

### III. Findings and Recommendations

#### A. ABRB 1 Program Status

The ABRB 1 Program between North Bennington and Manchester and Vergennes and Charlotte started in 1999 and finished in 2001. This work was funded under ABRB CONTRACT 1 by the Federal Highway Administration (FHWA) and State of Vermont.

The work primarily consisted of track and bridge rehabilitation and has been completed.

#### B. ABRB 2 Program Status

The ABRB 2 Program between North Bennington and Manchester and Florence and Brandon started in 2000 and has not yet been completed. This work was funded under ABRB CONTRACT 2 by FHWA and the State of Vermont.

The work primarily consisted of track, bridge and grade crossing rehabilitation and was partially completed on these segments. The following items have not yet been completed:

- 1,300 cross ties
- 9,200 tons of ballast
- 111,637 feet of track surfacing
- 2 rail lubricators to be installed
- 1 grade crossing surface (Richville Road)
- 16 grade crossing warning systems
- 1 advanced warning signal (Arlington)
- 1 timber bridge deck (Br. 3.13 – Paran Creek)
- 1 structural repair (Bridge 63)



#### C. ABRB S Program Status

The ABRB S Program between Hoosick Junction, NY and North Bennington, VT started in 2000 and is not yet completed. This work was funded under ABRB CONTRACT 4 by the State of Vermont.

The work primarily consisted of track, bridge and grade crossing rehabilitation and was partially completed on these segments. The following items are not yet completed:

- 1,280 tons of ballast
- 36,960 feet of track surfacing
- 2 rail lubricators
- 1 culvert repair (MP 0.80)
- 3 grade crossing surfaces (N. Hoosick Rd, Caretakers, Cottrell Rd.)
- 3 grade crossing warning systems (N. Hoosick Rd, Caretakers, Cottrell Rd.)

#### D. ABRB SC Scoping Program Recommendations

The ABRB SC Scoping Program outlined in this report is a summary of the work required to upgrade the ABRB corridor to FRA Class III operations from Hoosick Junction, NY to Burlington, VT in order to accommodate future freight and passenger rail service.

The program presented in this section includes all of the work not yet completed under the previous ABRB Program phases described above, as well as the remaining work necessary to upgrade the line segments not already addressed by these programs.

The track program includes all of the necessary improvements to upgrade the mainline and sidings to FRA Class III standards and 286,000 lb. axle loadings where required for freight service. Currently the rail service requirements for 286,000 lbs is only required on the rail segment between Middlebury and Rutland.

The bridge program primarily addresses the structural repairs and upgrades necessary to support 286,000 lb. loads that are now the current standard for the freight rail industry. When bridges are repaired or replaced, they are repaired to 315,000 lb axle loadings for future use.

The grade crossing program includes the installation of automatic warning signals at each grade crossing on the corridor. In addition costs for advanced warning signals for selected turnouts with visibility problems are included in this program.

The chart listed below shows a proposed prioritization schedule of proposed work with the associated costs for each segment:

SEGMENT	FROM MP	TO MP	COST	PRIORITY
<b>BURLINGTON to CHARLOTTE</b>	122	110	\$ 3,296,000	5
<b>CHARLOTTE to VERGENNES</b>	110	100	\$ 3,268,000	2
<b>VERGENNES to MIDDLEBURY</b>	100	87	\$ 10,282,000	3
<b>MIDDLEBURY to RUTLAND</b>	87	55	\$ 32,676,000	1
<b>RUTLAND to N. BENNINGTON</b>	55	0	\$ 38,010,000	4
<b>N. BENNINGTON to HOOSICK</b>	170	165	\$ 792,000	6

## Middlebury to Rutland (Priority 1)

### *Freight Service*

This 31-mile segment of the ABRB corridor is the highest priority for VTrans and VTR at this time. OMYA, a large mineral processing plant located on this segment, is already Vermont Railway's largest customer and is planning to expand their facilities. In order for this to occur, this segment of the corridor would need to be upgraded to allow for the heavier axle loads and higher freight traffic volumes.



OMYA currently ships outbound product via Rutland by rail, but most of their raw materials inbound move by truck from their quarry near Middlebury. The average truck volume for OMYA shipments alone is about 25,000 to 30,000 trucks per year.

However, VTrans is currently studying the potential for transferring the inbound shipments from the quarry in Middlebury to the plant in Florence from truck to rail by building a new track connection from the quarry and the VTR mainline. A high-sided rail gondola can handle the equivalent of about 5 truckloads of raw materials. If implemented, this action would significantly reduce the truck traffic volumes on the most congested sections of US Route 7 south of Middlebury and through Brandon.

In addition to this potential new traffic, there is still a need to upgrade the track and bridges south of Florence to handle the increasing outbound shipments from the plant. This traffic moves in the types of rail cars (covered hoppers) that generate the heavier axle loads now the design standard for infrastructure improvements in the freight industry.

Below is a summary of work and estimated costs for this segment:

- 32 miles of track rehabilitation - \$20.6 million
- 18 bridge rehabilitations – \$9.0 million
- 17 grade crossing surface restoration - \$0.5 million
- 19 grade crossing warning systems – \$2.2 million
- Other miscellaneous work - \$0.4 million

### *Passenger Service*

If the investment outlined above is made on this segment of the ABRB corridor, it would benefit the future extension of the Amtrak service from Rutland to Burlington.

## **Charlotte to Vergennes (Priority 2)**

### ***Freight Service***

This 10-mile segment of the ABRB corridor is the second highest priority because the freight traffic volumes are very high. Upgrading this segment of the corridor would provide a longer service life of the track for freight service. Below is a summary of work and associated costs for this segment of the corridor.

- 10 miles of track rehabilitation – \$2.1 million
- 1 bridge rehabilitations – \$0.1 million
- 7 grade crossing surfaces - \$0.2 million
- 7 grade crossing warning systems – \$0.9 million



### ***Passenger Service***

These improvements would promote the future extension of Amtrak passenger rail service from Rutland to Burlington. The State of Vermont was also interested in extending commuter rail service from Charlotte to Vergennes, but that train is no longer in operation.

## **Vergennes to Middlebury (Priority 3)**

### ***Freight Service***

This 13-mile segment of the ABRB corridor is at about the same priority level as the segment above because the freight traffic volumes are high in this segment. Below is a summary of work and estimated costs for this segment of the corridor.

- 13 miles of track rehabilitation – \$9.3 million
- 3 bridge rehabilitations – \$0.2 million
- 4 grade crossing surface restoration - \$0.2 million
- 4 grade crossing warning systems – \$0.5 million
- Other miscellaneous work – \$0.2 million

### ***Passenger Service***

These improvements would promote the future extension of Amtrak passenger rail service from Rutland to Burlington.

## **Rutland to North Bennington (Priority 4)**

### ***Freight Service***

This 55-mile segment of the ABRB corridor has many freight customers including a quarry, a lumber yard and Haskins Propane. Since the general track conditions are poor and this segment has limited potential for future economic development, it is not a top investment priority for VTrans. Critical individual projects may have to be completed in order to maintain existing service levels. Below is a summary of work and estimated costs for this segment of the corridor.

- 55 miles of track rehabilitation – \$29.4 million
- 32 bridge rehabilitations – \$3.2 million
- 25 grade crossing surface restoration - \$0.8 million
- 37 grade crossing warning systems – \$4.2 million
- Other miscellaneous work - \$0.4 million

### ***Passenger Service***

There is currently no passenger service operated on the segment of the corridor. However, these improvements would promote the future extension of passenger rail service to Manchester, if desired.

## **Burlington to Charlotte (Priority 5)**

### ***Freight Service***

Although the freight traffic volumes are high on this segment of the ABRB corridor, the railroad infrastructure investments made in previous ABRB Program phases and the Commuter Rail demonstration project have left this segment in a state of good repair for FRA Class III operations. Below is a summary of work and estimated costs for this segment of the corridor.



- 12 miles of track rehabilitation – \$3.3 million

### ***Passenger Service***

There is currently no passenger service operated on this segment of the corridor. The State would like to extend Amtrak service to Burlington in the future. The commuter train that had operated on this segment has been discontinued, but most of the upgrades associated with operating that service are still in place.

## **North Bennington to Hoosick (Priority 6)**

### ***Freight Service***

Currently there are no freight train operations occurring on this 5-mile segment of the ABRB corridor. Projected freight volumes are not expected to increase in the near future, so this remains a low investment priority for VTrans and VTR. Below is a summary of work and the associated costs for this segment of the corridor.

- 5 miles of track rehabilitation – \$0.3 million
- 3 grade crossing warning systems – \$0.4 million
- 2 bridge rehabilitations – \$0.1 million

### ***Passenger Service***

There is currently no passenger service on this segment of the corridor. A majority of this segment of track is located in New York State. This is no longer a priority since there is currently no freight or passenger rail traffic on this segment.

## **Hoosick Junction to Albany, NY**

In order to provide passenger service to Manchester, service and infrastructure improvements would be required to the West and South into New York State on the Springfield Terminal Railway and the Canadian Pacific Railway.

The improvements on these rail lines are outside the scope of this project.

Program summaries showing all of the proposed improvements, including the remaining work from previous phases of the ABRB Program, are presented in this section including the following:

- Track Program Summary
- Grade Crossing / Signal Program Summary
- Bridge Program Summary
- Overall ABRB Program Summary

