



RESTRUCTURING PAPER
ON A
PROPOSED PROJECT RESTRUCTURING
OF
ENHANCING THE CLIMATE RESILIENCE OF THE WEST COAST ROAD
APPROVED ON DECEMBER 18, 2012
TO
MINISTRY OF FINANCE

TRANSPORT & ICT

EAST ASIA AND PACIFIC

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ABBREVIATIONS AND ACRONYMS

CDC	Cabinet Development Committee
CRRS	Climate Resilient Road Strategy
CRWCR	Enhancing the Climate Resilience of the West Coast Road Project
ERAP	Enhanced Road Access Project
GCLS	Grievance Complaints Logging System
GoS	Government of Samoa
IPA	Isikuki Punivalu and Associates Ltd
LTA	Land Transport Authority
MoF	Ministry of Finance
MSL	Mean Sea Level
MWTI	Ministry of Works Transport and Infrastructure
PDO	Project Development Objectives
PMC	Project Management Consultancy
PMD	Project Management Division
SAIP	Samoa Aviation Investment Project
SAMS	Samoa Asset Management System
SPCR	Strategic Program for Climate Resilience
VA	Vulnerability Assessment
WCR	West Coast Road



BASIC DATA

Product Information

Project ID P126504	Financing Instrument Investment Project Financing
Original EA Category Partial Assessment (B)	Current EA Category Partial Assessment (B)
Approval Date 18-Dec-2012	Current Closing Date 31-Aug-2018

Organizations

Borrower Ministry of Finance,Government of Samoa	Responsible Agency Land Transport Authority
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Project Development Objective (PDO)

Original PDO

The project development objectives of the Enhancing the Climate Resilience of the West Coast Road Project (CRWCR) are to: (i)improve the climate resilience of the West Coast Road; and (ii) enhance local capacity to develop a more climate resilient roadnetwork.

Summary Status of Financing

Ln/Cr/Tf	Approval	Signing	Effectiveness	Closing	Net Commitment	Disbursed	Undisbursed
TF-13579	28-Jan-2013	28-Jan-2013	26-Apr-2013	31-Aug-2018	14.80	1.83	12.97

Policy Waiver(s)

Does this restructuring trigger the need for any policy waiver(s)?

No



I. PROJECT STATUS AND RATIONALE FOR RESTRUCTURING

A. Project Status and Rationale for Restructuring.

1. This project paper is to restructure the project for: (i) an extension of the closing date by 22 months to June 30, 2020 so as to ensure that works can be completed satisfactorily and the PDO is achieved; and, (ii) changes to the results framework to improve the monitoring of the project's achievements.
2. The Project Development Objective (PDO) of the Enhancing the Climate Resilience of the West Coast Road (CRWCR) project is to: (i) improve the climate resilience of the West Coast Road (WCR); and (ii) enhance local capacity to develop a more climate resilient road network. Implementation progress on the project has been slow, mostly due to the delayed design of the WCR civil works, for which the works constitute approximately 80% of the total grant financing. Progress towards achieving the PDO is currently *Moderately Unsatisfactory* and Implementation Progress is currently *Moderately Unsatisfactory*, with grant disbursement at 12.4% as of December 2017. The project has however achieved key milestones including: (i) Component 1: the finalization of the design of the WCR including revisions to reduce the land acquisition required, mitigating the risk of further time delays; and, (ii) Component 2: completion of activities with the finalization of the Vulnerability Assessment (VA) and Climate Resilient Road Strategy (CRRS), which will provide Samoa with a sound foundation for enhancing infrastructure resilience in the transport sector.
3. A Mid-Term Review (MTR) was undertaken for the project in August 2017. The MTR's conclusions and recommendations have already been taken on board to prioritize investments and inform design standards. The Government of Samoa (GoS) has committed to an Action Plan to improve implementation performance, with some of these actions achieved and significant progress made against many others (outlined below). It is expected that the implementation progress rating will be upgraded to *Moderately Satisfactory* at the time of the next mission. However, due to the delays to date, the PDO is unlikely to be achievable within the current timeframe, even with the completion of the actions outlined in the Action Plan. The proposed extension will allow for the civil works to be completed, and it is expected that the PDO rating will be upgraded to *Moderately Satisfactory* following progress on the civil works.
4. A summary of the current status for each Component is provided below:



- (a) **Component 1: Improving the Climate Resilience of the WCR:** Under this component, physical works are to be designed and constructed to improve the climate resilience of the economically critical WCR, a key objective of the GoS under the *Strategic Program for Climate Resilience* (SPCR). Specifically, the works will involve raising the most vulnerable sections of the WCR, sealing road shoulders, improving longitudinal and cross drainage and upgrading coastal protection through raising/replenishing revetments and through the addition of vegetated scour protection.

The design of these works has been extensively delayed, in a large measure due to difficulties the consultant has experienced with undertaking cadastral survey of land boundaries. This survey is required for both the engineering design and for land acquisition purposes. Uncertainty over the allowable right of way width resulted in survey rework, and as this was on the critical path, has meant long delays in finalizing the design. Now, after extensive review by GoS and IDA, the final detailed design has been completed, with the works tender advertised as of December 23, 2017.

It was originally envisaged that the project would improve the climate resilience of the full length of the WCR from Faleolo Airport to Saina (23 km) through a selection of interventions ranging from minor improvements to more comprehensive rehabilitation, which differed over the length of the road. However, as the design was being developed, the GoS decided that their needs would best be met through full rehabilitation of the entire length of the road, including increasing the climate resilience design standard through raising the minimum elevation of the road from 2 m to 2.24 m to allow the road surface to be at least 2 m above projections of mean sea level in 2038, and therefore account for current and future risks of coastal inundation associated with key hazards including sea level rise, storm surges and wave action during cyclones, and tsunami events. This would help to ensure that the infrastructure upgrades have improved durability and serviceability.

The associated construction costs of increasing the climate resilience design standard and full road rehabilitation have meant that the full length of works originally envisaged cannot be completed as the cost of the resulting works are beyond the currently available funding for the project. As a result, GoS have prioritized the section of road between Saina to Malua into separate works packages; two lots for the eastern half (km 11.9 to km 24.4 Saina to Malua), intended to be financed under the current project and either one or two for the western half (km 0.5 to km 11.9 Malua to Faleolo) to be financed separately – potentially under IDA18.

Following a review of road elevation along the WCR it was determined that the eastern half should be prioritized as it is relatively more vulnerable to severe weather events and climate change than the western half. Therefore, the prioritization of the eastern half strategically targets the most vulnerable section of the WCR to ensure that all low spots are raised to the minimum elevation design standard, thereby increasing the longer-term benefits from overall increased resilience. The revised packages have been chosen so the available budget can be best spent to ensure that primary economic benefits can be achieved including reduced infrastructure damage, fewer and shorter road closures and lower on-going maintenance costs.

It is planned that the two lots for the eastern half will be bid with national competitive bidding (NCB). This packaging approach does allow the contracts to be undertaken in parallel and therefore with a condensed implementation timeframe; however, the delays described above have meant that works won't be able to be completed by the current closing date, and hence an extension is required. In addition, scope changes within the project design have meant adjustments are required to the project indicators as described in detail below.



- (b) **Component 2: Vulnerability Assessment of the Samoa Road Network:** This component involves technical assistance to support the SPCR by bringing transformative change in the way that climate change is addressed within the Samoan road sector and was successfully completed. The Vulnerability Assessment (VA), which is critical to this component, and the Climate Resilient Road Strategy (CRRS) have been completed to an acceptable standard with the recommendations endorsed by the Cabinet Development Committee (CDC) on August 17, 2017. The resulting documents will provide Samoa with a good grounding for enhancing resilience of road infrastructure to the impacts of climate change. The VA involved detailed mapping of physical hazards including sea level rise, cyclone, extreme rainfall and landslide risk, as well as a review of the best available climate change forecasts. Through this work, the key risks to functionality of the main road network have been assessed, and the CRRS developed. As this work has been successfully completed, the proposed restructuring includes indicators to capture the extent to which the VA and CRRS have been, and will be, implemented.
- (a) **Component 3: Project Management and Operating Costs:** Early in the project, a consulting firm was hired to assist the implementing agency, the Land Transport Authority (LTA), in project implementation. This support has included preparing procurement documentation, maintaining a financial management system, reviewing and commenting on technical outputs from consultants, knowledge exchange and monitoring and evaluating results. Performance of the firm has been mixed, and project management has also suffered from staff attrition within the LTA's Project Management Division (PMD). Additional implementation support was provided to the PMD by IDA and through an international Technical Advisor who has now completed his tenure.

As part of the GoS' Action Plan, key areas were identified for improving project management in the areas of contract management, financial management, procurement and safeguards. Progress has been made on implementing this plan: (i) a Safeguards Specialist has been hired to assist LTA; (ii) negotiations are under way for the recruitment of a Procurement Specialist; (iii) the contract variation to transfer financial management support from the Project Management Consultancy (PMC) to the Ministry of Finance (MoF) has been finalized; and, (iv) the implementation consultant's contract has been amended to increase its level of support to LTA in the areas project and contract management. These actions, together with the extended closing date will allow the objectives of the project to be fully achieved.

II. DESCRIPTION OF PROPOSED CHANGES

B. Proposed Changes.

5. The changes proposed under this Level 2 restructuring include a 22 month extension of the closing date to June 30, 2020 to allow for physical works on the WCR rehabilitation under Component 1 to be completed. In addition, the results framework will be revised to reflect the modified project scope described above. Full details are provided below, in particular the following changes are proposed:
- (a) The inclusion of new PDO indicators:
- (i) Improved climate resilience of the WCR; and
 - (ii) Improved Government capacity for planning and constructing resilient road infrastructure.
- (b) The inclusion of new intermediate indicators:
- (i) Core indicator - Length of road rehabilitated;
 - (ii) Length of sealed shoulders on the WCR;



- (iii) Drainage conditions of WCR improved (number of new and upgraded drainage outfall channels);
 - (iv) Length of coastal protection revetment which has been raised and/or replenished;
 - (v) Length of new vegetated coastal scour protection planted by communities under the guidance of MNRE;
 - (vi) Training provided to strengthen Government capacity for planning and constructing resilient road infrastructure;
 - (vii) Number of designs that have been informed by the Vulnerability Assessment; and
 - (viii) Grievances registered related to delivery of project benefits that are addressed (%);
- (c) Deletion of the PDO indicators:
- (i) Roads rehabilitated, Non-rural;
 - (ii) Percentage of road vulnerable to climate change;
 - (iii) Length of road with unsealed shoulders;
 - (iv) Drainage conditions improved (number of new outfall channels installed); and
 - (v) Climate-resilient policies, codes and standards for road construction and maintenance developed and adopted by Government.
- (d) Deletion of the intermediate indicators:
- (i) Improvements launched to strengthen WCRs resilience to climate events; and
 - (ii) Vulnerability assessments & design work underway.

III. SUMMARY OF CHANGES

	Changed	Not Changed
Change in Results Framework	✓	
Change in Loan Closing Date(s)	✓	
Change in Disbursement Estimates	✓	
Change in Implementation Schedule	✓	
Change in Implementing Agency		✓
Change in DDO Status		✓
Change in Project's Development Objectives		✓
Change in Components and Cost		✓
Cancellations Proposed		✓
Reallocation between Disbursement Categories		✓
Change in Disbursements Arrangements		✓
Change in Systematic Operations Risk-Rating Tool (SORT)		✓
Change in Safeguard Policies Triggered		✓
Change of EA category		✓



Change in Legal Covenants		✓
Change in Institutional Arrangements		✓
Change in Financial Management		✓
Change in Procurement		✓
Other Change(s)		✓
Change in Economic and Financial Analysis		✓
Change in Technical Analysis		✓
Change in Social Analysis		✓
Change in Environmental Analysis		✓

IV. DETAILED CHANGE(S)

RESULTS FRAMEWORK

Project Development Objective Indicators

Roads rehabilitated, Non-rural Unit of Measure: Kilometers Indicator Type: Custom				
	Baseline	Actual (Current)	End Target	Action
Value	0.00	0.00	23.00	Marked for Deletion
Date	18-Dec-2012	16-Dec-2014	31-Aug-2018	
Percentage of road vulnerable to climate change Unit of Measure: Percentage Indicator Type: Custom				
	Baseline	Actual (Current)	End Target	Action
Value	10.00	0.00	0.00	Marked for Deletion
Date	18-Dec-2012	16-Dec-2014	31-Aug-2018	
Length of road with unsealed shoulders Unit of Measure: Kilometers Indicator Type: Custom				
	Baseline	Actual (Current)	End Target	Action
Value	23.00	23.00	0.00	Marked for Deletion



Date	18-Dec-2012	16-Dec-2014	31-Aug-2018	
Drainage conditions improved (number of new outfall channels installed)				
Unit of Measure: Number				
Indicator Type: Custom				
	Baseline	Actual (Current)	End Target	Action
Value	0.00	0.00	23.00	Marked for Deletion
Date	18-Dec-2012	16-Dec-2014	31-Aug-2018	
Climate-resilient policies, codes and standards for road construction and maintenance developed and adopted by Government				
Unit of Measure: Text				
Indicator Type: Custom				
	Baseline	Actual (Current)	End Target	Action
Value	Current road policies and standards do not address climate resilience.	No policies yet in place	Climate-resilience policies and standards adopted by Government.	Marked for Deletion
Date	18-Dec-2012	16-Dec-2014	31-Aug-2018	
Improved climate resilience of the WCR				
Unit of Measure: Kilometers				
Indicator Type: Custom				
	Baseline	Actual (Current)	End Target	Action
Value	0.00	0.00	12.50	New
Date	08-Aug-2017	08-Aug-2017	30-Jun-2020	
Improved Government capacity for planning and constructing resilient road infrastructure				
Unit of Measure: Text				
Indicator Type: Custom				
	Baseline	Actual (Current)	End Target	Action
Value	Vulnerability Assessment completed and endorsed by cabinet.	Vulnerability Assessment completed and endorsed by cabinet.	Vulnerability Assessment recommendations considered on new projects.	New
			Vulnerability Assessment used to	



			inform transport sector planning.
Date	08-Aug-2017	08-Aug-2017	30-Jun-2020

Intermediate Indicators

Improvements launched to strengthen WCRs resilience to climate events Unit of Measure: Text Indicator Type: Custom				
	Baseline	Actual (Current)	End Target	Action
Value	No improvements.	No improvements.	Works completed.	Marked for Deletion
Date	18-Dec-2012	16-Dec-2014	31-Aug-2018	
Vulnerability assessments & design work underway. Unit of Measure: Text Indicator Type: Custom				
	Baseline	Actual (Current)	End Target	Action
Value	Standards to strengthen road resilience not available.	Standards to strengthen road resilience not available.	Climate-resilient measures available (Q4).	Marked for Deletion
Date	18-Dec-2012	16-Dec-2014	31-Aug-2018	
Roads rehabilitated Unit of Measure: Kilometers Indicator Type: Corporate				
	Baseline	Actual (Current)	End Target	Action
Value	0.00	0.00	12.50	New
Date	08-Aug-2017	08-Aug-2017	30-Jun-2020	
Length of sealed shoulders on the WCR Unit of Measure: Kilometers Indicator Type: Custom				
	Baseline	Actual (Current)	End Target	Action
Value	0.00	0.00	25.00	New
Date	08-Aug-2017	08-Aug-2017	30-Jun-2020	
Drainage conditions of WCR improved (number of new and upgraded drainage outfall channels)				



Unit of Measure: Number Indicator Type: Custom				
	Baseline	Actual (Current)	End Target	Action
Value	0.00	0.00	17.00	New
Date	08-Aug-2017	08-Aug-2017	30-Jun-2020	
Length of coastal protection revetment which has been raised and/or replenished Unit of Measure: Meter(m) Indicator Type: Custom				
	Baseline	Actual (Current)	End Target	Action
Value	0.00	0.00	2500.00	New
Date	08-Aug-2017	08-Aug-2017	30-Jun-2020	
Length of new vegetated coastal scour protection planted by communities under the guidance of MNRE Unit of Measure: Meter(m) Indicator Type: Custom				
	Baseline	Actual (Current)	End Target	Action
Value	0.00	0.00	2000.00	New
Date	08-Aug-2017	08-Aug-2017	30-Jun-2020	
Training provided to strengthen Government capacity for planning and constructing resilient infrastructure Unit of Measure: Text Indicator Type: Custom				
	Baseline	Actual (Current)	End Target	Action
Value	LTA receives training to update sections of the completed Vulnerability Assessment and Climate Resilient Road Strategy.	LTA receives training to update sections of the completed Vulnerability Assessment and Climate Resilient Road Strategy.	LTA trains new staff and colleagues from different agencies on the use of tools to assess the vulnerability of its road network	New
Date	08-Aug-2017	08-Aug-2017	30-Jun-2020	
Number of designs that have been informed by the Vulnerability Assessment Unit of Measure: Text Indicator Type: Custom				
	Baseline	Actual (Current)	End Target	Action



Value	3	3	5	New
Date	08-Aug-2017	08-Aug-2017	30-Jun-2020	
Grievances registered related to delivery of project benefits that are addressed (%)				
Unit of Measure: Percentage				
Indicator Type: Custom				
	Baseline	Actual (Current)	End Target	Action
Value	0.00	0.00	100.00	New
Date	08-Aug-2017	08-Aug-2017	30-Jun-2020	

LOAN CLOSING DATE(S)

Ln/Cr/Tf	Status	Original Closing	Revised Closing(s)	Proposed Closing	Proposed Deadline for Withdrawal Applications
TF-13579	Effective	31-Aug-2018		30-Jun-2020	30-Oct-2020

DISBURSEMENT ESTIMATES

Change in Disbursement Estimates

Yes

Year	Current	Proposed
2014	1,000,000.00	0.00
2015	3,750,000.00	591,053.85
2016	3,750,000.00	160,729.42
2017	3,250,000.00	500,429.73
2018	2,800,000.00	2,257,965.00
2019	0.00	6,773,893.00
2020	0.00	4,515,929.00

C. Detailed Changes**6. Details of changes to PDO indicators:**



- (a) The new PDO indicators have been updated to encapsulate the project outcomes and break this down by the PDO, which includes two key objectives: (i) enhance the climate resilience of the WCR; and, (ii) enhance local capacity to develop a more climate resilient road network.
- (b) The first PDO indicator “Improved climate resilience of the WCR” relates to the key outcome of Component 1 and the first key objective of the PDO. The indicator represents the sum of the Intermediate actions as improving climate resilience is a function of more than one action. The indicator will therefore be measured through the length of climate resilient upgrades proposed under the two works packages along a total length of 12.5 km of the WCR. The climate resilient upgrades specifically include raising the road to reduce vulnerability to coastal inundation, improving drainage conditions and coastal protection works. These actions are captured as intermediate indicators.
- (c) The second PDO indicator “Improved Government capacity for planning and constructing resilient road infrastructure” relates to the second key objective of the PDO. This indicator will be measured through the work undertaken as part of the VA and the incorporation of the recommendations where feasible on new projects and the use of the report to inform transport sector planning. It will also be informed by the intermediate indicators on training and use of the VA on designs. As a strategic planning tool, the VA is already informing climate resilient designs for a range of infrastructure investments including CRWCR, Enhanced Road Access Project (ERAP) road and bridge segments, the Samoa Aviation Investment Project (SAIP), and a proposed next-phase climate resilient transport project. Additionally, the recommendations of the VA will be progressively rolled out to further prioritize investments in the transport sector.
- (d) The proposed end target dates have all been updated to June 30, 2020 to allow the works program to be completed.

Project Development Objective	Project Outcome Indicators	Use of Project Outcome Information
A. Improve the climate resilience of the West Coast Road (WCR)	A. Improved climate resilience of the WCR	A. Government monitors improvements to assess effectiveness and potential for application to other roads that are at risk
B. Enhance local capacity to develop a more climate resilient road network	B. Improved Government capacity for planning and constructing resilient road infrastructure	B. Climate resilience measures available and used to inform transport sector planning

7. Details of changes to Intermediate indicators:

- (a) The new Intermediate indicators have been added to reflect the outputs of the activities carried under Components 1 and 2.
- (b) “Length of road rehabilitated”, where vulnerability is measured through a minimum elevation of 2.24 m to allow for a minimum road elevation of 2 m above MSL predicted for 2038. Rehabilitation works on the WCR address the most vulnerable sections within eastern works packages i.e., the low spots below 2.24 m.
- (c) “Length of sealed shoulders on the WCR”. Within the works packages, it is proposed that the total length of WCR rehabilitated will have sealed shoulders on both sides of the road.
- (d) “Drainage conditions of the WCR improved (number of new and upgraded drainage outfall channels)”. Drainage conditions will be improved along the WCR, and contained within the eastern works packages are a total of 17 drainage outfall channels which are either new or will be upgraded.
- (e) “Length of coastal protection revetment, which has been raised and/or replenished”. Due to the close proximity of the WCR to the coast, revetments will be raised and/or replenished to enhance coastal protection.
- (f) “Length of new vegetated coastal scour protection planted by coastal communities under the guidance of MNRE”. As a ‘green’ measure, it is proposed that vegetated coastal scour protection will be included as part of the WCR rehabilitation works. This will be implemented by coastal communities under the guidance of MNRE, with the MNRE Forestry Division to advise on appropriate species and develop a community based planting and maintenance program.
- (g) “Training provided to strengthen the Government capacity for planning and constructing resilient road infrastructure”. This will be measured through the training received by LTA as part of the VA and CRRS process. As the VA is a live document, training provided will allow LTA to update sections of the report as well as train new staff and colleagues from different agencies on the tools used to assess the vulnerability of the road network. This will help to enhance local capacity and ensure that institutional knowledge is retained.
- (h) “Number of designs that have been informed by the Vulnerability Assessment”. The application of the VA in prioritizing investments will be reflected by the number of designs (i.e. roads or crossings) informed by the report.



- (i) “Grievances registered related to delivery of project benefits that are addressed (%)”. The inclusion of this citizen engagement indicator will enable the incorporation of beneficiary feedback into project monitoring. The data will be collected through the Grievance Complaints Logging System (GCLS). The GCLS has been set up for the project, and LTA will register and manage all grievances, relaying them to the appropriate party for resolution and advising the complainant of the outcome. To make the system more publicly accessible, information about accessing the GCLS webpage will be included on LTA’s Facebook site and webpage and on public notice boards in the project areas. The system is operational and training has been undertaken; however, there have been no project related complaints or grievances received to date.
- (j) The proposed end target dates have all been updated to June 30, 2020 to allow the works program to be completed.

Intermediate Outcomes	Intermediate Outcome Indicators	Use of Intermediate Outcome Monitoring
A. Progress on climate resilience works	A1. <u>Core indicator</u> - Length of road rehabilitated	A. Ensure satisfactory project progress
	A2. Length of sealed shoulders on the WCR	
	A3. Drainage conditions of WCR improved (number of new and upgraded drainage outfall channels)	
	A4. Length of coastal protection revetment, which has been raised and/or replenished	
	A5. Length of new vegetated coastal scour protection planted by coastal communities under the guidance of MNRE	
B. Adaptation strategy and improved standards to inform climate resilient measures	B1. Training provided to strengthen Government capacity for planning and constructing resilient road infrastructure	B. Government planning informed by Vulnerability Assessment
	B2. Number of designs that have been informed by the Vulnerability Assessment	
C. Citizen Engagement	C1. Grievances registered related to delivery of project benefits that are addressed (%)	C. Incorporation of beneficiary feedback into project monitoring

- 8. **Project Operations Manual (POM):** The updated monitoring and results indicators have been reflected in the revised POM dated 24 January, 2018.
- 9. **Disbursement Forecasts:** Disbursement estimates have been updated to reflect the project extension.
- 10. **Audited Financial Statements:** The audited financial statements for the year ended June 30, 2017, have been reviewed and accepted.