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Administration

VIRGIN ISLANDS **RECOVERY AND** DEVELOPMENT AGENCY

Flax Administration Building Evaluating Value for Money

Project Number: MGG.02.21.200.01

Flax Administration Building

Value for Money (VfM) Assessment Report

1) INTRODUCTION

One of the core roles of the Recovery and Development Agency (RDA) is ensuring Value for Money (VfM) in the delivery of programmes and projects aimed toward recovery and development of the Virgin Islands. Section 5(2)(c) and (d) of the Virgin Islands Recovery and Development Regulations outline the value for money mandate of the RDA, specifying that:

The Agency shall be responsible for implementing the Government's Recovery and Development Plan in partnership with the Ministries and in so doing shall:

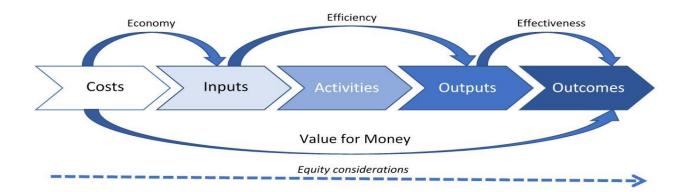
- (c) deliver the intended benefits; [and]
- (d) ensure that each project represents value for money.

To this end, the RDA has developed a Value for Money Framework and Methodology, which uses specific criteria to asses projects' Value for Money and assigns an overall VfM score for each project.

The VfM score is made up of eight indicators (listed in Table 1) within the four outlined areas of Value for Money, namely Economy, Efficiency, Effectiveness and Equity.

Table 1: Value for Money Areas within the 4Es

VALUE FOR MONEY AREA		
Economy	Economy	
Efficiency	Output Cost, Output Time, Schedule	
Effectiveness	Output Effectiveness, Outcome Effectiveness, Quality	
Equity	Equity	



The Flax Administration Building project began in May 2020, aimed at repairing and reconstructing the Flax Administration Building in Virgin Gorda. This project activity was one of three reconstruction activities for public administration buildings in Virgin Gorda, including the North Sound Admin, the neighbouring Vanterpool Building, and the Flax Admin Building – all damaged from passage of 2017's storms. This project was funded by the Caribbean Development Bank (CDB), through the Rehabilitation and Reconstruction Loan (RRL) portfolio of projects which have included works on roads, schools, administration buildings and water infrastructure. These projects were handed over to the Recovery and Development Agency (RDA) for implementation in early 2020. At the point of handover, the contract for the Flax Administration Building project had been awarded, and as such RDA has been involved only from the point of project delivery, rather than also including project planning and procurement.

Works on the two-storey Flax Administration Building included demolishing and replacement of internal and external roof structures, removal and replacement of all floor tiles, installation of interior and exterior doors, installation of air conditioning, hurricane shutters and generator, and internal and external painting. Repair and refurbishment of the Flax Building has been aimed at creating a better working environment for civil servants employed in the building to provide public services to the Virgin Gorda community. Over a period of 334 days, using \$1,146,612, this project was able to deliver on its planned outputs, and achieve its targeted outcome, and no valid defects have been reported in the ensuing months.

The following sections of this report assess the overall Value for Money of the Flax Admin Building project, using the methodology outlined in the RDA's VfM Framework Guidelines for Economy, Efficiency, Effectiveness and Equity.

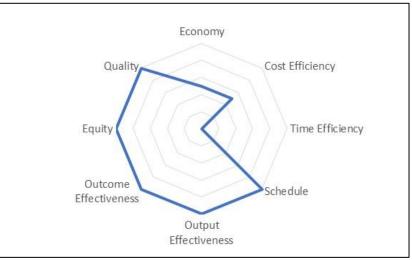
2) Overview of Overall VfM Score (75 out of max 100 points)

The main challenge to a more successful overall VfM score for this project was the failure of the project to be within its original budget, and within the relevant benchmarks used for costs and time. The project was able to achieve its targeted outputs and contribute to a broader outcome within its expected schedule, resulting in full scores for Economy, Schedule, Output and Outcome Effectiveness, Quality and Equity.

Flax Admin Building – VfM Scoring			
Economy	Economy	5/10	5/10
	Cost Efficiency	10/20	
Efficiency	Time Efficiency	0/10	20/40
	Schedule	10/10	
	Output Effectiveness	20/20	
Effectiveness	Outcome Effectiveness	15/15	45/45
	Quality	10/10	
Equity	Equity Goals	5/5	5/5
Overall VfM Score			75/100
Total Adjust	ed VfM Score	75	

The overall VfM score was 75 out of 100. This indicates some scope for improving overall Value for Money of this project, specifically as it relates to time and costs. Spending above the expected budget, in combination with some delays in project completion, and areas where timelines exceeded relevant benchmarks, affected the economy as well as the efficiency scores.

As part of an effort to continuously improve, the RDA has implemented cost containment strategies through more detailed planning efforts and improved time management to help propel efficiency gains and more adequately capture user requirements.





The overall Value for Money Scoring Chart (Figure 1) demonstrates the excellent scores received for Schedule, Output and Outcome Effectiveness, Equity and Quality, while assessments of Economy and Cost Efficiency resulted in partial points awarded, and assessment of Time Efficiency resulted in no points being awarded.

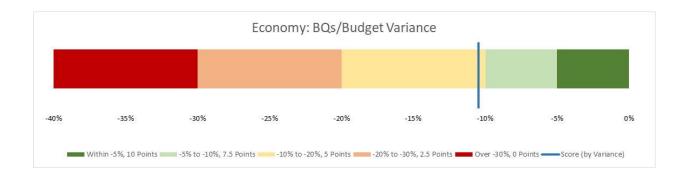
3) ECONOMY (5 out of max 10 points)

The economy of the Flax Administration Building project has been assessed based on the original budget for the project agreed with the CDB, at \$1.04 million.

The total spend for this project as at end of September 2021 is \$1.15 million which is approximately 11% above the original budget. As such, this project has been assigned partial points at five (5) points in assessment of its Economy (Table 2).

ECONOMY ASSESSMENT: 5/10 POINTS		
Original Budget	\$1,038,000.00	
Actual Spend	\$1,146,611.58	
Variance (\$)	\$108,611.58	
Variance (%)	(10.46%)	
ECONOMY SCORE	5	

Table 2: Assessment of Economy



4) ON BENCHMARKS USED

In calculating VfM Scores for both Cost and Time Efficiency, consideration has been given to performance against relevant benchmarks established for the production of specific outputs. Giving a background of the benchmarks used, and why, provides the necessary context for comparisons made.

In the case of the Flax Administration Building project, the following benchmarks for cost and time have been used to assess cost and time efficiency:

Туре	Benchmark	Sources	Considerations
Cost	\$242.50 per square foot rehabilitated	BCQS Market Trend Report 2020 (p. 20) https://bcqs.com/wp- content/uploads/2021/01/bcqs- construction-market-report-2020.pdf	Average construction cost per square foot for 1-3 storey, shell
Time	30 square feet rehabilitated per day	Aquila Commercial: https://aquilacommercial.com/learnin g-center/how-long-build-out-renovate- office-space/	Average time to rehabilitate square feet of office space

Cost Benchmark

The cost benchmark has been determined based on the average construction cost per square foot quoted in the 2020 Market Trend Report by BCQS, at \$242.50 per square foot (See Table above for details).

Time Benchmark

The time benchmark used was determined based on the average time taken to renovate an office space, quoted by the Aquila Commercial Construction Guide, at 30 square feet renovated per day. It should be noted that this benchmark has been adopted from the United States context, and that timing may therefore be longer in the Virgin Islands, given the need to import required materials.

5) EFFICIENCY (20 out of max 40 points)

The efficiency of an intervention considers Output Cost (Cost Efficiency), Output Time (Time Efficiency) and Schedule.

Cost Efficiency

In terms of output cost, the project involved refurbishment of 3,683 square feet of the Flax Admin Building using \$1,146,611.58. This translates to an average of \$311.34 per square foot refurbished in the building. Based on research conducted, a benchmark cost for office space refurbishment of \$242.50 per square foot has been used. In this way, the cost of each output for this project was higher than the benchmark cost, but within the threshold for assignment of partial points, therefore ten (10) points have been assigned for cost efficiency (Table 3).

COST EFFICIENCY ASSESSMENT: 10/20 POINTS		
Output Unit Cost	\$311.34 per square foot	
Benchmark Output Unit Cost	\$242.50 per square foot	
Variance (\$)	(\$68.84)	
Variance (%)	(28.39%)	
COST EFFICIENCY SCORE	10	

Table 3: Cost Efficiency Assessment

		Cost Ef	ficiency: Compa	arison to Ber	nchmark Out	put Cost		
-40%	-35%	-30%	-25%	-20%	-15%	-10%	-5%	0%
	Within -20%, 20 Points	-20%	to -30%, 10 Points	-30% to -35%, 5	Points O	ver -35%, 0 Points	Score (by Variance)	

Time Efficiency

Having started on 1 May 2020, the project was initially slated to be completed by the 28 February 2021, that is within 303 days. The project was completed on 31 March 2021, with a total recorded number of project days therefore at 334. Due to restrictions on movement imposed in April/May 2020 following the onset of the coronavirus pandemic, the total number of project days has been adjusted by 28 days, to account for the period during which a Territory-wide curfew was imposed, bringing the adjusted number of project days used for assessment of the Schedule to 306. It should be noted though, that while this adjustment accounts for direct impacts of Covid-19 on the project schedule, it does not however account for indirect impacts which have affected the global supply chain and thus resulted in delays.

In terms of assessment of time efficiency, the calculated output unit time was an average of 12 square feet rehabilitated per day, whereas the benchmark output unit time was an average of 30 square feet rehabilitated per day, using a benchmark from Aquila Commercial. This resulted in no points being assigned for Time Efficiency, as the actual outputs - square feet rehabilitated - produced within the timeframe (12 square feet rehabilitated per day) was less than the benchmark output unit time of 30 square feet rehabilitated per day (Table 4).

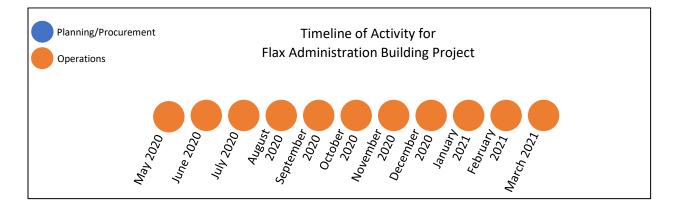
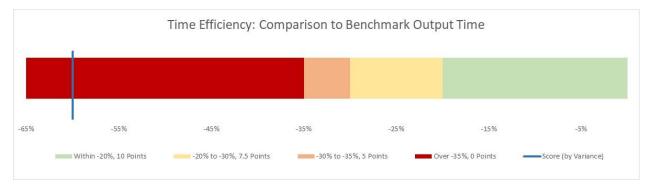


Table 4: Time Efficiency Assessment

TIME EFFICIENCY ASSESSMENT: 0/10 POINTS		
Output Unit Time	Avg. 12 square feet rehabilitated per day	
Benchmark Output Unit Time	Avg. 30 square feet rehabilitated per day	
Variance (sq ft.)	(18)	
Variance (%) (6		
TIME EFFICIENCY SCORE 0		

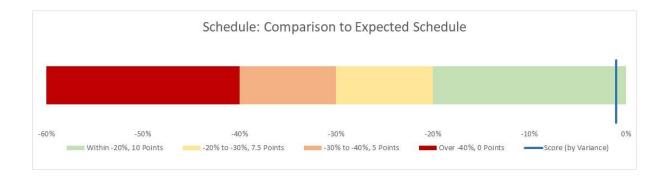


Schedule

In terms of schedule performance, given that there were 303 planned project days compared to a total number of adjusted actual project days at 306, this variance of 3 days meant that the project was generally in line with its scheduled timeline, with 10 points thus awarded for the Schedule assessment (Table 5).

Table 5: Schedule Assessment

SCHEDULE ASSESSMENT: 10/10 POINTS		
Planned Project Days	303 days	
Actual Project Days	334 days	
Adjusted Actual Project Days	306 days	
Variance (days)	(31 days)	
Adjusted Variance (days)	(3 days)	
Variance (%)	(10%)	
Adjusted Variance (%)	(0.99%)	
SCHEDULE SCORE	10	



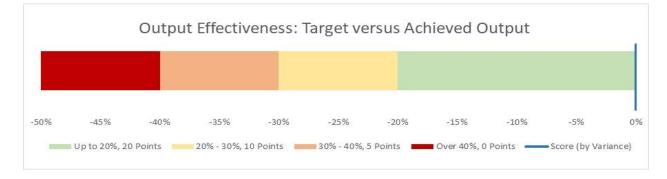
6) EFFECTIVENESS (45 out of max 45 points)

Output Effectiveness

Output effectiveness is a measure which compares targeted output indicators to achieved output indicators. In the case of the Flax Administration Building project, the total square footage targeted for rehabilitated to improve working conditions was 3,683 square feet. The project was able to rehabilitate the targeted square footage, and hence a full 20 points has been assigned for Output Effectiveness (Table 6).

Table 6: Target versus Achieved Output

OUTPUT EFFECTIVENESS ASSESSMENT: 20/20		
Targeted Outputs	3,683 square feet	
Achieved Outputs Rehabilitated	3,683 square feet	
Variance	(0)	
Variance (%) (C		
OUTPUT EFFECTIVENESS SCORE	20	



Outcome Effectiveness

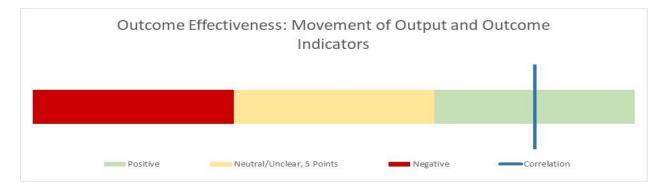
In terms of outcome effectiveness, the change relationship between the observed output and outcome has been used as a simple measure of outcome effectiveness. Using this methodology, the directional change in output is compared to the directional change in outcome. In the case of the Flax Administration Building project, both the output: square feet of building rehabilitated; as well as the outcome: number of administrative services offered within clean/acceptable space in Virgin Gorda; moved positively due to

the execution of this project, i.e. as more square feet of the building were rehabilitated, more administrative services could be and were offered within a clean/acceptable space in Virgin Gorda.

The change relationship between output and outcome has thus been deemed a positive correlation, and the maximum score of 15 points has been assigned (Table 7).

Table 7: Relationship between Outputs and Outcomes

OUTCOME EFFECTIVENESS ASSESSMENT: 15/15		
Output Change: square feet of building rehabilitated	+3,683	
Outcome Change: administrative services offered from clean/acceptable space in Virgin Gorda	+	
Assessment of Change Relationship	Positive correlation	
OUTCOME EFFECTIVENESS SCORE	15	



Quality

In terms of Quality, reports of valid defects have been used as the basis on which to assess the Quality of the Flax Administration Building project. No valid defects were reported within the defects and liabilities period for the project; hence a full ten (10) points have been assigned for quality of this project.

Table 8: Quality Assessment

QUALITY ASSESSMENT: 10/10		
Number of valid defects reported	0	
Quality Assessment (Standards) Me		
QUALITY SCORE	10	

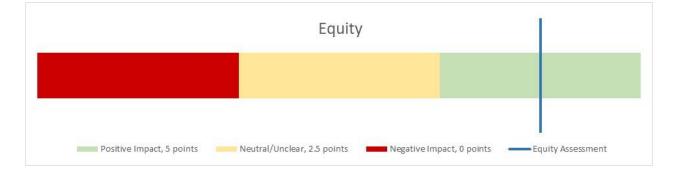


Equity

The Equity assessment of the Flax Administration Building project recognises that the Virgin Gorda community is one of the sister island communities in the Virgin Islands which is somewhat removed from the center of Government business in Road Town, Tortola. As such, provision of administrative services to this community can be difficult and protracted. Appropriate, safe and acceptable facilities from which to offer public services in Virgin Gorda are crucial to ensuring equitable access to these services, regardless of geographical position in the Territory. Rehabilitation of the Government buildings in Virgin Gorda aims to improve access to public services by the Virgin Gorda community. As such, this project has been deemed to have a positive impact on equity goals in the Territory, specifically as it relates to geographical equity.

Table 9: Equity Assessment

EQUITY ASSESSMENT: 5/5		
Increased services provided to Virgin Gorda		
community	Ť	
Equity Assessment (Equity goals)	Positive Impact	
EQUITY SCORE	5	



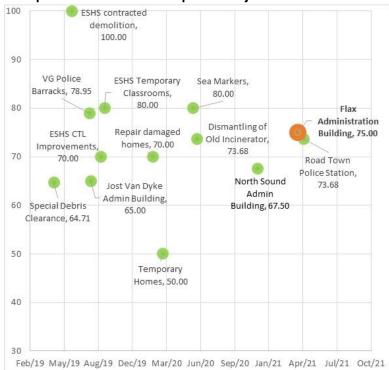


Figure 2: VfM Score Comparison with Other Completed Projects

7) Lessons Identified

Lessons identified coming out of the Flax Administration Building project include:

- 1) Improving project planning to better anticipate requirements in order to minimize the number of variations, which have cost and time implications. Examples of additional works which may have been avoided with more comprehensive project planning include additional demolition, installation of metal roof connectors, and variations in floor and ceiling heights. There were a total of twenty-five (25) variations on this project. More comprehensive project planning processes will help to minimise variations and improve cost and time efficiency;
- 2) Importance of efficiently managing time at early stages of project, prior to procurement, recognizing that time delays for projects involving repair and rehabilitation often mean further deterioration of existing structures, fixtures and fittings which then have cost implications; and
- **3)** Conscientiously ensuring that contractors order required materials as early as possible, in order to maximise the required lead time and minimise delays in project completion.

8) Conclusions

This report has been prepared using the RDA's Value for Money Framework in assigning a VfM Score to the Flax Administration Building project based on Economy, Efficiency, Effectiveness and Equity. The importance of keeping accurate, up-to-date, readily accessible information on project budgets, schedules, spending and results has once again been underlined in the process of conducting this VfM assessment. The Monitoring and Evaluation Team continues to play an important role in reviewing the quality of this information, and collating data for calculation of projects' VfM scores.

Achieving 75 points out of 100, the Flax Administration Building project's VfM could have been enhanced through improved cost containment and time management. That said, the project was able to achieve its targeted outputs within its expected schedule, and contribute to a broader outcome, demonstrating perfect scores in Schedule, Output and Outcome Effectiveness, Quality and Equity.