



GOVERNMENT OF THE
VIRGIN ISLANDS
Premier's Office



VIRGIN ISLANDS
RECOVERY AND
DEVELOPMENT AGENCY

Virgin Gorda Police Barracks

Evaluating Value for Money

Project Number: SEC.01.21.182

Virgin Gorda Police Barracks

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:

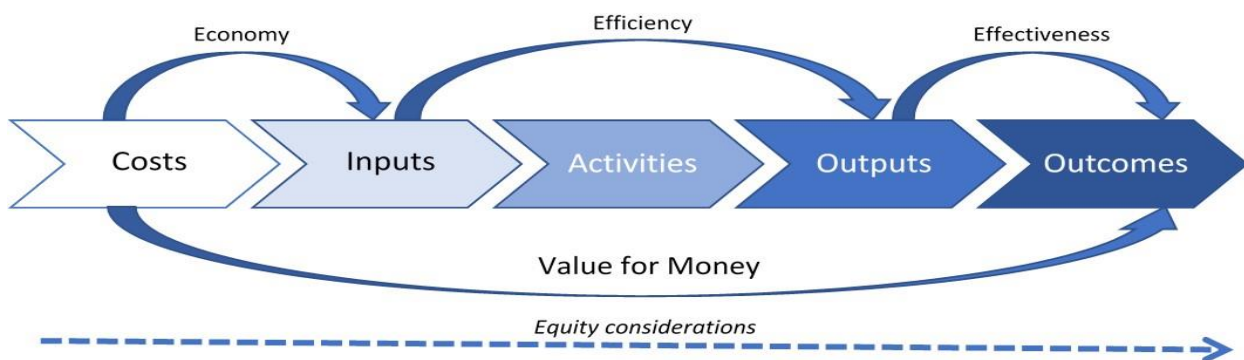
- (c) deliver the intended benefits; [and]
- (d) ensure that each project represents value for money.

To this end, the RDA has developed a Value for Money Framework and Methodology, which uses specific criteria to assess 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 Virgin Gorda Police Barracks project started at the end of July 2018, aimed at reconstructing the barracks next to the Police Station in the Valley, Virgin Gorda. This project involved rehabilitation of four (4) apartment units (three two-bedroom, and one three-bedroom) as well as an office. The project was able to deliver on its planned outputs, using \$889,044 over a time period of 366 days¹.

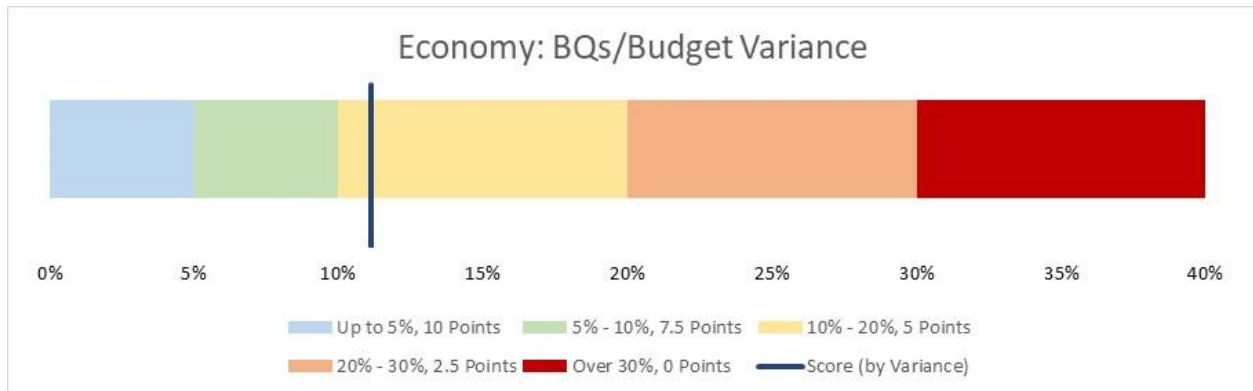
The following sections of this report assess the overall Value for Money of the VG Police Barracks project, using the methodology outlined in the RDA’s VfM Framework Guidelines for Economy, Efficiency and Effectiveness (Equity considerations were not measured for this project).

2) ECONOMY (5 out of max 10 points)

The economy of the Virgin Gorda Police Barracks project is assessed based on the budget for the Project. Within the Phase One Programme, this project was budgeted at \$800,000. The total expected spend to the end of the project is \$889,044 which is approximately 11.13% above the initial budget. This indicates that this project was executed above 10% but within a 20% variance, thus the project has been assigned 5 out of a maximum 10 points (Table 2). While the original budget from the Phase One Programme is used for this assessment, it should be noted that the project budget was revised after more detailed planning was conducted, with a revised budget of \$902,902 handed over to Operations/Delivery for project execution.

Table 2: Assessment of Economy

ECONOMY ASSESSMENT: 7.5/10 POINTS	
Original Budget	\$800,000
Projected Actual Spend	\$889,044
Variance (\$)	(\$89,044)
Variance (%)	(11.13%)
ECONOMY SCORE	5



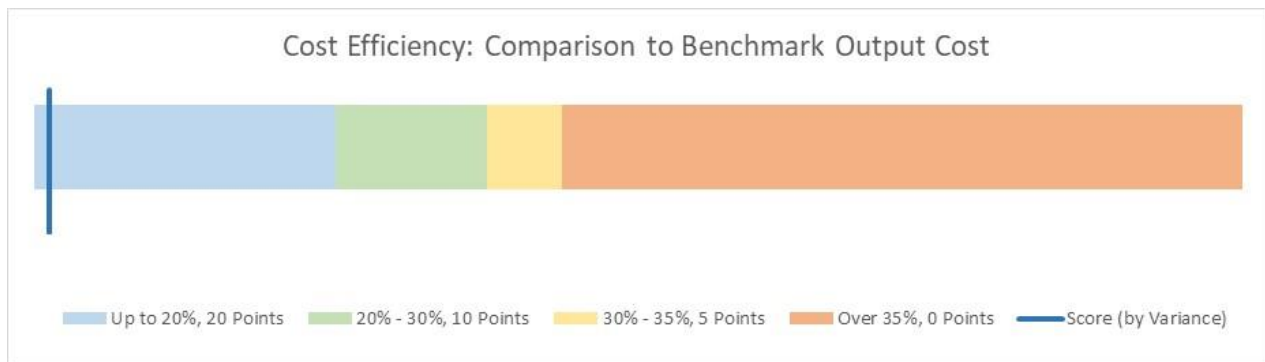
¹ Total number of project days calculated as 366 days, between 28 July 2018 and 29 July 2019.

3) EFFICIENCY (30 out of max 40 points)

The efficiency of an intervention considers Output Cost (Cost Efficiency), Output Time and Schedule (Time Efficiency). In terms of output cost, the project repaired the VG Police Barracks building, which is a total of 7,367 square feet for a total cost of \$889,044. This indicates an approximate rate of \$120.68 paid for each square foot rehabilitated. Based on research conducted, a benchmark cost of \$120.00 per square foot has been used.² In this way, the cost of each output for this project was largely within the benchmark cost for rehabilitation per square foot, and as such the project has been assigned a full 20 points for cost efficiency (Table 3).

Table 3: Cost Efficiency Assessment

COST EFFICIENCY ASSESSMENT: 20/20 POINTS	
Output Unit Cost	\$120.68 per square foot
Benchmark Output Unit Cost	\$120.00 per square foot
Variance (\$)	(\$0.68)
Variance (%)	(0.6%)
COST EFFICIENCY SCORE	20



Having started on 28 July 2018, the VG Police Barracks project was initially slated to be completed by the beginning of May 2019, that is, within 279 days (to 3 May 2019). The project was finally completed on 29 July 2019, with a total recorded number of project days therefore at 366. In terms of assessment of time efficiency, the calculated output unit time was an average of 20.13 square feet rehabilitated per day, while the benchmark output unit time was an average of 30 square feet³ rehabilitated per day. This resulted in 5 points being assigned for Time Efficiency, with the calculated output unit time 33% higher than the benchmark.

² The benchmark cost per square foot is evidenced from BCQS International Latin American and Caribbean Construction 2016 MarketTrend Report.

³ The benchmark for square feet rehabilitated per day is evidenced at: <https://aquilacommercial.com/learning-center/how-long-build-out-renovate-office-space/>

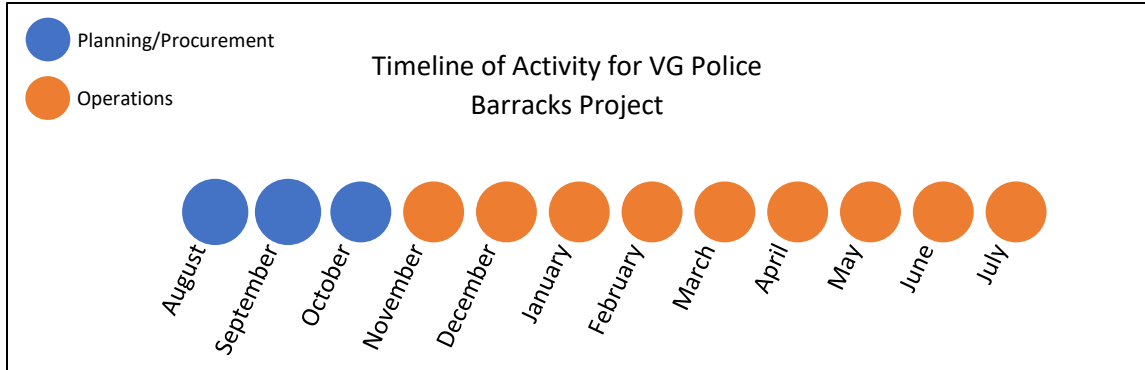


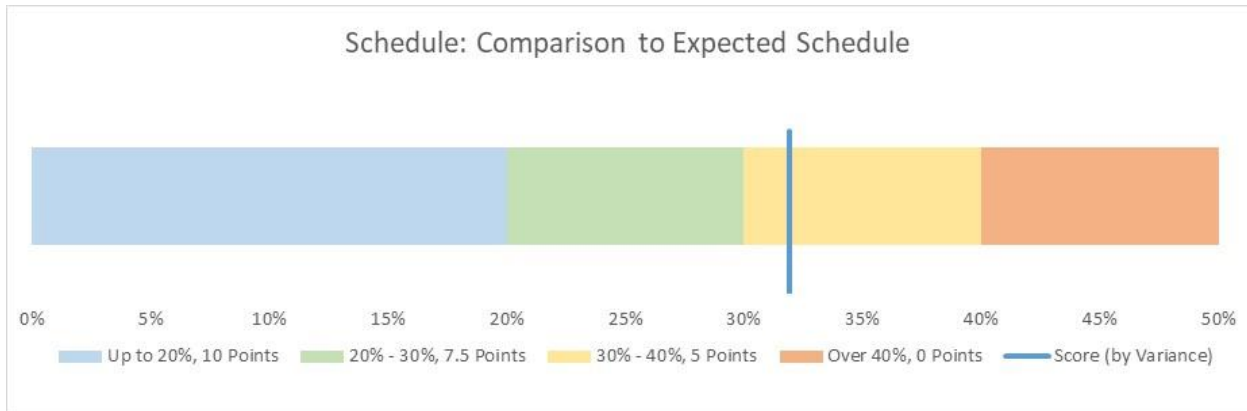
Table 4: Time Efficiency Assessment

TIME EFFICIENCY ASSESSMENT: 5/10 POINTS	
Output Unit Time	Avg. 20.13 square feet reconstructed per day
Benchmark Output Unit Time	Avg. 30 square feet reconstructed per day
Variance (days)	(9.87)
Variance (%)	(32.9%)
TIME EFFICIENCY SCORE	5

In terms of schedule, given that there were 279 planned project days compared to a total number of actual project days at 366, this variance of 87 days meant that the project was 31.2% over its scheduled timeline, indicating that 5 points were awarded for the Schedule assessment (Table 5).

Table 5: Schedule Assessment

SCHEDULE ASSESSMENT: 5/10 POINTS	
Planned Project Days	259 days
Actual Project Days	366 days
Variance (days)	(87 days)
Variance (%)	(31.2%)
SCHEDULE SCORE	5

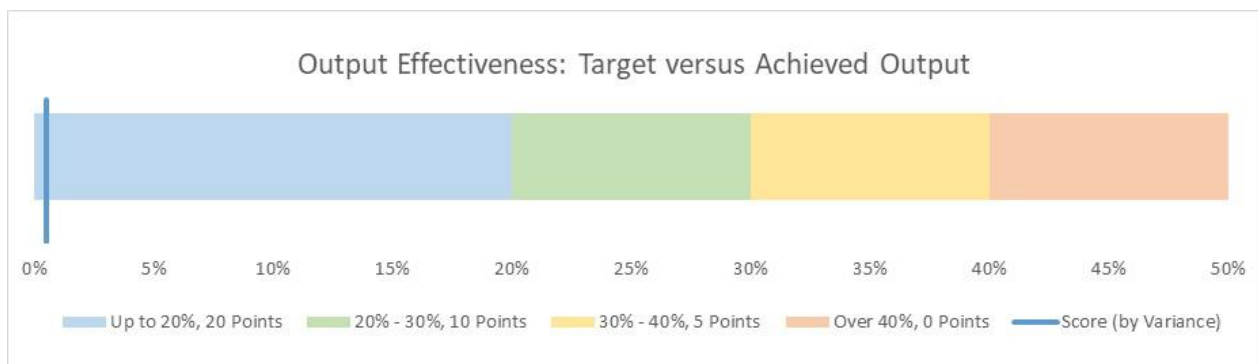


4) EFFECTIVENESS (40 out of max 45 points)

Output effectiveness is a measure which compares targeted output indicators to achieved output indicators. In the case of the VG Police Barracks project, the total targeted number of square feet to be rehabilitated was 7,367⁴. Given that the full targeted square footage was rehabilitated, this represented 100% of the target, with a variance percentage therefore of 0%. As such, a full 20 points has been assigned for Output Effectiveness (Table 6). It is also important to note that as well as producing the targeted square footage, the project was also able to deliver improved efficiency for the building going forward, through installation of a solar water heater.

Table 6: Target versus Achieved Output

OUTPUT EFFECTIVENESS ASSESSMENT: 20/20	
Targeted Outputs	7,367 square feet
Achieved Outputs	7,367 square feet
Variance (cubic yards)	(0)
Variance (%)	(0.0%)
OUTPUT EFFECTIVENESS SCORE	20



In terms of outcome effectiveness, the change relationship between the observed output and outcome has been used as a simple measure of outcome effectiveness for this project. The directional change in output is compared to the directional change in outcome. In the case of the VG Police Barracks project,

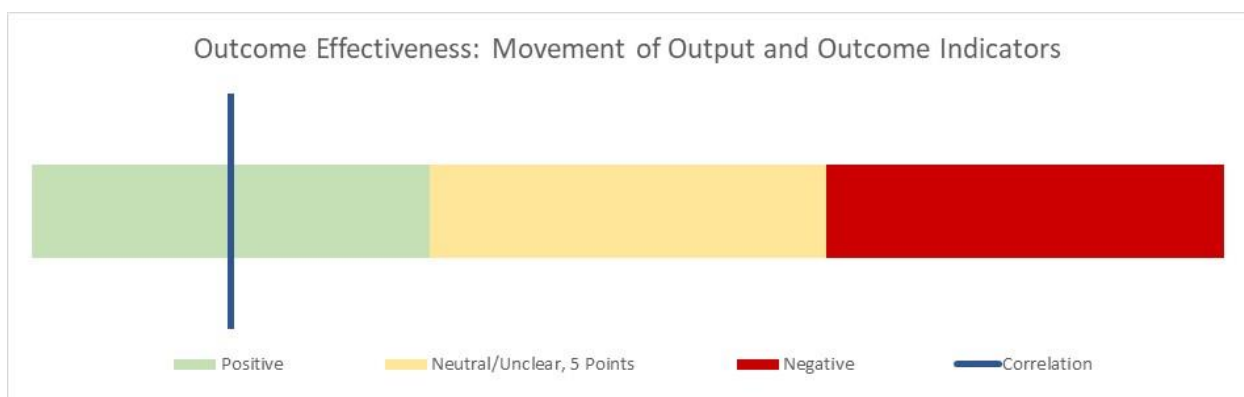
⁴ 7,367 square feet rehabilitated based on Bill of Quantities measurements for roof*2 for usable floor space.

both the output: square feet rehabilitated; as well as the outcome: police facilities fully equipped with modern facilities to meet needs; increased in the assessment period.

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 rehabilitated	+2,335
Outcome Change: equipped police facilities	+1
Assessment of Change Relationship	Positive correlation
OUTCOME EFFECTIVENESS SCORE	15



In terms of Quality, a user satisfaction survey was used to determine users’ level of satisfaction with the repairs to the VG Police Barracks, and thus to assess whether the level of quality has met user requirements and expectations. Of the approximately sixteen (16) persons accessing the VG Police Barracks, three (3) persons or 18.8% were interviewed.

From these interviews, it was determined that overall, persons were “Somewhat satisfied” with the quality of the repairs and the end-product, noting that works done drastically improved the VG Police Barracks from their deplorable condition following the impact of 2017’s storms. Specific problems caused by storm impacts, namely water leakage, mold and mosquito infestation, and ventilation have been resolved. At the same time however, challenges were noted with the quality and type of materials used being easily soiled, and specific security issues became present due to the types of windows used. For these reasons, the quality assessment for this project has been deemed “Partially Met” in terms of user satisfaction.

Table 8: Quality, User Satisfaction

QUALITY ASSESSMENT: 5/10	
User Satisfaction Rating	Somewhat Satisfied
Assessment of Quality	Partially Met
QUALITY SCORE	5

Overall, full scores assigned for output and outcome effectiveness demonstrate that the project was able to achieve its targeted outputs and contribute to the related outcome of improving police facilities, while the middling score for quality has recognised improvements made to the facility while noting the challenges still present with specific aspects.

5) Overview of Overall VfM Score (75 out of 95 weighted to 78.9 out of max 100 points)

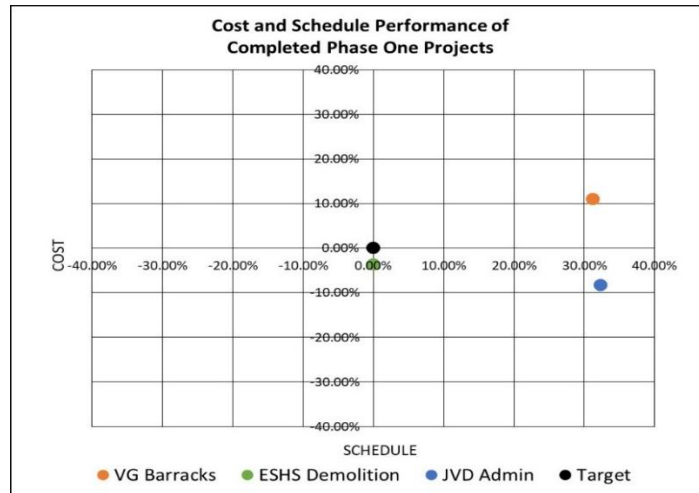
The main challenge to a more successful overall VfM score for this project was performance in terms of efficiency. Project delays in conjunction with higher costs and longer timelines negatively affected this project’s Efficiency scores. Meeting its targeted outputs and contributing to the broader outcome, the project was able to get full scores on Output and Outcome Effectiveness.

Special Debris Clearance Project – VfM Scoring			
Economy	Economy	5/10	5/10
Efficiency	Cost Efficiency	20/20	30/40
	Time Efficiency	5/10	
	Schedule	5/10	
Effectiveness	Output Effectiveness	20/20	40/45
	Outcome Effectiveness	15/15	
	Quality	5/10	
Equity	Equity Goals	N/A	N/A
Overall VfM Score			75/95
Adjusted Overall VfM Score			78.9/100

When weighted-up, the overall VfM score was 78.9 out of 100. This indicates some scope for improving overall Value for Money, specifically in terms of Economy, Efficiency and Quality scores. An overrun in costs (above the original budget) as well as some delays in project completion and quality challenges affected these scores. Following planning and execution of this project, the RDA has implemented cost containment strategies through creation of BQs by the Agency, more detailed planning efforts to anticipate challenges, and improved time management to further propel efficiency gains.

Overall, the project was able to rehabilitate the targeted square footage, though with moderate budget and schedule overruns (Figure 1). The performance of the project by expected cost and schedule (and comparison to other completed projects) is depicted in Figure 1 below, demonstrating that the budget target was more closely met than the schedule target.

Figure 1: Cost and Schedule Performance



Lessons identified coming out of the VG Police Barracks project include:

- 1) Creating BQs during the planning process prior to procurement as a cost containment measure;
- 2) Increasing emphasis on detailed planning to anticipate challenges and opportunities;
- 3) Processing payments on a monthly-basis to alleviate contractors' potential cashflow problems; and
- 4) Collaboratively working with and proactively communicating with contractors and the lead Ministry in order to minimise occurrence of delays.

Figure 2: Overall Value for Money Scoring – Radar Chart



The overall Value for Money Scoring Chart (Figure 2) demonstrates the excellent scores received for Cost Efficiency, Output Effectiveness and Outcome Effectiveness; while Economy, Time Efficiency, Schedule and Quality received middling scores due to an overrun of the original budget, some delays in project implementation, and specific issues with Quality.

6) Conclusions

This report has been prepared using the RDA's Value for Money Framework in assigning a VfM Score to the VG Police Barracks project based on Economy, Efficiency and Effectiveness. 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 78.9 points out of 100, the VG Police Barracks project's VfM could have been enhanced through improved cost containment and time management, as well as improvements in the planning process to ensure user requirements are well-captured. That said, the project achieving its target outputs and contributing to a larger outcome meant a perfect score for Output and Outcome Effectiveness.