



Combined Project Information Documents / Integrated Safeguards Datasheet (PID/ISDS)

Appraisal Stage | Date Prepared/Updated: 11-Apr-2018 | Report No: PIDISDSA24044



BASIC INFORMATION

A. Basic Project Data

Country Samoa	Project ID P165782	Project Name Samoa Climate Resilient Transport Project	Parent Project ID (if any)
Region EAST ASIA AND PACIFIC	Estimated Appraisal Date 06-Apr-2018	Estimated Board Date 13-Jun-2018	Practice Area (Lead) Transport & Digital Development
Financing Instrument Investment Project Financing	Borrower(s) Ministry of Finance	Implementing Agency Land Transport Authority	

Proposed Development Objective(s)

Improve the climate resilience of Samoa’s road network and in the event of an Eligible Crisis or Emergency, to provide an immediate response to the Eligible Crisis or Emergency.

Components

- Component 1: Sectoral and Spatial Planning Tools
- Component 2: Climate Resilient Infrastructure Solutions
- Component 3: Strengthening the Enabling Environment
- Component 4: Contingency Emergency Response

The processing of this project is applying the policy requirements exceptions for situations of urgent need of assistance or capacity constraints that are outlined in OP 10.00, paragraph 12.

Yes

Financing (in USD Million)

SUMMARY

Total Project Cost	35.75
Total Financing	35.75
Financing Gap	0.00

DETAILS



Total World Bank Group Financing	35.75
World Bank Lending	35.75

Environmental Assessment Category

B - Partial Assessment

Decision

The review did authorize the preparation to continue

Other Decision (as needed)

B. Introduction and Context

Country Context

1. The Independent State of Samoa (Samoa) is a small and remote Pacific Island Country (PIC) with a population of approximately 197,000 people.¹ Samoa consists of the two large islands of Upolu and Savai'i, and eight smaller islands, and has a total land area of approximately 2,935 km.² Like many PICs, Samoa is vulnerable to extreme weather events. The Pacific-Australia Climate Change Science and Adaptation Planning Program (PACCSAP) have suggested that the frequency and intensity of extreme weather and climate events, such as heavy rainfall, strong winds and storm surges is already on the rise throughout the region.³ Such events cause severe damage to infrastructure and other economic assets, and have adverse effects on livelihoods. Samoa has been heavily impacted by natural disasters, particularly tropical storms and cyclones, including Cyclone Ofa (1990), Cyclone Val (1991) and Cyclone Evan (2012). The combined impacts of Ofa and Val included 21 fatalities, widespread damage and total economic losses estimated as high as US\$500 million⁴, which was equivalent to about four times the country's gross domestic product (GDP) at the time. According to the Damage and Loss Assessment following Tropical Cyclone Evan, the combined physical damage and economic losses to transport infrastructure, houses, and tourism facilities were estimated at US\$204 million, approximately 28 percent of the total value of goods and services produced in Samoa in 2011.⁵ Samoa also experiences high seismic activity, and on September 29, 2009, was impacted by an earthquake-triggered

¹ Samoa Bureau of Statistics

² Central Intelligence Agency World Fact Book – Samoa <https://www.cia.gov/library/publications/the-world-factbook/geos/ws.html>

³ "Climate Variability, Extremes and Change in the Western Tropical Pacific: New Science and Updated Country Reports," Pacific-Australia Climate Change Science and Adaptation Planning Program, 2014.

⁴ "Country Risk Profile: Samoa," Pacific Catastrophe Risk Assessment and Financing Initiative (PCRAFI), September 2011.

⁵ "Samoa Post-Disaster Needs Assessment, Cyclone Evan 2012", Government of Samoa, March 2013.



tsunami. As a result, there were 143 reported deaths and nearly 5,300 people were affected, mainly on the southern, eastern and south-western coast of Upolu.⁶

Sectoral and Institutional Context

2. Samoa's transport network is of critical importance to the country's economy and economic development through supporting trade and promoting commercial activity by facilitating the movement of goods and services, and providing safe and efficient access to social services including schools and health facilities. In addition, approximately 70 percent of the population in Samoa lives within one kilometer of the coast, and critical infrastructure including roads, hospitals, schools, places of employment, port facilities, tourist facilities, power plants and airports, are located primarily in the coastal zone. The transport network therefore faces a range of issues that increase vulnerability such as: (i) exposure to sea-level rise, storm surge, and wave action during cyclones and tsunamis; (ii) flooding and landslides associated with extreme rainfall events; (iii) damage from earthquakes; and, (iv) accelerated pavement deterioration due to extreme weather and rising water tables.
3. Building on previous experiences in the transport sector, the Samoa Climate Resilient Transport Project (SCRTP) proposes to improve the resilience of Samoa's road network and in the event of an Eligible Crisis or Emergency, to provide an immediate response to the Eligible Crisis or Emergency.

C. Proposed Development Objective(s)

Development Objective(s) (From PAD)

Improve the climate resilience of Samoa's road network and in the event of an Eligible Crisis or Emergency, to provide an immediate response to the Eligible Crisis or Emergency.

Key Results

D. Project Description

4. In line with the framework for the Pacific Climate Resilient Transport Program Series of Projects, SCRTP consists of four components:
 - (a) **Component 1: Sectoral and Spatial Planning Tools.** This component involves TA that will improve the way that climate change is addressed in Samoa's road sector and allows for the financing of updates to analytical and sector planning tools to enable policymakers to make informed decisions based on the most accurate and up-to-date information available. A program of activities designed to update and improve analytical and planning tools and strategies for the road sector is proposed, including:

⁶ Samoa Post Disaster Needs Assessment, Following the Earthquake and Tsunami of 29 September 2009. Government of Samoa, December 2009.



- (i) Updating and upgrading of the hardware, software and ancillary tools in relation to the Samoa Asset Management System (SAMS), including conducting of trainings in relation to such system.
 - (ii) Updating of the Vulnerability Assessment (VA) and Climate Resilient Road Strategy (CRRS).
 - (iii) Establishing and operationalizing a database for recording and analyzing road accident data.
 - (iv) Providing hardware, software and ancillary tools in relation to the Solutions for the Samoa Open Land Administration (SOLA) system, including conducting of trainings in relation to such system.
- (b) **Component 2: Climate Resilient Infrastructure Solutions.** This component involves feasibility studies, design and construction of identified priority road assets to improve their resilience to climate-related hazards and/or events. The integration of climate change considerations into infrastructure activities will help strengthen the resilience of assets and improve functionality of the transportation network. The VA and CRRS have guided the priorities for infrastructure improvements and have been used to inform the project activities included within this component. The following activities are proposed:
- (i) Carrying out of activities to improve climate resilience of the western section of the West Coast Road between Malua and Faleolo, including supervision activities required for such work.
 - (ii) Supporting the assessment, design, construction and supervision activities in relation to the protection and slope stabilization works on the East Coast Road to reduce landslip and rockfall hazards and the related risks to the road assets and road users.
 - (iii) Supporting the assessment, design, construction, and supervision activities to improve and/or replace bridges, culverts and fords on Upolu and Savai'i, including but not limited to, the replacement of the Afega Bridge and the Lano Ford Crossing.
 - (iv) Conducting feasibility studies for upgrading the Alafa'alava Road.
- (c) **Component 3: Strengthening the Enabling Environment.** This component will provide funding to support institutional and regulatory reforms for road sector asset management and maintenance, including measures to strengthen local capacity and to increase the sustainability of climate resilient road sector investments. In addition, this component will help to strengthen coordination among relevant institutions, will look at ways in which road sector management can be improved, and will address any emerging priority issues that can help support the Government in addressing climate change risks. Proposed activities include:
- (i) Providing technical and operational assistance to the GoS's Centralized Technical Services Support Unit (CTSSU) and the Transport and Infrastructure Sector Coordination Division (TISCD).



- (ii) Providing technical and operational assistance to the Land Transport Authority's (LTA) Project Management Division (PMD) on project management and implementation.
- (iii) Providing technical assistance and support to: (i) review and revise LTA's Legislation and explore revenue generation options available to the LTA; (ii) conduct control surveys of the road network; and, (iii) conduct beneficiary surveys, including surveys focusing on gender and people with disabilities, to assess the impact of the major climate resilient works carried out under the Project.
- (iv) Carrying out of activities to: (i) provide technical assistance to improve road safety; (ii) provide technical assistance and equipment to support the enforcement of axle-load limits; and, (iii) provide trainings to LTA staff and contractors on occupational health and safety measures.
- (v) Providing technical assistance to strengthen the Recipient's capacity to address emerging priority issues that could have an impact on the Recipient's ability to manage a climate resilient road network.

(d) **Component 4: Contingency Emergency Response Component (CERC).** Since PICs will remain vulnerable to climate change and severe weather events, even with the successful implementation of the first three components, supporting post-disaster recovery is an important feature of the PCRTP. This component is designed to provide swift response in the event of an Eligible Crisis or Emergency⁷, by enabling the Government to request the Bank to re-allocate project funds to support emergency response and reconstruction.

5. To monitor progress toward the Project Development Objective, the following set of indicators has been identified:
- a. Identified planning tools being used to improve climate resilience of roads.
 - b. Identified climate resilient investments constructed and in use.
 - c. Identified enabling environment solutions implemented.
 - d. Roads constructed or rehabilitated with climate resilience measures.
 - e. Water crossings constructed or rehabilitated with climate resilience measures.

E. Implementation

Institutional and Implementation Arrangements

6. As for previous transport projects, the Executing Agency for SCRTP will be the Ministry of Finance (MoF), with the LTA acting as the Implementing Agency.
7. While the capacity for implementing complex infrastructure projects in Samoa is limited, lessons learned

⁷ Defined as "an event that has caused, or is likely to imminently cause, a major adverse economic and/or social impact associated with natural or man-made crises or disasters", OP/BP 8.00, *Rapid Response to Crises and Emergencies*.



during the implementation of previous road subsector projects will be addressed for SCRTP through revised governance arrangements. The LTA’s PMD will be responsible for the day-to-day implementation of SCRTP, and will be further assisted by two tiers of centralized implementation support; the CTSSU (housed within MoF) and the TISCD (housed within the Ministry of Works Transport and Infrastructure).

F. Project location and Salient physical characteristics relevant to the safeguard analysis (if known)

It is proposed that project investments will be undertaken on the islands of Upolu and Savai’i in Samoa. The project will finance the rehabilitation of the western section of the West Coast Road from Malua to Fale’olo and the upgrade of the Afega Bridge along this road as a separate project activity. Other project investments will be undertaken at discrete sites along the East Coast Road (e.g., slope stabilization works); however, the exact locations are unknown at this stage. The works are located in areas close, or adjacent to, the coast, and the receiving environment of the proposed investments include coastal and coral reef communities. The Environmental and Social Management Framework (ESMF) includes the principles, rules, guidelines and procedures for screening and assessment of environmental impacts of project activities once they have been defined with sufficient detail to be specifically evaluated.

G. Environmental and Social Safeguards Specialists on the Team

Nicholas John Valentine, Environmental Safeguards Specialist
Craig Andrew Clark, Social Safeguards Specialist

SAFEGUARD POLICIES THAT MIGHT APPLY

Safeguard Policies	Triggered?	Explanation (Optional)
Environmental Assessment OP/BP 4.01	Yes	The project is unlikely to cause any significant adverse environmental impacts and has been categorized as Category B under OP 4.01. Potential impacts are expected to be site-specific and few, if any, would be irreversible. Required mitigation measures are expected to be largely standardized; however, they will need to respond to the potential environmental risks identified during the environmental assessment. Importantly, the receiving environment of the proposed investments is highly sensitive and includes coral reef communities that contain significant biodiversity and



are important for livelihoods. Many of the activities will be located close, or adjacent to, the coast hence the prevention of pollution from sedimentation and hydrocarbons will be critical.

Environmental assessments will be undertaken in accordance with the SCRTP ESMF. The Safeguards Screening Form will be used to screen activities to determine the categorization in accordance with this policy, identify potential environmental and social impacts, and provide guidance on the level of detail required for an Environmental Assessment and EMP in line with national regulatory and OP4.01 requirements. In the case of the West Coast Road, the ESMP has already been completed and disclosed in country.

Component 2 involves activities that require soil excavation and other earth-moving works with the potential to cause impacts on the immediately surrounding and downstream environments. Likewise, during construction, any resulting contamination, sedimentation, spills, etc. will potentially have adverse consequences for fragile coastal ecosystems, including lagoons, mangrove areas and reefs. Hence, the implementation of adequate mitigation measures during construction will be critical in protecting these ecological values.

No forests will be impacted.

The project does not involve the use of pesticides.

Recent experience on other road projects in Samoa found that tombs and cemeteries or gravesites are often located near the road reserve and/or within the construction zone. There are also excavation works associated with crossings, slope stabilization, and possibly within easements for storm water management that may uncover culturally important resources requiring the activation of Chance Finds Procedures. Considering this, the policy is triggered as a precautionary measure. The SCRTP ESMF details a 'Chance Finds' procedure, which can be used to guide contractors.

An assessment of the applicability of OP 4.10 to the PICs was undertaken during the preparation of the Environmental and Social Safeguard Instruments for the Pacific Island Countries (ESSIP) (2015). It was

Natural Habitats OP/BP 4.04

Yes

Forests OP/BP 4.36

No

Pest Management OP 4.09

No

Physical Cultural Resources OP/BP 4.11

Yes

Indigenous Peoples OP/BP 4.10

No



determined that OP 4.10 is not typically triggered in Samoa . However, a precautionary approach has been applied for this project through employing culturally appropriate communication processes to ensure that traditional community structures are respected and incorporated.

Preparation and implementation of involuntary resettlement is guided by a Land Acquisition and Resettlement Framework (LARF) and is included as part of the SCRTP ESMF. In the case of the West Coast Road, the LARF has been disclosed, with the LARP currently under preparation.

Involuntary Resettlement OP/BP 4.12 Yes

Safety of Dams OP/BP 4.37 No Not applicable.

Projects on International Waterways OP/BP 7.50 No Not applicable.

Projects in Disputed Areas OP/BP 7.60 No Not applicable.

KEY SAFEGUARD POLICY ISSUES AND THEIR MANAGEMENT

A. Summary of Key Safeguard Issues

1. Describe any safeguard issues and impacts associated with the proposed project. Identify and describe any potential large scale, significant and/or irreversible impacts:

The project involves the rehabilitation of existing roads and crossings. Typical construction-related impacts from the civil construction works include erosion and sedimentation, increased dust and noise, traffic disruption and waste disposal. Depending on the scope and design of slope stabilization works along East Coast Road there may be a need for spoil disposal. Utilization of quarries for sourcing road construction material will be required and development consent will need to be obtained for any facility proposed to be exploited. Construction-related impacts are not expected to be significant and can be mitigated through good industry practice, which is embodied in the Samoa Codes of Environmental Practice (COEP). Works are anticipated to be within established public road easements and involuntary resettlement impacts are expected to be minor and largely involve minor land acquisition (eg. for road widening), loss/relocation of secondary structures and trees/crops, however relocation of housing is not considered likely. Temporary loss of land use for diversion roads associated with bridge construction is also expected. Impacts on livelihoods are expected to be minimal and temporary in nature. Most of the involuntary resettlement impacts will be associated with the upgrading of the western section of the West Coast Road. Large scale, significant and/or irreversible impacts are not anticipated. To ensure any land acquisition issues are managed in a way which seeks to minimize impacts and ensure full application of OP4.12, a LARF has been prepared for the West Coast Road. Paragraph 28 of OP4.12 requires that a Resettlement Action Plan (RAP) be prepared prior to appraisal unless one of two criteria are satisfied, namely “the zone of impact of subprojects cannot be determined, or... the zone of impact is known but precise sitting alignments cannot be determined. The broad zone of impact is known in as much as a concept design has been completed; however, experience has shown (on the eastern end of the same road) that the concept designs often do not adequately address social (land) impacts and can require more land than is actually required. In the eastern end of the road, the land holdings affected in the concept design were many times the land holdings affected



in the detailed design. This reduction in impacts was achieved by ground-truthing and design optimization, thereby achieving the objective of paragraph 28 of OP4.12. Furthermore, the precise sitting alignment of the infrastructure is not known at this stage and the team is very keen to build on the process applied in the eastern end of the corridor to further reduce potential impacts through an iterative impact minimization process.

2. Describe any potential indirect and/or long term impacts due to anticipated future activities in the project area:

No indirect or long-term negative impacts are expected from future activities in the area of the project activities. Location and alignment options will be considered to ensure that an alignment selected will be based on the least impact and community preferences. Long-term impacts are expected to be overwhelmingly positive through the improvement in climate resilience of road sector assets in Samoa.

3. Describe any project alternatives (if relevant) considered to help avoid or minimize adverse impacts.

There are no feasible alternatives other than the “do nothing” option which will fail to meet the project development objective. Potential environmental and social impacts will be considered during the design process for each project activity and measures to minimize any adverse impacts will be incorporated.

4. Describe measures taken by the borrower to address safeguard policy issues. Provide an assessment of borrower capacity to plan and implement the measures described.

A consultant Safeguards Specialist was recruited by LTA under the Enhanced Road Access Project and the Enhancing the Climate Resilience of the West Coast Road Project and this arrangement will continue under SCRTP. In addition, LTA has recently recruited a Safeguards Specialist and this new capacity will be supplemented by the continued retention of the consultant Safeguards Specialist. The Specialists will help prepare safeguards instruments for project investments and help ensure that adequate safeguards monitoring and supervision is enacted during the construction phase. This will help increase capacity to manage environmental and social risks on project activities. The project will also incorporate an Occupational Health and Safety (OH&S) component which will include a capacity assessment of LTA and opportunities to develop further OH&S capacity within the implementing agency.

Activities under Component 4 CERC are subject to World Bank safeguards policies, including paragraph 12 of the Investment Project Financing (IPF) Policy. As far as possible the CERC will rely on procedures detailed in the SCRTP ESMF (Section 5.3). The borrower will be required to prepare an Emergency Action Plan following the declaration of an emergency which will summarize the safeguard implications and any safeguard instruments to be prepared.

5. Identify the key stakeholders and describe the mechanisms for consultation and disclosure on safeguard policies, with an emphasis on potentially affected people.

The key stakeholders for SCRTP are the travelling public using the road infrastructure and the communities in the immediate vicinity of the project activity locations. The respective stakeholder groups will be consulted during design and assessment of the individual sub-project activities and their feedback and views incorporated into project designs where feasible.

Information disclosure is mandated by OP4.01, OP4.12 and the Bank’s Disclosure Policy. Safeguard instruments are disclosed in a language and format accessible to people, communities and civil society who may be interested in, or affected by, Project activities to ensure sufficient understanding of the project activities, potential impacts and management arrangements, as well as the grievance redress mechanism. The LTA is responsible for managing information dissemination as well as overseeing public consultation.

The SCRTP ESMF and LARF has been disclosed in country and on the Bank's external website.



The West Coast Road ESMP, dated June 2017, has been completed and disclosed in country; however, the LARP for the West Coast Road is still under preparation and will be disclosed in country prior to works commencing. For the West Coast Road, the LARF, dated March 2015, was disclosed April 2015.

B. Disclosure Requirements

Environmental Assessment/Audit/Management Plan/Other

Date of receipt by the Bank	Date of submission for disclosure	For category A projects, date of distributing the Executive Summary of the EA to the Executive Directors
03-Mar-2018	19-Mar-2018	

"In country" Disclosure

Samoa
26-Mar-2018

Comments
Disclosed on the LTA website.

Resettlement Action Plan/Framework/Policy Process

Date of receipt by the Bank	Date of submission for disclosure
03-Mar-2018	19-Mar-2018

"In country" Disclosure

Samoa
26-Mar-2018

Comments
Disclosed on the LTA website.

C. Compliance Monitoring Indicators at the Corporate Level (to be filled in when the ISDS is finalized by the project decision meeting)

OP/BP/GP 4.01 - Environment Assessment

Does the project require a stand-alone EA (including EMP) report?

Yes

If yes, then did the Regional Environment Unit or Practice Manager (PM) review and approve the EA report?

Yes



Are the cost and the accountabilities for the EMP incorporated in the credit/loan?

Yes

OP/BP 4.04 - Natural Habitats

Would the project result in any significant conversion or degradation of critical natural habitats?

No

If the project would result in significant conversion or degradation of other (non-critical) natural habitats, does the project include mitigation measures acceptable to the Bank?

NA

OP/BP 4.11 - Physical Cultural Resources

Does the EA include adequate measures related to cultural property?

Yes

Does the credit/loan incorporate mechanisms to mitigate the potential adverse impacts on cultural property?

Yes

OP/BP 4.12 - Involuntary Resettlement

Has a resettlement plan/abbreviated plan/policy framework/process framework (as appropriate) been prepared?

Yes

If yes, then did the Regional unit responsible for safeguards or Practice Manager review the plan?

Yes

The World Bank Policy on Disclosure of Information

Have relevant safeguard policies documents been sent to the World Bank for disclosure?

Yes

Have relevant documents been disclosed in-country in a public place in a form and language that are understandable and accessible to project-affected groups and local NGOs?

Yes



All Safeguard Policies

Have satisfactory calendar, budget and clear institutional responsibilities been prepared for the implementation of measures related to safeguard policies?

Yes

Have costs related to safeguard policy measures been included in the project cost?

Yes

Does the Monitoring and Evaluation system of the project include the monitoring of safeguard impacts and measures related to safeguard policies?

Yes

Have satisfactory implementation arrangements been agreed with the borrower and the same been adequately reflected in the project legal documents?

Yes

CONTACT POINT

World Bank

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Borrower/Client/Recipient

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APPROVAL

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Approved By

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