



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



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

# Repair to damaged home

Evaluating Value for Money

Project Number: HOU.01.26.157

# Repair to Damaged Home

## 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:

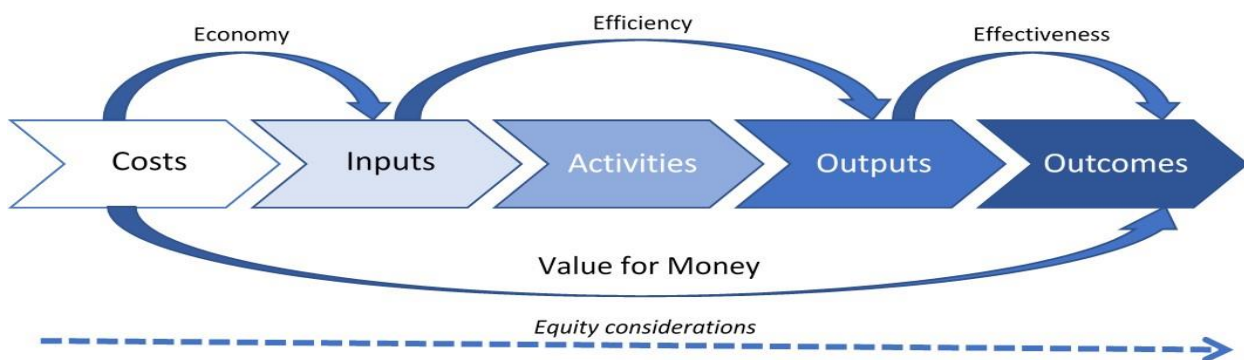
- (c) deliver the intended benefits; [and]
- (d) ensure that each project represents value for money.

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 Repair to damaged home project began in August 2019, aimed at repairing a home on Virgin Gorda by demolishing the damaged roof and installing a new roof, windows, doors, flooring, masonry and other fixtures and fittings, and repairing electrical connections as necessary in order to provide habitable living conditions for a vulnerable household. Over a period of 157 days, using \$193,700, this project was able to deliver its planned outputs, thereby providing improved living conditions to the household.

The following sections of this report assess the overall Value for Money of the Repair to damaged home project, using the methodology outlined in the RDA’s VfM Framework Guidelines for Economy, Efficiency, Effectiveness and Equity.

**2) Overview of Overall VfM Score (70 out of max 100 points)**

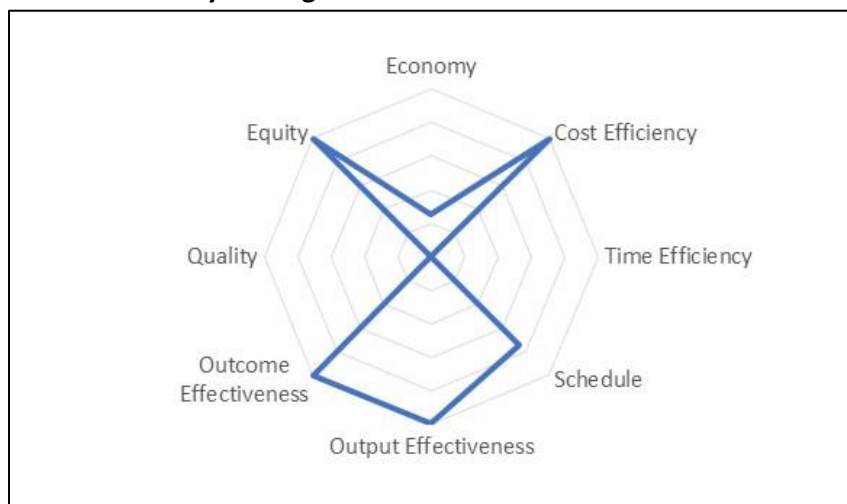
The main challenge to a more successful overall VfM score for this project was the failure of the project to be within the Bill of Quantities (BQs) plus 15%, within relevant benchmarks on spending and timelines, and the number of valid defects reported, which negatively affected the Economy, Time Efficiency, Schedule and Quality scores. Largely achieving its targeted outputs and contributing to a broader outcome, while progressing equity goals in the Territory, the project was able to get full scores on Cost Efficiency, Output Effectiveness, Outcome Effectiveness, and Equity.

<b>Repair to damaged home – VfM Scoring</b>			
<b>Economy</b>	Economy	2.5/10	2.5/10
<b>Efficiency</b>	Cost Efficiency	20/20	27.5/40
	Time Efficiency	0/10	
	Schedule	7.5/10	
<b>Effectiveness</b>	Output Effectiveness	20/20	35/45
	Outcome Effectiveness	15/15	
	Quality	0/10	
<b>Equity</b>	Equity Goals	5/5	5/5
<b>Overall VfM Score</b>			<b>70/100</b>
<b>Total Adjusted VfM Score</b>			<b>70/100</b>

The overall VfM score was 70 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 RDA-prepared BQs plus 15%, in combination with some delays in project completion, and areas where timelines exceeded 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.

**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 Equity; while Economy and Schedule received middling scores, and Time Efficiency which compares actual performance to benchmark timeframes and Quality which measured the number of valid defects reported, received no points.

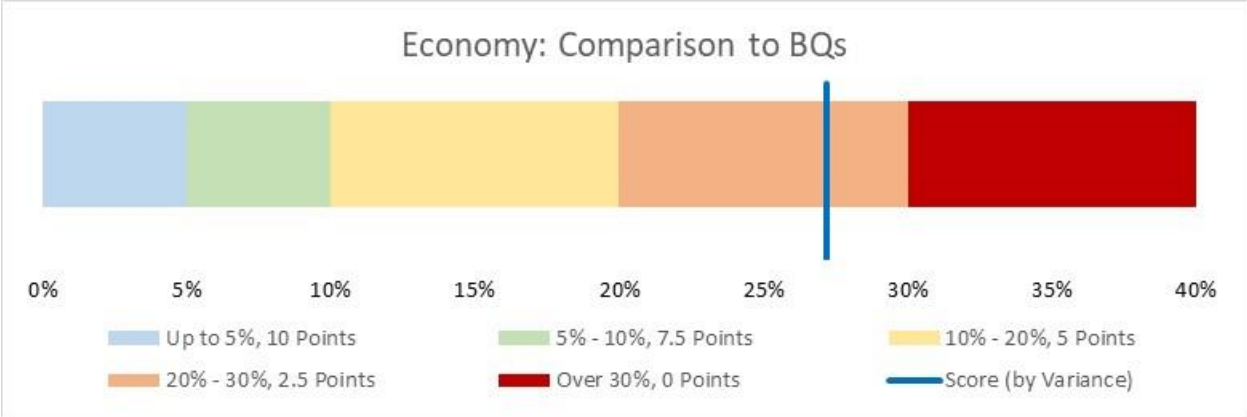
### 3) ECONOMY (2.5 out of max 10 points)

The economy of the Repair damaged home project has been assessed based on the priced bill of quantities (BQs) for the project with an additional 15% added for project management and other management costs. The priced BQs prepared by the RDA for repair of the home on Virgin Gorda was \$132,441 and with 15% added, the total original budget used for this assessment is \$152,307. It should be noted that within the Phase One Programme, this project was initially intended to involve repair of up to 100 homes. The scope of the project was reduced, as no additional funding was granted to complete repair of the additional homes envisaged under this project. Instead, the Ministry of Health and Social Development’s Housing Recovery Assistance Programme (HRAP) has continued repair of the additional homes.

The total spend and commitments for this project as at end of April 2020 is \$193,700 which is approximately 27.2% above the original budget. As such, this project has been assigned 2.5 points in the assessment of Economy (Table 2). A total budget of \$208,000 was handed over to Operations/Delivery for execution of this project.

*Table 2: Assessment of Economy*

<b>ECONOMY ASSESSMENT: 2.5/10 POINTS</b>	
Original Budget	\$152,307
Actual Spend	\$193,700
Variance (\$)	(\$41,393)
Variance (%)	(27.2%)
<b>ECONOMY SCORE</b>	<b>2.5</b>



**4) EFFICIENCY (27.5 out of max 40 points)**

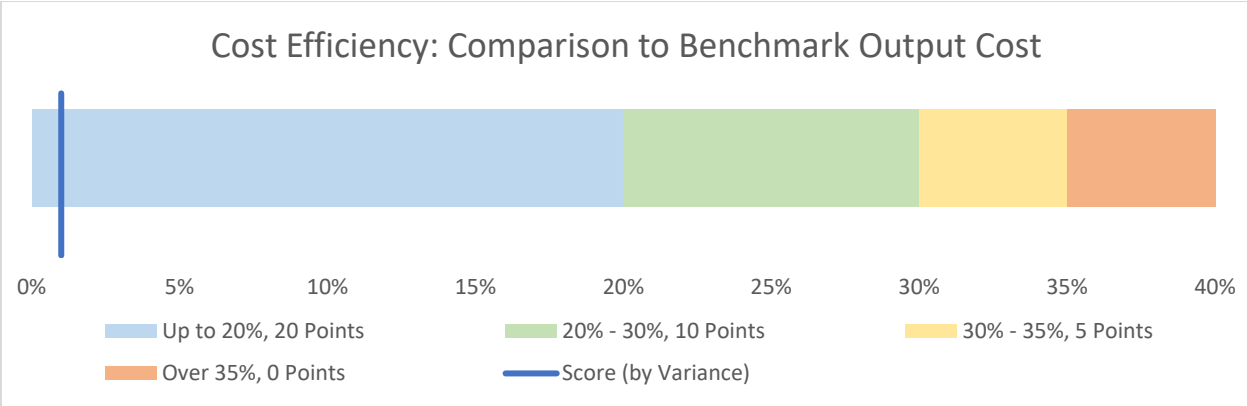
The efficiency of an intervention considers Output Cost (Cost Efficiency), Output Time (Time Efficiency), and Schedule.

*Cost Efficiency*

In terms of output cost, the project repaired one home in Virgin Gorda including roof, windows, doors and flooring installation for a space measuring 2,052 square feet. This translates to an average of \$94.40 per square foot repaired to create adequate living conditions in the home. Based on research conducted, a benchmark cost for reconstruction of \$120 per square foot has been used.<sup>1</sup> In this way, the cost of each output for this project was well within the benchmark cost, therefore a full 20 points have been assigned for cost efficiency (Table 3).

Table 3: Cost Efficiency Assessment

COST EFFICIENCY ASSESSMENT: 20/20 POINTS	
Output Unit Cost	\$94.40 per square foot
Benchmark Output Unit Cost	\$120.00 per square foot
Variance (\$)	\$25.60
Variance (%)	21.3%
<b>COST EFFICIENCY SCORE</b>	<b>20</b>



<sup>1</sup> Average reconstruction cost per square foot based on BCQS Market Trend Report, 2016.

### Time Efficiency

Having started on 26 August 2019, the project was initially slated to be completed by the 31 December 2019, that is within 127 days. The project was completed on 30 January 2020, with a total recorded number of project days therefore at 157. In terms of assessment of time efficiency, the calculated output unit time was an average of 13 square feet reconstructed per day, whereas the benchmark output unit time was an average of 30 square feet reconstructed per day. This resulted in no points being assigned for Time Efficiency, as the actual outputs (square feet) produced within the timeframe was significantly less than the benchmark output unit time (Table 4).

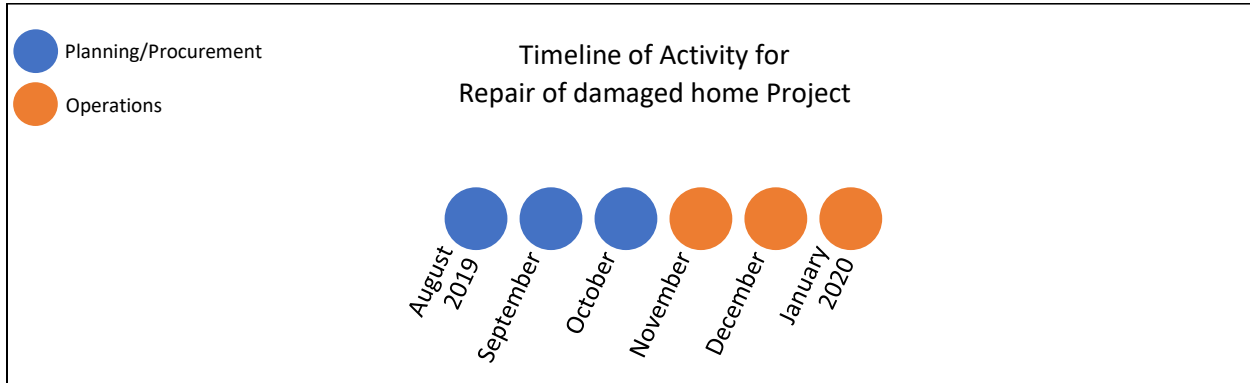
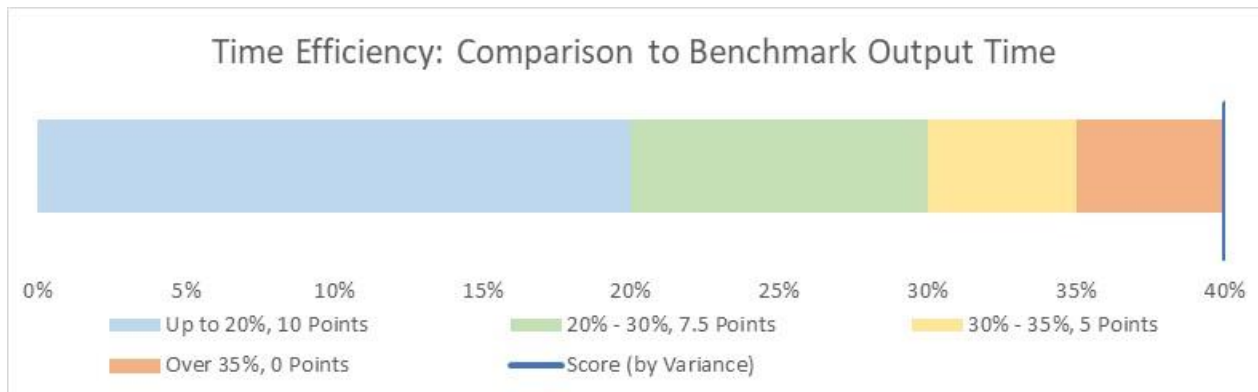


Table 4: Time Efficiency Assessment

TIME EFFICIENCY ASSESSMENT: 0/10 POINTS	
Output Unit Time	Avg. 13.07 square feet reconstructed per day
Benchmark Output Unit Time	Avg. 30 square feet reconstructed per day
Variance (days)	(16.93)
Variance (%)	(56.4%)
<b>TIME EFFICIENCY SCORE</b>	<b>0</b>

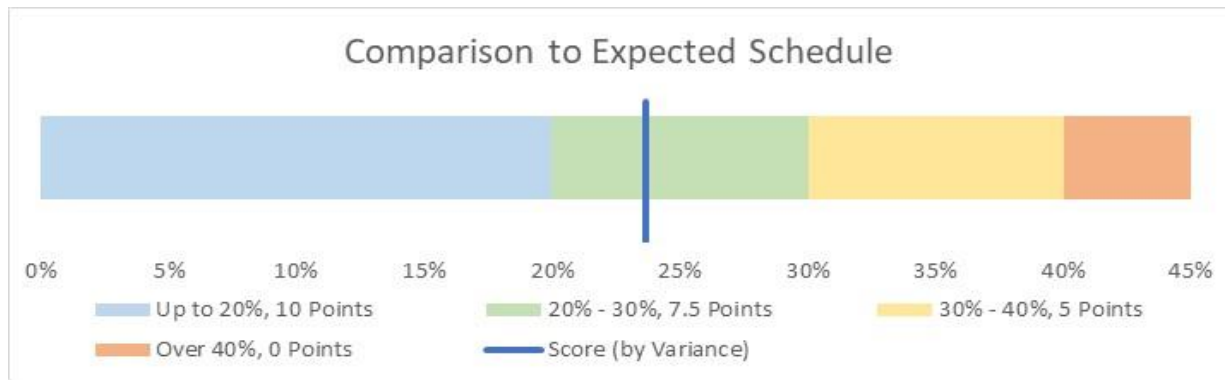


*Schedule*

In terms of schedule performance, given that there were 127 planned project days compared to a total number of actual project days at 157, this variance of 30 days meant that the project was 23.6% over its scheduled timeline, with 7.5 points therefore awarded for the Schedule assessment (Table 5).

Table 5: Schedule Assessment

<b>SCHEDULE ASSESSMENT: 7.5/10 POINTS</b>	
Planned Project Days	127 days
Actual Project Days	157 days
Variance (days)	(30 days)
Variance (%)	(23.6%)
<b>SCHEDULE SCORE</b>	<b>7.5</b>



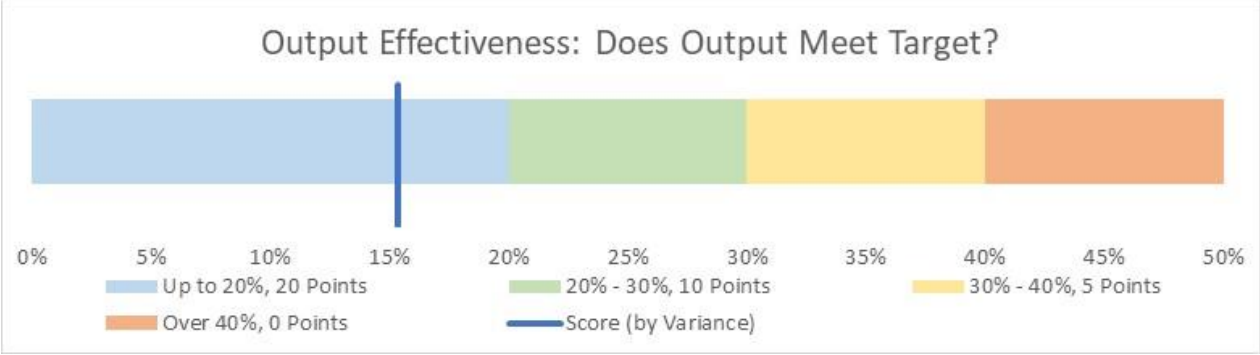
**5) EFFECTIVENESS (35 out of max 45 points)**

*Output Effectiveness*

Output effectiveness is a measure which compares targeted output indicators to achieved output indicators. In the case of the Repair to damaged home project, the total square footage targeted for repair of roof, windows, doors and flooring was 2,052 square feet. The project was able to repair the full square footage targeted, 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	2,052 square feet
Achieved Outputs	2,052 square feet
Variance	(0)
Variance (%)	(0%)
<b>OUTPUT EFFECTIVENESS SCORE</b>	<b>20</b>



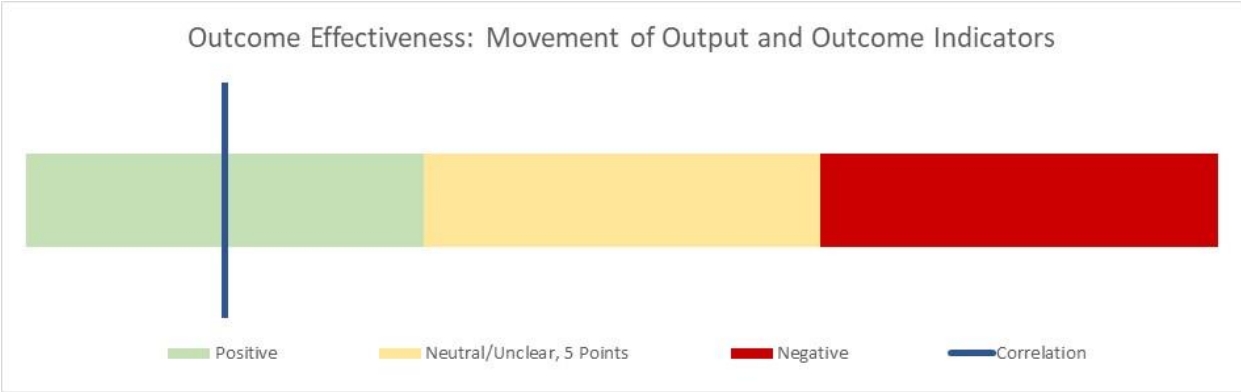
**Outcome Effectiveness**

In terms of outcome effectiveness, the change relationship between the observed output and outcome has been used as a simple measure of outcome effectiveness. The directional change in output is compared to the directional change in outcome. In the case of the Repair to damaged home project, both the output: square feet of home repaired; as well as the outcome: vulnerable persons with secure housing needs met; 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

<b>OUTCOME EFFECTIVENESS ASSESSMENT: 15/15</b>	
Output Change: square feet of home repaired	+2,052
Outcome Change: vulnerable persons with secure housing needs met	+4
Assessment of Change Relationship	Positive correlation
<b>OUTCOME EFFECTIVENESS SCORE</b>	<b>15</b>





## Quality

In terms of quality measurement, valid reports within the defects and liabilities period has been used as a measurement of quality. As at 5 June 2020, there were five (5) defects reported to the Agency, and of these, three (3) were considered valid and within contracted responsibility, namely:

- 1) Cistern cover casted but not installed;
- 2) Improper alignment of front door; and
- 3) Improper alignment of back door causing water to seep into the home.

It should also be noted that additional defects of cracks in the walls resulting in water ingress into the home were reported but were not judged as valid by the Agency, as these were not within the scope of works for the project. The three (3) valid defects listed above are to be remedied by the contractor. These three (3) reported defects have affected the assessed quality of the home and have resulted in an assignment of the rating of “Not Met” in terms of quality (See Table 8).

Table 8: Quality, Valid Defects Reported

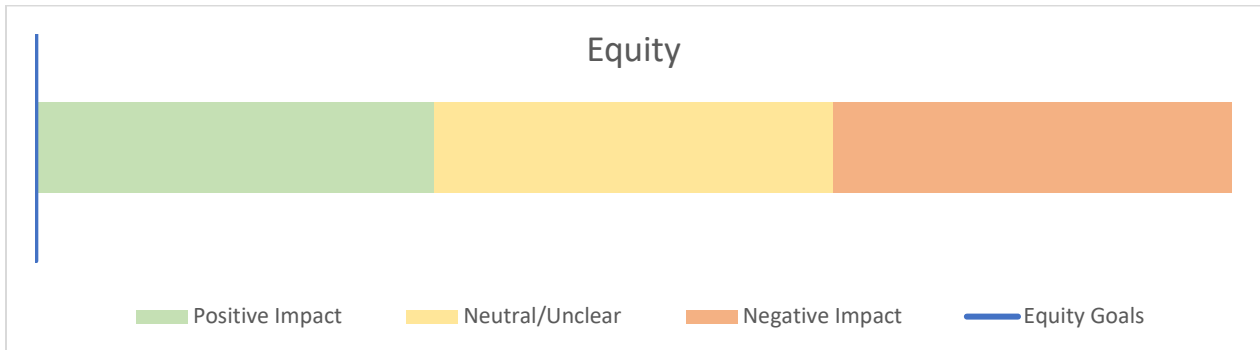
QUALITY ASSESSMENT: 0/10	
Valid Defects Reported	3
Assessment of Quality	Not Met
<b>QUALITY SCORE</b>	<b>0</b>

## 6) EQUITY (5 out of max 5 points)

Measurement of equity involves assessing whether a project has realised the equity goals it aimed at achieving. For the Repair to damaged home project, the repair of the home’s roof, windows, doors and flooring has improved the living conditions of members of the vulnerable household living within the home. The improvement in living conditions for the most vulnerable households has decreased the level of vulnerability and relative poverty of these households, thereby contributing to the achievement of equity goals in the Territory. Achievement of this result which advances equity resulted in assignment of full equity points for the project (Table 9).

Table 9: Achievement of Equity goals

EQUITY ASSESSMENT: 5/5	
Number of vulnerable persons with secure housing needs met	4
Assessment of Impact on Equity	Positive impact
<b>EQUITY SCORE</b>	<b>5</b>



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



Lessons identified coming out of the Repair to damaged home project include:

- 1) Strengthening detailed planning efforts in order to ensure needs are captured and accounted for in project design, including receipt of necessary permissions; and
- 2) Mitigating scope creep and budget increases by managing stakeholders through regular communication and up-to-date record keeping.

## **7) Conclusions**

This report has been prepared using the RDA's Value for Money Framework in assigning a VfM Score to the Repair to damaged home 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 70 points out of 100, the Repair to damaged home project's VfM could have been enhanced through improved cost containment, time management and quality assurance. That said, the project was able to achieve its target outputs within the benchmark timeline, contribute to a broader outcome, and advance equity goals, demonstrating perfect scores in Time Efficiency, Output and Outcome Effectiveness and Equity.