

Route 29 Charlottesville Bypass Financial Plan

June 6, 2012





COMMONWEALTH of VIRGINIA

DEPARTMENT OF TRANSPORTATION

1601 Orange Road
Culpeper, Virginia 22701

Gregory A. Whirley
Commissioner

Route 29 Charlottesville Bypass Albemarle County, Virginia

Initial Financial Plan

LETTER OF CERTIFICATION

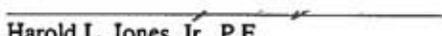
Dear Commissioner:

The Virginia Department of Transportation has developed this Initial Financial Plan for the Route 29 Bypass Project (State Project No. 029-002-844; UPC#102419) as required under § 33.1-12 of the Code of Virginia. 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 this Initial Financial Plan provides an accurate accounting of costs and includes a realistic estimate of future costs based on engineers' estimates and expected construction cost escalation factors. While the estimates of financial resources rely upon assumptions regarding future economic conditions and demographic variables, they represent realistic estimates of necessary monies to fully fund the project. We believe this Initial Financial Plan provides an accurate basis upon which to schedule and fund the Route 29 Bypass Project. The Department will review and update the financial plan on an annual basis.

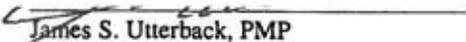
To the best of our knowledge and belief, the Initial Financial Plan, as submitted herewith, fairly and accurately presents the financial position of the Route 29 Bypass Project, its projected cash flows and expected schedule for the project's construction period. The financial forecasts presented are based on our judgment of the expected project conditions and our expected course of action. We believe that the assumptions underlying the Initial Financial Plan are reasonable and appropriate. Further, we have made available all significant information that we believe is relevant to the Initial Financial Plan and, to the best of our knowledge and belief, the documents and records supporting the assumptions are appropriate.

Signature on File


Harold L. Jones, Jr., P.E.
Project Manager

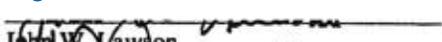
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Signature on File


James S. Utterback, PMP
District Administrator

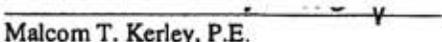
19 JUN 2012
Date

Signature on File


John W. Lawson
Chief Financial Officer

6/19/2012
Date

Signature on File


Malcom T. Kerley, P.E.
Chief Engineer

6/19/12
Date

Signature on File


Reta R. Busher
Chief of Planning and Programming

6/19/12
Date

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SUMMARY

Existing Route 29 located in the City of Charlottesville and Albemarle County is surrounded by numerous housing developments, retail businesses including shopping centers, schools, and the University of Virginia. Currently 47,000 vehicles per day travel along the Route 29 segment where the northern terminus will connect. At the northern terminus location, the average daily traffic is expected to increase over 68 percent by 2036 to more than 79,200 vehicles per day on US 29 North to Culpeper. At the southern terminus, 48,000 vehicles per day currently travel along the Route 250 Bypass. Approximately 72,000 vehicles per day (a 50 percent increase) are expected to use Route 29/US 250 south to Ivy Road by 2036.

The Route 29 Bypass is anticipated to carry over 27,000 vehicles per day by 2036, relieving a heavily congested section of Rte. 29 that currently has thirteen traffic lights along the bypassed segment.

As a result of the Bypass, projected traffic (2036) on US 250 east of the southern terminus to Barracks Road is expected to be reduced to 51,000 vehicles per day, a 29% decrease from the 72,000 vehicles per day anticipated on this segment by 2036 without the bypass.

The current budget for the Route 29 Bypass Project is \$244.6 million, with approximately \$47.8 million expended (as of June 6, 2012) on project development efforts to date. Based on the program cost estimate developed by the VDOT staff as of June 6, 2012, the project can be completed within current and planned allocations.

Section 33.1-12 of the *Code of Virginia* requires the following:

For transportation construction projects valued in excess of \$100 million, the Commonwealth Transportation Board shall require that a financial plan be prepared. This plan shall include, but not be limited to, the following: (i) a complete cost estimate for all major project elements; (ii) an implementation plan with the project schedule and cost-to-complete information presented for each year; (iii) identified revenues by funding source available each year to meet project costs; and (iv) a detailed cash-flow analysis for each year of the proposed project.

In accordance with the aforementioned legislative requirement, this document is prepared as the Initial Plan of Finance for the Route 29 Bypass Project (the Project).

This financial plan will define the methodology, resources, and time schedule of the work completed and remaining work to finish the Project, and includes the following topics:

BACKGROUND

Provides a description of the Project and the Project's history
Explains the current Project activities
Presents the Project's Implementation Schedule

PROJECT COST ESTIMATE

Identifies key cost components
Explains the cost estimating methodology
Identifies actual cost incurred and projected expenditures by fiscal year

PROJECT FINANCING

Identifies and discusses current and planned funding sources
Describes the State's commitment to fund the remainder of the project

PROJECT CASH FLOW

Analyzes anticipated funding in relation to projected costs
Demonstrates funding needs will be satisfied
Discusses the project's remaining funding requirements

This plan demonstrates and outlines VDOT's commitment to sound financial planning and providing the resources needed to complete the Project by July 15, 2016.

SECTION 1 – BACKGROUND

PROJECT DESCRIPTION

Under the terms of the design-build contract (scheduled for July 2012), the Design-Builder will construct a new four-lane divided, limited access highway west of existing Route 29. The road will run 6.2 miles from its northern terminus at Route 29 north of the South Fork of the Rivanna River to the southern terminus on the Route 29/250 Bypass at Leonard Sandridge Road and the North Grounds of the University of Virginia.

The Route 29 Charlottesville Bypass (“the Project” a.k.a the Western Bypass) will improve efficiency and safety along the existing Route 29 corridor. The Project will also address a gap in ongoing improvements to Route 29 through central Virginia and provide an alternate route for regional traffic that will avoid the existing developed corridor along Route 29 north of the City of Charlottesville. The road will bypass 13 existing traffic signals along the Route 29 corridor, reducing the travel time for motorists traveling north of Charlottesville to destinations along Route 29 south of Charlottesville. It will also provide an alternate route for motorists traveling to the University of Virginia or the UVA Medical Center. Access to the new highway will be provided through termini at both ends, with no intermediate public access points to crossroads or adjacent properties, except a private access point for the Rivanna Water and Sewer Authority’s facilities.

The project will include maintaining the following existing public crossing roads along the corridor: Barracks Road; Lambs Road; Roslyn Ridge Road; Earlysville Road and Woodburn Road. Necessary modifications to the existing Route 29/250 Bypass at the southern terminus and existing Route 29 at the northern terminus are included. Further, all modifications to crossings on Route 29/250 Bypass (i.e. Old Ivy Road, Ivy Road, CSXT Railroad) will be included, as necessary to implement the Project.

Project History

The following is a brief chronology on the development of the Route 29 Bypass Project:

1979 - 1990

A western Route 29 bypass around Charlottesville was originally proposed in 1979. Engineering and environmental work on the project began in late 1984 and the location was approved and adopted by the Commonwealth Transportation Board in 1990.

1991-2001

Acquisition of right-of-way for the project began in 1991 and continued until 2001. No additional right-of-way has been purchased since then. As of June 2012, VDOT owns 36 properties and 24 of those have leases in effect.

1996

In 1996 the Charlottesville-Albemarle Metropolitan Planning Organization (MPO) inserted language into its Transportation Improvement Program that prevented additional funds from being allocated to construction of the Western Bypass. That language was removed by the MPO Policy Board in July 2011.

1998-2003

In 1998, a lawsuit was filed challenging the project, alleging that the environmental impact review of the project violated the National Environmental Policy Act (NEPA). In 2001 the federal court ruled in favor of VDOT on the suit, but required the agency to complete a Supplemental Environmental Impact Statement addressing the road's impacts on the South Fork Rivanna Reservoir and the mitigation to minimize those impacts. The Final Supplemental Environmental Impact Statement was approved in May 2003 and a Record of Decision was issued on September 23, 2003.

2006

The North Grounds Connector, which is to connect to the proposed Route 29 Bypass project, was built in 2006 and renamed as Leonard Sandridge Road.

2011

In June, 2011, the Albemarle County Board of Supervisors voted to direct its Metropolitan Planning Organization (MPO) representatives to remove language from the Transportation Improvement Plan (TIP) opposing the Route 29 Bypass. In July, 2011, the Commonwealth Transportation Board (CTB) approved a reallocation of \$197.4 million for the construction of the Project. Also in July, the MPO voted to amend the TIP to include the Western Bypass. In September, VDOT issued a formal Request for Design-Build Proposals for the Project.

CURRENT ACTIVITIES

The Virginia Department of Transportation is currently conducting a re-evaluation of the previously approved National Environmental Policy Act (NEPA) document to ensure that impacts to air, noise, cultural resources, hazardous materials and endangered species are considered and mitigated. The formal NEPA review is being accomplished in the form of an Environmental Assessment (EA) and is anticipated to be completed by the end of October 2012.

Regarding the Design-Build solicitation, Technical Proposals from qualified Offerors were received in April 2012 and price proposals were opened on May 11, 2012. Notice of Intent to Award was issued on May 22, 2012. The project is scheduled to be presented to the Commonwealth Transportation Board on June 20, 2012.

Project Website

Additional information on the Route 29 Bypass Project can be found on the Project website. The website may be accessed at VDOT's external website at the following link:

http://www.viriniadot.org/projects/culpeper/rt.29_bypass.asp

The website provides additional information regarding project description, purpose, maps, implementation schedule, contact options, etc.

PROJECT IMPLEMENTATION PLAN

The charts on the following page illustrate the actual or anticipated start and completion dates for the Project as well as the anticipated costs to complete the Project by year. Table 1A presents the Implementation Schedule for the Project and Table 1B provides the estimated remaining costs by year.

Table 1A: Project Implementation Schedule

Project	Activity	Notice to Proceed Issued	Scheduled Completion
Route 29 Bypass NTP#1	Preliminary design activities only, ROW purchase prohibited , Utility relocation prohibited . Traffic studies (ITR/IMR/Traffic analysis for North and South Termini) and Geometric alignment in support of traffic studies.	July 20, 2012*	N/A
Route 29 Bypass NTP#2	Final design activities, issued once NEPA related work is completed, Commence work on final design, ROW purchase, utility relocation and construction.	October 31, 2012*	July 15, 2016

* Denotes anticipated NTP date

Table 1B: Estimated Remaining Costs By Year (Thousands)

Phase	Total Estimated Expenditures	Actual Expenditures Thru June 6, 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018
PE	\$32,103	\$14,463	\$7,056	\$7,056	\$2,117	\$1,235	\$176	
Right of Way	\$78,634	\$33,554	\$13,524	\$31,556	\$0	\$0	\$0	
Construction	\$133,281	\$0	\$15,994	\$39,984	\$53,312	\$22,658	\$1,333	
Total		\$48,017	\$36,574	\$78,596	\$55,429	\$23,893	\$1,509	
Estimated Remaining Expenditures	\$244,018	\$196,001	\$159,427	\$80,831	\$25,402	\$1,509	\$0	\$0

SECTION 2 – PROJECT COST ESTIMATE

The negotiated design-build contract for the Route 29 Bypass Project is \$135,988,092. This amount includes the following major work elements to be provided by the Design-Builder: final design; right-of-way acquisition services; utility coordination; utility relocations; construction; and, construction QA/QC.

VDOT will remain responsible for updating NEPA documentation, preliminary engineering support services, oversight of final design, oversight of right-of-way acquisition services, payment for new right-of-way acquired for the Project; and oversight of construction. Thus, for billing and tracking purposes, these anticipated costs have been allocated into the following project numbers (UPCs) and phases.

Table 2: Projected Cost Estimates

Route County/City Type Length	Description	Expenditure Type	Estimated Amount By Phase
0029 Albemarle Primary – ONE Hearing Design 0.0000	RTE 29 – PE for Env Doc & Design of Western Alternative UPC: 3965	PE	\$4,134,610
		RW CN TO	\$4,134,610
0029 Albemarle RW Monitoring Only 0.0000	RTE 29 (Charlottesville Bypass) – Alternative 10 UPC: 11771	PE	\$5,288,013
		RW CN TO	\$5,288,013
0029 Albemarle Primary - ONE Hearing Design 6.2 Miles	RTE 29 – Bypass UPC: 16160	PE	\$11,903,135
		RW CN TO	\$100,193,025 \$112,096,160
0029 Albemarle Single Hearing 6.2 Miles	Route 29 Bypass UPC: 102419	PE	\$4,800,000
		RW CN TO	\$118,275,045 \$123,075,045
TOTAL			\$244,593,828

ESTIMATE OF REMAINING PROJECT COSTS

Estimated remaining project costs for the Route 29 Bypass Project are captured in the overall budget in addition to monies expended to date. The estimates of remaining costs to implement the Project (as of June 6, 2012) are summarized in the table below:

Table 3: Estimate of Remaining Project Costs

Cost Item Description	Summary Rationale	Estimated Remaining Cost
Preliminary Engineering	Preliminary Design, Professional Services Support for VDOT oversight, NEPA documentation, and other misc. environmental investigations	\$1,295,000
Right-of-Way Purchases	Cost of real property, relocations, condemnation support	\$35,400,000
Design-Build Contract	Final Design, Construction, Construction QA/QC, Right-of-Way Acquisition Services, Utility Coordination, Utility Relocations	\$135,988,092
Landscaping	Landscaping after project is constructed	\$1,200,000
Contingency	Design-Build risk contingency	\$10,900,000
Stipends	\$100,000 to each responsive Offeror (6 each)	\$600,000
Department Project Oversight	Overall project management, design reviews, construction oversight	\$9,929,610
TOTAL		\$195,312,702

COST ESTIMATING METHODOLOGY

Preliminary Engineering

VDOT has executed agreements with various professional services firms to provide engineering and technical support during project development. Specifically, VDOT needs support for preparation of NEPA documentation, survey base map preparation, cultural resources investigations, and reviewing preliminary and final design submissions.

Right of Way Purchases

In accordance with the Design-Build Request for Proposals, Part 2, Section 1.6, VDOT remains responsible for the actual cost of the purchase of right-of-way, all easements and miscellaneous fees associated with real estate closings as part of the Project and oversight of the right-of-way acquisition/payment/condemnation process. The VDOT staff recently prepared an updated cost estimate of remaining right-of-way to be purchased for the Project. Such cost accounted for anticipated design modifications to the northern interchange and is shown in Table 3 above.

Design-Build Contract

An estimated cost for the Design-Build Contract was developed using the existing 1997 Conceptual Plans and making adjustments to a construction quantity estimate developed for those plans, to account for anticipated changes to the Project. The changes account for modifications to the plans to meet current Project design criteria as detailed in the Design-Build RFP Technical Requirements. The estimate for the Design-Build contract includes the major work elements noted in the table above. The fixed amount of the Design-Build contract is a lump sum, with payments based upon the Project physical percent of completion.

Department Project Oversight Costs

Department costs to manage the project and provide oversight of the project are estimated to be \$9,929,610. These costs include overall project management, design reviews, contract administration and construction oversight.

Summary Estimates and Expenditures

The following table depicts the estimated project cost compared to actual expenditures as of June 6, 2012. This chart demonstrates that the project is funded for costs incurred to date.

Table 4: Project Cost Estimate By Major Element

Expenditure Type	Current Budget**	Expended Thru June 6, 2012	Available Budget	Estimated Remaining Cost
PE	\$20,837,745	\$14,462,503	\$6,375,242	\$1,295,000*
RW	\$105,481,038	\$33,554,495	\$71,926,543	\$35,400,000
CN↔	\$118,275,045	\$0	\$118,275,045	\$158,617,702
TOTAL	\$244,593,828	\$48,016,998	\$196,576,830	\$195,312,702

*Anticipate PE expenditures of \$400,000 through end of FY 2012

** Current Budget refers to the previous and planned allocations to the Project as included in the DRAFT FY2013-2018 Six-Year Improvement Program. The Financial Plan will be updated annually and may need to be updated after the FY 2013-2018 SYIP is approved by the Commonwealth Transportation Board.

↔ CN includes D-B Bid and VDOT oversight, stipends, future landscaping and contingency.

SECTION 3 – PROJECT FINANCING

FINANCING THE PROJECT

The current total project cost estimate is \$244,593,828. Based on the draft FY 2013-2018 Six-Year Improvement Program presented to the Commonwealth Transportation Board on April 18, 2012, total previous and future allocations to the Project total \$244,593,828, fully funding the Project. The distribution of funding across the FY 2013-2018 SYIP includes \$72,166,759 in previous allocations and \$172,427,069 in planned future allocations from FY 2013 through FY 2018, inclusive.

Six Year Improvement Program Funding

Federal Sources

Minimum Guarantee/Equity Bonus: The draft FY13-18 SYIP includes \$34,331,200 in federal Minimum Guarantee/Equity Bonus funds allocated to date.

National Highway System: The draft FY13-18 SYIP includes \$89,988,764 in National Highway System funds. This amount includes \$14,355,339 allocated to date and \$75,633,425 in planned allocations from FY 2013 through FY 2018.

Surface Transportation Program: The draft FY13-18 SYIP includes \$42,996,560 in federal Surface Transportation Program funds, including \$6,788,519 allocated to date and \$36,208,041 in planned allocations from FY 2013 through FY 2018.

Soft Match: The draft FY13-18 SYIP includes \$32,960,367 in Soft Match allocations. This amount includes \$5,000,000 allocated to date and \$27,960,367 in planned future allocations from FY 2013 through FY 2018.

State Sources

Capital Projects Revenue Bonds: The draft FY13-18 SYIP includes \$32,625,236 in Capital Projects Revenue bond proceeds in FY 2013.

Primary Funds: The draft FY13-18 SYIP includes \$973,705 state Primary Formula funds allocated to date.

State Match: The draft FY13-18 SYIP includes \$8,868,765 in state matching funds allocated to date.

Other Sources

Project Contributions: The draft FY13-18 SYIP also includes project contributions resulting from estimated Right of Way Lease proceeds. Estimated Right of Way Lease proceeds to date total \$1,849,231.

The following table presents a summary of the draft FY13-18 SYIP funding by fiscal year.

Table 5: Route 29 Bypass Project - Summary of Funding by Source (Thousands)

Source	Thru FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018
Minimum Guarantee/Equity Bonus	\$34,331	\$0	\$0	\$0	\$0	\$0	\$0
National Highway System	\$14,355	\$0	\$0	\$18,633	\$19,000	\$19,000	\$19,000
Surface Transportation Program	\$6,789	\$9,791	\$11,955	\$5,131	\$936	\$3,595	\$4,800
Soft Match	\$5,000	\$2,448	\$2,989	\$5,941	\$4,984	\$5,649	\$5,950
Capital Projects Revenue Bonds	\$0	\$32,625	\$0	\$0	\$0	\$0	\$0
Primary Funds	\$974	\$0	\$0	\$0	\$0	\$0	\$0
State Match	\$8,869	\$0	\$0	\$0	\$0	\$0	\$0
Project Contributions	\$1,849	\$0	\$0	\$0	\$0	\$0	\$0
TOTAL	\$72,167	\$44,864	\$14,944	\$29,705	\$24,920	\$28,244	\$29,750

SECTION 4 – PROJECT CASH FLOW

PROJECTED COSTS COMPARED TO ALLOCATIONS BY FISCAL YEAR

The Route 29 Bypass Project is a high priority for both VDOT and the local area. Through the annual Six-Year Improvement Program update by the Commonwealth Transportation Board, allocations are adjusted as needed to attempt to match fiscal year expenditures with annual allocations to ensure that the Project is adequately funded in the year of expenditure. The following table presents the projected expenditures and allocations by fiscal year.

Table 6: Comparison of Expenditures to Allocations (Thousands)

Expenditures	Thru FY-2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	Total
PE	\$14,463	\$7,056	\$7,056	\$2,117	\$1,235	\$176		\$32,103
Right of Way	\$33,554	\$13,524	\$31,556	\$0	\$0	\$0		\$78,634
Construction	\$0	\$15,994	\$39,984	\$53,312	\$22,658	\$1,333		\$133,281
Total Annual Expenditures		\$36,574	\$78,596	\$55,429	\$23,893	\$1,509		
Cumulative Expenditures	\$48,017	\$84,591	\$163,187	\$218,616	\$242,509	\$244,018	\$244,018	\$244,018
Total Annual Allocations*		\$44,864	\$14,944	\$29,705	\$24,920	\$28,244	\$29,750	
Cumulative Allocations*	\$72,167	\$117,031	\$131,975	\$161,680	\$186,600	\$214,844	\$244,594	\$244,594
Cumulative Allocation Surplus (Deficit)	\$24,150	\$32,440	(\$31,212)	(\$56,936)	(\$55,909)	(\$29,174)	\$576	\$576

* Allocations refer to the previous and planned allocations to the Project as included in the DRAFT FY2013-2018 Six-Year Improvement Program.

Approach

The Route 29 Bypass Project’s annual cash expenditures are based on the Project Schedule from the Design-Builder, earnings estimate, and identified remaining work.

Financial Status

In accordance with § 33.1-12(11) of the *Code of Virginia*, the total funds allocated to the Project are equal to total expenditures within 12 months following anticipated completion of the project. VDOT's Financial Plan Guidelines state that the Programming Division "will be responsible for maintaining copies of all financial plans for documentation as part of the Six-Year Improvement Program..." and will coordinate annual update certification processes for this document. This document will be used in the development of each year's Six-Year Improvement Program so that the required funding for the project is properly allocated.

Based on current cost projections, there is no projected funding shortfall on the Route 29 Bypass Project. The estimate of cumulative expenditures for the project (as shown in Table 6 above) is \$244.018 million and available allocated funding to the project is \$244.594 million, leaving an estimated surplus of \$0.576 million.

SECTION 5 – UPDATES AND RESOURCES

FUTURE UPDATES

Any required adjustments to the cost estimate will be computed in a manner consistent with the methodology established in the Initial Financial Plan. The Financial Plan will be updated annually and when major changes occur during the project. It should be noted that this Financial Plan may need to be updated after the FY 2013-2018 Six-Year Improvement Program is approved by the Commonwealth Transportation Board if the final Six-Year Improvement Program varies significantly from the Draft SYIP available at the time this Initial Financial Plan was prepared. As noted above, the annual Financial Plan update will be coordinated with the Programming Division and is expected to be used in the development of each year's Six-Year Improvement Program.

Internally, VDOT will continue to monitor the Project and issue weekly progress reports to update the status of work underway and provide advanced warning of potential issues.

Table 7: Staff Resources

<p>Malcolm T. Kerley, PE Chief Engineer (804) 786-4798</p> <p>Barton Thrasher Asst. L&D Engineer (804) 786-5869</p> <p>Harold L. Jones, Jr., PE District Project Manager (540) 829-7370</p>	<p>Mohammad Mirshahi, PE Deputy Chief Engineer (804) 786-2501</p> <p>Jeffrey A. Roby, PE APD Program Manager (804) 786-1103</p>
<p>John W. Lawson Chief Financial Officer (804) 786-2707</p>	<p>James Utterback, PMP District Administrator (540) 829-7511</p>
<p>Wendy E. Thomas ADA- Business/Planning and Investment Management (540) 727-3233</p>	<p>John A. Giometti, PE District L & D Engineer (540) 829-7546</p>
<p>Ken Connors, P.E., CCM, PMP District Construction Engineer (540) 829-7510</p>	