

**Heartland Corridor Clearance Project
Financial Plan Annual Update
May 2009**

LETTER OF CERTIFICATION

The Federal Highway Administration (FHWA), Eastern Federal Lands Highway Division in partnership with Norfolk Southern Railway Company (Railroad) has developed a comprehensive Financial Plan for the Clearance Project in accordance with the requirements of Section 106, Title 23, and the Financial Plan Guidance issued by the Federal Highway Administration. The plan provides detailed cost estimates to complete the project and the estimates of financial resources to be utilized to fully finance the project.

The cost data in the Financial Plan provides an accurate accounting of costs incurred to date and includes a realistic estimate of future costs based on engineer's estimates and expected construction cost escalation factors. While the estimates of financial resources rely upon assumptions regarding future economic conditions demographic variables, they represent realistic estimates of available resources to fully fund the project.

The FHWA and Railroad believe it provides an accurate basis upon which to schedule and fund the Clearance Project. The FHWA and Railroad will review and update the Financial Plan on an annual basis.

To the best of our knowledge, the Financial Plan as herein submitted, fairly and accurately presents the financial position of the Clearance Project, including cash flows and expected conditions for the project's life cycle. The financial forecasts in the Financial Plan are based on the FHWA's and Railroad's judgment of the expected project conditions and the expected course of action. The FHWA and Railroad believe that the assumptions which underlie the Financial Plan are reasonable and appropriate. Further, the FHWA and Railroad have made available all significant information relevant to the Financial Plan. To the best of our knowledge, the documents and records supporting the assumptions are appropriate.

Acting Donald W. Miller
Division Engineer
Eastern Federal Lands Highway Division

6/30/09
Date

Robert E. Martinez
Vice President
Norfolk Southern Railway Company
Robert E. Martinez

6-4-2009
Date

**FEDERAL HIGHWAY
ADMINISTRATION
EASTERN FEDERAL LANDS
HIGHWAY DIVISION
And
NORFOLK SOUTHERN RAILWAY
COMPANY**

**FINANCIAL PLAN
2009 UPDATE**

**HEARTLAND CORRIDOR
CLEARANCE PROJECT**

**FEDERAL HIGHWAY ADMINISTRATION
And
NORFOLK SOUTHERN RAILWAY COMPANY
PROJECT FINANCIAL PLAN
HEARTLAND CORRIDOR CLEARANCE PROJECT**

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BACKGROUND

The *Safe, Accountable, Flexible, And Efficient Transportation Act: A Legacy for Users (SAFETEA-LU)* enacted on August 10, 2005 significantly revised federal and state stewardship and oversight responsibilities over our nation's transportation system to provide greater emphasis on financial integrity, project delivery and major project oversight. A key provision lowers the monetary threshold for defining a Major Project from \$1 billion to \$500 million and extends the lower cost threshold to projects requiring a Project Management Plan. A new provision also requires that an annual financial plan be prepared for every project with an estimated total cost between \$100 million and \$500 million.

On January 19, 2007 FHWA issued a Memorandum "*Issuance Major Project Guidance*" which provides guidance to administering agencies for the development of Project Financial Plans for projects between \$100 million and \$500 million.

In accordance with the FHWA Guidance, the remainder of this document will provide detailed cost, schedule and revenue projections for the \$195.2 million Clearance Project within the Heartland Corridor.

INTRODUCTION

The Heartland Corridor was designated as a Project of National and Regional Significance under the SAFETEA LU legislation. The Heartland Corridor's key project components consist of:

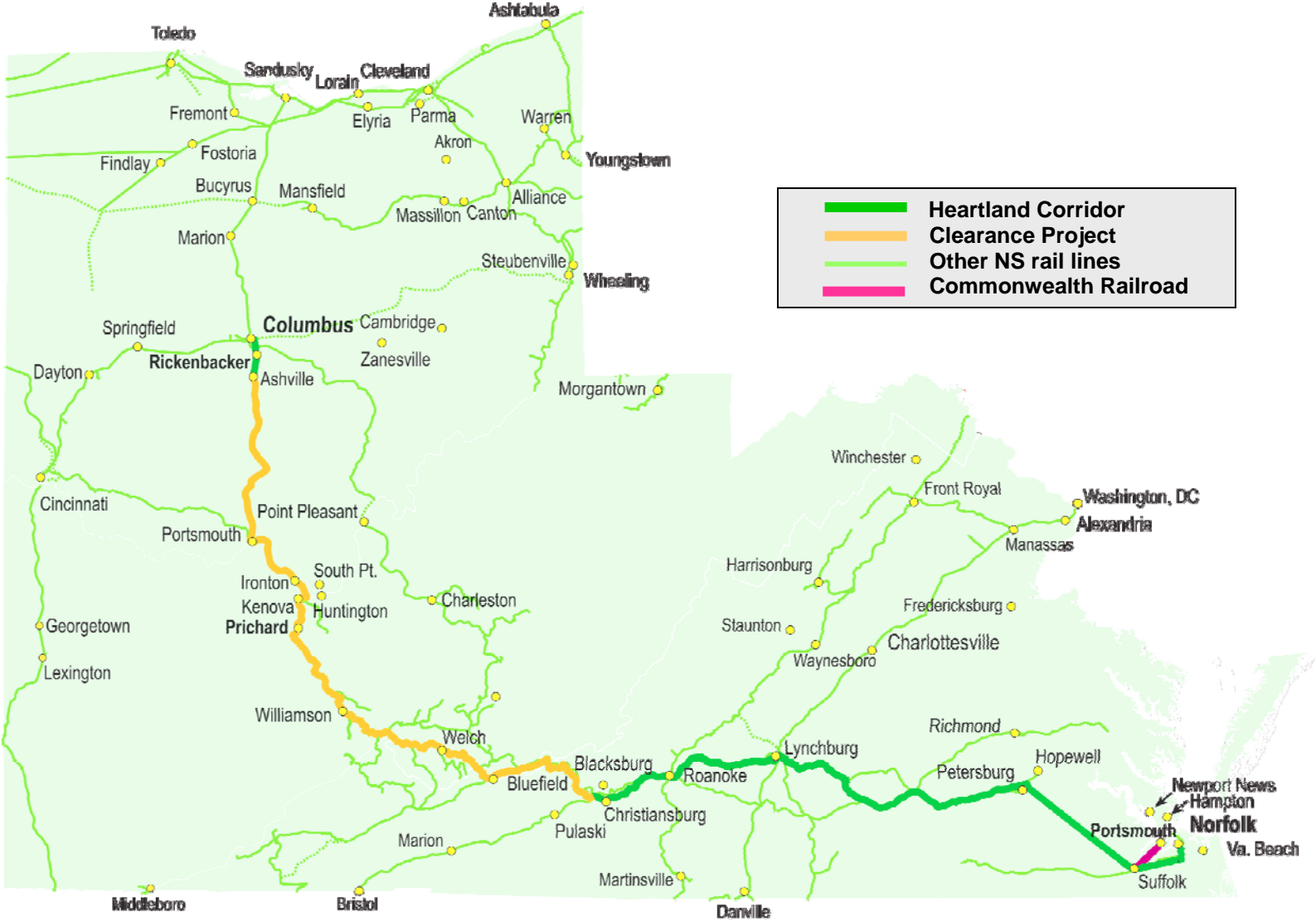
- Central Corridor Double-stack Project (Clearance Project)
- Expanded Intermodal Capacity
- Western Freeway Rail Corridor

This Financial Plan only covers the Clearance Project which will enable double-stacked international maritime and domestic containers to be transported by rail between the Hampton Roads region of Virginia and locations in the Midwest by increasing tunnel clearances and modifying other overhead obstructions in western Virginia, West Virginia, and through to Columbus, Ohio. A double-stacked freight train is a train configured to carry two layers of standard freight containers. The Clearance Project does not include work at rail facilities, nor at any stations or sidings along the route.

The Federal Highway Administration (FHWA) Eastern Federal Lands Highway Division and the Norfolk Southern Railway Company (Railroad) signed a Memorandum of Agreement (MOA) on August 8, 2006 which outlines the roles and responsibilities for each during the Clearance Project. FHWA is responsible for the coordination and facilitation of the overall schedule for the entire Clearance Project, as well as for the management of the Federal funding. The design and construction of the Clearance Project will be completed by the Railroad.

In Figure 1 below, the project limits are identified on a map of the corridor.

Figure 1: Project Area Map



Background

The Clearance Project is located on the Railroad's principal line through West Virginia which extends from Norfolk, VA through Roanoke, VA and on to Columbus, OH. This section of track is referred to as the Pocahontas mainline. East of Bluefield, WV this line is part of the Virginia Division. West of Bluefield, the route lies in the Pocahontas Division. After entering West Virginia at Bluefield, the route skirts the state's southern border, passing through Welch and Williamson en route to Kenova, where it crosses the Ohio River. From a junction at Portsmouth, OH, traffic can move north to Columbus.

The mainline within the Pocahontas Division is one of the heaviest tonnage routes in the Railroad's system. Train volumes exceed 50 per day at some locations, especially in the mining district. Because of its importance and high traffic levels, the route is predominantly double tracked, with only short sections of single track remaining. Numerous crossovers permit train movement between the main tracks, and frequent sidings provide additional flexibility. The entire route is equipped with a block signal system, and many miles operate under a centralized traffic control system.

Project Description

This Project is being undertaken to increase tunnel clearances and modify other overhead obstructions to accommodate double-stacked intermodal shipments. For the tunnel work, three categories of clearance improvement methods have been identified depending on tunnel condition and additional clearance required:

- Track Modifications
- Notching or replacing the lining
- Elimination or replacement of the tunnel

The overhead obstructions that have been identified include overpass structures, wires, signals, wayside slide fences, and railway bridges. The possible clearance improvement methods include:

- Track Modifications
- Bridge Jacking
- Bracing Modifications
- Fencing Modifications
- Overhead Wire Removal
- Miscellaneous Signal Work

Scope of Work

Within the Project area, there are 30 tunnels that range in length from 174 ft. to 3302 ft, with a total length of 31,112 ft. Of the 30 tunnels, there are 28 tunnels on the mainline that have clearance deficiencies. Three of those tunnels have relatively minor deficiencies with less than 6" encroachments. Nine tunnels have significant vertical clearance deficiencies greater than 2'. Six tunnels also have horizontal clearance deficiencies. The Railroad company standards for double stack operation specify a vertical clearance of 20'-9" above the top of rail over a minimum width of 8'-6" centered on the track.

In addition to the tunnel work, there are 26 other overhead obstructions that need to be removed or adjusted. These additional obstructions include nine slide fences that need adjusting, three over-head bridges that need track modifications or bridge jacking, eleven thru truss bridges that need bracing

modified, and three locations with overhead wires to be removed. There are also various locations that will require signal modifications.

Only certain portions of the work will be paid for in part with Federal funding, as noted below:

- All work to allow double stacked freight trains to run between the Hampton Roads region in Virginia and Columbus, OH was eligible for Federal funds. In a MOA signed by the FHWA and the States of Virginia, West Virginia, and Ohio it was agreed that all Section 1301 funds would be used for improvements in the State of West Virginia.
- The Railroad has elected to apply all Section 1702 Federal funding available in the State of Virginia to the work at Cowan tunnel. Work at all other tunnels in Virginia will be paid for by the Railroad and the Virginia Department of Rail and Public Transportation (VDRPT).
- Federal funds will not be used for work at rail facilities, nor at any stations or sidings along the route.
- The Railroad is responsible solely for any utility relocation costs.
- Work in Kentucky will be paid for in full by the Railroad. One tunnel in Kentucky requires clearance improvements.
- Work in Ohio will be paid for in full by the Railroad and the Ohio Rail Development Commission (ORDC).
- Drainage improvements in tunnels not requiring clearance improvements will be paid for in full by the Railroad. One tunnel in West Virginia and one tunnel in Kentucky fall into this category.
- Expenditures incurred prior to the signing of the MOA between the FHWA and Railroad on August 8, 2006 will be paid for in full by the Railroad. All planning work was completed prior to the MOA being signed.

Taking the above into consideration, there are 24 tunnels and 19 other overhead obstructions that will be paid for in part with Federal funding.

CHAPTER 1: PROJECT COST ESTIMATE

In Table 1 below, the current cost estimate for the Clearance Project is broken down by Federal participation, state, activity and calendar year. Preliminary engineering and construction estimates have been provided by the Railroad. The construction costs include construction engineering and construction inspection services. Administrative costs for FHWA and the states are listed separately and include NEPA costs. Expenditures incurred prior to 2006 are included in 2006.

Table 1: Estimated Project Cost by State, Activity and Year

	≤ 2006	2007	2008	2009	2010	TOTAL
Federal Participation						
Virginia						
PE/Design	\$4,175	\$584,615	\$152,575			\$741,365
Construction		\$2,411,209	\$11,570,083	\$180,108		\$14,161,400
Sub Total	\$4,175	\$2,995,824	\$11,722,658	\$180,108		\$14,902,765
West Virginia						
PE/Design	\$431,532	\$6,121,415	\$1,370,944	\$1,119,163		\$9,043,045
Construction		\$626,977	\$42,834,876	\$92,501,285	\$24,449,455	\$160,412,593
Sub Total	\$431,532	\$6,748,392	\$44,205,820	\$93,620,448	\$24,449,455	\$169,455,647
FHWA/States	\$54,252	\$308,740	\$298,095	\$300,000	\$38,913	\$1,000,000
Subtotal	\$489,959	\$10,052,956	\$56,226,573	\$94,100,556	\$24,488,368	\$185,358,412
Non-Federal Participation						
Virginia						
PE/Design		\$260,257				\$260,257
Construction		\$186,703	\$1,908,107			\$2,094,810
Sub Total		\$446,960	\$1,908,107			\$2,355,067
West Virginia						
PE/Design						
Construction						
Sub Total						
Kentucky						
PE/Design	\$34,000		\$265,988	\$135,789		\$435,777
Construction			\$43,175	\$4,819,501		\$4,862,676
Sub Total	\$34,000		\$309,163	\$4,955,290		\$5,298,453
Ohio						
PE/Design	\$126,815	\$99,107				\$225,922
Construction		\$360,001	\$459,116			\$819,117
Sub Total	\$126,815	\$459,108	\$459,116			\$1,045,039
Planning	\$1,108,179					\$1,108,179
Subtotal	\$1,268,994	\$906,068	\$2,618,851	\$5,012,825		\$9,806,738
TOTAL	\$1,741,953	\$10,976,024	\$71,057,347	\$86,901,458	\$24,488,368	\$195,165,150

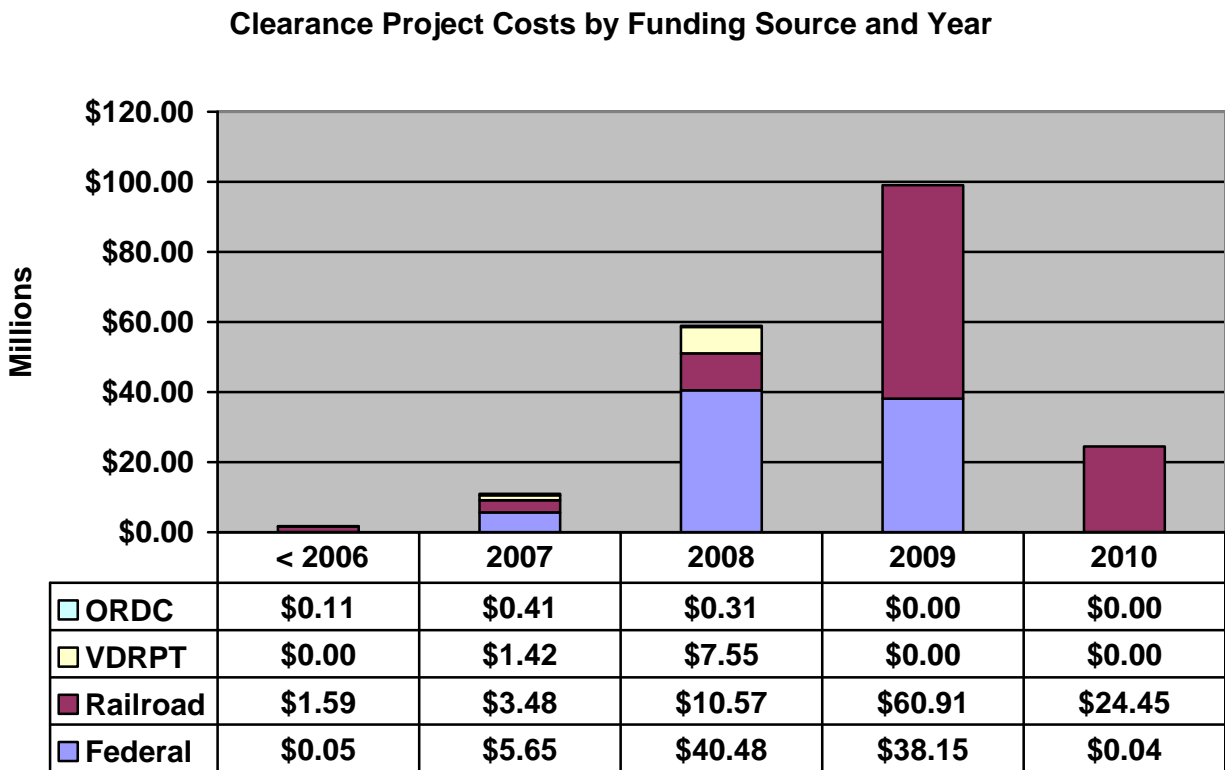
The current total estimated cost to complete the entire Clearance Project in year-of-expenditure dollars has increased from the initial estimate of \$159.9 million to \$195.2 million, using 2009 base costs.

The initial trackwork cost estimates were based on gang size, equipment levels, material, and daily production. The built up estimates were then compared with recent unit prices obtained on bids for track construction projects. The current trackwork costs estimates have been based on actual costs from the first tunnels completed on this project.

The initial liner modification cost estimates were developed based on gang size, equipment levels, material, and daily production. These built up estimates were then adjusted to account for peculiarities of each tunnel. The current liner modification cost estimates have been based on actual costs from the first tunnels completed on this project.

For the initial estimate, an additional 10% contingency was added for planning and funding purposes to the year-of-expenditure cost given the nature of tunnel work and uncertainty related to the expected start date of the project. Revised project cost estimates will be provided in the next annual Financial Plan Update which will be due in 2010.

Figure 2: Estimated Project Costs by Source and Year



CHAPTER 2: IMPLEMENTATION PLAN

Preliminary engineering (PE) for the entire project was started in early 2005. The Compliance with National Environmental Policy Act (NEPA) requirements for the entire project was started in October 2006. It is expected that a programmatic Categorical Exclusion (CE) will be issued for the entire corridor. The PE will continue on a parallel path with the NEPA compliance in order to provide the supporting documentation for the CE. The CE is scheduled to be completed in May 2007 which will clear the way for the Railroad to complete final design. The final design and construction packages will be completed in phases to allow some tunnels to be advertised prior to all of the final design being completed. The scheduled date for awarding the first construction contract is July 2007. Construction is expected to be completed by June 2010. Exhibit 1 below shows the project timeline.

Exhibit 1: Clearance Project Timeline

MILESTONE	2004	2005	2006	2007	2008	2009	2010
PE/DESIGN	3/05					7/08	
NEPA			7/06		8/07		
CONSTRUCTION Ohio Bridges				7/07	5/08		
CONSTRUCTION VA Tunnels				8/07	8/08		
CONSTRUCTION WV 2007 Projects				8/07	10/08		
CONSTRUCTION WV/KY 2008 Projects				2/08	7/09		
CONSTRUCTION WV 2009 Projects					12/08		6/10

Time Delayed from Start

Work Completed on Time or Ahead of Schedule

Work Completed Behind Schedule

Work to be Completed on Schedule

Work to be Completed Behind Schedule

CHAPTER 3: PROJECT FUNDING

The Clearance Project is a Public-Private partnership and will be financed through a combination of federal, state and Railroad funds.

Funding Sources

Congress authorized \$95 million for this Project in SAFETEA-LU. Under Section 1301(m)(2), \$90 million was authorized for the work in Virginia, West Virginia, and Ohio; and under Section 1702, Project No. 5072, \$5 million was authorized for the work in Virginia. Both Sections authorize an annual distribution. For Section 1301, funds are distributed as follows: fiscal year 2005 - 10%, fiscal year 2006 - 20%, fiscal year 2007 - 25%, fiscal year 2008 - 25%, and fiscal year 2009 - 20%. For Section 1702, funds are distributed at 20% per fiscal year. In addition, for fiscal years 2005, 2006, and 2007 Congress imposed an obligation limitation in order to restrict the amount of funding obligation in a given fiscal year, thus limiting budgetary outlays. For fiscal year 2005, the obligation limitation was 85.5%. For fiscal year 2006, the obligation limitation was 87%. For funds available in fiscal year 2006, Congress imposed an additional 1% rescission of funds to all Federal funding categories. For fiscal year 2007, the obligation limitation was 90.5%. For fiscal year 2008, the obligation limitation was 92.4%. An obligation limitation of 85% was assumed for fiscal years 2009.

For fiscal year 2007, in addition to the original 25% annual distribution, the Project also received \$390,726 in RABA adjustment under Section 1301.

Both federal and Railroad funds are key components of the financial plan for the Clearance Project. \$84.4 million (\$95 million reduced by estimated obligation limitations, rescissions, etc.), or approximately 43% of the \$195.2 million identified for the project, will be federally funded. \$101.0 million has been committed by the Railroad. The ORDC has committed another \$0.8 million and VDRPT has committed \$9.0 million.

The funding needs for the project are provided in Table 2 and depicted by the pie chart in Figure 3. In Figure 4 the funding sources and use of funds are identified.

Figure 3: Project Funding (\$Millions)

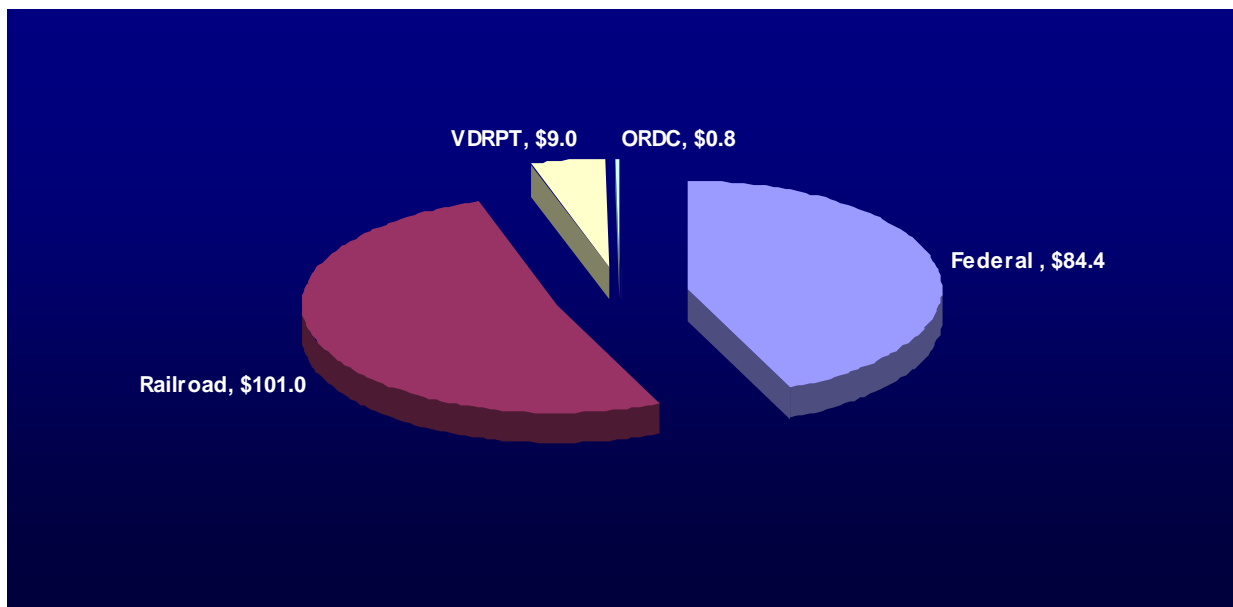
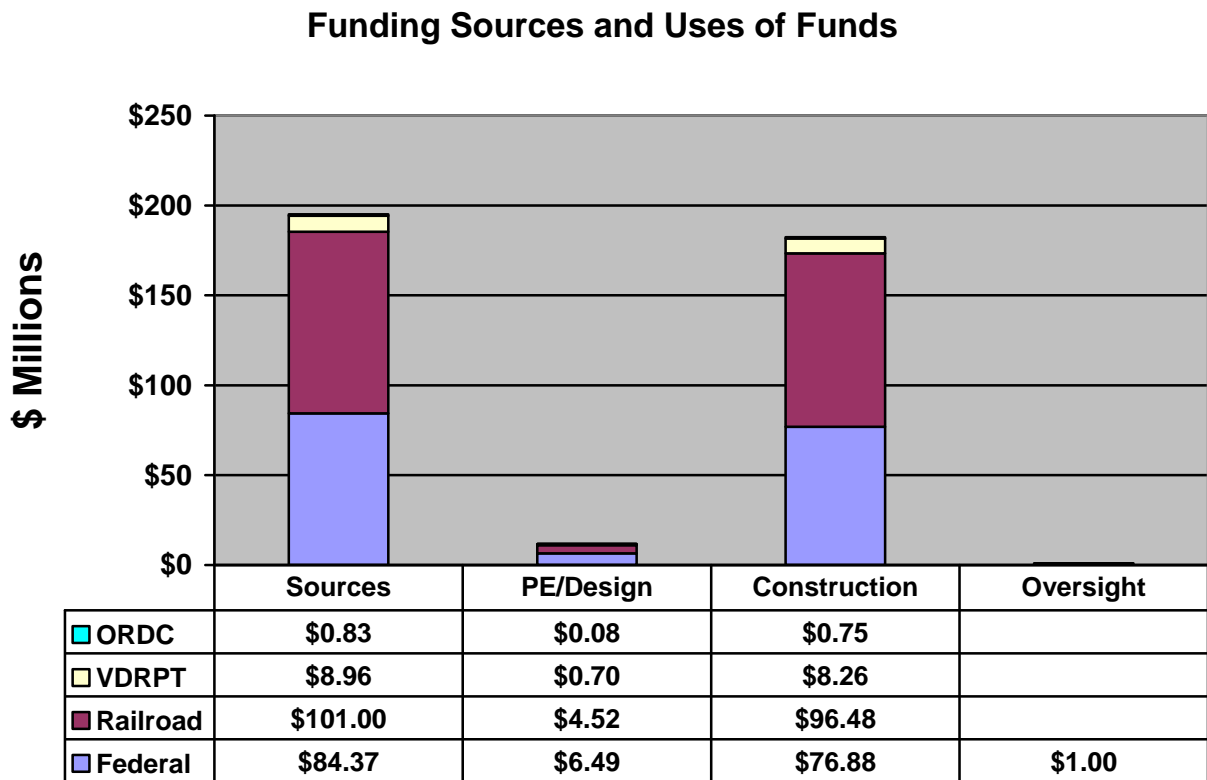


Table 2: Project Funding by Funding Source

State/Activity	Federal	VDRPT	ORDC	Railroad	TOTAL
Virginia					
PE/Design	\$196,364	\$701,135		\$104,123	\$1,001,622
Construction	\$4,213,360	\$8,263,666		\$3,779,184	\$16,256,210
Sub Total	\$4,409,724	\$8,964,801		\$3,883,307	\$17,257,832
West Virginia					
PE/Design	\$6,295,898			\$2,730,156	\$9,026,054
Construction	\$72,662,709			\$87,766,884	\$160,429,593
Sub Total	\$78,958,607			\$90,497,040	\$169,455,647
Kentucky					
PE/Design				\$435,777	\$435,777
Construction				\$4,862,676	\$4,862,676
Sub Total				\$5,298,453	\$5,298,453
Ohio					
PE/Design			\$82,513	\$143,409	\$225,922
Construction			\$753,842	\$65,275	\$819,117
Sub Total			\$836,355	\$208,684	\$1,045,039
Planning					
				\$1,108,179	\$1,108,179
FHWA/States					
	\$1,000,000				\$1,000,000
TOTAL					
	\$84,368,331	\$8,964,801	\$836,355	\$100,995,663	\$195,165,150

Figure 4: Clearance Project: Sources and Uses of Funds (\$ Millions)



Project Expenditures

From March 2005 through December 31, 2008, total expenditures of \$71,620,936 had been incurred on the Clearance Project, or approximately 36.7% of the current total cost estimate. Expenditures were incurred for planning, preliminary engineering, construction management, and construction. Table 4 below provides a breakdown of actual project expenditures as of December 31, 2008. Expenses for non-Federal participation work in West Virginia and Kentucky, as well as expenses for the early planning work will be lumped together in the table below. This is done to correspond with the Railroad's project accounts.

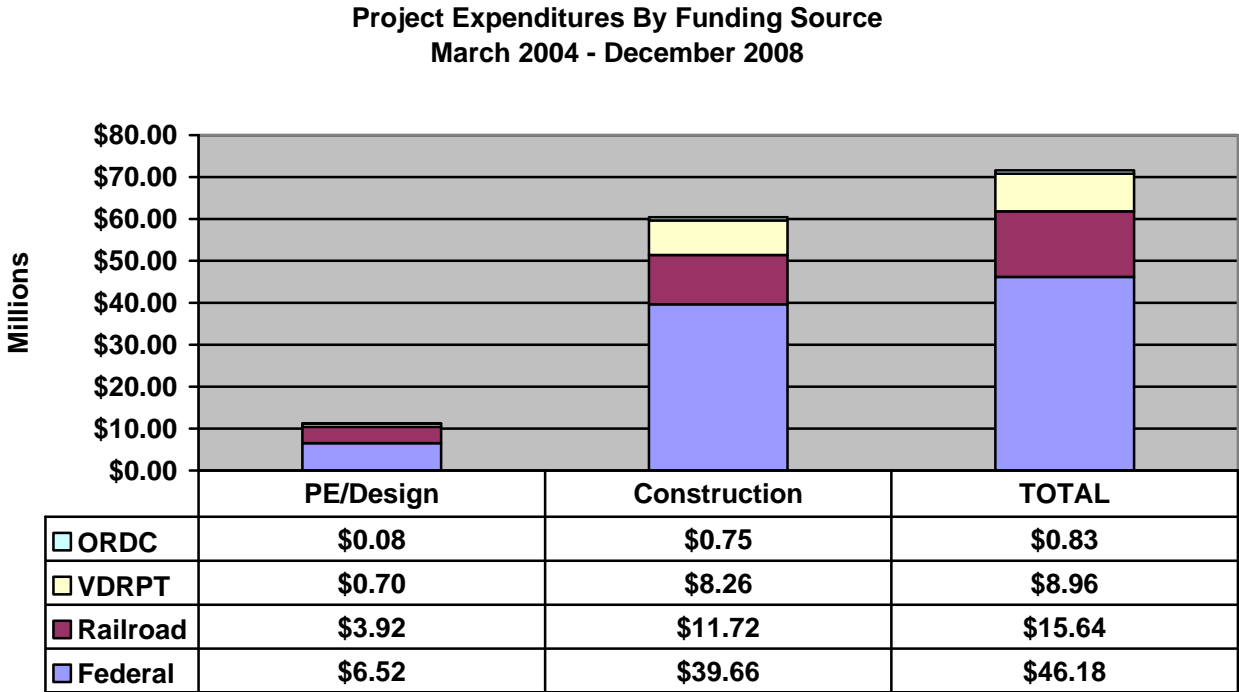
Table 4: Clearance Project Expenditures by Year. March 2004 – December 2008

	≤ 2006	2007	2008	2009	2010	TOTAL
Federal Participation						
Virginia						
PE/Design	\$4,175	\$584,615	\$152,575			\$741,365
Construction		\$2,411,209	\$11,570,083			\$13,981,292
Sub Total	\$4,175	\$2,995,824	\$11,722,658			\$14,722,657
West Virginia						
PE/Design	\$431,532	\$6,121,415	\$1,370,944			\$7,923,891
Construction		\$626,977	\$42,834,876			\$43,461,853
Sub Total	\$431,532	\$6,748,392	\$44,205,820			\$51,385,744
FHWA/States						
	\$54,252	\$308,740	\$298,095			\$661,087
Subtotal	\$489,959	\$10,052,956	\$56,226,573			\$69,124,555
Non-Federal Participation						
Virginia						
PE/Design		\$260,257				\$260,257
Construction		\$186,703	\$1,908,107			\$2,094,810
Sub Total		\$446,960	\$1,908,107			\$2,355,067
Ohio						
PE/Design	\$126,815	\$99,107				\$225,922
Construction		\$360,001	\$459,116			\$819,117
Sub Total	\$126,815	\$459,108	\$459,116			\$1,045,039
WV, KY, & Planning						
PE/Design	\$1,142,179		\$265,988			\$1,408,167
Construction			\$43,175			\$43,175
Sub Total	\$1,142,179		\$309,163			\$1,451,342
Subtotal	\$1,268,994	\$906,068	\$2,676,386			\$4,851,448
TOTAL	\$1,758,953	\$10,959,024	\$58,902,959			\$71,620,936

The project activities identified in Table 4 above, with exception to FHWA/State expenditures, have been covered initially with Railroad funds. Federal and state funds will be used to reimburse the eligible costs up to the approved amount. Once federal and state funds have been expended, the

Railroad will cover all remaining costs. An expenditure breakdown by funding phase and funding source is provided below in Figure 5.

Figure 5: Clearance Project Expenditure by Funding Source



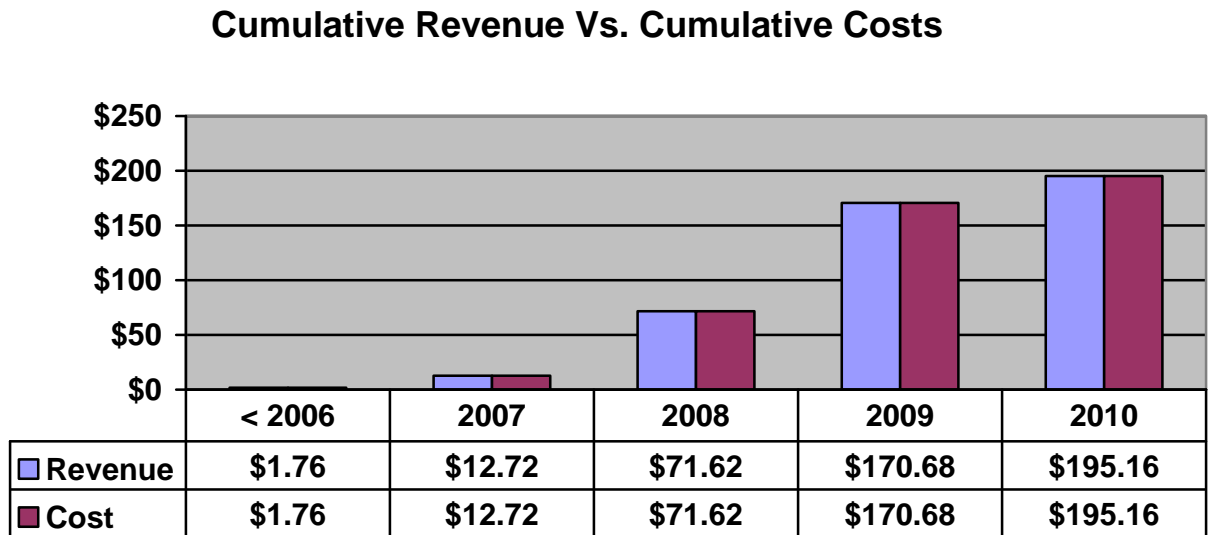
CHAPTER 4: CASH FLOW

The Railroad expects to have sufficient revenues available for the Clearance Project to meet project expenditures as they occur. Table 5 and Figure 6, respectively, compare and display the availability of anticipated project revenues with the schedule of project expenditures to demonstrate adequate cash flow for the project. The data for Table 5 and Figure 6 was taken from Table 1, Table 2 and Table 4.

Table 5: Clearance Project Cash Flow Analysis

REVENUES	≤ 2006	2007	2008	2009	2010
Federal	\$54,252	\$5,649,294	\$27,774,305	\$50,851,567	\$ 38,913
Virginia	\$ 0	\$ 422,836	\$ 4,741,728	\$ 3,800,237	\$ 0
Ohio	\$ 0	\$ 0	\$ 674,075	\$ 162,280	\$ 0
Railroad	\$1,704,701	\$4,886,894	\$25,712,850	\$44,241,762	\$24,449,455
TOTAL REVENUE	\$1,758,954	\$10,959,024	\$58,902,959	\$99,055,846	\$24,488,368
CARRYOVER	\$ 0	\$0	\$0	\$0	\$0
TOTAL AVAILABLE	\$1,758,953	\$10,959,024	\$58,902,959	\$99,055,846	\$24,488,368
EXPENDITURES					
Federal	\$54,252	\$5,649,294	\$40,475,860	\$38,150,012	\$38,913
Virginia	\$ 0	\$1,415,621	\$7,549,180	\$ 0	\$ 0
Ohio	\$ 114,134	\$413,197	\$ 309,024	\$ 0	\$ 0
Railroad	\$1,590,568	\$3,480,912	\$10,568,894	\$60,905,834	\$24,449,455
TOTAL PROJECT EXPENDITURES	\$1,758,953	\$10,959,024	\$58,902,959	\$99,055,846	\$24,488,368
CARRY FORWARD	\$0	\$0	\$0	\$0	\$0

Figure 6: Clearance Project Cumulative Revenue vs. Cumulative Costs (\$ Millions)



CHAPTER 5: OTHER FACTORS

Federal Funding Reductions

In the initial planning stages of this project the Railroad expected to receive the full \$95 million described in SAFETEA-LU. During initial discussions between FHWA and the Railroad in early 2006, FHWA informed the railroad that Congress imposed an obligation limitation of 85.5% for fiscal year 2005, 87% for fiscal year 2006, 90.5% for fiscal year 2007, and 92.4% for fiscal year 2008. It can be assumed that Congress will impose an obligation limitation in future fiscal year as well. Also, for funds available in fiscal year 2006, Congress imposed an additional 1% rescission of funds to all Federal funding categories, in order to provide for emergency supplemental appropriations to address damages from the hurricanes in the Gulf in 2005. These obligation limitations and rescissions result in approximately \$12.36 million of reduced federal funding for the project. Worst case scenario, the Railroad will have to cover this shortfall as is shown in the tables above. Best case would be that the additional 10% contingency, \$13.7 million, included in the estimated cost would not be needed and the Railroad's anticipated share of the project would not increase.

Termination of Project

While it is the intention of FHWA and the Railroad to complete this Project, it is recognized that not all future events can be anticipated. If it becomes apparent that total Project costs, less the total amount of reimbursement from Federal funds, exceed the Railroad's approved capital budget authorization for the Project, the Railroad shall give notice to the FHWA of the gap in funding. If, at the end of ninety (90) days (or such other period as Railroad and FHWA may mutually agree) from the date Railroad gives notice, Railroad and FHWA have failed to reach an agreement on how the gap in funding will be filled, either with as yet unidentified additional Federal funds, Railroad funds or funds from other sources, the Railroad may terminate the Project by sending written notice to FHWA. If the Railroad exercises this termination right, it shall refund to FHWA any of the Federal funds received by the Railroad.

Cost Increase Mitigation Options and Strategy

The Norfolk Southern Board of Directors has approved the Heartland Project as a whole. Annual funding needs will be budgeted by Norfolk Southern on an annual basis. To ensure that the total cost of the Project less the amount of actual Federal reimbursement is within its capital improvement budget authority, the Railroad reserves the right to reject bids, re-bid the Project or portions thereof as appropriate, re-design the Project or portions thereof as appropriate, or take other reasonable measures as may be appropriate under the circumstances.

Schedule for Annual Updates

The Railroad's records for the Clearance Project are kept on a calendar year basis. The annual updates for the project Financial Plan will be completed between January and March of each year with updated information through December of the previous year.

CHAPTER 6: REVENUE SHORTFALL MITIGATION

The Railroad developed a revised project estimate that was presented and approved by the NS Board of Directors. The additional funds approved by the Board will cover the increased costs.

CHAPTER 7: SUMMARY OF SIGNIFICANT COST REDUCTIONS

Due to the increased costs, the Railroad has eliminated all work that isn't directly related to obtaining the required clearance. Most of the work eliminated included drainage improvements in the same or adjacent tunnels. This work was to be completed during the track shutdowns required for clearance work.

Other cost saving measures have included tailoring some of the construction requirements to help maximize efficiency and reduce costs while maintaining quality and safety standards. Some of these measures have included reducing the number of rockbolts needed in the sidewalls and, developing revised notching criteria, and streamlining the Investigative Probing Program.

CHAPTER 8: SUMMARY OF SIGNIFICANT COST INCREASES

The estimated cost to complete the clearance work has increased from an estimated \$159.9 million to \$195.2 million. The increase in costs can be attributed to two main factors: actual tunnel conditions being worse than anticipated and construction costs increasing significantly over the last several years. The different ground conditions at some of the tunnels have necessitated the use of more costly ground support methods such as steel sets instead of rock-bolting.