





EVALUATING VALUE FOR MONEY

PROJECT NUMBER: MGG.02.21.200.01

Vanterpool 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:

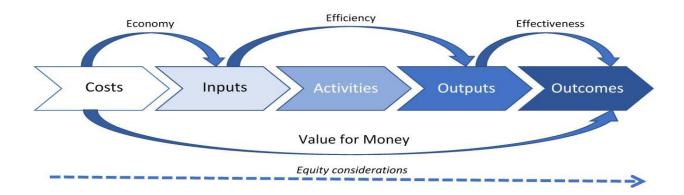
- (c) deliver the intended benefits; [and]
- (d) ensure that each project represents value for money.

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 Vanterpool Administration Building project activity began in July 2020, aimed at repairing and reconstructing the Vanterpool 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 Building, the neighbouring Flax Admin Building, and the Vanterpool 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, and since then, works have taken place across roads, administrative buildings, schools and water network infrastructure.

Works on the multi-story Vanterpool Building included demolition and replacement of internal roof structures, removal and replacement of floor finishes, installation of windows and doors, installation of air conditioning and hurricane shutters, and internal and external painting. Repair and refurbishment of the Vanterpool 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 an adjusted period of 400 days, using \$1,662,142.09 this project was able to deliver on its planned outputs, and achieve its targeted outcome, with only one valid defect, which has been rectified, reported in the ensuing months.

The following sections of this report assess the overall Value for Money of the Vanterpool 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 (92.5 out of max 100 points)

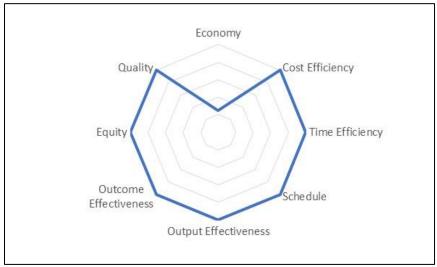
This project scored relatively well in its VfM assessment, with its main challenge being economy, having fell outside its original budget estimate. The project was however able to achieve its targeted outputs and contribute to a broader outcome largely within the cost and time benchmarks used, improving resiliency and providing services to a geographically underserved community, resulting in full scores for Cost Efficiency, Time Efficiency, Schedule, Output and Outcome Effectiveness, Quality and Equity.

Vanterpool Admin Building – VfM Scoring			
Economy	Economy	2.5/10	2.5/10
Efficiency	Cost Efficiency	20/20	
	Time Efficiency	10/10	40/40
	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			92.5/100
Total Adjusted VfM Score			92.5/100

The overall VfM score was 92.5 out of 100. This indicates a relatively high VfM scoring. Spending above the expected budget affected the economy score.

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.

Figure 1: Overall Value for Money Scoring – Radar Chart



The overall Value for Money Scoring Chart (Figure 1) demonstrates the excellent scores received for Cost Efficiency, Time Efficiency, Schedule, Output and Outcome Effectiveness, Equity and Quality, while assessments of Economy resulted in partial points awarded.

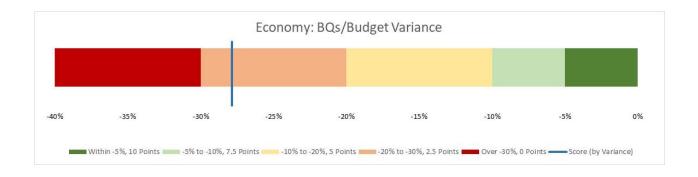
3) ECONOMY (2.5 out of max 10 points)

The economy of the Vanterpool Administration Building project has been assessed based on the original budget for the project agreed with the CDB, at \$1.3 million.

The total spend for this project as at end of August 2022 is \$1.66 million which is approximately 28% above the original budget. As such, this project has been assigned partial points at two point five (2.5) points in assessment of its Economy (Table 2). The reasons for this project spend being well-above the original budget largely lie in the delay between the reconstruction designs and actual start of construction. Since the building was occupied and commencement of construction works were thus delayed, continued deterioration of the building translated to higher reconstruction costs.

Table 2: Assessment of Economy

ECONOMY ASSESSMENT: 2.5/10 POINTS		
Original Budget	\$1,300,000.00	
Actual Spend	\$1,662,142.09	
Variance (\$)	(\$362,142.09)	
Variance (%)	(27.86%)	
ECONOMY SCORE 2.5		



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 Vanterpool Administration Building project, the following benchmarks for cost and time have been used to assess cost and time efficiency:

Type	Benchmark	Sources	Considerations
Cost	\$215 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 story, 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 \$215 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 (40 out of max 40 points)

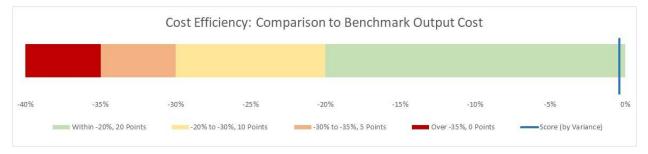
The efficiency of an intervention considers Output Cost (Cost Efficiency), Output Time (Time Efficiency) and Schedule.

Cost Efficiency

In terms of output cost, the project involved refurbishment of 10,836 square feet of the Vanterpool Admin Building using \$1,662,142.09. This translates to an average of \$153.39 per square foot refurbished in the building. Based on research conducted, a benchmark cost for office space refurbishment of \$215 per square foot has been used. In this way, the cost of each output for this project was well within the benchmark cost used, therefore a full twenty (20) points have been assigned for cost efficiency (Table 3).

Table 3: Cost Efficiency Assessment

COST EFFICIENCY ASSESSMENT: 20/20 POINTS		
Output Unit Cost	\$153.39 per square foot	
Benchmark Output Unit Cost	\$215 per square foot	
Variance (\$)	\$61.61	
Variance (%)	28.7%	
COST EFFICIENCY SCORE 2		



Time Efficiency

Having started on 15 July 2020, the project was initially slated to be completed within one calendar year or 365 days, that is, by the 15 July 2021. The project was actually completed on 20 December 2021, with a total recorded number of project days therefore at 523. It should be noted, that while there were no direct impacts of Covid-19 on the project schedule, there would have been indirect impacts for instance on the global supply chain and workforce numbers which may have resulted in unforeseen project delays. In addition to this, work was unable to commence on the Vanterpool Admin Building following contract award, as the Building remained occupied for an additional four (4) months. In this way, construction could not begin on the site until 15 November 2020. The actual number of project days have thus been adjusted by 123 days, reflecting the time period during which the contractor would have been able to start works, but that the site was occupied and commencement of works had to be delayed.

In terms of assessment of time efficiency, the calculated adjusted output unit time was therefore an average of 27 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 a full ten (10) points being assigned for Time Efficiency, as the actual outputs - square feet rehabilitated - produced within the timeframe (27 square feet rehabilitated per day) was slightly less than the benchmark

output unit time of 30 square feet rehabilitated per day, but still within the threshold for full points to be awarded (Table 4).

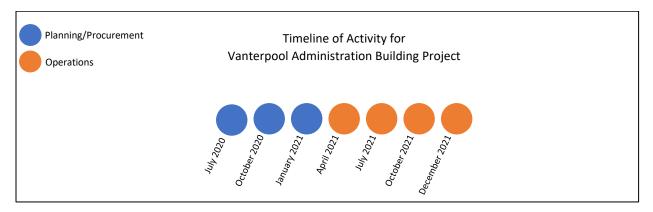
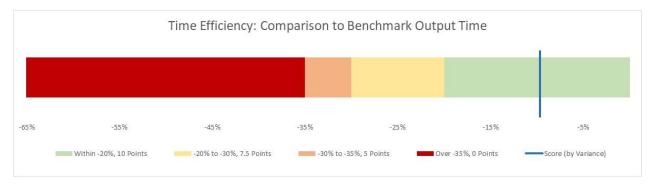


Table 4: Time Efficiency Assessment

TIME EFFICIENCY ASSESSMENT: 10/10 POINTS		
Output Unit Time	Avg. 21 square feet rehabilitated per day	
Adjusted Output Unit Time	Avg. 27 square feet rehabilitated per day	
Benchmark Output Unit Time	Avg. 30 square feet rehabilitated per day	
Variance (sq ft.)	(9)	
Adjusted Variance (sq ft.)	(3)	
Variance (%)	(30.9%)	
Adjusted Variance (%)	(9.7%)	
TIME EFFICIENCY SCORE	10	



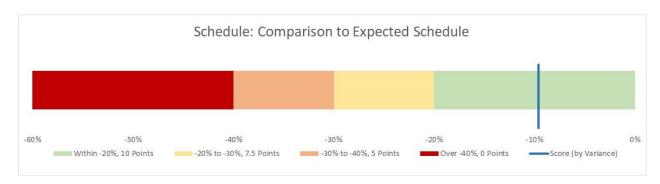
Schedule

In terms of schedule performance, given that there were 365 or a full year of planned project days compared to a total number of actual project days which stood at 523, then adjusted to 400 given the period of time during which the building was occupied and site works could not begin, this adjusted variance of 35 days meant that the project was assigned ten (10) full points in its Schedule assessment (Table 5).

Table 5: Schedule Assessment

SCHEDULE ASSESSMENT: 10/10 POINTS		
Planned Project Days	365 days	
Actual Project Days	523 days	
Adjusted Actual Project Days 400 days		

Variance (days)	(158 days)
Adjusted Variance (days)	(35 days)
Variance (%)	(43.3%)
Adjusted Variance (%)	(9.6%)
SCHEDULE SCORE	10



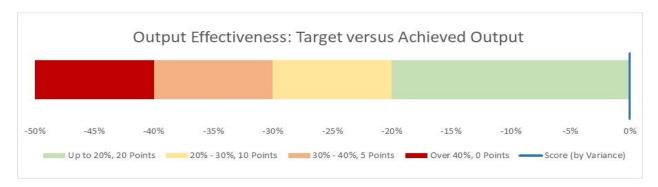
6) EFFECTIVENESS (45 out of max 45 points)

Output Effectiveness

Output effectiveness is a measure which compares targeted output indicators to achieved output indicators. In the case of the Vanterpool Administration Building project, the total square footage targeted for rehabilitation to improve working conditions was 10,836 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	10,836 square feet	
Achieved Outputs Rehabilitated	10,836 square feet	
Variance	0	
Variance (%)	0%	
OUTPUT EFFECTIVENESS SCORE 20		



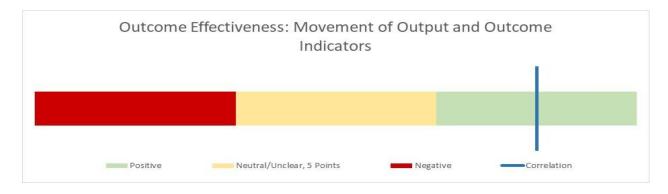
Outcome Effectiveness

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 Vanterpool 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	+10,836	
Outcome Change: administrative services offered from clean/acceptable space in Virgin Gorda	+2	
Assessment of Change Relationship	Positive correlation	
OUTCOME EFFECTIVENESS SCORE	15	

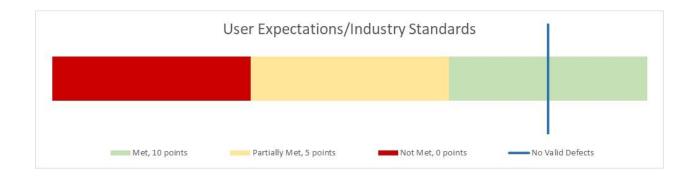


Quality

In terms of Quality, reports of valid defects have been used as the basis on which to assess the Quality of the Vanterpool Administration Building project. One (1) valid defect was reported and rectified 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 1		
Quality Assessment (Standards)		
QUALITY SCORE 10		



Equity

The Equity assessment of the Vanterpool 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 Government 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 location 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	T
Equity Assessment (Equity goals)	Positive Impact
EQUITY SCORE	5



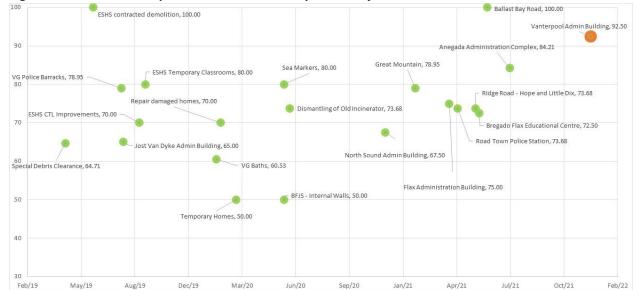


Figure 2: VfM Score Comparison with Other Completed Projects

7) Lessons Identified

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

- 1) Improving project planning to better anticipate requirements which would minimise the number of variations, and related cost and time implications. Examples of additional works which may have been avoided with more comprehensive project planning include additional ceiling demolition, expansion in the roof scoping, and variations in number of windows requiring replacement. A total of twenty-four (24) variations were required for adequate completion of this project. More comprehensive project planning processes will help to minimise variations and improve cost and time efficiency; and
- 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.

8) Conclusions

This report has been prepared using the RDA's Value for Money Framework in assigning a VfM Score to the Vanterpool 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 (M&E) Team continues to play an important role in reviewing the quality of this information, and collating data for calculation of projects' VfM scores.

The Vanterpool Administration Building achieved 92.5 points out of 100 in its VfM assessment. The project was able to achieve its targeted outputs at a high level of quality, within the cost and time benchmarks used, and contribute to a broader outcome and to the Territory's equity goals, demonstrating perfect scores in Cost Efficiency, Time Efficiency, Schedule, Output and Outcome Effectiveness, Quality and Equity.