Special Joint Dulles Corridor and Finance Committee

Phase 1 Cost and Schedule Update as of April 30, 2015 and

Recommendation to Amend the 2015 Budget for the Dulles Corridor Metrorail Project



MAY 2015



Phase 1 Budget Update

- A final contract amount has been negotiated and agreed with Dulles Transit Partners
- As this agreement amount represents more than ²/₃ of the Project cost, we have been able to forecast the final cost with a high degree of confidence
- Request a \$76M Increase in Phase 1 Budget
- The increase is due to:
 - 100+ Scope changes
 - Extended completion and testing schedule and resultant longer staffing durations
 - Safety & reliability improvements

Phase 1 Proposed Budget Adjustment

Scope Changes

Delay Costs

Safety & Reliability

- Significant Scope Changes
 - West Falls Church Yard Sound Tunnel
 - Safety Improvements
 - Remote Monitoring of Automatic Train Control
 - Remote Monitoring of Traction Power Equipment
 - VDOT Requirements

Phase 1 Proposed Budget Adjustment

Scope Changes

Delay Costs

Safety & Reliability

- Significant Delay Costs
 - Scope Expansion
 - Extended commissioning of new systems
 - Extended staffing through July 2016
 - WMATA Operations Staffing
 - DTP Costs



Scope Changes

Delay Costs

Safety & Reliability

- Significant Safety Improvements
 - Alstom Circuit Safety Upgrades
 - Power Frequency Track Circuits
 - New Communications and Signaling Contracts



RAIL PROJECT BUDGET



RAIL PROJECT BUDGET

	as of April 2015 if Adjustment is Approve				Change				
\$ Millions		Total	% of Total	1	Total	% of Total		Dollars	%
Phase 1 Capital Budget		2,906			2,982			76.0	2.6%
Phase 2 Capital Budget (1)		2,778			2,778				0.0%
Total Rail Project Budget (2)	\$	5,684		\$	5,760			76.0	1.3%
Federal		900	15.8%		900	15.6%		-	0.0%
Commonwealth of Virginia (3)		575	10.1%		575	10.0%		-	0.0%
Fairfax County		915	16.1%		927	16.1%		12.2	1.3%
Loudoun County		273	4.8%		276	4.8%		3.6	1.3%
MWAA (Aviation Funds)		233	4.1%		236	4.1%		3.1	1.3%
MWAA (Dulles Toll Road)		2,788	49.0%		2,845	49.4%		57.0	2.0%
TOTAL SOURCES OF FUNDS	\$	5,684	100.0%	\$	5,760	100.0%		76.0	1.3%

Fixed amount
Fixed percentage of total cost
Residual

Some totals may not sum due to rounding.

- (1) Capital budget for Phase 2 includes approximately \$551 million of contingency.
- (2) Phase 2 Parking Garages are to be funded directly by the Counties and are not included in the Total Rail Project Budget.
- (3) Does not include \$150 million of Commonwealth funds that will be used to pay interest on Dulles Toll Road revenue bonds.



- \$76 million Phase 1 adjustment is shared among funding partners per Local Funding Agreement
- Ultimate financial impact to funding partners may be reduced or eliminated if Phase 2 contingency is not fully used and the Total Rail Project Cost is under budget
- Net toll revenue during construction should be sufficient to pay additional Phase 1 capital costs allocated to the DTR
- Because of favorable borrowing costs, the Federally approved Phase 1 budget will not be exceeded
- Phase 1 Budget Adjustment does not impact previously published Projected Dulles Toll Road toll rates



Purpose

That the Dulles Corridor and Finance Committees approve and recommend to the full Board the approval of the amendment to the 2015 Airports Authority Budget for the Dulles Corridor Metrorail Project (Project) to increase the Phase 1 Project Budget authorization from \$2.906 Billion to \$2.982 Billion to include an additional \$76 Million Project cost.





March Expenditures \$ 4.2 Million

Total Expenditures \$ 2.741 Billion

(Thru March 31, 2015)

2.982 Billion

Forecast at Completion



Phase 1 Path Forward

- Coordinate WMATA railcar deliveries through July August 2015
- Finalize Phase 1 task order procurement
- Closeout DTP contract in 2015
- Major Punchlist Activities through 2016
 - Art- in-Transit
 - Alstom Terminal Units and Automatic Train Control Training Equipment
 - Third Rail Heater Controllers
 - Remote Terminal Unit Upgrade
 - Old Meadow Road Reconfiguration
- Incorporate Phase 1 budget increase of \$76M
 - Less than 3% of Total Budget



Recommendation

That the Dulles Corridor and Finance Committees approve and recommend to the full Board the approval of the amendment to the 2015 Airports Authority Budget for the Dulles Corridor Metrorail Project (Project) to increase the Phase 1 Project Budget authorization from \$2.906 Billion to \$2.982 Billion to include an additional \$76 Million Project cost.







DULLES CORRIDOR METRORAIL PROJECT - PHASE 1 MONTHLY COST SUMMARY As of March 31, 2015

Description	Budget	Budget	Total	Budget Varia	ances	Expenditures	to Date	Contract	Contract	
	Authorization ^{1,6}	Amount ²	Forecast ³	Amount	Percent	Amount	Total	NTP	Substantial	
				Over / (Under)			Percent			
	а		b	b-a	b-a/a	С	c/b		Note 5	
DULLES CORRIDOR METRORAIL PRO	OJECT - PHASE 1									
DESIGN-BUILD	2,027,776,076	1,712,504,539	2,051,345,982	23,569,906	1.2%	1,985,767,534	97%	2-Mar-09	9-Sep-13	
UTILITY RELOCATION	188,240,026	129,016,151	178,607,183	(9,632,843)	-5.1%	176,280,896	99%	1-Aug-07	30-Sep-10	
ROW	86,769,130	87,215,795	71,709,235	(15,059,895)	-17.4%	76,003,305	106%	1-Aug-07	28-Feb-10	
WMATA	278,485,628	271,635,628	293,901,156	15,415,528	5.5%	173,631,208	59%	28-Jul-07	8-Dec-13	
PRELIMINARY ENGINEERING ⁴	100,730,999	100,968,646	100,730,999	0	0.0%	100,730,999	100%	28-Jun-04	30-Jun-08	
PROJECT MANAGEMENT	223,693,141	142,109,519	285,418,775	61,725,634	27.6%	228,858,275	80%	n/a	n/a	
TOTAL FOR DCMP	2.905.695.000	2.443.450.278	2.981.713.330	76.018.330	2.6%	2.741.272.217	92%			

Notes:

- 1 Budget Authorization based on FFGA project budget with estimated contingency spread among line items; includes interrelated highway improvements; does not include financing costs.
- 2 Budget Amount is based on FFGA project budget but does not include finance costs and contingency distribution.
- 3 Total Forecast includes approved change orders, estimates at completion and the estimated cost of future contingency utilization. It does not include finance costs.
- 4 Preliminary Engineering expenditures have been agreed to be \$100,731,000. This is \$237,646 under the original budget of \$100,968,646. The under run is transferred to unallocated contingency.
- 5 Design-Build Contract Substantial date was revised from the original date of 7/31/2013 to 9/9/2013.
- 6 Additional Budget Authorization of \$150 million was approved by the Airports Authority's Board on June 22, 2012.

Legend: Black - Forecast within Authorization

Green - Forecast less than 3% over Authorization Red - Forecast greater than 3% over Authorization



DULLES CORRIDOR METRORAIL PROJECT - PHASE 1 MONTHLY COST SUMMARY As of April 30, 2015

Description	Amount in million (\$)				
DULLES CORRIDOR METRORAIL PROJECT - PHASE 1					
Total Contingency (including additional funding)	\$	462.3			
Total Contingency Utilized through April 2015	\$	462.3			
Remaining Contingency	\$	-			



AIRPORTS AUTHORITY								
Airport	Project No	MONTHLY COST SUMMARY	Original Budget	Budget				
			Amount	Authorization				
DULLES	CORRIDOR	METRORAIL PROJECT - PHASE 1						
DOLLLO	COMMIDON	METRONAL TROOPS TIME						
DESIGN-								
DCMP	5101/5103	DTP - FFP	1,185,980,111	1,322,086,717				
DCMP	5101/5103	Trackwork Allowance	75,378,042	88,408,431				
DCMP	5101/5103	Station Finishes & MEP Allowance	81,953,493	96,120,562				
DCMP	5101/5103	WFCY Sound and Box Platforms Allowance	6,686,211	7,842,037				
DCMP	5101/5103	Pedestrain Bridges Allowance	12,239,488	14,355,294				
DCMP	5101/5103	Site Development Allowance	61,718,153	70,200,426				
DCMP	5101/5103	Installation of Public Art Allowance	633,862	743,436				
DCMP	5101/5103	Communications and Securtiy Allowance	24,300,826	28,501,641				
DCMP	5101/5103	Fire Suppression Allowance	2,667,214	3,128,288				
DCMP	5101/5103	Elevators and Escalators Allowance	38,732,282	45,427,822				
DCMP	5101/5103	Spare Parts Allowance	5,515,011	6,468,375				
DCMP	5101/5103	WFCY S&I Building Allowance	27,613,591	32,387,074				
DCMP	5101/5103	Traction Power Supply Allowance	45,594,511	53,393,254				
DCMP	5101/5103	ATC Supply Allowance	26,918,598	31,571,940				
DCMP	5101/5103	Corrosion & Stray Currents Allowance	1,579,685	1,852,761				
DCMP	5101/5103	Contact Rail Allowance	8,431,848	9,889,438				
DCMP	5101/5103	Wiehle Parking Garage Allowance (By others)	29,091,684	34,120,681				
DCMP	5101/5103	Commodity Index Payments	77,469,926	86,241,691				
DCMP	5101/5103	Contingency	220,235,332	00,211,001				
DOM	0101/0100	Additional Budget Authorization of \$150 million was		95,036,208				
		SUBTOTAL - DESIGN-BUILD	1,932,739,867	2,027,776,076				
			1,00=,1 00,001	_,0_1,110,010				
UTILITY	RELOCATIO	N						
DCMP	5101/5103	DTP (Lane)	83,310,836	98,449,857				
DCMP	5101/5103	Design	2,394,135	2,775,026				
DCMP	5101/5103	PM/CM	8,347,544	9,498,307				
DCMP	5101/5103	Legal Permit Fee	834,796	923,095				
DCMP	5101/5103	TERF	6,502,667	7,137,990				
DCMP	5101/5103	Washington Gas Light - Force Account	4,231,456	4,644,877				
DCMP	5101/5103	Dominion Power - Force Account	7,410,599	8,134,628				
DCMP	5101/5103	Verizon - Force Account	3,418,254	3,752,224				
DCMP	5101/5103	ATT Local - Force Account	1,935,438	2,124,534				
DCMP	5101/5103	ATTLD - Force Account	216,276	237,407				
DCMP	5101/5103	Verizon Business (MCI) - Force Account	1,761,409	1,933,502				
DCMP	5101/5103	FiberLight - Force Account	75,234	82,585				
DCMP	5101/5103	Qwest Government - Force Account	1,708,886	1,875,847				
DCMP	5101/5103	Qwest Comercial - Force Account	993,153	1,090,186				
DCMP	5101/5103	Above Net - Force Account	1,467,478	1,610,853				
DCMP	5101/5103	Level 3 Com - Force Account	995,253	1,092,491				
DCMP	5101/5103	XO Communication - Force Account	250,922	275,438				
DCMP	5101/5103	Cox - Force Account	752,115	825,598				
DCMP	5101/5103	Comcast - Force Account	178,697	196,156				
DCMP	5101/5103	Fibergate - Force Account	31,512	34,591				
DCMP	5101/5103	Time-Warner - Force Account	199,576	219,075				
DCMP	5101/5103	FastToll (Qwest Business) - Force Account	220,584	242,135				



Airport Project No		MONTHLY COST SUMMARY	Original Budget	Budget		
All port	Project No	WONTHLY COST SUMMARY	Amount	Authorization		
DCMP	5101/5103	VDOT - Force Account	178,568	196,014		
DCMP	5101/5103	ITS Fiber - Force Account	26,260	28,826		
DCMP	5101/5103	UTILITY COMPANIES DESIGN	1,574,500	1,728,332		
DCMP	5101/5103	Contingency	20,093,426			
		Adjustment due to Additional Funding 2012		39,130,452		
		SUBTOTAL - UTILITY RELOCATION	149,109,574	188,240,026		
ROW						
DCMP	5101/5103	Support Services	8,171,000	8,625,590		
DCMP	5101/5103	Land & Relocation	79,044,794	87,639,548		
DCMP	5101/5103	Contingency	9,049,345	, ,		
		Adjustment due to Additional Funding 2012	, ,	(9,496,008)		
		SÚBTOTAL - ROW	96,265,139	86,769,130		
WMATA						
DCMP	5101	Vehicles	195,138,328	222,863,121		
DCMP	5101	Construction and Procurement	31,484,799	35,958,085		
DCMP	5101	WMATA Force Account Startup	13,777,100	15,734,518		
DCMP	5101	Project Management and Final Design	31,235,400	35,673,251		
DCMP	5101/5103	Contingency	38,593,348	,,-		
_		Adjustment due to Additional Funding 2012	,,-	(31,743,347)		
		SUBTOTAL - WMATA	310,228,975	278,485,628		
PRELIMIN	NARY ENGIN	NEERING				
DCMP		PRELIMINARY ENGINEERING	100,968,646	100,968,646		
_		Adjustment due to Additional Funding 2012	,,-	(237,647)		
		SUBTOTAL - PRELIMINARY ENGINEERING	100,968,646	100,730,999		
PROJEC1	Γ MANAGEN	IENT				
DCMP	5101/5103		23,225,715	27,133,777		
DCMP	5101/5103		88,565,041	103,771,334		
DCMP	5101/5103		1,439,608	1,686,783		
DCMP	5101/5103		28,879,153	33,791,186		
DCMP	5101/5103	Contingency	24,273,563	,,		
- · · · · ·		Adjustment due to Additional Funding 2012	= 1,=: 0,000	57,310,061		
		SUBTOTAL - PROJECT MANAGEMENT	166,383,080	223,693,141		

REPORT TO THE SPECIAL JOINT DULLES CORRIDOR AND FINANCE COMMITTEE RECOMMENDATION TO AMEND THE 2015 BUDGET FOR THE DULLES CORRIDOR METRORAIL PROJECT May 2015

ACTION REQUESTED

That the Dulles Corridor and Finance Committees approve and recommend to the full Board that it approve an amendment to the Airports Authority 2015 Budget for the Dulles Corridor Enterprise Fund, adopted pursuant to Resolution 14-31, for an increase of \$76 million for the Dulles Corridor Metrorail Project – Phase 1 Project, including Concurrent Roadway Improvements. Funding for this additional \$76 million will be shared in accordance with the 2007 Local Funding Agreement between the Airports Authority, Fairfax County and Loudoun County. This will increase the Project cost for the Local Funding Agreement, including Concurrent Roadway Improvements, from \$2.906 billion to \$2.982 billion.

DISCUSSION

The Project's current budget of \$2.906 billion (which excludes finance charges, other costs associated with Virginia Department of Rail and Public Transportation, Comprehensive Agreement and Acquisition Costs, Transportation Management Plan, and Washington Metropolitan Area Transit Authority (WMATA) Latent Defect Reserve) included \$462.3 million in contingency for unknown changes and cost overruns. As of March 2015, the Project, which is in its close out phase, has expended or committed approximately 98 percent of the \$462.3 million contingency. The current forecast requires an additional \$76 million for change orders, system enhancements, delay costs and safety items expected through Project completion in 2016. Of the additional \$76 million, \$76 million is for potentially eligible costs included in the Full Funding Grant Agreement (FFGA).

A recently concluded global settlement with the construction contractor for Phase 1, Dulles Transit Partners (DTP), along with the resolution of other outstanding matters including the close-out of Virginia permits with allowed Phase 1 work within Routes 7 and 123 in Tysons Corner, and the execution of contracts to supplement certain Phase 1 work, as required by WMATA, has allowed the Airports Authority to project a final Phase 1 close-out cost of \$2.982 billion and to move to the final close-out of the Phase 1 Project. This represents an additional cost of about \$76 million. The majority of the remaining work on Phase 1, which opened for passengers in July 2014, will be completed by the end of this year, including the delivery of 64 new rails cars to expand the Metrorail fleet at a cost of \$189.4 million. Final close-out of Phase 1 is expected to occur in 2016.

The total Project cost, including Concurrent Roadway Improvements, will increase by \$76 million from \$2.906 billion to \$2.982 billion. Funding for these additional costs are shared on a fixed percentage basis under the 2007 Local Funding Agreement between the Airports Authority, Fairfax County and Loudoun County in accordance with the Local Funding Agreement. The Airports Authority has agreed to contribute 4.1 percent of the total Project costs. Fairfax County's contribution is 16.1 percent, and Loudoun County's contribution is 4.8 percent. The residual additional cost is borne through the Toll Road Contributions. The previously projected toll rate increases will not require adjustment as a result of this recommended budget amendment.

The table below shows the DCMP Phase 1 Project Cost Summary.

Dulles Corridor Metrorail project -	Phase 1	Project Cost Sum	nary			
	Budget Authorization		Recommended Budget Amendment		Budget Authorization as Amended	
Guideway and Track Elements	\$	611,189,212	\$	6,514,419	\$	617,703,631
Stations, Stops, Terminals and Intermodals		349,865,048		15,046,624		364,911,672
Support Facilities: Yards, Shops, Admin Building		71,761,926		(1,610,774)		70,151,152
Site Work & Special Conditions		256,450,344		4,858,738		261,309,082
Systems		305,793,406		19,113,480		324,906,886
Right-of-Way (ROW), Land and Existing Improvements		59,046,925		(7,200,000)		51,846,925
Vehicles (Rail Cars and Support Vehicles)		194,648,939		(3,064,099)		191,584,840
Professional Service		846,222,017		49,911,849		896,133,866
Unallocated Contingency		9,309,247		(7,552,200)		1,757,047
Subtotal Project Cost - Phase 1	\$	2,704,287,064	S	76,018,037	\$	2,780,305,101
Concurrent Roadway Improvements*		201,408,229		= -w/####################################		201,408,229
Project Cost - Phase 1 Including Concurrent Roadway Improvements	\$	2,905,695,293	8	76,018,037	\$	2,981,713,330

^{*}Non-FFGA Costs

RECOMMENDATION

The Dulles Corridor and Finance Committees approve and recommend to the full Board that it approve the amendment to the 2015 Airports Authority Budget for the Dulles Corridor Enterprise Fund, adopted pursuant to Resolution 14-31, to authorize an increase of \$76 million for the Dulles Corridor Metrorail Project – Phase 1 (Project). This will be accomplished by increasing the budget authorization by \$76 million. This will increase the Project for the Local Funding Agreement costs including Concurrent Roadway Improvements from \$2.906 billion to \$2.982 billion.

Prepared by: Office of Finance and Office of Engineering May 11, 2015

Proposed Resolution

Adopting an Amendment to the 2015 Budget for the Dulles Corridor Metrorail Project Phase 1

WHEREAS, On December 10, 2014, the Board of Directors, in Resolution No. 14-31, approved the 2015 Budget for the Airports Authority which included, under the Dulles Corridor Enterprise Fund, a budget for Phase 1 of the Dulles Corridor Metrorail Project (Phase 1), including concurrent roadway improvements;

WHEREAS, A recently concluded global settlement with the construction contractor for Phase 1, Dulles Transit Partners (DTP), along with the resolution of other outstanding matters relating to Phase 1, has allowed Airports Authority staff to project a final Phase 1 close-out cost of approximately \$2.982 billion and to move to the final close-out of the Phase 1 project;

WHEREAS, This projected Phase 1 close-out cost of approximately \$2.982 billion represents an increase of \$76 million from the current Phase 1 approved budget authorization of approximately \$2.906 billion;

WHEREAS, This additional Phase 1 cost of \$76 million will be shared in accordance with the 2007 Local Funding Agreement between the Airports Authority, Fairfax County and Loudoun County;

WHEREAS, Staff has recommended that the Airports Authority's Phase 1 budget authorization be amended by increasing it by \$76 million to \$2,981,713,330; and

WHEREAS, The Dulles Corridor and Finance Committees have accepted that staff recommendation, and has recommended that the Board so amend the Phase 1 budget authorization; now, therefore, be it

RESOLVED, That the Airports Authority's 2015 Budget is amended to increase the budget authorization for Phase 1 of the Dulles Corridor Metrorail Project, including concurrent roadway improvements, to \$2,981,713,330.