term parking is free for passengers	
HUN	Huntington	Y	Y	N	31	5	Adjacent to station in well-lighted lot	Short-term and Long-term parking free to Amtrak passengers	
MNG	Montgomery	N	Y	N	50	50	Adjacent to train boarding platform.	Short-term and Long-term parking free for Amtrak passengers	
MRB	Martinsburg	N	Y	N	5	40	Adjacent to station	Short-term parking free for passenger pick-up/drop-off	Long-term parking permit \$1 a day, \$12 for a calendar month
PRC	Prince	Y	Y	N	30	30	Adjacent to station in open lot	Short-term and Long-term parking is free for passengers	
THN	Thurmond	N	Y	N	5	5	Adjacent to station in open lot	Short-term and Long-term parking free for Amtrak passengers	
WSS	White Sulphur Springs	N	Y	N	20	200	Adjacent to Station in open lot	Short-term and Long-term parking is free for passengers	

Source: Amtrak



Table 3: Stations – Transit Connections

Code	Station Name	Bus Name	Airport Name	Public Transit Name	Commuter Rail Name	Taxi Name_1	Taxi Name_2	Taxi Name_3	Taxi Name_4
ALD	Alderson	Bus Service Not Available	Greenbrier Valley Airport	None		No local cab service	Jones Taxi Service		
CHW	Charleston	Greyhound Bus Company	Yeager Airport	Kanawha Regional Transit		C and H Taxi Company	Kanawha Valley Cab Company	Mountaineer Limo Service	Hickory Limousine
HFY	Harpers Ferry		Martinsburg Municipal Airport		Maryland Area Regional Commuter (MARC) rail	Community Taxi Company	Cam's Taxi Service	Luxury Transport of Charles Town	
HIN	Hinton	No service available	Raleigh Memorial			Hinton Cab Company	AAA Taxi, Inc	City Cab Company	
HUN	Huntington	Greyhound	Tri-State Airport	Tri-State Transit Authority		Yellow Cab Company	Express Cab Company		
MNG	Montgomery	Greyhound	Kanawha Airport	Kanawha Regional Transit		City Cab Company			
MRB	Martinsburg		Martinsburg Municipal Airport		Maryland Area Regional Commuter (MARC) rail	Harley McCain Taxi Service	E. G. Limo Service		
PRC	Prince	Greyhound	Raleigh Memorial			AAA Taxi, Inc	City Cab Company	Ambassador Auto & Taxi	
THN	Thurmond	Greyhound	Raleigh Memorial			Checker Cab Company	Oak Hill Taxi Company		
WSS	White Sulphur Springs	Greyhound	Greenbrier Valley Airport			Greenbrier Valley Limousine	Greenbrier Valley Limo	Jones Taxi Service	

Source: Amtrak



Table 4: Ridership per Station Boardings

CODE	Station	Train Service	Total FY07 Ridership (Ons-Offs)	Total FY08 Ridership (Ons-Offs)	2030 Growth Ridership* (Ons-Offs)
ALD	Alderson	Flag	475	550	831
CHW	Charleston	Regular	8,608	9,178	15,067
HFY	Harpers Ferry	Regular	3,315	3,967	5,802
HIN	Hinton	Regular	8,705	10,162	15,236
HUN	Huntington	Regular	11,080	12,610	19,393
MRB	Martinsburg	Regular	5,910	7,068	10,344
MNG	Montgomery	Regular	733	886	1,283
PRC	Prince	Regular	3,247	3,495	5,683
THN	Thurmond	Flag	372	405	651
WSS	White Sulphur Springs	Regular	3,762	4,896	6,585

\*2.7% annual growth assumed  
Source: Amtrak

Anderson and Thurmond are flag stops, which mean trains stop at these stations only if there are passengers waiting at the platforms. All other stops are regular stops; the trains always stop regardless of the presence of waiting passengers.

Table 5: Riders per Station Boardings

CODE	Station	2003	2004	2005	2006	2007	2008
		Riders On and Off	Riders On and Off	Riders On and Off	Riders On and Off	Riders On and Off	Riders On and Off
ALD	Alderson	1	51	564	504	408	570
CHW	Charleston	8,780	8,284	7,514	8,399	8,857	8,314
HFY	Harpers Ferry*	3,170	2,902	2,907	3,396	3,476	3,897
HIN	Hinton	10,479	10,971	2,915	8,476	10,090	10,159
HUN	Huntington	13,567	13,690	13,138	10,718	12,357	12,145
MRB	Martinsburg*	5,269	5,397	5,706	6,310	5,932	6,514
MNG	Montgomery	769	817	768	728	779	753
PRC	Prince	3,259	3,496	3,280	2,990	3,327	3,329
THN	Thurmond	251	223	247	237	358	382
WSS	White Sulphur Springs	6,163	4,098	4,231	4,210	3,896	4,420

Source: Amtrak  
\*On and off boardings at Harpers Ferry and Martinsburg listed above is for Amtrak only, no MARC rail ridership is included.



### Amtrak Thruway bus routes

There are currently no Amtrak Thruway bus routes serving any Amtrak station in West Virginia. At other locations, Amtrak Thruway buses connect with Amtrak trains and take passengers to off-line destinations.

## **MARC**

MARC (Maryland Area Regional Commuter train) is a regional rail system comprising of three lines in the Baltimore-Washington Metropolitan Area serving Washington, D.C., various northern Virginia suburbs, Baltimore and Maryland suburbs, and West Virginia suburbs. MARC is administered by the Maryland Transit Administration (MTA).

MARC is a commuter rail that operates trains on weekdays, with no weekend or holiday service. Generally, commuter rail passenger trips are typically 20 miles long or more. Typical commuter rail station spacing is about every 5 to 7 miles. Commuter trains link city centers and outer suburbs and towns or other locations/activity centers that draw large numbers of commuters. For the most part in the United States, commuter rail services operate in part or entirely on tracks owned by freight railroads.

The MARC line that serves West Virginia, the Brunswick Line, runs between Washington, D.C. and Martinsburg. The Brunswick Line is part of a CSX rail line. Train service on this line is offered during morning and evening rush hours only. MARC operations on the Brunswick Line are not supported by West Virginia state funding.

### Brunswick Line

The Brunswick Line is the second most ridden MARC line, having an average daily ridership of approximately 7,000 commuters. The Brunswick Line is operated under contract with CSX. Brunswick Line trains travel over the CSX Metropolitan, Old Main Line, and Cumberland Subdivision tracks. West Virginia Brunswick Line stops are at Martinsburg (terminus), Duffields (no station building), and Harpers Ferry. Duffields is a stand alone MARC stop, while the Martinsburg and Harpers Ferry stations are jointly served by MARC and Amtrak. Figure 3 on the following page shows the stations in West Virginia and Maryland served by MARC.



Figure 3: Stations in West Virginia Served by MARC (upper left-hand corner)



Source: Department of Transportation Maryland Transit Administration

As mentioned earlier, per Mr. Galloway of Amtrak, the Martinsburg station is owned by the City of Martinsburg, and the Harpers Ferry station structure is owned by the United States National Park Service. The Duffields property is owned by the State of West Virginia.

**Level of Service**

MARC service operates on weekdays, with no weekend or holiday service. There are two daily trains inbound every weekday morning leaving Martinsburg at 5:25 a.m. and 6:30 a.m. and arriving at Washington, D.C.’s Union Station at 7:28 a.m. and 8:30 a.m., respectively.

There are three daily outbound trains leaving Washington, D.C.’s Union Station bound for Martinsburg. These trains depart Union Station at 4:55 p.m., 5:35 p.m. and 7:15 p.m. and arrive in Martinsburg at 6:50 p.m., 7:41 p.m. and 9:14 p.m., respectively.

**Stations – Parking**

Amtrak estimates of available parking at Martinsburg and Harpers Ferry, appearing on Table 2, differ slightly from MARC estimates. Ira Silverman, the MARC’s Director of Transit Operations Initiatives, lists Harpers Ferry with 98 parking spots and Martinsburg with 81 official parking spaces in two lots. The MARC figure for Martinsburg was confirmed as accurate by Bill Hill of the West Virginia State Rail Authority, but the number of parking spaces he cited for Harpers Ferry was 88. As do Amtrak passengers, MARC riders must pay for parking at Martinsburg. Harpers Ferry parking is free. Even though MARC lists Duffields with 295 spaces, according to Mr. Hill, the station only has a total of 199 parking spots, which are free.



For reference, the Maryland Transit Administration provides station parking information (parking space numbers differ for Duffields and Harpers Ferry with the numbers the State of West Virginia has for the two stations) on its web site under the MARC link. The details are Table 6 below:

Table 6: MARC Brunswick Line Stations in West Virginia

MARC Station	Location	Lot Owner	Parking Spaces	Cost	Connecting Services
Martinsburg, WV	226 E. Martin Street Martinsburg, WV 25401	City of Martinsburg	81	\$12 for monthly permit / metered	Amtrak, EPTA Blue & Red
Duffields, WV	5057 Flowing Springs Road, Duffields, WV 25414	CSX/WV	295	Free	none
Harpers Ferry, WV	120 Potomac Street Harper's Ferry WV 25425	WV Rail	98	Free	Amtrak, EPTA Orange

Source: Maryland Transit Administration

### Stations – Transit Connections

Transit connections for Martinsburg and Harpers Ferry were listed previously in the Amtrak section under Table 3. In addition to the data provided by Amtrak, the MTA's web site has additional information on connecting services as shown in Table 6. The Martinsburg and Harpers Ferry stations are served by the Eastern Panhandle Transit Authority (EPTA). PanTran, the ground transportation arm of the EPTA, provides service to the Eastern Panhandle of West Virginia serving the two stations. The PanTran Blue and Red route buses stop at the Martinsburg station, and PanTran Orange buses pick and drop-off passengers at the Harpers Ferry. A search of the City of Duffields' web site did not indicate any transit connections at the Duffields MARC stop.

### Ridership per Station Boardings

According to Mr. Silverman, for the 12-month period between November 2007 and October 2008, MARC counted 225 average weekday boardings at Martinsburg, 183 at Duffields, and 138 at Harpers Ferry.

## Tourist Railroads

A typical tourist railroad operation consists of a short train ride through scenic or historic part of the country. Tourist railways operate on tracks of all gauges sometimes using rolling stock dating from the 19th Century. Track lengths carry steam locomotives, diesel engines, coaches, railcars, gang cars, etc. Tourist railroads typically are either a for-profit business or are operated as non-profits for historical preservation purposes.

The different tourist railroads operational in West Virginia are:

- Cass Scenic Railroad
- Durbin & Greenbrier Valley Railroad
- Mountain State New River Gorge Mystery Train
- New River Train
- Potomac Eagle Scenic Railroad

**Comment [JMA1]:** Couldn't find confirmation on website on the "profit" part.



The summaries below discuss level of service, service characteristics, and other relevant information for the tourist railroads. Basic information for all these railroads was gathered from various sources. Ridership information and other detail were requested from the railroads. As of January 2009, only Cass Scenic Railroad has responded. In some cases, information is missing, and there is more detail for some railroads and less detail for others, depending on what can be found on railroad web sites. Thus, there is a significant variance of information presented for the tourist railroads.

### **Cass Scenic Railroad**

Three scenic routes originate in Cass and head to destinations in Whittaker, Bald Knob and Spruce, all of which are in Pochahontas County. Trips to Whittaker generally operate twice everyday on a weekday at noon and at 2:30 p.m. On weekends they operate thrice starting at 9:30 a.m. Trips to Bald Knob are generally available five to six times a week at 11:30 a.m. Trips to Spruce run every Friday at 11:30 a.m. These trains run approximately from memorial weekend in May through the end of October and average about three trips everyday – two trips to Whittaker and one trip to either Bald Knob or Spruce. For the year 2008, the annual ridership for all the three routes including weekends and special events amounted to more than 50,000 passengers.

### **Durbin & Greenbrier Valley Railroad**

The Durbin & Greenbrier Valley Railroad, also in Pochahontas County, operates four trains departing from different towns and small cities along their routes. The New Tygart Flyer trips culminate at the High Falls of Cheat waterfalls. There is a four-hour or seven-hour trip from Elkins Station or from Belington Station to High Falls of the Cheat for an all day trip. The schedule varies per season and runs mostly during weekends. The Durbin Rocket leaves from Durbin and travels through the Monongahela National Forest along the Greenbrier River. Trips run from Thursday thru Sunday or on weekends depending on the season. The Cheat Mountain Salamander train travels through the Cheat Mountains. Trips run on Friday and Saturday from May to November. The Mountain Explorer includes a four-course meal and travels through the Monongahela National Forest to the High Falls of Cheat. The train departs at 5:00 p.m. from the Elkins Depot every Friday and Saturday during the traditional (summer, early fall) tourist season..

### **Mountain State New River Gorge Mystery Train**

This railroad serves West Virginia's New River Gorge National River Recreation Area and Virginia's Shenandoah National Park. This scenic train route originates passenger service in Huntington, Charleston or Beckley and operates all year round. There are three different year-round trips that travel to/from West Virginia. The Mountain State Mystery Train originates in Huntington, Charleston or Beckley, and services various scenic destinations or major festivals in West Virginia for day trips, overnights or weekend. The Ohio River Mystery Train and the Blue Ridge - Shenandoah Mystery Train originates in Cincinnati, Ohio and Washington, D.C. respectively and travel through West Virginia for day trips, overnights and/or weekend.



## **New River Train**

New River Train travels through the New River Gorge in southern West Virginia. Rail trips occur during peak autumn foliage time when the train traverses the former Chesapeake & Ohio (C&O) mainline from Huntington to Hinton. Trips depart at 8:30 a.m. from the Huntington C&O Depot with stops in St. Albans and Montgomery, giving passengers the option of three boarding locations.

## **Potomac Eagle Scenic Railroad**

The South Branch Valley Railroad (SBVR) comprises a 52.4-mile route from Petersburg to Green Spring where it links to the CSX (freight) mainline connecting Cumberland, Maryland to Martinsburg. The SBVR generally parallels the South Branch of the Potomac River, from which the railroad takes its name. The railroad covers the West Virginia landscape along the South Branch of the Potomac River. Crossing Hampshire, Hardy and Grant Counties, the SBVR serves the towns of Romney, Moorefield and Petersburg. The railroad is headquartered in Moorefield and is owned and operated by the West Virginia State Rail Authority.

All-Day Trains depart from Romney at 9:00 a.m., travel south to Moorefield and Petersburg, and return to Romney at approximately 5:00 p.m.



## **FUTURE DEMAND**

### **Amtrak**

#### **Growth related to domestic economy, energy prices**

No specific ridership growth particular to West Virginia boardings was singled out by Mr. Galloway of Amtrak. He did say that on average growth for the Amtrak system on the whole is about 2 percent per year. The figures Amtrak forwarded on growth listed previously in this report (Table 4 - Ridership) assumed an optimistic annual growth rate of 2.7 percent per year for West Virginia boardings.

Amtrak did not provide any detail on how future demand is affected by the recession or the elasticity of energy prices.

### **MARC**

#### **Related to service improvements**

According to MARC's Mr. Silverman, no future ridership projections have specifically been made for West Virginia stations other than the 3 percent annual ridership growth assumed for MARC service on the whole.

Mr. Silverman did say that there is no new service to West Virginia stations planned for the short or long-term future. MARC has a \$60 million budget deficit which must be cut out of the \$200 million long-term capital budget. This massive budget deficit means that no new rail equipment will be bought until FY 2014, and even then West Virginia service will be a low priority. Because the State of West Virginia does not contribute any funding to MARC or subsidize MARC financially in any way, service to West Virginia is a lower priority. The primary obligation for MARC is to the taxpayers of the State of Maryland and, thus, West Virginia is not in a good position to get increased service unless it has funds to contribute.

According to Mr. Silverman and West Virginia Department of Transportation State Rail Authority CEO Cindy Butler, MARC was seriously looking at cutting the third and last evening train from Washington, D.C. to Martinsville (train #P833 leaving D.C. at 7:15 p.m.) due to a lack of funding. However, in a deal brokered between MARC and the West Virginia State Rail Authority, it was agreed that fares from all three MARC stations located within West Virginia would go up \$2 per one-way fare to Washington, D.C. beginning in February 2009. This fare increase will raise operating revenue for MARC and allow the agency to continue running the third night train from Washington, D.C. to Martinsburg for the time being. No timetable was set between MARC and the West Virginia State Rail Authority as to how long the \$2 fare increase will allow MARC to continue to run the third and last evening train from Washington, D.C. to Martinsville.

MARC did not provide any detail on how future demand is affected by the recession or the elasticity of energy prices.



## **SERVICE EXPANSION**

### **Amtrak**

Amtrak's FY2008 Comprehensive Business Plan does not specifically mention service improvements to the routes serving West Virginia. The report mentions implementing a strategy to enhance connectivity and improve ridership and revenue to the long distance operations that the *Capitol Limited* and *Cardinal* are part of. Some of the operating initiatives improvements mentioned are to help increase ridership on existing routes but mentions nothing specific regarding the routes that serve West Virginia.

Some of the general expenditures in terms of service improvements mentioned in the report are:

- Fleet investments to focus on improving availability and reliability. This will eventually support maintenance as well as improve customer satisfaction.
- Upgrade of the service's information systems. The priority is to focus on Amtrak's Strategic Asset Management (SAM) project, integrating financial, supply chain, material and asset management (linear, fixed, and rolling stock) business processes and information.

These investments are planned by Amtrak nationwide, and therefore it can be inferred that the service lines through West Virginia will also see some improvements.

### **Station and Parking Needs**

Research gathered on existing parking facilities and station infrastructure at the Amtrak stations serving West Virginia has not indicated any need for immediate improvements, apart from Martinsburg and Harpers Ferry (see discussion of MARC parking needs below). Any substantial increase in ridership on both the services would require revisiting parking needs in the long-term future. Even so, as mentioned earlier, the estimated annual growth of West Virginia patronage on Amtrak is 2.7 percent, and thus it is not likely that there will be a major need for additional parking in the near term.

### **MARC**

#### **Station needs and Parking needs**

The following chart received from the West Virginia State Rail Authority (SRA) detailing capital expenditures for the three MARC stations and related parking lots in the past few years. No new additional funding is slated for further capital improvements at this time.



Table 7: Paid by Rail Authority for MARC Stations in E. Panhandle over past years

EXPENSE DESCRIPTION	AMOUNT
Lease For Commons Area & Ticket Agent Room at Martinsburg	\$ 11,250.00
Land Lease Paid To CSX For All Locations	\$ 3,400.00
Duffields Snow Removal & Utilities	\$ 18,000.00
Harpers Ferry Snow Removal & Utilities	\$ 12,000.00
<b>Total Yearly Expenses</b>	<b>\$ 44,650.00</b>
<b>DUFFIELDS PARKING LOT EXPANSION</b>	
	AMOUNT
2004 - Purchased Additional 2 Acres at Duffields	\$ 45,000.00
2006 - Excavation To Expand Parking at Duffields	\$ 25,384.00
2007 - Paving And Striping Of Additional Parking	\$ 26,544.00
2008 - Final Paving Costs	\$ 5,214.00
<b>Total Spent To Double Parking Capacity Of Duffields</b>	<b>\$ 102,142.00</b>
<b>HARPERS FERRY -UPGRADES – PHASE I</b>	
2007- Tunnel Renovation/Rewiring/New Light Fixtures	\$ 83,328.00
2008 - Platform Lights Installed	\$ 15,506.00
<b>Total Phase I Upgrades</b>	<b>\$ 98,834.00</b>

Source: West Virginia Department of Transportation, State Rail Authority

*The next planned phase for Harpers Ferry is to utilize a Transportation Enhancement Grant that the SRA was awarded to renovate the underpass shelters and platforms. The shelters will be renovated to match the historical appearance of the depot. The platforms will be ADA compliant when complete. The grant is an 80/20 match in the amount of \$289,700, making the total of the project estimated at \$362,125.*

*The final phase of renovations at the Harpers Ferry Station will consist of making the entire location ADA compliant.*

*This will involve redesign of the underground passage. At this time no final decision has been made on what is the most logical and economical way to proceed. Department of Highway engineers are working with MARC, Amtrak and CSXT to come up with designs that will be suitable for all parties. Numerous ideas have been discussed including ramps, elevators and chair lifts. Since no decision has been made on how to proceed, I have no cost estimate for this phase at this time.*

*Surveillance cameras will be installed at Duffields. Approximate cost for installation \$50,000 and a monthly expense of \$1,500. A pre-bid is scheduled for this project.*

According to MARC's Mr. Silverman, Duffields has adequate parking for years to come, but Martinsburg and Harpers Ferry have constrained parking currently and will need additional parking as ridership slowly grows throughout future years.

Ms. Butler of the West Virginia State Rail Authority said that some of West Virginia's state senators are interested in upgrading the Martinsburg layover facility for utilization by MARC trains, but no details on this project are available at this time and no funding has been identified for upgraded passenger service within West Virginia. Similarly, no proposed projects related to passenger rail in West Virginia are on the drawing board for the proposed federal economic stimulus infrastructure package.



If funding becomes available, the West Virginia State Rail Authority would like to see the Martinsburg layover facility expanded in order to hold more than two trains and possibly relocate the current facility to a location outside of Martinsburg to rectify the noise problems associated with idling trains. In the original Intermodal Surface Transportation Efficiency Act (ISTEA) federal transportation bill, federal West Virginia Senator Robert Byrd successfully earmarked \$15 million for an extensive upgrade of the CSX signaling system serving the MARC Brunswick Line and for the capital construction of the original Martinsburg layover facility. Ms. Butler did not know what role, if any, Senator Byrd would play in the developing and dispersing of infrastructure funding associated with the any federal stimulus package.

## **Other Potential Rail Service Expansion**

### **High-Speed Rail Initiatives**

High-speed rail is a type of passenger rail transport that operates significantly faster than the normal speed of rail traffic. According to the United States Federal Railroad Administration (FRA), high-speed is defined as any speed above 90 mph (145 km/h) but there is no single standard, and lower speeds can be required by local constraints. Amtrak's *Acela* in the northeastern portion of the U.S. travels from 125-150 mph and is considered the only legitimate high-speed rail in the nation. Research indicated that there are no high-speed rail initiatives currently planned for the short-term or long-term future (10-25 years out) that would serve the State of West Virginia.

Magnetic Levitation (Maglev) trains fall under the category of high-speed rail. Maglev is a system of transportation that suspends, guides and (usually) propels vehicles (predominantly trains) using magnetic forces. This method has the potential to be faster, quieter and smoother than wheeled transportation systems. Research indicated that there is no Maglev initiatives currently planned that would serve the State of West Virginia. There are two Maglev initiatives in neighboring jurisdictions (Pennsylvania, Maryland and Washington, D.C.) that are in the planning stages. However, according to the web sites for the Pennsylvania High Speed Maglev Project and the Baltimore-Washington Maglev Project, neither project has any current or future plans to serve the State of West Virginia.

### **Commuter Rail Initiatives**

As explained earlier, commuter rail service is a passenger rail transport service linking suburban communities to employment and other activity centers on a daily basis. Research indicated that there are no commuter rail initiatives (other than MARC service described in the previous section) for the short-term or long-term future (10-25 years out) that would serve the State of West Virginia.

### **Light Rail Transit Initiatives**

Light rail transit (LRT) is a form of urban rail public transportation that generally has higher capacity and higher speed than street-running tram systems, but lower capacity and lower speed than either heavy rail subway systems or commuter rail systems. LRT systems can share right-of-way with motor vehicles as well as operate in separate guideways. They typically exist along urban corridors with dense residential and commercial land uses. The systems are normally electrified, but at least two diesel powered light rail system exists in the U.S (New Jersey Transit's River Line



and North County Transit District's Sprinter in suburban San Diego County). Train lengths are typically two or three cars long. A typical LRT stopping pattern is every few blocks in dense downtown urban areas to every few miles in more suburban settings.

Research indicated that there are no light rail transit initiatives for the short-term or long-term future (10-25 years out) that would serve the State of West Virginia. The Port Authority of Allegheny County in Pittsburgh, Pennsylvania has a light rail system (known as the "T") that serves Pittsburgh's downtown core and some of the suburbs within Pennsylvania. However, according to Jim McAllister of the Port Authority Planning Department, there are no plans in the short-term or long-term to extend any of the current five T lines into West Virginia. In fact, the five T lines span a total of 25 miles combined within the Pittsburgh metro area, while the closest West Virginia suburbs to Pittsburgh are to the west a great distance away. For example, Weirton, WV is 36.4 miles from downtown Pittsburgh, and Wheeling, WV is 59.2 miles from downtown Pittsburgh. In very general terms, a representative construction cost for a new LRT line could be around \$50-\$100 million per mile. Given such potential costs, it appears unlikely financially that the Port Authority would extend the T light rail service in to West Virginia.

### Future Needs Assessment

As mentioned earlier, commuter rail and light rail service originates/terminates in large downtown areas. Commuter rail connects these large downtown areas with suburban communities. On the other hand, light rail is an urban transit system best deployed on corridors dense with residential and commercial land uses. Both commuter rail and light rail services work well for big cities with congested roadways.

The U.S. Census indicates that the total population in some of the bigger cities in West Virginia has been declining the past 15 years, especially in Charleston and Huntington as shown in Table 7 below. While Martinsburg's population has risen, it is still comparatively light. Accordingly, there appears to be no likely or practical candidate region for commuter or light rail investments in West Virginia for the foreseeable future.

Table 8: West Virginia Cities Population

Name	Status	1990	2000	2007
Charleston	City	57,287	53,484	50,478
Huntington	City	54,844	51,560	48,982
Martinsburg	City	14,073	14,915	16,450

Source: U.S. Census Bureau



## Sources of Reference:

### Information from agency personnel

Jim McAllister - Planner, Port Authority of Alleghany County (PA.)  
Bill Hill - Property Manager, West Virginia Department of Transportation, State Rail Authority  
Ira Silverman – Director, Transit Operations Initiatives, Maryland Transit Administration (MARC)  
Drew Galloway – Assistant Vice-President of Strategic Partnerships, Eastern Region, Amtrak  
David Caplinger – Park Superintendent, Cass (WV) Scenic Railroad

### Information from agency reports

Amtrak report – FY 2008 Comprehensive Business Plan  
Amtrak report – Strategic Reform Initiatives and FY 2006 Grant Request  
Amtrak report – FY 2007 Annual Report  
Amtrak National Rail Timetable, 2008-2009  
MARC report – Growth & Investment Plan, 2007  
West Virginia Department of Transportation, State Rail Authority – West Virginia rail fact sheet and state rail map

### Information from the Intranet

Amtrak web site  
MARC web site  
West Virginia Department of Transportation, State Rail Authority web site  
Cass Scenic Railroad web site  
Durbin & Greenbrier Valley Railroad web site  
Mountain State New River Gorge Mystery Train web site  
New River Train web site  
Potomac Eagle Scenic Railroad web site  
Pennsylvania High Speed Maglev Project web site  
Baltimore-Washington Maglev Project web site  
Port Authority of Alleghany County (PA.) web site  
City of Duffields, West Virginia web site