



GOVERNMENT OF THE  
**VIRGIN ISLANDS**  
Premier's Office



**VIRGIN ISLANDS**  
**RECOVERY AND**  
**DEVELOPMENT AGENCY**



# Road Town Police Station

Evaluating Value for Money

Project Number: SEC.01.21.181

# Road Town Police Station

## 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:

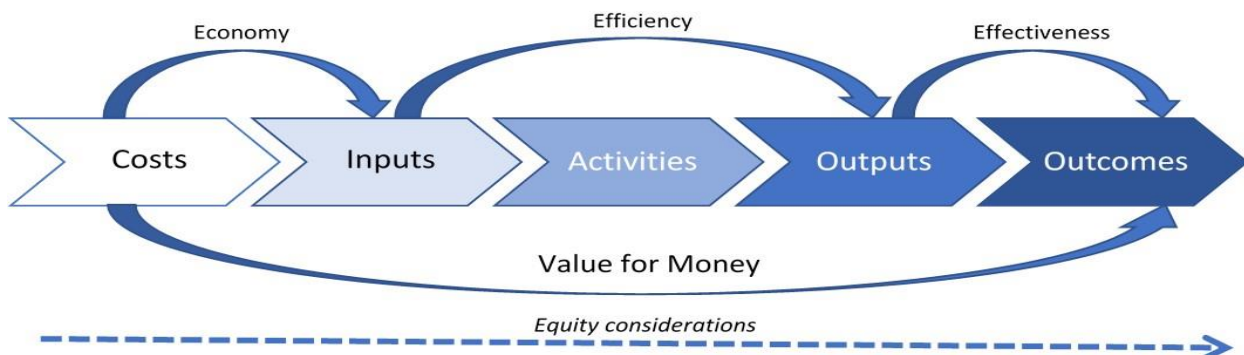
- (c) deliver the intended benefits; [and]
- (d) ensure that each project represents value for money.

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	
<b>Economy</b>	Economy
<b>Efficiency</b>	Output Cost, Output Time, Schedule
<b>Effectiveness</b>	Output Effectiveness, Outcome Effectiveness, Quality
<b>Equity</b>	Equity



The Road Town Police Station is a project which formed part of the Phase One programme of initial projects undertaken by the RDA. Following significant damage caused by 2017’s storms, the Road Town Police Station was initially refurbished under the auspices of the Governor’s Office, through a grant from the then Foreign and Commonwealth Office (FCO). Following this refurbishment however, several activities remained to bring the facility into full functionality, including perimeter fencing, wall, floor and ceiling finishes, installation of windows, doors and cabinetry, and electrical works including installation of air conditioning in Maintenance Supervisor and Administration offices.

The Road Town Police Station project began on the 21<sup>st</sup> August 2019, the date on which the Statement of Requirement was signed, and was completed on 16<sup>th</sup> April 2021. This project aimed at completing the rehabilitation of the Road Town Police Station which had been damaged by the passage of 2017’s storms but was not fully refurbished by the FCO.

The scope of this project encompassed perimeter fencing, wall, floor and ceiling finishes, installation of windows, doors and cabinetry, and electrical works including installation of air conditioning. This work has aimed at creating acceptable working conditions for officials and officers employed in the building, and critically, preparing spaces from which police services can be provided to the Territory.

Over a period of 604 days, using \$333,332, this project has been able to deliver on its planned outputs, providing improved working conditions for officials and officers and increasing the number of fully rehabilitated police facilities in the Territory.

The following sections of this report assess the overall Value for Money of the Road Town Police Station project, using the methodology outlined in the RDA’s VfM Framework Guidelines for Economy, Efficiency, and Effectiveness (Equity was not scored for this project).

**2) Overview of Overall VfM Score (73.68 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 estimated budget and schedule as well as the relevant benchmark for time, which negatively affected the Economy, Time Efficiency and Schedule scores. The project was able to achieve its targeted outputs and contribute to a broader outcome slightly above the cost benchmark used and at an acceptable level of quality, resulting in a partial score for Schedule, and full scores for Cost Efficiency, Output and Outcome Effectiveness, and Quality.

<b>Road Town Police Station – VfM Scoring</b>			
<b>Economy</b>	Economy	0/10	0/10
<b>Efficiency</b>	Cost Efficiency	20/20	25/40
	Time Efficiency	0/10	
	Schedule	5/10	
<b>Effectiveness</b>	Output Effectiveness	20/20	45/45
	Outcome Effectiveness	15/15	
	Quality	10/10	
<b>Equity</b>	Equity Goals	NA/5	NA/5
<b>Overall VfM Score</b>			<b>70/95</b>
<b>Total Adjusted VfM Score</b>			<b>73.68/100</b>

The overall VfM score was 73.68 out of 100. This indicates some scope for improving overall Value for Money of this project, specifically as it relates to economy and efficiency assessment against scheduled and benchmarked timelines. Spending above the original budget, in combination with some delays in project completion and timelines exceeding relevant benchmarks, affected the economy and 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 upfront.

It should be noted that during specific sections of time within the project’s timeline, the Territory was under quarantine and other movement and activity restrictions which resulted in delays and thus affected the overall project schedule. Specifically, project documents were ready to proceed to procurement in March, with designs completed, but project procurement did not actually commence until June 2020 due to COVID-19.

**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, Output Effectiveness, Outcome Effectiveness, and Quality; while assessment of Schedule received a middling score, and assessments of Economy and Time Efficiency resulted in no points being assigned for these aspects of Value for Money.

### **3) ECONOMY (0 out of max 10 points)**

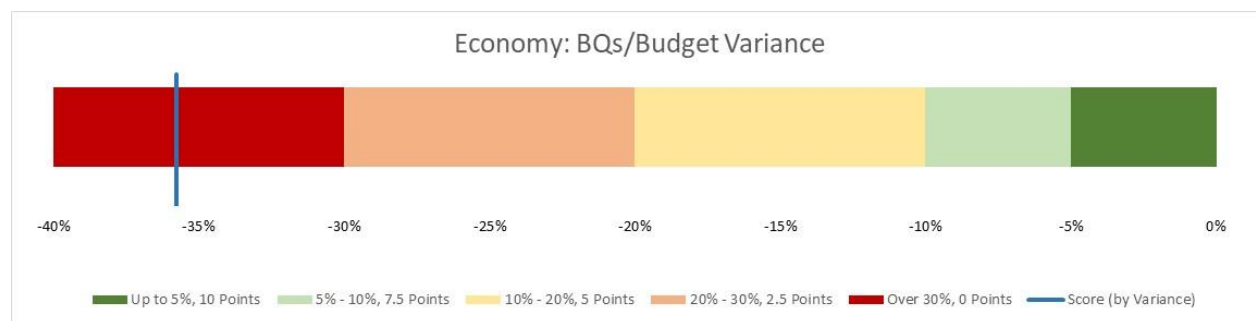
The economy of the Road Town Police Station project has been assessed based on the revised priced bill of quantities (BoQs) prepared prior to contract award, at \$245,520. This budget anticipated minor additional works to ensure full functionality of the facility following significant investment by the FCO on rehabilitating the station.

The total spend for this project as at end of August 2021 is \$333,332 which is 35.8% above the revised priced BoQs amount of \$245,520. As such, this project has not been assigned any points in assessment of its Economy.

(Table 2). During execution, this project had a total of four (4) variations, which therefore caused the overall project cost to be above its expected budget. The sum of these variations resulted in the overall project cost being above the acceptable variance threshold, hence no points were assigned for the Economy of this project.

Table 2: Assessment of Economy

<b>ECONOMY ASSESSMENT: 0/10 POINTS</b>	
Original Budget	\$245,520.09
Actual Spend	\$333,332.14
Variance (\$)	(\$87,812.05)
Variance (%)	(35.77%)
<b>ECONOMY SCORE</b>	<b>0</b>



Variations on the project included changes to the required height of the wall for the perimeter fencing due to the contours of the land on-site, as well as improved ventilation to prevent proliferation of mold in the installed air conditioning system, and painting and other requested finishes. These variations expanded the original scope of the project and resulted in the project spend being over expectations.

#### 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 Road Town Police Station project, the following benchmarks for cost and time have been used to assess cost and time efficiency:

Type	Benchmark	Sources	Considerations
Cost	\$270 per square foot rehabilitated	BCQS Market Trend Report 2020 (p. 20) <a href="https://bcqs.com/wp-content/uploads/2021/01/bcqs-construction-market-report-2020.pdf">https://bcqs.com/wp-content/uploads/2021/01/bcqs-construction-market-report-2020.pdf</a>	Average construction cost per square foot for warehouse

<b>Time</b>	30 square feet rehabilitated per day	Aquila Commercial Construction Guide: <a href="https://aquilacommercial.com/learnin-g-center/how-long-build-out-reno-vate-office-space/">https://aquilacommercial.com/learnin-g-center/how-long-build-out-reno-vate-office-space/</a>	Average time to renovate office space (Number of square feet renovated per day)
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**Cost Benchmark**

The cost benchmark has been determined based on the cost of constructing a 1-3 storey shell per square foot quoted in the 2020 Market Trend Report by BCQS, at \$270 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 (25 out of max 40 points)**

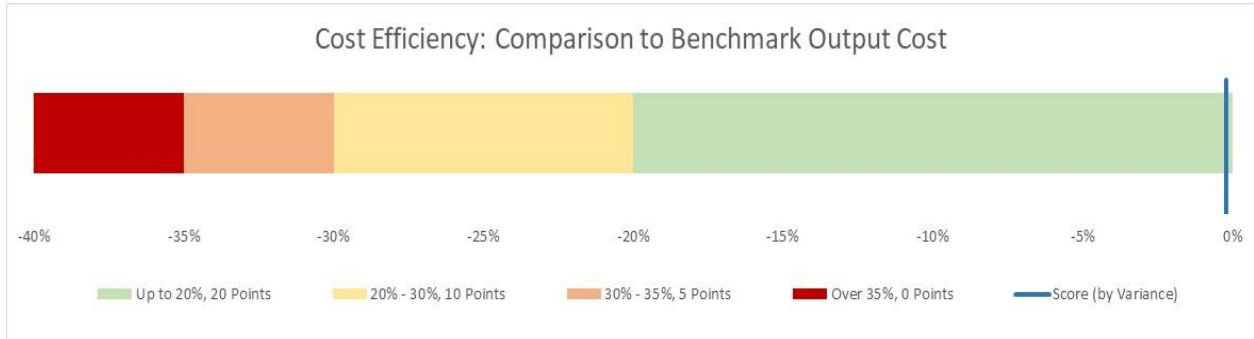
*Cost Efficiency*

The efficiency of an intervention considers Output Cost (Cost Efficiency), Output Time (Time Efficiency) and Schedule. In terms of output cost, the project activity involved rehabilitation of 1,030 square feet of space in the Road Town Police Station, mainly the Maintenance Supervisor and Administration offices. The project also involved construction of perimeter fencing and gates. Isolating the cost and square footage of the building refurbishment, this translated to an average of \$267.69 per square foot rehabilitated to provide adequate space for the provision of police services in the Territory. Based on research conducted, a benchmark indicative cost for construction based on construction cost of a 1-3 storey shell of \$270 per square foot has been used.<sup>1</sup> In this way, the cost of each output for this project was below the benchmark cost, therefore a full 20 points have been assigned for cost efficiency (Table 3).

Table 3: Cost Efficiency Assessment

<b>COST EFFICIENCY ASSESSMENT: 20/20 POINTS</b>	
Output Unit Cost	\$267.69 per square foot
Benchmark Output Unit Cost	\$270 per square foot
Variance (\$)	\$2.31
Variance (%)	0.86%
<b>COST EFFICIENCY SCORE</b>	<b>20</b>

<sup>1</sup> Indicative construction cost, BCQS Market Trend Report 2020, <https://bcqs.com/wp-content/uploads/2021/01/bcqs-construction-market-report-2020.pdf>



### Time Efficiency

Having started on 21 August 2019, the Road Town Police Station project was initially slated to be completed by 2 September 2020, that is within 378 project days. The project was completed on 16 April 2021, with a total recorded number of project days therefore at 604. Given the mandated lockdown period in Mar/Apr 2020 and the resulting delay in the project proceeding to procurement, as well as changes in the work schedule do to distancing requirements, the total actual project days has been adjusted by 90 days to 514 project days for the purposes of assessment of time efficiency and schedule. The calculated output unit time, using the adjusted 514 project days, was therefore an average of 2 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 Construction Guide.<sup>2</sup>

This resulted in no points being assigned for Time Efficiency, as the actual outputs - square feet rehabilitated - produced within the timeframe (2 square feet rehabilitated per day) was significantly less than the benchmark output unit time of 30 square feet rehabilitated per day (Table 4).

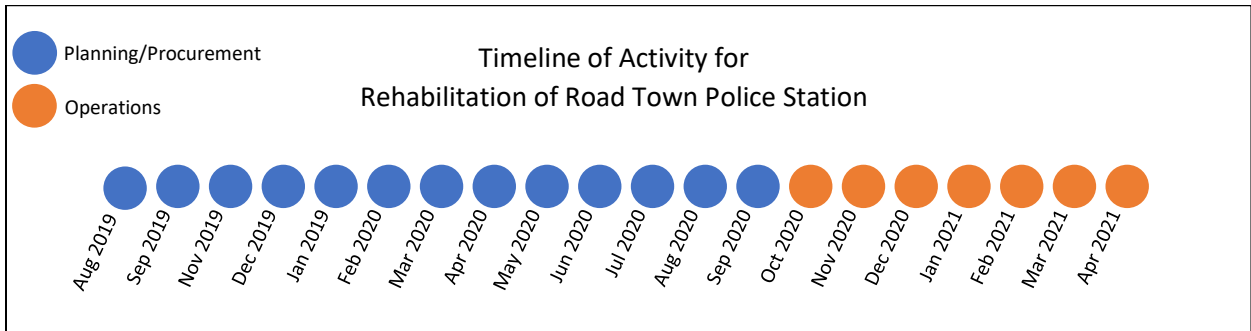
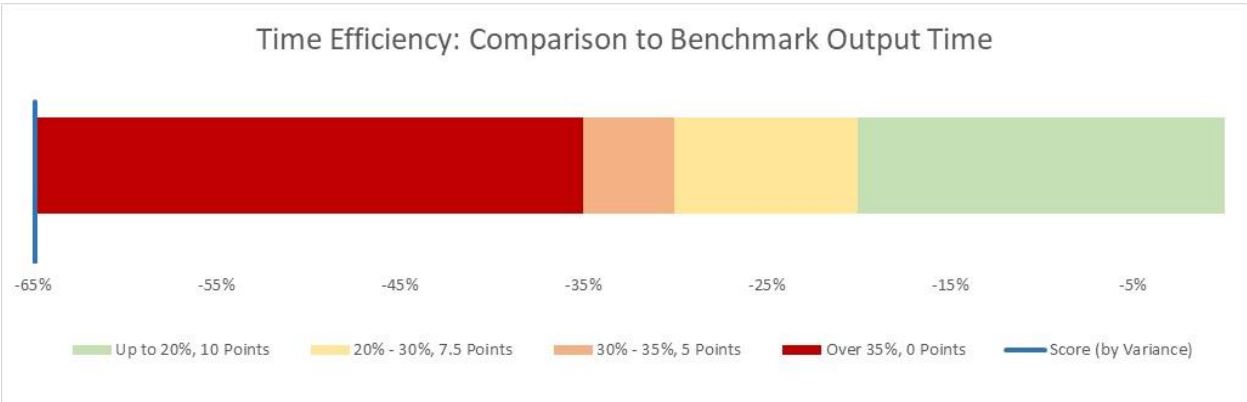


Table 4: Time Efficiency Assessment

TIME EFFICIENCY ASSESSMENT: 0/10 POINTS	
Output Unit Time	Avg. 2 square feet rehabilitated per day
Benchmark Output Unit Time	Avg. 30 square feet rehabilitated per day
Variance (days)	(28)
Variance (%)	(93.3%)
<b>TIME EFFICIENCY SCORE</b>	<b>0</b>

<sup>2</sup> Aquila Commercial Construction Guide, 2020. <https://aquilacommercial.com/learning-center/how-long-build-out-renovate-office-space/>



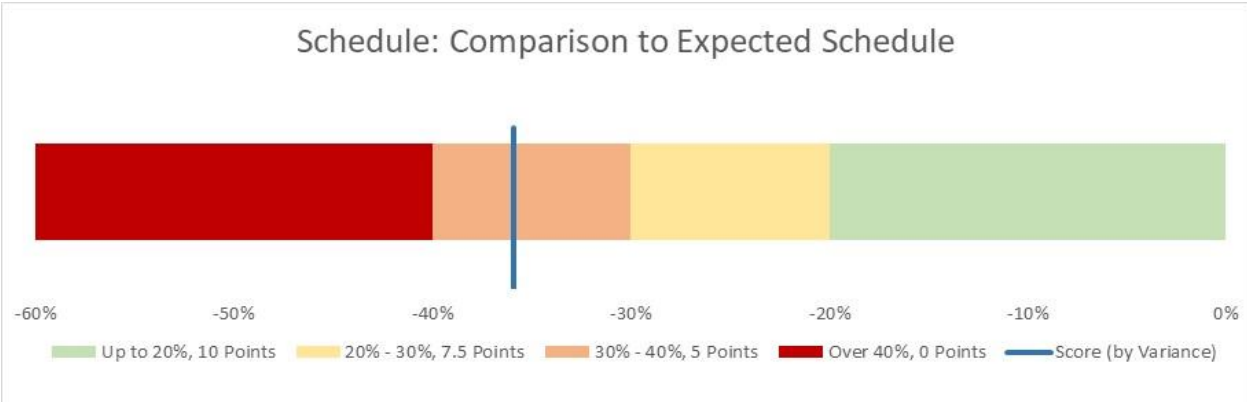
**Schedule**

It should be noted that movement and distance restrictions due to the COVID-19 protocols meant that the project timeline had to be expanded, as work that would have otherwise been done concurrently, had to be done sequentially, since there were restrictions on the number of workers that could be within a specified amount of physical space at the same time. The actual project days have thus been adjusted by 90 days to account for the impacts of COVID-19 on this project’s timeline.

In terms of schedule performance, given that there were 378 planned project days compared to a total adjusted number of actual project days at 514, the adjusted variance of 136 days meant that the project was 36% over its scheduled timeline, with 5 points thus awarded for the Schedule assessment (Table 5).

*Table 5: Schedule Assessment*

<b>SCHEDULE ASSESSMENT: 5/10 POINTS</b>	
Planned Project Days	378 days
Actual Project Days	604 days
Adjusted Actual Project Days	514 days
Variance (days)	(226 days)
Adjusted Variance (days)	(136 days)
Variance (%)	(59.8%)
Adjusted Variance (%)	(35.9%)
<b>SCHEDULE SCORE</b>	<b>5</b>





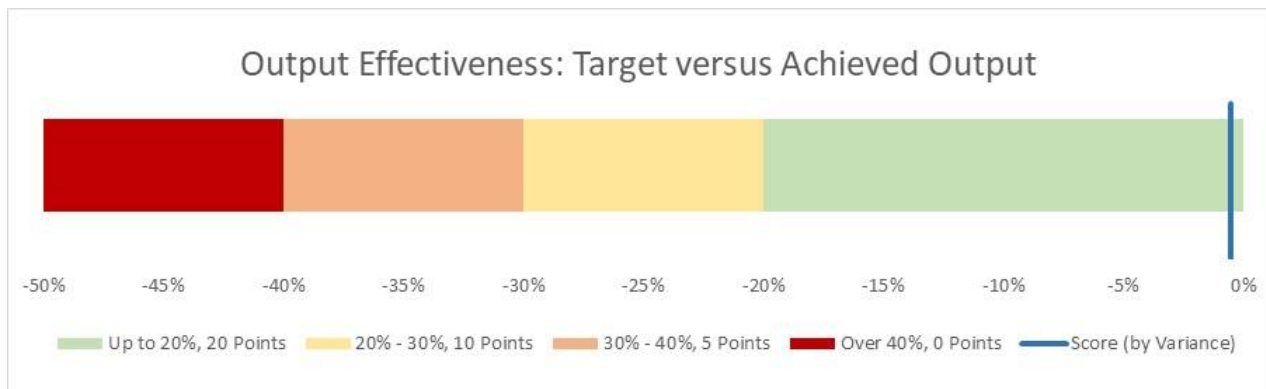
**6) EFFECTIVENESS (45 out of max 45 points)**

*Output effectiveness*

Output effectiveness is a measure which compares targeted outputs to achieved outputs, in determining whether and to what extent the project has met output expectations and produced the immediate result intended. In the case of the Road Town Police Station project, the total square footage targeted for rehabilitation in order to improve working conditions and provide police services was 1,030 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

<b>OUTPUT EFFECTIVENESS ASSESSMENT: 20/20</b>	
Targeted Outputs Rehabilitated	1,030 square feet
Achieved Outputs Rehabilitated	1,030 square feet
Variance	0
Variance (%)	0%
<b>OUTPUT EFFECTIVENESS SCORE</b>	<b>20</b>



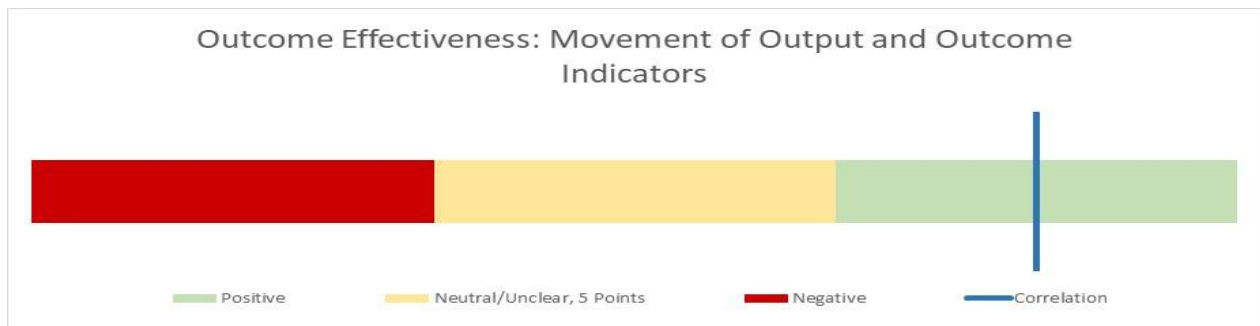
*Outcome effectiveness*

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. This assessment aims at determining whether execution of the project has contributed to achievement of the secondary result intended. In the case of the Road Town Police Station project, both the output: square feet of building rehabilitated; as well as the outcome: Proportion of police facilities equipped with modern facilities to meet needs; moved positively due to execution of this project. In other words, as more square feet of the building were rehabilitated, a greater proportion of police facilities were able to meet needs. Specifically, following completion of this project in April 2021, the Royal Virgin Islands Police Force adjudged that a greater proportion of its facilities were equipped to meet needs.

The change relationship between the output and outcome has thus been deemed a positive correlation, given that both the output and outcome indicators moved in a positive direction. Thus, the maximum score of 15 points has been assigned for outcome effectiveness (Table 7).

Table 7: Relationship between Outputs and Outcomes

<b>OUTCOME EFFECTIVENESS ASSESSMENT: 15/15</b>	
Output Change: square feet of building rehabilitated	+1,030
Outcome Change: proportion of police facilities equipped to meet needs	+
Assessment of Change Relationship	Positive correlation
<b>OUTCOME EFFECTIVENESS SCORE</b>	<b>15</b>



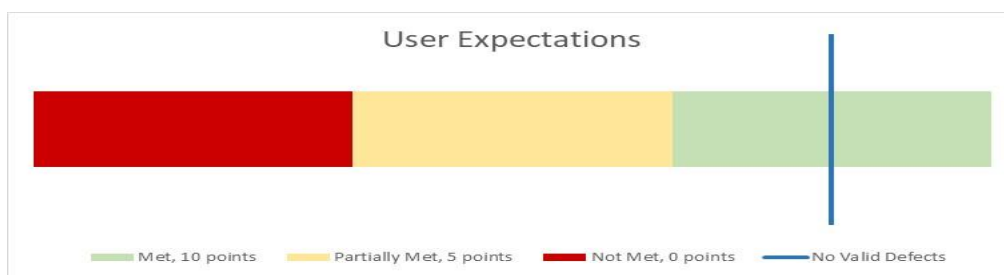
### Quality

Assessment of quality involves evaluating to what extent the project intervention has met quality expectations and may be based on meeting industry standards, meeting user expectations, and/or not having any valid defects reported. In the case of the Road Town Police Station project, its quality assessment is based on the number of valid defects reported in the defects and liabilities period.

The defects and liabilities period for this project is three (3) months following construction. In the three months following completion of the project in April, no valid defects were reported. As such, a full ten (10) points have been assigned for the Quality of this project (Table 8).

Table 8: Quality assessment

<b>QUALITY ASSESSMENT: 10/10</b>	
Valid Defects Reported	None
Assessment of Quality	Met
<b>QUALITY SCORE</b>	<b>10</b>



**Figure 2: VfM Score Comparison with Other Completed Projects**



Lessons identified coming out of the Road Town Police Station project include:

- 1) Consideration should be given to ensuring a higher contingency level for rehabilitation projects, as these types of projects are likely to involve unforeseen factors which cause variation in scope and associated costs and time; and
- 2) Improving specifications detailed in contract document to ensure clarity and full understanding of implications by contractors. Additional specifications in contract document combined with greater levels of engagement with contractors will help to ensure adequate understanding of scope of works including drawings and other visuals, which will aid effective project completion and identification of issues up-front.

## **7) Conclusions**

This report has been prepared using the RDA's Value for Money Framework in assigning a VfM Score to the Road Town Police Station project based on Economy, Efficiency, and Effectiveness (Equity has not been scored for this project). 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 the calculation of projects' VfM scores.

Achieving an overall score of 73.68 points out of 100, the Road Town Police Station project's VfM could have been enhanced through improved cost containment and time management. That said, the project intervention has been able to achieve its targeted outputs, has met quality expectations and has contributed to a broader outcome, while being in-line with the cost benchmark used. The project thus demonstrated perfect scores in Cost Efficiency, Output and Outcome Effectiveness, and Quality.