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Report No: PAD5641

INTERNATIONAL DEVELOPMENT ASSOCIATION

PROJECT PAPER

ON A

PROPOSED ADDITIONAL CREDIT
IN THE AMOUNT OF SDR 11.6 MILLION
(US\$15.3 MILLION EQUIVALENT)

AND A

PROPOSED SHORTER MATURITY LOAN
IN THE AMOUNT OF SDR 1.6 MILLION
(US\$2.1 MILLION EQUIVALENT)

AND A

PROPOSED ADDITIONAL GRANT
IN THE AMOUNT OF SDR 9.6 MILLION
(US\$12.6 MILLION EQUIVALENT)

TO THE

REPUBLIC OF VANUATU

FOR THE

VANUATU CLIMATE RESILIENT TRANSPORT PROJECT
UNDER THE PACIFIC CLIMATE RESILIENT TRANSPORT PROGRAM

MAY 20, 2024

Transport Global Practice
East Asia And Pacific Region

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CURRENCY EQUIVALENTS

(Exchange Rate Effective March 31, 2024)

Currency Unit = Vanuatu Vatu (VUV)

VUV121.00 = US\$1

US\$1.32405 = SDR 1

FISCAL YEAR

January 1 - December 31

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ABBREVIATIONS AND ACRONYMS

AC	Asphalt Concrete
AF, AF-I, AF-II	Additional Financing, First Additional Financing, Second Additional Financing
AM	Accountability Mechanism
ARAP	Abbreviated Resettlement Action Plan
CERC	Contingent Emergency Response Component
CESMP	Contractor's Environmental and Social Management Plan
DA	Designated Account
DSC	Design and Supervision Consultant
ESIA	Environmental and Social Impact Assessment
ESMP	Environmental and Social Management Plan
GAP	Gender Action Plan
GBV	Gender-Based Violence
GDP	Gross Domestic Product
GFDRR	Global Facility for Disaster Reduction and Recovery
GHG	Greenhouse Gas
GoV	Government of Vanuatu
GRM	Grievance Redress Mechanism
GRS	Grievance Redress Service
IDA	International Development Association
IMF	International Monetary Fund
IPS	International Procurement Specialist
MCCA	Ministry of Climate Change Adaptation
MFEM	Ministry of Finance and Economic Management
MIPU	Ministry of Infrastructure and Public Utilities
MoU	Memorandum of Understanding
OF	Original Financing
PDO	Project Development Objective
PIU/PST	Project Implementation Unit/Project Support Team
PSC	Project Steering Committee
POM	Project Operations Manual
PWD	Public Works Department
RAMS	Road Asset Management System
RPF	Regional Partnership Framework
SDR	Special Drawing Rights
SML	Shorter Maturity Loan
SSR	South Santo Road
TA	Technical Assistance
TC	Tropical Cyclone
ToR	Terms of Reference
UNFCCC	United National Framework Convention on Climate Change
VAC	Violence Against Children
VC RTP	Vanuatu Climate Resilient Transport Project

Vanuatu

Vanuatu Climate Resilient Transport Project Additional Financing II

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BASIC INFORMATION – PARENT (Vanuatu Climate Resilient Transport Project - P167382)

Country Vanuatu	Product Line IBRD/IDA	Team Leader(s) Fiona J Collin		
Project ID P167382	Financing Instrument Investment Project Financing	Resp CC IEAT1 (9381)	Req CC EACNF (6680)	Practice Area (Lead) Transport

Implementing Agency: Ministry of Infrastructure and Public Utilities

Is this a regionally tagged project? No	
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Bank/IFC Collaboration No	
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Approval Date 23-Jan-2020	Closing Date 31-Dec-2025	Expected Guarantee Expiration Date	Original Environmental Assessment Category Partial Assessment (B)	Current EA Category Partial Assessment (B)
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Financing & Implementation Modalities

<input type="checkbox"/> Multiphase Programmatic Approach (MPA)	<input checked="" type="checkbox"/> Contingent Emergency Response Component (CERC)
<input checked="" type="checkbox"/> Series of Projects (SOP)	<input type="checkbox"/> Fragile State(s)
<input type="checkbox"/> Performance-Based Conditions (PBCs)	<input checked="" type="checkbox"/> Small State(s)
<input type="checkbox"/> Financial Intermediaries (FI)	<input type="checkbox"/> Fragile within a Non-fragile Country
<input type="checkbox"/> Project-Based Guarantee	<input type="checkbox"/> Conflict
<input type="checkbox"/> Deferred Drawdown	<input type="checkbox"/> Responding to Natural or Man-made disaster
<input type="checkbox"/> Alternate Procurement Arrangements (APA)	<input type="checkbox"/> Hands-on Expanded Implementation Support (HEIS)



Development Objective(s)

To improve the climate resilience of the Recipient's road network, with emphasis on the selected project road, and in the event of an Eligible Crisis or Emergency, to provide an immediate response to the Eligible Crisis or Emergency.

Ratings (from Parent ISR)

	Implementation					Latest ISR
	21-Jan-2022	18-Aug-2022	20-Mar-2023	31-Jul-2023	05-Dec-2023	16-Apr-2024
Progress towards achievement of PDO	MS	MS	MS	MS	MS	MS
Overall Implementation Progress (IP)	MS	MS	MS	MS	MS	S
Overall Safeguards Rating	MS	MS	MS	MS	MS	MS
Overall Risk	S	S	S	S	S	S
Financial Management	MU	MS	MS	MS	MS	MS
Project Management	MS	MS	MS	MS	MS	MS
Procurement	MS	MS	MS	MS	MS	MS
Monitoring and Evaluation	S	S	S	MS	MS	MS

BASIC INFORMATION – ADDITIONAL FINANCING (Vanuatu Climate Resilient Transport Project Additional Financing II - P181577)

Project ID	Project Name	Additional Financing Type	Urgent Need or Capacity Constraints
P181577	Vanuatu Climate Resilient Transport Project	Cost Overrun/Financing Gap	No



	Additional Financing II		
Financing instrument	Product line	Approval Date	
Investment Project Financing	IBRD/IDA	07-Jun-2024	
Projected Date of Full Disbursement	Bank/IFC Collaboration		
30-Apr-2027	No		
Is this a regionally tagged project?			
No			

Financing & Implementation Modalities

<input checked="" type="checkbox"/> Series of Projects (SOP)	<input type="checkbox"/> Fragile State(s)
<input type="checkbox"/> Performance-Based Conditions (PBCs)	<input checked="" type="checkbox"/> Small State(s)
<input type="checkbox"/> Financial Intermediaries (FI)	<input type="checkbox"/> Fragile within a Non-fragile Country
<input type="checkbox"/> Project-Based Guarantee	<input type="checkbox"/> Conflict
<input type="checkbox"/> Deferred Drawdown	<input type="checkbox"/> Responding to Natural or Man-made disaster
<input type="checkbox"/> Alternate Procurement Arrangements (APA)	<input type="checkbox"/> Hands-on Expanded Implementation Support (HEIS)
<input checked="" type="checkbox"/> Contingent Emergency Response Component (CERC)	

Disbursement Summary (from Parent ISR)

Source of Funds	Net Commitments	Total Disbursed	Remaining Balance	Disbursed
IBRD				%
IDA	112.80	19.08	89.11	18 %
Grants				%

PROJECT FINANCING DATA – ADDITIONAL FINANCING (Vanuatu Climate Resilient Transport Project Additional Financing II - P181577)

FINANCING DATA (US\$, Millions)



SUMMARY (Total Financing)

	Current Financing	Proposed Additional Financing	Total Proposed Financing
Total Project Cost	66.00	30.00	96.00
Total Financing	66.00	30.00	96.00
of which IBRD/IDA	66.00	30.00	96.00
Financing Gap	0.00	0.00	0.00

DETAILS - Additional Financing

World Bank Group Financing

International Development Association (IDA)	30.00
IDA Credit	15.30
IDA Grant	12.60
IDA Shorter Maturity Loan (SML)	2.10

IDA Resources (in US\$, Millions)

	Credit Amount	Grant Amount	SML Amount	Guarantee Amount	Total Amount
Vanuatu	15.30	12.60	2.10	0.00	30.00
National Performance-Based Allocations (PBA)	15.30	12.60	2.10	0.00	30.00
Total	15.30	12.60	2.10	0.00	30.00

COMPLIANCE

Policy

Does the project depart from the CPF in content or in other significant respects?

[] Yes [] No

Does the project require any other Policy waiver(s)?

[] Yes [] No



INSTITUTIONAL DATA

Practice Area (Lead)

Transport

Contributing Practice Areas

Climate Change and Disaster Screening

This operation has been screened for short and long-term climate change and disaster risks

PROJECT TEAM

Bank Staff

Name	Role	Specialization	Unit
Bowen Wang	Team Leader (ADM Responsible)	Transport and Climate Change	IEAT1
Fiona J Collin	Team Leader	Engineering	IEAT1
Cristiano Costa e Silva Nunes	Procurement Specialist (ADM Responsible)	Procurement	EEAR2
Janet Virginia Gamarra Rupa	Financial Management Specialist (ADM Responsible)	Financial Management	EEAG2
Rachelle Therese Marburg	Social Specialist (ADM Responsible)	Social Development	SEAS1
Rosemary Alexandra Davey	Environmental Specialist (ADM Responsible)	Environment Safeguard	SEAE1
Anita Shrestha	Team Member		IEAT1
Craig Andrew Clark	Social Specialist	Social Safeguard	SEAS1
Laisa Duri Boedoro	Team Member	Program Assistant	EACVA
Leisande Otto	Team Member	Liaison Officer	EACVA
Ma. Lourdes Mascardo	Team Member	WFA	WFACS
Vipasha Bansal	Counsel	Legal	LEGAS
Vivianti Rambe	Environmental Specialist	Environment Safeguard	SEAE1



Extended Team

Name	Title	Organization	Location
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I. BACKGROUND AND RATIONALE FOR ADDITIONAL FINANCING

A. Introduction

1. **The Project Paper seeks the approval of the World Bank’s Board of Executive Directors for an additional IDA Credit in the amount of SDR 11.6 million (US\$15.3 million equivalent), an IDA Shorter Maturity Loan (SML) in the amount of SDR 1.6 million (US\$2.1 million equivalent), and an Additional IDA Grant in the amount of SDR 9.6 million (US\$12.6 million equivalent,) for a second Additional Financing (AF-II) to the Vanuatu Climate Resilient Transport Project (VC RTP, P167382).** The parent project in the amount of US\$66 million of IDA financing (IDA Credit 65310-VU, IDA Grant D5500) was approved by the Board on January 28, 2020, and became effective on March 6, 2020, with the original closing date of December 31, 2025. It was followed by a first Additional Financing (AF-I) of US\$46.80 million (IDA Credit 69990-VU, IDA Grant D9260) which was approved on December 10, 2021, and became effective on January 31, 2022. On August 22, 2023, an amendment to the original IDA Credit 6531-VU allowed a retroactive financing of SDR 180,000 and a reallocation between disbursement categories. Current total project financing is US\$112.80 million.

2. **The proposed AF-II is required to finance cost overrun.** The AF-II responds to the request of the Government of Vanuatu (GoV) in a letter, dated October 18, 2023, to cover cost overruns within the existing scope of the parent project. Several factors contributed to the cost-overrun: (i) higher bid prices for civil works; (ii) additional road climate resilient designs needed to prevent similar damages caused by Category 5 tropical cyclone (TC) Harold, which in 2020 caused an estimated US\$617 million (66 percent of 2020 GDP) in economic impacts; and (iii) SDR/US\$ exchange rate fluctuations and subsequent losses.

3. **This Project Paper also includes a level 2 restructuring** to (i) extend the current project closing date by 12 months to December 31, 2026, to enable completion of activities and therefore full achievement of Project Development Objective (PDO); (ii) revise project components to be better aligned with the priorities of the GoV; (iii) update the Result Framework to be aligned with the new World Bank Group Corporate Scorecard and to better track progress and impact; and (iv) introduce a Project Steering Committee (PSC) as a part of the project implementation arrangements. No changes are introduced to the project scope.

4. **The project is performing well and meets the criteria for additional financing.** It has been rated Moderately Satisfactory for implementation progress (IP) and development objectives (DO) over the past 12 months. The project is compliant with legal covenants, including audit and financial management (FM) reporting requirements. The project’s overall risk rating is *Substantial*.

B. Background and Context

5. **VC RTP is part of the World Bank–funded Pacific Climate Resilient Transport Program Series of Projects (PC RTP SOP), which focuses on systematically enhancing climate resilience in the transport sector across the Pacific region.** PC RTP SOP upgrades vital transport infrastructure to help make communities more resilient to extreme weather events and climate change. The program is structured through a common resilience framework that includes four pillars: (i) Spatial and sectoral planning tools, (ii) Climate resilient infrastructure solutions, (iii) Measures to strengthen the enabling environment, and (iv) Post disaster recovery support. The SOP was approved in September 2018 and included eight projects across six countries (Samoa, Tonga, Tuvalu, Vanuatu, Kiribati and the Federated States of Micronesia) focusing on road, maritime, and aviation sectors. While many of the projects are in the early stages of implementation, in 2022-2023, Tonga upgraded two wharves and one airport to elevated



levels of climate resilience, and Samoa upgraded seven kilometers of primary roads. By 2028 (the closing year of SOP), an additional 140+ kilometers of roads and six maritime sites will be made more climate resilient in these six countries. Approximately 380,000 people are expected to benefit from greater access to climate resilient transport services, which represents about 45 percent of the population across these six countries.

6. **VC RTP focuses on the rehabilitation of the 65 km South Santo Road (SSR) located on the Island of Espiritu Santo (Santo), the largest island in land area in Vanuatu and the second largest in population** (about 40,000, which is over 12 percent of the national population). SSR is a backbone of the core road network for Santo as defined in the GoV's Public Road Strategy. It is the only road connecting the southern and western parts of the island with the capital, Luganville. SSR serves as a critical link for fishing and agricultural products to reach markets in Luganville and provides rural communities in Santo with access to health, education, and social services. SSR was severely damaged by TC Harold in 2020, which made landfall on the coast of Espiritu Santo, where SSR is located, with storm surges and waves exceeding 30 feet and top winds of 130 mph. As a result, the conditions of roads and bridges along the SSR deteriorated heavily compared to in 2019 when VC RTP was appraised. The First Additional Financing (AF-I) was to fill an anticipated cost overrun to rehabilitate a more deteriorated SSR.

7. **VC RTP is consistent with the World Bank Group's Pacific Islands—Regional Partnership Framework (RPF) FY17-FY21¹** (Report 120479) covering nine Pacific Island countries, including Vanuatu, specifically the RPF Objectives of *Increased access to basic services and improved connective infrastructure (Objective 4.2)*, and *Strengthened resilience to natural disasters and climate change (Objective 3.1)*. VC RTP contributes to the WBG's mission, *to end extreme poverty and boost shared prosperity on a livable planet* by extending the benefits of climate-resilient road accessibility and transportation services to Santo residents. It will also help agricultural products from rural Santo to easily reach markets in the island's capital of Luganville and connect with international logistics for export. VC RTP directly contributes to the GoV's National Sustainable Development Plan 2016 to 2030 and the newly adopted Public Road Strategy.

C. Project Implementation Status

8. **The PDO of VC RTP is to improve the climate resilience of the Recipient's road network, with emphasis on the selected project road, and in the event of an Eligible Crisis or Emergency, to provide an immediate response to the Eligible Crisis or Emergency.** The project consists of four components: (1) Sectoral and Spatial Planning Tools; (2) Climate Resilient Infrastructure Solutions; (3) Strengthening the Enabling Environment; and (4) Contingent Emergency Response. The implementation agency of the project is the Ministry of Infrastructure and Public Utilities (MIPU) through its Public Works Department (PWD).

9. **To date, the project has gone through two restructurings.** The first restructuring was conducted in December 2021, almost two years from approval to process the AF-I to bridge an anticipated cost overrun for civil works under Component 2. The second restructuring was conducted in August 2023 with changes that aimed at a reallocation between disbursement categories.

- a. **First restructuring: AF-I (cost overrun).** The AF-I in the amount of US\$46.80 million of IDA financing (IDA Credit 69990-VU, IDA Grant D9260) was approved on December 10, 2021, and became effective on January 31, 2022, making the current total project financing at US\$112.80 million.
- b. **Second restructuring (reallocation).** On August 22, 2023, an amendment to the original IDA Credit

¹ Extended by the Board of Executive Directors on February 6, 2020, to FY23.



6531-VU allowed a retroactive financing of SDR 180,000 and a reallocation between disbursement categories to reallocate SDR 180,000 from the undisbursed amount of SDR 819,637.28 under Category 3 “Refund of Project Preparation Advance” to Category 1 “Goods, works, non-consulting services, and consulting services, training, and operating costs for Part 1, 2, and 3 of the Project.”

10. **Overall project implementation is progressing well despite early project shortcoming and delays caused by the border closure between 2020–2022 due to the COVID-19 pandemic and the impact of TC Harold in 2020.** As of May 2024, two out of three civil work packages have completed the bidding process and the last civil work package is at the bid evaluation stage. Disbursement has reached 17 percent, higher than the revised disbursement projections. The development toward achievement of PDO and overall implementation progress have been consistently rated as *Satisfactory* or *Moderately Satisfactory*, including in the latest Implementation Status and Results Report dated April 16, 2024. All four components are rated Moderately Satisfactory or better. During its first years of implementation, however, the project suffered significant shortcomings due to weak project management and poor project support team resulting in insufficient guidance to the design and supervision consultants, resource mobilization issues, irregular reporting, and lack of commitment to safeguard requirements, which in turn all delayed the preparation of detailed designs and bidding documents. Measures were agreed to fast-track implementation by addressing project management capacity, hiring additional supervisory and safeguard staff and close contract monitoring. These measures enabled completion of the design stage documentation for all three packages, and allowing bidding of the works packages to begin, with the first works package awarded in December 2022.
11. **Component 1: Sectoral and Spatial Planning Tools (US\$0.28 million).** Terms of Reference (ToR) had been prepared for upgrading the existing Road Inventory System at the MIPU-PWD to a Road Asset Management System (RAMS), which aims to enable the integration of climate and disaster risk profiles of road assets in asset investment and maintenance planning. Using this ToR, a procurement was launched in 2022 using a cost-quality selection approach. After receiving the bid prices, it was evident that the initially allocated budget was not commensurate with the scope of the ToR, and a new ToR is being prepared to relaunch the procurement in the first quarter of FY25 with a total financing allocation of US\$2 million for this component.
12. **Component 2: Climate Resilient Infrastructure Solutions (US\$107.55 million).** As of April 2024, two of three civil work packages for rehabilitation of the SSR—including construction/repairing of 14 bridges (Package 1) and rehabilitation of 5 km of road sections between Sarakata Bridge and Saint Michel (Package 3)—have been procured by the MIPU and disbursements are expected to accelerate as civil works advance. The civil work package for the rehabilitation of 60 km of road sections between Saint Michel and Tasiriki (Package 2) is at the bid evaluation stage, with the contract award expected in May 2024. The contract for Package 1 was awarded in December 2022, and work has commenced since June 2023. The overall physical works progress of Package 1 is about 23 percent and progressing. The contract for Package 3 was awarded in February 2024, with works expected to commence in May 2024, after completion and approval by the World Bank of the update to the Abbreviated Resettlement Action Plan (ARAP) for Package 3 and compensation paid to the affected persons. The contract for the Design and Supervision Consultant (DSC) services was awarded in November 2020, which includes two phases—Phase 1 between November 2020 to February 2024 for the detailed design, and Phase 2 from December 2022 till the project end for construction supervision. Based on the contract prices awarded for Packages 1 and 3 and bids received for Package 2, the financing shortfall under Component 2 is estimated around US\$26.55 million (details in Section IV-B Technical Appraisal). To complete the civil works across the three packages, an additional 12 months would be required from the original project closing date.
13. **Component 3: Strengthening the Enabling Environment (US\$4.97 million).** Limited progress has been



made in implementing the TA activities under subcomponent 3.1, as the priority was given to putting it back on track for major civil work activities. However, the Memorandum of Understanding (MoU) between MIPU and the MCCA on data exchange and collaboration was signed, and the data exchange has been ongoing. The Community Liaison Officer/Gender Specialist was mobilized in November 2023 and has since started working on the Gender Action Plan (GAP) and the Strategy for Preventing Gender-based Violence (GBV) and Violence Against Children (VAC). The MIPU has requested to revise and streamline the TA activities to better align with the government's priorities. A financing shortfall of US\$1.62 million in Component 3.2 on implementation support is estimated to be needed to cover the operating costs of the PIU/PST over the 12-month project extension.

14. **Environmental and Social Safeguards performance is *moderately satisfactory*.** The PIU/PST are staffed with experienced international and national environmental and social safeguard specialists. The Environmental and Social Impact Assessment (ESIA), Abbreviated Resettlement Action Plan (ARAP), and Environmental and Social Management Plan (ESMP) were prepared, approved, and disclosed during the project preparation. After the completion of the detailed designs of civil works for all three packages, the ESIA was updated, approved, and re-disclosed by the PIU. The ARAP is being updated for each contract package following the detailed design to finalize quantities of impacts and compensation at current replacement costs. Thus far, the ARAP for Package 1 has been updated, cleared by the World Bank, and implemented, and updating of the ARAP for the remaining two packages is underway and expected to be submitted to the World Bank for review/approval by end May 2024 (Package 3) and end July 2024 (Package 2). A Stakeholder Engagement Plan was also developed and cleared by the World Bank to guide the community engagement process for all environmental and social issues related to the project. The Contractor's Environmental and Social Management Plan (CESMP) for Package 1 was developed and approved by the DSC, but the implementation quality of the CESMP and supervision by DSC needs to improve. This is being addressed through a DSC contract amendment. The CESMP for Package 3 has been prepared by the Contractor and is currently under review by the DSC.

15. **The Project's performance on safeguard is *moderately satisfactory* but the safeguard supervision capacity of the DSC needs to be strengthened.** A strong on-site management by the safeguard team of the PIU/PST has contributed to the safeguard performance of the Project, including developing a register to record environmental incidents and corrective actions undertaken to close out the incidents. However, the DSC is not fully meeting the expected supervision responsibility on safeguard implementation by the Contractor. To resolve this issue, a contract amendment for the DSC is being processed to mobilize additional full-time staff on-site. An Environmental Impact Assessment for the extraction of materials from the Navaka River for Package 1 was prepared by MIPU and approved by the World Bank in December 2023. The environmental permit for extraction of materials was issued to the Contractor by the Department of Environmental Protection and Conservation in October 2023. Extraction works are under way. A Community Liaison Officer and Gender Specialist were mobilized in November 2023 and are working on updating the GAP and supporting implementation of GAP at the MIPU. The Grievance Redress Mechanism (GRM) is in place and operational to log and track resolution of grievances, managed by the Community Liaison Officer.

16. **The Project's performance on procurement and financial management is *moderately satisfactory*.** As priorities were given to procuring civil work packages, procurement of technical assistance services has been delayed. The primary technical assistance activity under the project—upgrading the road inventory system to RAMS—was not successfully procured in the first attempt due to an insufficient budget allocation. The PIU is updating the ToR for this activity with an increased budget allocation of US\$2 million and aiming to relaunch this procurement by the end of May 2024. The PIU/PST needs to improve procurement monitoring using the Systematic Tracking of Exchanges in Procurement (STEP) by ensuring regular updates of the project procurement plan and records of contract milestones.



17. The overall financial management arrangement is currently sufficient and continues meeting the minimum requirements as stipulated in the World Bank Policy on Investment Project Financing. All Interim Unaudited Financial Reports (IFRs) up to the quarter ending December 31, 2023, have been submitted on time and accepted by the World Bank. An international Financial Management Specialist and a national Finance Manger are in place under PIU/PST. The audit for FY2023 is being carried out, and the audited report will be due in June 2024. Submissions of withdrawal applications for disbursement of funds from the World Bank are being made regularly. The counterpart funds from the Ministry of Finance and Economic Management (MFEM) have been made available to the project.

18. **Compliance with Legal Covenants.** The Project is largely in compliance with the legal covenants. Several key positions in PIU/PST required in the legal covenants have recently resigned in February and March 2024 and the procurement of the replacements is underway. The interim arrangements are sufficient to continue advancing the project implementation progress. The full list of legal covenants for the parent project and AF-I is presented in Annex 1.

D. Rationale for the Proposed Additional Financing

19. **The World Bank received a request from the GoV in a letter, dated October 18, 2023, for additional IDA credits and grant in the amount of US\$30 million for an AF-II to the VCRTP.** The proposed AF-II will cover a cost overrun within the existing scope of the VCRTP resulting from high inflation and price increases of key inputs, including fuel and bitumen, over the past three years, which have resulted in higher bid prices for civil works than the engineering estimates conducted in 2019 before the approval of the parent project and the appraisal of the AF-I in 2021. Furthermore, the need for improved climate resilience interventions following the damages caused by TC Harold in 2020 for the project roads has further increased financing needs. A contingency allocation is programmed for the works under the proposed AF-II. The SDR/US\$ exchange rate fluctuations and subsequent losses have also contributed to the cost overrun. Details of key factors that contributed to the cost overrun are presented in Section IV-B Technical Appraisal.

Table 1: Updated Road Rehabilitation Timeline after the Project Extension

Road Works Packages		Work Commencement Date	Road Improvement Completion	Construction Period
Component 2: Climate Resilient Infrastructure Solutions				
1	Package 1: Construction/Repair 14 Bridges	29 June, 2023	28 June, 2025	24 months
2	Package 2: Rehabilitation of 60 km of road sections between Saint Michel and Tasiriki	30 August, 2024 (Exp.)	29 August, 2026	24 months
3	Package 3: Rehabilitation of 5 km of road sections between Sarakata Bridge and Saint Michel	30 June, 2024 (Exp.)	28 February, 2025	8-months
<i>Note: The project extension allows a buffer of 8-months for any potential delays in civil work progress, including any delays in the issuance of the Notice to Commence and impact from cyclones.</i>				

20. **In addition to covering the cost overrun, a restructuring is proposed to extend the current project closing date by 12 months, from the original closing date of December 31, 2025, to December 31, 2026, to enable full**



completion of project activities. The total project implementation period would be extended from six years to seven years. TC Harold and the COVID-19 pandemic-related travel restrictions affected the project’s early implementation and delayed the detailed field investigation and design works, as well as the procurement of civil work packages. To allow sufficient time for civil works, an extension of the project closing date is necessary. The extension will apply to both the original project and the AF-I. The proposed restructuring will also revise and streamline the TA activities to better align with the GoV’s priorities. Accordingly, the result framework will be revised to better monitor and measure progress and impact based on the revised activities for TA, as well as introducing two PDO indicators aligned with the new WBG Scorecard Indicators. The project’s disbursement estimates will be updated, considering the AF-II and the extended project timeline. The extension would allow sufficient time for civil work construction, listed in Table 1.

II. DESCRIPTION OF ADDITIONAL FINANCING

21. **The key changes under the AF-II include the following:** (i) changes to project component costs associated with the providing of US\$30 million to address the cost overrun; (ii) a closing date extension of the parent project and the AF-I by 12 months, from December 31, 2025 to December 31, 2026; and (iii) revisions to the Results Framework to reflect the implementation progress and the remaining project implementation period. Two new PDO result indicators are introduced, and one existing intermediate result indicator is revised to align with the new World Bank Group Corporate Scorecard. The PDO and the project scope remain unchanged, with the existing four components and all original sub-components. While there are no changes with the project implementation agency, which remains with the MIPU the project’s implementation arrangements will be updated to include a Project Steering Committee (PSC) to provide complementary inter-agency coordination related to the project and address the issues related to project implementation. Legal covenants were updated to include this change.

E. Changes to Project Components and Costs

22. **The proposed restructuring will revise the component activities to align with the project timeline, the latest developments in the country, and the GoV’s priorities.** The revised component description and financing allocation is presented below and total project costs per component under the current original financing and AF-I as well as the proposed allocation under the AF-II is presented in Table 2. Details of the proposed changes to the project activities are presented in Annex 2.

Table 2: Proposed Financing Allocation across VCRTTP Components with AF-II (in US\$ million)

Project Components	Original Allocation (Original and AF-I)	Cost Overrun /Proposed AF-II	Total
Component 1: Sectoral and Spatial Planning Tools	0.28	1.72	2.00
Component 2: Climate Resilient Infrastructure Solutions	107.55	26.66	134.21
Component 3: Strengthening the Enabling Environment	4.97	1.62	6.59
▪ Subcomponent 3.1: Technical Assistance	1.52	—	1.52
▪ Subcomponent 3.2: Project Implementation Support	3.45	1.62	5.07
Component 4: Contingent Emergency Response	0.00	—	0.00



	Total	112.80	30.00	142.80
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- a. **Component 1: Sectoral and Spatial Planning Tools (US\$2.00 million equivalent)** finances (i) the upgrading the existing road inventory management system at PWD and affiliated data collection tools to a road asset management system, which systematically integrates climate and disaster risk profiles of road assets; and **(ii) building the institutional capacity of the PWD to operationalize and utilize the road asset management system once it’s developed (new activity integrated from the original Component 3.1).**
- b. **Component 2: Climate Resilient Infrastructure Solutions (US\$134.21 million equivalent)** finances design, physical works, and maintenance of South Santo Road to improve its resilience to climate-related hazards and seismic disasters. The investments include: (i) sealing of the existing 60 km of gravel road between Saint Michel and Tasiriki to enhance road resilience and connectivity during rainy seasons; (ii) resurfacing a 5-km road section between Sarakata Bridge and Saint Michel; (iii) constructing ten new bridges (including large box culvert), repairing three existing bridges, and replacing one existing bridge, and reconstruction of one existing bridge to address the loss of connectivity resulting from previous climatic and seismic disasters and improve traffic safety (including building Bailey bridges for traffic diversion and emergency response during the project construction period); (iv) construction box and pipe culverts to adapt to the forecasted increase in rainfall volumes and intensities; and (v) construction of ancillary structures to improve climate resilience, such as coastal protection, masonry covered drains, unvented drifts, and gabion retaining walls. The investments are accompanied by consulting services for the detailed design and supervision of civil works (including constructing and operating a small quality control laboratory). **The activity ‘Piloting multi-year performance-based road maintenance after the defect liability period’ is dropped.**
- c. **Component 3: Strengthening the Enabling Environment (estimated cost US\$6.59 million equivalent)** provide (i) technical assistance to PWD on key sectoral issues, as well as (ii) project implementation support:
 - i. **Subcomponent 3.1: Technical Assistance (US\$1.52 million equivalent)** provides technical assistance to strengthen the institutional and regulatory capacity of the MPIU on road sector management, including (i) establishing climate resilient road asset management practices; **(ii) improving road safety (new); (iii) enhancing road construction supervision and monitoring (new);** and (iv) mainstreaming actions to address gender gaps at MIPU and the broader transport sector. **The original activities related to road asset condition assessment, implementing plans to operationalize RAMS, and capacity building for road maintenance supervision are integrated into Component 1 (ii).**
 - ii. **Subcomponent 3.2: Project Implementation Support (US\$5.07 million equivalent)** finances the Project Implementation Unit (PIU)/Project Support Team (PST) contracted staff and operating costs associated with implementation of the project, and yearly audits of the project accounts.
- d. **Component 4: Contingent Emergency Response (CERC, US\$0 million)** is a zero-dollar component designed to provide a swift response in the event of an eligible crisis or emergency by enabling the GoV to request the World Bank to reallocate project funds to support emergency responses.



F. Changes to the Results Framework

23. **The restructuring will also update the original project result framework to better monitor and measure progress and impact.** Two new PDO result indicators are introduced, and one existing intermediate result indicator is revised to align with the new World Bank Group Corporate Scorecard. In accordance with the revisions proposed to the project activities presented above, the result framework and indicators are updated with details summarized in Table 3. Detailed appraisal of the proposed revisions of listed result indicators are included in Section IV-B Technical Appraisal.

Table 3: Proposed Changes to the Result Framework

	Original Indicator	Proposed Changes	Rationale
PDO Result Indicators			
1	Identified planning tools adopted and being used to improve climate resilience of roads (Number)	No change	—
2	Length of road upgraded with climate resilience measures (Kilometers)	No change	—
3	Number of bridges constructed with climate resilience measures (Number)	No change	—
4	Number of people that benefit from improved access to sustainable transport infrastructure and services (Number, thousands)	<i>Added</i>	The New WBG Corporate Scorecard Result Indicator that measures WBG projects contribution to SDG 11.2, “access to safe, affordable, accessible and sustainable transport systems for all.”
5	Number of people with enhanced resilience to climate risks due to gained access to climate-resilient infrastructure (Number)	<i>Added</i>	The New WBG Corporate Scorecard Result Indicator that measures people benefitting directly and indirectly from improved climate risk management and increased climate resilience as a result of the WBG investment.
6	Identified enabling environment solutions adopted and implemented (Number)	<i>Dropped</i>	Integrated under PDO Result Indicator 1.
Intermediate Result Indicators—Component 1: Sectoral and Spatial Planning Tools			
1	Road Inventory Management System upgraded with a module to integrate climate and disaster risk profiles of road assets (Yes/No)	Revised to “ <i>Road Inventory Management System upgraded into RAMS with a module to integrate climate and disaster risk profiles of road assets</i> ” (Yes/No)	To accurately align with the project activity.
2	Percentage of the road network covered under the RAMS (percentage)	<i>Added</i>	To measure the operationalization of the RAMS.



	Original Indicator	Proposed Changes	Rationale
Intermediate Result Indicators—Component 2: Climate Resilient Infrastructure Solutions			
1	Bridges repaired (Number)	Revised to <i>“Bridges and large box culverts constructed and repaired,”</i> with end target of 14	To align with final detailed designs of civil works.
2	Box culverts installed (Number)	Changed to <i>“Culverts Installed”</i> and end target updated from 102 to 142	Based on the detailed design, the total number of culverts (pipe and culverts) to be constructed is 142.
3	Satisfactory road safety audit at design and post-construction phases (Yes/No)	Updated to <i>“Satisfactory road safety audit at design, construction and post-construction phases,”</i> and change the unit of measure to Numbers with an end target of 3 times.	To include one additional audit during the construction phase.
4	South Santo Road under piloting of multi-year performance-based maintenance contracts supported by VCRTP (Kilometers)	<i>Dropped</i>	The activity on piloting multi-year performance-based maintenance program is dropped.
5	Number of people with enhanced access to transportation services (Number)	<i>Dropped</i>	Integrated into new PDO result indicator 4.
Intermediate Result Indicators—Component 3: Strengthening the Enabling Environment			
1	Institutional and policy arrangements provided to support the GoV in establishing the Vanuatu Road Safety Authority (Yes/No)	<i>Added</i>	To align with the revisions to the TA activities.
2	Delivery of ICT-based Construction Site Inspection and Monitoring System to PWD (Yes/No)	<i>Added</i>	To align with the revisions to the TA activities.
3	Percentage of women employed in technical positions at MIPU-PWD at national and provincial levels (Percentage)	Revised to <i>“People benefitting from greater gender equality.”</i>	The new WBG Corporate Scorecard result indicator that measures the number of people directly benefitting from operations supported by the WBG that intentionally seek to advance gender equality.
4	An MoU signed between MIPU and MCCA for inter-ministerial collaboration (Yes/No)	No Change	MOU signed.
5	Proportion of Contractor staff who sign Codes of Conduct (Percentage)	No change	—



	Original Indicator	Proposed Changes	Rationale
6	Grievances registered related to delivery of project benefits that are addressed (Percentage)	No change	—
7	Proportion of Contractor staff who attend GBV & VAC training (Percentage)	No change	—
8	Development of the Gender Responsive Policy Inputs to VISIP M&E (Yes/No)	<i>Dropped</i>	Integrated into new Intermediate Result Indicator No.3 under Component 3.
9	Public transport providers and drivers trained in GBV prevention (Yes/No)	<i>Dropped</i>	The project does not involve counterparts from public transport providers and drivers.
10	The MIPU-PWD’s construction material testing laboratory accredited (Yes/No)	<i>Dropped</i>	The activity on establishing the testing laboratory is carried out by DSC.
11	Technical specifications for road design updated (Yes/No)	<i>Dropped</i>	The activity on developing the road design specifications is dropped (the support in this area has already been provided to PWD by another development partner and was completed in 2023).

G. Changes to Closing Date

24. **The closing date of the AF-II will be set to December 31, 2026, and the closing date of the parent project and the AF-I will be extended by 12 months from December 31, 2025, to December 31, 2026.** The extension will provide sufficient time to complete all remaining project activities and enable the full achievement of the PDO.

H. Changes in Legal Covenants

25. **The implementation arrangements of the project will be updated to include a Project Steering Committee (PSC).** The PSC is to provide inter-agency coordination related to the project and address the issues related to project implementation. The PSC will consist of senior Director-General level representatives (or their delegates) from the MIPU, MFEM, and other relevant agencies. The current Project Operations Manual (POM) was approved by the Minister of MIPU on January 18, 2021. The detailed composition and mandate of the PSC will be updated in the POM, which needs to be adopted in form and substance satisfactory to IDA as a Condition of Effectiveness of the AF-II. The updated POM, once adopted, will apply to the OF, AF-I, and AF-II. Furthermore, the establishment of the PSC is introduced as a new project Legal Covenant, which is to be fulfilled by the Recipient no later than one month after the Effective Date of the AF-II.

26. **There are no other changes to the existing implementation arrangements,** including the implementing agencies; PIU/PST; and the Project’s procurement, disbursement, and financial management arrangements, including reporting requirements.

III. KEY RISKS



27. The overall risk rating for the project continues to be assessed as *Substantial*. The institutional capacity, fiduciary, and environmental and social risks are rated *Substantial* as described below.

28. **The risks for institutional capacity for implementation and sustainability remains *Substantial*.** Despite the positive progress made in project implementation since 2022, the PIU/PST faces a high turnover rate. Three key staff at the PIU/PST have resigned recently, including the Deputy Head of the PIU (resignation effective in February 2024), the International Financial Management Specialist (resignation effective in May 2024), and the International Procurement Specialist, who has submitted a resignation but agreed to stay in position until a replacement is hired. MIPU is in the process of recruiting replacements for staff who recently resigned. The relatively high turnover rate for the PIU/PST team poses a substantial risk for the institutional capacity to implement the project effectively. This risk is compounded with the challenge in recruiting replacements particularly for positions that require full-time commitment in Vanuatu.

29. Risk mitigation measures include (i) proactively communicating any staff turnover matters to allow sufficient time for replacement recruitment; (ii) ensuring interim arrangements, such as designating acting roles in combination with part-time support from the incumbent staff; (iii) exploring options in contract negotiation and amendments where possible to minimize resignation; (iv) proactively acting on launching and processing the procurement process for re-selection using the most fit-for-purpose approach; and (v) continue prioritizing capacity building by the international specialists at the PST to national officers at the PIU on respective project management functions.

30. **Integrated residual fiduciary risks remain *Substantial*.** The National Procurement Specialist, the Finance Manager, and Project Accountant are in place. A selection process was conducted for the replacement of the International Procurement Specialist, but the PIU was not satisfied with the candidates who applied and plans to revise the scope of the services and budget and readvertise the opportunity. The procurement process for the replacement of the International Financial Management Specialist is under preparation. Key risks remain applicable in terms of (i) turnover of the PIU/PST personnel; (ii) delays in finalization of ToRs for technical assistance, activities (consulting services); (iii) noncompliance with the World Bank's financial management and procurement requirements; (iv) risks related to contract management, fraud, and corruption; and (v) delay in submitting the Interim Payment Certificates for claims and subsequent delays in disbursement.

31. The mitigating measures include (i) finalizing the selection process for the replacements of international financial management and procurement specialists under PST (aiming for contract award in June/July); (ii) continuing capacity building by the PST to national officers on financial management, procurement and contract management; (iii) proactively planning for resources required for the development of ToRs of TA activities to enable timely procurement; (iv) continue engaging an external auditor recruited by the Vanuatu National Audit Office to provide assurance on the project financial statements, compliance, and performance; and (v) close monitoring contract implementation as per the Annual Work Program and Budget ensuring compliance and improvement in the disbursement rate.

32. **The inherent environmental risks remain *Substantial*, as for the original project.** The proposed AF-II is for cost overruns and does not involve additional activities nor change in scope. The project activities are not likely to cause significant or irreversible environmental impacts. Potential major environmental impacts and risks are limited to construction-related activities and sourcing of gravel aggregates. Some of the inherent risks may include (among others): the increased turbidity of surface waters during construction near riverbanks, soil erosion from use of heavy machinery, health risks associated with dust generated from aggregate crushing plant, and changes to the hydrodynamics of the Navaka River due to poorly planned extraction.



33. These risks are being mitigated by ensuring sufficient capacity across PIU/PST, the DSC, and the contractor on the safeguard matters. The PIU/PST has put in place adequate resources to monitor implementation of environmental and social safeguards, including: an international environmental specialist, an international social specialist, a national environmental safeguards specialist, a national social safeguards specialist, and a national gender and community liaison specialist. The DSC team includes an environmental safeguard specialist and a social specialist; however, it has been identified that the current work arrangement and provision are considered inadequate. The DSC has been requested to update the TOR for the environmental safeguard specialist and ensure sufficient time allocation under their contract and increase the input of the social specialist. The PIU has now determined that the DSC should have a full-time Santo-based Environmental Specialist, and this will be addressed through a contract amendment. The PIU will provide regular environmental inspections to support DSC performance until the issue is addressed through a contract amendment to the DSC contract.

34. **The inherent social risks remain *Substantial* as for the original project.** The proposed AF-II is for cost overrun and does not involve additional activities nor change in scope. The project requires land acquisition for bridge replacements (some of which involve realignment), minor road widening, and minor realignments to smooth some curves. An ARAP was prepared prior to project approval and cleared by the World Bank and is being updated as three ARAPs based on detailed design according to contract packages. Acquisition of customary land in Vanuatu has the potential to be complicated by limited land titling and multiple claimants. Project-affected land is mostly customary land and preparation of the draft and updated ARAPs incorporated consultations with traditional leaders and the community to ensure community support for land being acquired and that mitigation measures are appropriate and supported. ARAP implementation to date has been satisfactory. No displacement of housing or severe impacts on income generating resources are expected. A functional GRM has been established and is operational. While there have been some periods of gaps in staffing of required positions for social safeguards, gender, and community liaison, the PIU has applied adaptive measures to ensure that the functions have been appropriately covered and remedial actions have taken place to hire replacement personnel to cover these areas. Considering the ARAPs for Package 2 and Package 3 are not yet finalized and compensation to the affected persons have not yet been paid, the residual risk remains as the inherent risk as *Substantial*.

IV. APPRAISAL SUMMARY

A. Economic and Financial (if applicable) Analysis

35. **A traditional Cost Benefit Analysis conducted at appraisal in 2019 and at the AF-I in 2021 was updated using the Roads Economic Decision Model and the Road Safety Screening and Appraisal Tool (RSSAT).** The analysis follows the same methodology used at appraisal and the AF-I and focuses on the economic appraisal of Component 2, for which investments amount to 94 percent of project cost at the AF-II. It is based on the latest capital investment costs, construction schedule, and 2021 traffic. The benefits quantified included the reduction of vehicle operating costs, travel time costs, carbon dioxide (CO₂) emission costs, road safety costs, and road maintenance costs. The detailed analysis can be found in Annex 3, Economic Analysis.

36. **The overall economic internal rate of return (EIRR) of the project is 8.4 percent, and the net present value (NPV) is US\$20.1 million, corresponding to the benefit-cost ratio of 1.2.** These are down from the EIRR of 9.8 percent, the NPV of US\$32.3 million, and the benefit-cost ratio of 1.4 at the AF-I, due mainly to the increase of construction costs. Normal traffic benefits account for 80.4 percent of the project benefits, generated traffic benefits for 20.1 percent, road safety benefits for 1.1 percent, and CO₂ emissions benefits for -1.6 percent.



37. **A sensitivity analysis shows that the project is economically justified even if the construction cost is 10 percent higher or if the project benefits are 10 percent lower, or both, compared with the costs and benefits appraised for AF-II.** If construction costs were 10 percent higher and the project benefits were 10 percent lower than the AF-II actuals, the EIRR would drop to 6 percent. A switching values analysis shows that construction costs would have to increase by 23 percent for the NPV to be equal to zero.

38. **A separate road safety impact appraisal was conducted using the RSSAT, and the road safety benefits were incorporated in the updated economic analysis.** The project is expected to reduce the fatalities by up to 17 percent per year through road infrastructure upgrading. It is also expected to achieve the Project Safety Impact score of 0.84 on the Sarakata Bridge–Saint Michel section, 0.83 on the Saint Michel–Maniao River section, and 0.99 on the Maniao River–Tasiriki section. The overall road safety benefits are estimated to be US\$2.5 million during the infrastructure lifecycle of 20 years.

39. **The net CO₂ emissions over the 20-year evaluation period are 34,763 tons, corresponding to an annual net CO₂ emission of 1,738 tons.** The gross CO₂ emissions without the project are 94,629 tons, while those with the project are 129,392 tons. The increase in greenhouse gas (GHG) emissions is attributed to the traffic generated by the road upgrade.

B. Technical Appraisal

40. **VC RTP continues to be highly relevant to Vanuatu.** The World Bank's update for the Systematic Country Diagnostic for the nine Pacific Islands (Report No. 180998) published in 2023 highlights how Pacific countries, including Vanuatu, continue facing fundamental constraints from their high vulnerability to disasters and climate change. The lack of resilient transport connectivity within and outside of the Pacific countries results in high transport and logistic costs, which translate into pressure to the livelihood and human development of the islanders. Challenges to connectivity also compromise the ability of Pacific countries to absorb multiple shocks, such as natural hazards and pandemics.

41. **There is no change to the original project scope.** VC RTP finances the rehabilitation of 65 km SSR to improve the road conditions, climate resilience, and safety. Project roads are being sealed with a Double Bituminous Surface Treatment or concrete in the flood-prone areas. Ten new bridges along the project road are being constructed, and one existing bridge is being reconstructed with more climate resilient structure and designs. Three existing bridges are being repaired to improve safety. The technical appraisal summary of the original project remains applicable. The initially planned activity for piloting a multi-year performance-based road maintenance contract after construction completion was cancelled, owing to the limited project implementation period.

42. **The proposed AF-II would be used to cover a cost overrun.** Key factors that have contributed to the cost overrun include points a through d. Table 4 provides a detailed breakdown of factors contributing to the cost-overrun.

- a. Higher bid prices for civil work packages than engineering estimates appraised at the preparation of the AF-I in 2021, driven by high inflation and price increases of key inputs such as fuel and bitumen. The unit cost for sealing 1 km of gravel road was estimated at around US\$0.86 million at the appraisal of the OF. In comparison, the actual unit cost in the contract price was US\$1.02 million per 1 km, representing an 18.6 percent increase. Furthermore, the estimated unit cost for bridge works at the appraisal of the AF-I was about US\$51,712 per meter, while the actual unit cost from the contract is



about US\$73,334 per meter, representing 42 percent increase. The proposed AF-II will also include a contingency allocation for potential road work variations and unforeseen needs for emergency road maintenance and repairing after disasters.

- b. Additional time-based costs related to project implementation from extending the project closing date by 12 months, that is, staff costs for the PIU and PST, and the DSC, using the same price rate as the existing consultancy contracts.
- c. Improved climate resilience measures identified from the detailed design process of project roads to address the damages caused by TC Harold in 2020. In the detailed designs, about 575 m of masonry retaining walls and 900 m of gabion retaining walls will be constructed to protect the project roads from sea-level raise, high tide surge, and coastal erosions. All coastal road sections affected by coastal flooding are designed with a shift of road centerline away from the coastal by 1.4–8.0 m to reduce the risk exposure. About 3.3 km of project roads will be paved with concrete pavement in order to withstand the anticipated flood inundation. About 900 m of road base will be elevated above the flood levels. About 21.57 km of masonry covered drains and unvented drifts will be installed. All bridges are designed for 100-year floods, taking them into a projected climate change scenario to 2121.
- d. SDR/US\$ exchange rate fluctuation compared with the time at the approval of the OF and the AF-I. As of April 2024, the project deficit caused by SDR/US\$ exchange fluctuation is about US\$4.7 million.

Table 4: Factors Contributing to the Cost Overrun

Component and Activities		Original Allocation (OF + AF- I)	Financing Gap	Total	Factors Contributing to the Gap
Component 1: Sectoral and Spatial Planning Tools		0.28	1.72	2.00	
Upgrading Road Inventory System into RAMS		0.28	1.72	2.00	Underestimation in original budget allocation; expanded work scope.
Component 2: Climate Resilient Infrastructure Solutions		107.55	26.66	134.21	
Civil Works	Package 1: Bridges and Structures	103.15	9.40	46.90	US\$9.40 million cost overrun from actual contract cost overrun.
	Package 2: Road Rehabilitation 60 km			57.41	
	Package 3: Road Rehabilitation 5 km			8.24	
Design and Supervision Services		4.40	4.60	9.00	Cost overrun entails: <ul style="list-style-type: none"> - US\$0.20 million actual contract cost overrun. - US\$4.13 million from contract amendments for additional on-site supervision capacity and additional supervision service covering the 12-month project extension.
Civil Work Contingency		—	12.66	12.66	Contingency for unforeseen cost variations, include:



				<ul style="list-style-type: none"> - 7% contingency for three civil work packages for potential work variations. - an emergency maintenance work that was carried on the project road in 2020, following the unforeseen damaged caused by TC Harold. - SDR/US\$ exchange rate fluctuation.²
Component 3: Strengthening the Enabling Environment	4.97	1.62	6.59	
Technical Assistance	1.52	—	1.52	No change.
Project Implementation Support	3.45	1.62	5.07	US\$1.62 million finance shortfall to cover additional PIU/PST operating costs over the 12-month extension.
Component 4: Contingent Emergency Response	0	—	0	No change.
Total	112.80	30.00	142.80	

43. **Road maintenance and sustained project impact.** The initially planned project activity “piloting multi-year performance-based road maintenance after the defect liability period” is dropped due to the limited time left under the project timeline. Although the project finance will no longer directly finance maintenance of the SSR, it provides critical institutional capacity for the GoV to effectively carry out the maintenance work using its own resources. Currently, the GoV has a rolling road maintenance program funded by the state budget and Australian government. Under Component 1, the project finances the development of a modern Road Asset Management System (RAMS) for the GoV. Once it’s rolled out under the project, the GoV will be able to effectively monitor road asset conditions through automatized regular condition assessments and identify critical needs for preventative maintenance. Prioritization of maintenance interventions will be based on the criticality of the roads, conditions, and climate risk exposure. SSR will be covered in the RAMS.

44. **Change of Project TA Activities and Result Indicators:** A revision is proposed to the TA activities originally planned under the VC RTP across Component 1 and subcomponent 3.1. However, the revision does not result in any increase of scope for the TA activities, as the thematic focus of TA activities remains about (i) establishing climate resilient road asset management; (ii) improving road safety; (iii) enhancing road construction supervision and monitoring; and (iv) gender mainstreaming. The revision of the TA activities is formalized through a change to the project Procurement Plan, with the rationale and justifications elaborated in the updated Project Procurement Strategy for Development. Details of the proposed revisions are summarized in Table 3 under Section II.

45. **Several activities under Component 3 revolving around road asset management are integrated into Component 1,** which focuses on upgrading the existing Road Inventory System at MIPU-PWD to a RAMS. The integration enables efficient implementation that synchronizes the design and development of the RAMS as a tool with key institutional capacity building efforts for operationalizing the RAMS, including road asset data collection, the development of the asset condition inspection manual, and the establishment of an Asset Management Unit to utilize the RAMS. Two TA activities are cancelled, either because MIPU is already receiving such support from other development partners or because a change of the government priority. Two new TA activities are added,

² The exchange loss is US\$4.70 million as of April 2024.



with one focusing on support the GoV to establish a critical Road Safety Authority and another focusing on developing an ICT tool to enable PWD to effectively inspect and monitor on-site works during construction.

46. Based on the revised activities, the project's result indicators are updated accordingly to align the monitoring of project outputs from the revised TA activities (intermediate result indicators) with project outcomes and impact. Details of the proposed update to the Result Framework is summarized in Table 4 of Section II.

47. **The restructuring involves introducing a PSC** to the project implementation arrangement. The PSC aims to enhance coordination across relevant government agencies and facilitate the process in resolving any issues that may require interventions from government entities beyond the implementing agency MIPU. This mechanism is introduced in response to previous delays observed under the project due to the less-than-optimal collaboration among relevant government agencies.

48. **Corporate Commitments:** The proposed AF-II will cover the financing shortfall for the original project without any change to the original project scope. The appraisal of the AF-II against WBG corporate commitments is retained as the original project and summarized below:

- a. **Paris Alignment:** The proposed AF-II does not introduce any additional scope compared to the original project, which was approved prior to the Paris Agreement Alignment, and is not inconsistent with Paris Alignment principles. Considering that the project finances rehabilitation of existing roads with a focus on rural accessibility, the proposed AF-II will have a negligible impact on Vanuatu's low greenhouse gas (GHG) emissions development pathways. Risks from climate hazards are considered acceptable, given there are no changes to the climate change and disaster risk screening conducted for the original project (see paragraph below), and climate resilient designs are being implemented to project roads to mitigate these risks.
- b. **Climate Change:** The climate change and disaster risk screening applied to the original project remains applicable, considering no change is involved as a result of the AF-II in terms of the project location, risk exposure, and vulnerability to flooding. All climate adaptation measures identified at the appraisal of the original project remain applicable. With detailed engineering designs being completed for project roads, more site-specific resilient engineering solutions are introduced such as improved drainages, slope stabilization measures, and concrete reinforced road bases. The proposed AF therefore retains the same level of climate co-benefits as the original project. The result framework includes climate change indicators at both PDO and intermediate level. GHG accounting and shadow pricing of carbon analyses are included in the updated economic appraisal.
- c. **Gender:** The design of the original project was informed by a gender analysis based on field data collection and community consultations. The analysis benefitted from a set of guiding principles, in alignment to the government priorities and the World Bank Guidance Note on Mainstreaming Gender in Road Transport and building on experience of ongoing projects financed by the World Bank and other development partners in the transport sector. The original project was gender tagged. Given that the proposed AF-II does not involve any changes to the project scope and activities related to gender, the proposed AF remains qualified for the gender tag. The proposed AF-II will continue to support the implementation of the Gender Action Plans at MIPU, promoting employment opportunities for women under the project, and actively identifying and minimizing project-induced risks of GBV/VAC.
- d. **Citizen Engagement:** The proposed AF-II will continue to ensure that project communities and stakeholders are informed and involved in all stages of project implementation. The project GRM is in



place and fully operationalized. Community outreach and training is being carried out on GBV/VAC and road safety, and grievances are regularly monitored and addressed. The result indicators related to citizen engagement (GRM indicator) remains applicable. The PIU will work on further dissemination of the GRM.

C. Financial Management

49. Given the moderately satisfactory financial management performance under the original project, the existing financial management arrangements and accountability will continue serving the proposed AF-II. The financial management appraisal for the proposed AF-II was carried out according to the World Bank Policy and World Bank Directive: Investment Project Financing, updated March 13, 2023. The project financial management arrangements for the proposed AF-II follow the Guidance Note of the World Bank’s Investment Project Financing for Additional Financing. The pooled Designated Account already opened under the original financing will be used for receipts of IDA funds (both IDA credits and IDA grant) under this AF-II, the project general ledger code in Smartstream accounts will be used for the AF-II including IDA credit and IDA grant accounts to record funds receipts and disbursements, and funds will physically sit in the one central treasury account managed by MFEM. The project disbursement category remains unchanged (Table 5).

Table 5: Disbursement Categories (Allocation of IDA Credit Proceeds, US\$ equivalent)

Category	Additional Grant Allocated	Additional Credit Allocated	SML Allocated	Percentage of Expenditures to be Financed (inclusive of Taxes)
(1) Goods, works, non-consulting services, consulting services, Operating Costs, and Training and Workshops for Parts 1, 2, and 3 of the Project	12.6	15.3	2.1	100%
(2) Emergency Expenditures under Part 4 of the Project	0	0	0	100%
Total Amount	12.6	15.3	2.1	

50. The “Operating Costs” definition in the AF-II includes audit fees. The audit fees were not included in the OF and AF-I because these were considered as consulting services. However, for all projects in Vanuatu, the procurement of the audit service is done by the Vanuatu National Audit Office instead of the implementing entities, therefore the audit fees are not consulting services to be procured by MIPU for VC RTP but an operating cost. As such, the GoV reported the audit fees under operating costs in the project budget approved by the World Bank in September 2022. The definition of Operating Costs is being updated accordingly to align with the project budget approved by the World Bank. The financing from OF and first AF-I also allow audit fees under the operating costs; hence, the definition of Operating Costs in both OF and AFI will be updated accordingly.

51. The AF-II will continue to use all disbursement methods (advance to designated account, reimbursement, direct payment, and special commitments). The ceiling of the Designated Account, minimum value of Applications for direct payment, Reimbursement and Special Commitment, and supporting documentation are set out in the Project’s Disbursement and Financial Information Letter. To the extent practical, funds from IDA SML maybe exhausted first before funds from the IDA grant and credits are utilized. Covering all sources of funds, the project



Annual Work Program and Budget will be prepared and submitted to the World Bank for No-Objection no later than July 31 each year, quarterly Interim Financial Reports will be required to be submitted to the World Bank no later than 45 days after the end of the reporting period, and annual audited financial statements will be required to be submitted to the World Bank no later than six months after the end of the financial year.

D. Procurement

52. **There are no changes to the procurement arrangements for the proposed AF.** The existing procurement systems and implementation arrangements are sufficient to ensure that procurement will be carried out in accordance with the World Bank Procurement Regulations for IPF Borrowers dated September 2023. The PIU/PST's procurement function will continue to be comprised of a National Procurement Specialist and an International Procurement Specialist. The PIU/PST has been intently managing the hiring of the new international procurement specialist so that the transition between the incumbent and replacement is seamless. The most recent procurement plan was approved on April 2, 2024. It indicates that PIU/PST will procure, by September 2024, fifteen activities estimated at US\$65.5 million. Out of these fifteen activities, the procurement of six activities estimated at US\$ 61.6 million is ongoing and most of them are expected to be completed in the coming months. The largest activity with on-going procurement effort is activity No. VU-MIPU-555002-CW-RFB-Upgrading of Saint Michel–Tassiriki, which is estimated at US\$55.6 million, and it is under the bid evaluation stage. Other than these six activities currently being procured, there are nine activities estimated at US\$3.9 million, all consultancy services, in which the terms of reference are yet to be finalized and the procurement process to start.

E. Social (including Safeguards)

53. **There are no changes to the social safeguards approach and arrangements for the proposed AF-II.** The Abbreviated Resettlement Action Plan (ARAP) and GBV/VAC Strategy prepared for the original project VCRTTP remain relevant and appropriate for the anticipated risks. The nature of expected impacts associated with the planned works fall within the types of anticipated impacts covered by the ARAP. The ARAPs are being updated based on a detailed design for each of the contract packages. The ARAP for Package 1 has been updated, cleared by the World Bank, and satisfactorily implemented. Updating of the ARAP with respect to the other works contract packages is underway and expected to be completed by the end of May 2024. The preparation and implementation of the Project and safeguard instruments incorporate a consultative process with local traditional leaders and communities, as guided by the approved Stakeholder Engagement Plan. Project information material is disseminated in locally used languages as well as presented in local community meetings. The PIU/PST is being supported by an international social safeguard specialist, with support from a national environmental safeguard specialist and a national community liaison officer and gender specialist to provide overall social safeguard management assistance. The national social safeguard specialist resigned in March 2024, and the PIU has commenced the selection process for a replacement.

F. Environment (including Safeguards)

54. **Similar to the original project, the proposed AF-II is a Category B project under the World Bank Safeguards Policy.** Activities and investments are not likely to cause significant or irreversible environmental impacts. The proposed AF-II is for cost overrun. There is no change to the project scope and impact. The Environmental and Social Safeguards profile, potential impacts, and management approach for the AF-II remain the same. The location and type of infrastructure to be built remain the same as previously assessed by the current



ESIA under the original project VCRTTP. The project's instruments (ESIA and ESMP) have been updated, approved, and disclosed to accommodate changes in design. The approved ESMPs have been included in the bidding documents.

55. **An Environmental Impact Assessment (EIA) for the extraction of materials from the Navaka River for Package 1 was prepared by MIPU, and accepted by the World Bank in December 2023.** The EIA report is supplementary to the project's ESIA, and impact assessment is focused on material extraction in the Navaka River. The assessment highlights the following potential impacts, among others: (i) depletion of geologic resource, (ii) change in river hydrology, (iii) risk of pollution of river water (water quality), and (iv) risk of impacts to freshwater biota due to adverse impacts on fluvial features. The existing ESIA has covered a safeguards management approach for aggregate materials sourcing. An emerging issue is a probable shortfall of construction materials if all are sourced from sites along the Navaka River covered under the current EIA. An additional quantity of construction materials is likely to be needed. The Navaka River is being considered as one of the alternatives for additional materials sourcing. The PIU/PST will conduct thorough assessments (technical, environmental, and social aspects) on the feasibility of this option. If this is deemed feasible, the EIA for the Navaka River will need to be updated accordingly. The World Bank will review and provide clearance on the EIA.

56. Following VCRTTP institutional arrangement, PIU/PST is being supported by an experienced international environmental safeguards specialist and a national environmental safeguards specialist; who are responsible for the overall performance of the project's safeguards implementation on environmental aspects; ensuring that the World Bank's safeguard policies, as well as the GoV regulations, are adequately met.

G. Other Safeguard Policies (if applicable)

V. WORLD BANK GRIEVANCE REDRESS

57. **Grievance Redress.** Communities and individuals who believe that they are adversely affected by a project supported by the World Bank may submit complaints to existing project-level grievance mechanisms or the World Bank's Grievance Redress Service (GRS). The GRS ensures that complaints received are promptly reviewed in order to address project-related concerns. Project-affected communities and individuals may submit their complaint to the World Bank's independent Accountability Mechanism (AM). The AM houses the Inspection Panel, which determines whether harm occurred, or could occur, as a result of World Bank non-compliance with its policies and procedures, and the Dispute Resolution Service, which provides communities and borrowers with the opportunity to address complaints through dispute resolution. Complaints may be submitted to the AM at any time after concerns have been brought directly to the attention of World Bank Management and after Management has been given an opportunity to respond. For information on how to submit complaints to the World Bank's Grievance Redress Service (GRS), please visit <http://www.worldbank.org/GRS>. For information on how to submit complaints to the World Bank's Accountability Mechanism, please visit <https://accountability.worldbank.org>

**VI. SUMMARY TABLE OF CHANGES**

	Changed	Not Changed
Results Framework	✓	
Components and Cost	✓	
Loan Closing Date(s)	✓	
Implementing Agency		✓
Project's Development Objectives		✓
Cancellations Proposed		✓
Reallocation between Disbursement Categories		✓
Disbursements Arrangements		✓
Safeguard Policies Triggered		✓
EA category		✓
Legal Covenants		✓
Financial Management		✓
Procurement		✓

VII. DETAILED CHANGE(S)**COMPONENTS**

Current Component Name	Current Cost (US\$, millions)	Action	Proposed Component Name	Proposed Cost (US\$, millions)
Component 1: Sectoral and Spatial Planning Tools	0.28	Revised	Component 1: Sectoral and Spatial Planning Tools	2.00
Component 2: Climate Resilient Infrastructure Solutions	107.55	Revised	Component 2: Climate Resilient Infrastructure Solutions	134.21
Component 3: Strengthening the Enabling Environment	4.97	Revised	Component 3: Strengthening the Enabling Environment	6.59



Component 4: Contingent Emergency Response	0.00	No Change	Component 4: Contingent Emergency Response	0.00
TOTAL	112.80			142.80

LOAN CLOSING DATE(S)

Ln/Cr/Tf	Status	Original Closing	Current Closing(s)	Proposed Closing	Proposed Deadline for Withdrawal Applications
IDA-65310	Effective	31-Dec-2025	31-Dec-2025	31-Dec-2026	30-Apr-2027
IDA-69990	Effective	31-Dec-2025	31-Dec-2025	31-Dec-2026	30-Apr-2027
IDA-D5500	Effective	31-Dec-2025	31-Dec-2025	31-Dec-2026	30-Apr-2027
IDA-D9260	Effective	31-Dec-2025	31-Dec-2025	31-Dec-2026	30-Apr-2027

Expected Disbursements (in US\$)

Fiscal Year	Annual	Cumulative
2020	258,414.00	258,414.00
2021	478,366.00	736,780.00
2022	5,386,173.00	6,122,953.00
2023	6,738,271.00	12,861,224.00
2024	7,500,000.00	20,361,224.00
2025	55,000,000.00	75,361,224.00
2026	62,000,000.00	137,361,224.00
2027	5,438,774.00	142,799,998.00

SYSTEMATIC OPERATIONS RISK-RATING TOOL (SORT)

Risk Category	Latest ISR Rating	Current Rating
Political and Governance	● Moderate	● Moderate
Macroeconomic	● Substantial	● Moderate
Sector Strategies and Policies	● Moderate	● Moderate
Technical Design of Project or Program	● Moderate	● Moderate



Institutional Capacity for Implementation and Sustainability	● Substantial	● Substantial
Fiduciary	● Substantial	● Substantial
Environment and Social	● Substantial	● Substantial
Stakeholders	● Moderate	● Moderate
Other	● Low	● Low
Overall	● Substantial	● Substantial

LEGAL COVENANTS – Vanuatu Climate Resilient Transport Project Additional Financing II (P181577)

Sections and Description

The Recipient shall, by no later than one (1) month after the Effective Date (or such other date which the Association has confirmed in writing to the Recipient), establish and thereafter maintain throughout the Project implementation period, a Project Steering Committee, with a mandate, composition and resources satisfactory to the Association, which shall be: (a) responsible for, inter alia: providing inter-agency coordination for the Project and addressing any issues related to Project implementation; and (b) include Director General level senior representatives (or their delegates) from Ministry of Finance and Economic Management, Ministry of Infrastructure and Public Utilities, and other relevant agencies, all in accordance with the Project Operations Manual.

Conditions

Type	Financing source	Description
Effectiveness	IBRD/IDA	The Amendment Letter has been executed and delivered on behalf of the Recipient (Art. 4.01 of the Financing Agreement)
Disbursement	IBRD/IDA	No withdrawals shall be made for Emergency Expenditures under Category (2), unless and until the Association is satisfied that all of the conditions listed in Section I.E.2 of Schedule 2o to the Original Financing Agreement have been met in respect of said expenditures (Section III.B.1(b) of Schedule 2 to the Financing Agreement).
Effectiveness	IBRD/IDA	The Recipient has adopted an updated Project Operations Manual in form and substance satisfactory to the Association.



VIII. RESULTS FRAMEWORK AND MONITORING

Results Framework

COUNTRY: Vanuatu

Vanuatu Climate Resilient Transport Project Additional Financing II

Project Development Objective(s)

To improve the climate resilience of the Recipient's road network, with emphasis on the selected project road, and in the event of an Eligible Crisis or Emergency, to provide an immediate response to the Eligible Crisis or Emergency.

Project Development Objective Indicators by Objectives/ Outcomes

Indicator Name	PBC	Baseline	Intermediate Targets					End Target
			1	2	3	4	5	
Improve the climate resilience of the Recipient's road network								
Identified planning tools adopted and being used to improve climate resilience of roads (Number)		0.00	0.00	0.00	0.00	0.00	2.00	2.00
<i>Action: This indicator has been Revised</i>	<i>Rationale: Tagged as climate result indicator. Adding the definition for the indicator. Expand the monitoring period by 12-month to cover the project extension.</i>							
Length of road upgraded with climate resilience measures (Kilometers)		0.00	0.00	0.00	0.00	5.00	20.00	65.00
<i>Action: This indicator has been Revised</i>	<i>Rationale: Tagged as climate result indicators. Expand the monitoring period by 12-months to cover the project extension.</i>							



Indicator Name	PBC	Baseline	Intermediate Targets					End Target
			1	2	3	4	5	
Number of bridges constructed with climate resilience measures (Number)		0.00	0.00	0.00	0.00	0.00	5.00	10.00
Action: This indicator has been Revised	Rationale: <i>Tagged as climate result indicator. Expand the monitoring period by 12-months to cover the project extension. Update the end target to align with the final civil work packages.</i>							
Identified enabling environment solutions adopted and implemented (Number)		0.00	0.00	1.00	2.00	3.00	4.00	4.00
Action: This indicator has been Marked for Deletion	Rationale: <i>Integrated under PDO Result Indicator 'Identified planning tools adopted and being used to improve climate resilience of roads '.</i>							
Number of people that benefit from improved access to sustainable transport infrastructure and services (Number)		0.00	0.00	0.00	0.00	5,000.00	30,000.00	40,000.00
Action: This indicator is New	Rationale: <i>To align with the New WBG Corporate Scorecard Result Indicator that measures WBG projects' contribution to SDG 11.2 'access to safe, affordable, accessible and sustainable transport systems for all'.</i>							
Number of people with enhanced resilience to climate risks due to gained access to climate-resilient infrastructure (Number)		0.00	0.00	0.00	0.00	5,000.00	30,000.00	40,000.00
Action: This indicator is New	Rationale:							



Indicator Name	PBC	Baseline	Intermediate Targets					End Target
			1	2	3	4	5	
<i>The New WBG Corporate Scorecard Result Indicator that measures people benefitting directly and indirectly from improved climate risk management and increased climate resilience as a result of the WBG investment.</i>								

Intermediate Results Indicators by Components

Indicator Name	PBC	Baseline	Intermediate Targets					End Target
			1	2	3	4	5	
Component 1: Sectoral and Spatial Planning Tools								
Road Inventory Management System upgraded into RAMS with a module to integrate climate and disaster risk profiles of road assets (Yes/No)		No	No	No	No	No	Yes	Yes
Action: This indicator has been Revised	Rationale: <i>Tagged as climate result indicator. Revise the indicator name to accurately reflect the project activity. Expand the monitoring period by 12-months to cover the project extension.</i>							
Percentage of the road network covered under the RAMS (Percentage)		0.00	0.00	0.00	0.00	0.00	30.00	60.00
Action: This indicator is New	Rationale: <i>To measure the operationalization of the RAMS.</i>							



Indicator Name	PBC	Baseline	Intermediate Targets					End Target
			1	2	3	4	5	
Component 2: Climate Resilient Infrastructure Solutions								
Bridges and large box culverts constructed and repaired (Number)		0.00	0.00	0.00	0.00	5.00	14.00	14.00
Action: This indicator has been Revised	Rationale: <i>To revise the end target to align with the final civil work packages. Expand the monitoring period by 12-months to cover the project extension.</i>							
Culverts installed (Number)		0.00	0.00	0.00	0.00	30.00	142.00	142.00
Action: This indicator has been Revised	Rationale: <i>Update the indicator name to include both box culverts and pipe culverts. Increase the end target to 142 based on the final designs. Expand the monitoring period by 12-months to cover the project extension.</i>							
South Santo Road under piloting of multi-year performance-based maintenance contracts supported by VCRTP (Kilometers)		0.00	0.00	0.00	0.00	0.00	0.00	65.00
Action: This indicator has been Marked for Deletion	Rationale: <i>The activity on piloting multiyear performance-based maintenance program is dropped.</i>							
Satisfactory road safety audit at design, construction, and post-construction phases (Number)		0.00	0.00	0.00	0.00	3.00	3.00	3.00
Action: This indicator has been Revised	Rationale: <i>Update the indicator name to add one more phase of audit during construction. Expand the monitoring period by 12-months to cover the project extension.</i>							



Indicator Name	PBC	Baseline	Intermediate Targets					End Target
			1	2	3	4	5	
<i>Change the measurement to Numbers.</i>								
Number of people with enhanced access to transportation services (Number)		0.00	0.00	0.00	0.00	0.00	15,000.00	29,700.00
Action: This indicator has been Marked for Deletion	Rationale: <i>This indicator is now replaced with the new PDO Indicator 'Number of people that benefit from improved access to sustainable transport infrastructure and services'</i>							
Component 3: Strengthening the Enabling Environment								
The MIPU-PWD's construction material testing laboratory accredited (Yes/No)		No	No	No	No	No	Yes	Yes
Action: This indicator has been Marked for Deletion	Rationale: <i>The activity on establishing the testing laboratory is implemented by the DSC.</i>							
Technical specifications for road design updated (Yes/No)		No	No	No	No	No	Yes	Yes
Action: This indicator has been Marked for Deletion	Rationale: <i>Another development partner has developed a Climate Resilient Road Design Guide and handed it over to PWD in November 2023.</i>							
An MoU signed between MIPU and MCCA for inter-ministerial collaboration (Yes/No)		No	No	Yes	Yes	Yes	Yes	Yes



Indicator Name	PBC	Baseline	Intermediate Targets					End Target
			1	2	3	4	5	
Action: This indicator has been Revised	Rationale: <i>Expand the monitoring period by 12-month to cover the project extension.</i>							
Proportion of Contractor staff who sign Codes of Conduct (Percentage)	0.00	0.00	0.00	0.00	0.00	100.00	100.00	100.00
Action: This indicator has been Revised	Rationale: <i>Expand the monitoring period by 12-month to cover the project extension.</i>							
Proportion of Contractor staff who attend GBV & VAC training (Percentage)	0.00	0.00	0.00	0.00	0.00	100.00	100.00	100.00
Action: This indicator has been Revised	Rationale: <i>Expand the monitoring period by 12-month to cover the project extension.</i>							
Development of the Gender Responsive Policy Inputs to VISIP M&E (Yes/No)	No	No	No	No	No	No	Yes	Yes
Action: This indicator has been Marked for Deletion	Rationale: <i>This indicator is now replaced by indicator 'People benefitting from greater gender equality, of which (%) from actions that expand and enable economic opportunities'</i>							
People benefitting from greater gender equality (Percentage)	10.00	10.00	11.00	11.00	11.00	12.00	12.00	12.00
Action: This indicator has been Revised	Rationale: <i>The new WBG Corporate Scorecard result indicator that measures the number of people directly benefitting from operations supported by the WBG that intentionally seek to advance gender equality.</i>							



Indicator Name	PBC	Baseline	Intermediate Targets					End Target
			1	2	3	4	5	
Public transport providers and drivers trained in GBV prevention (Yes/No)	No	No	No	No	No	Yes	Yes	Yes
Action: This indicator has been Marked for Deletion	Rationale: <i>The project does not involve counterparts from public transport providers and drivers.</i>							
Institutional and policy arrangements provided to support the GoV in establishing the Vanuatu Road Safety Authority (Yes/No)	No	No	No	No	No	No	Yes	Yes
Action: This indicator is New	Rationale: <i>To align with the revisions to the TA activities.</i>							
Enhanced ICT-based Construction Site Inspection and Monitoring System (Yes/No)	No	No	No	No	No	Yes	Yes	Yes
Action: This indicator is New	Rationale: <i>To align with the revisions to the TA activities.</i>							
Citizen engagement								
Grievances registered related to delivery of project benefits that are addressed (Percentage)	0.00	0.00	0.00	75.00	75.00	75.00	75.00	75.00
Action: This indicator has been Revised	Rationale: <i>Expand the monitoring period by 12-months to cover the project extension.</i>							



Indicator Name	PBC	Baseline	Intermediate Targets					End Target
			1	2	3	4	5	

Monitoring & Evaluation Plan: PDO Indicators

Indicator Name	Definition/Description	Frequency	Datasource	Methodology for Data Collection	Responsibility for Data Collection
Identified planning tools adopted and being used to improve climate resilience of roads	Monitoring the delivery and adoption of road sector planning tools developed under the project activities that contribute to the enhanced climate resilience of the road infrastructure, including (i) RAMS with climate modules; (ii) road condition datasets; and (iii) asset condition inspection manual.	Continuous	Project Implementation Status Reports (PISR)	Accumulatively tracking the completion of planning tools listed in the definition and their adoption for use by PWD.	PIU
Length of road upgraded with climate resilience measures	Monitoring the km of project roads rehabilitated with climate resilience measures as per the detailed designs.	Continuous	PISR	Accumulatively tracking the kms of project roads completed with full implementation of climate resilience measures as per the detailed design.	PIU



Number of bridges constructed with climate resilience measures	Monitoring the completion of project bridges (12, including foot bridges) with full implementation of climate resilience designs.	Continuous	PISR	Accumulatively tracking the number of bridges constructed and/or repaired with climate resilience measures.	PIU
Identified enabling environment solutions adopted and implemented		Continuous	PISR	Reviewing PISR	PIU
Number of people that benefit from improved access to sustainable transport infrastructure and services	The New WBG Corporate Scorecard Result Indicator that measures the number of direct beneficiaries that experience improved access to sustainable transport infrastructure and services that have been built or rehabilitated through a WBG-financed project.	Quarterly	PISRs	Applying the percentage of civil works completed along the SSR to the total population (40,000) living on the Island of Espiritu Santo.	PIU
Number of people with enhanced resilience to climate risks due to gained access to climate-resilient infrastructure	The New WBG Corporate Scorecard Result Indicator that measures people benefitting directly and indirectly from improved climate risk management and increased climate resilience as a result of the WBG investment. It will consider how WBG interventions enhance resilience of their	Quarterly	PISRs	Applying the percentage of civil works completed along the SSR to the total population (40,000) living on the Island of Espiritu Santo.	PIU



	beneficiaries by including structural investments such as access to climate-resilient infrastructure.				
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Monitoring & Evaluation Plan: Intermediate Results Indicators

Indicator Name	Definition/Description	Frequency	Datasource	Methodology for Data Collection	Responsibility for Data Collection
Road Inventory Management System upgraded into RAMS with a module to integrate climate and disaster risk profiles of road assets	Monitoring the design and completion of the RAMS with the climate risk module.	Continuous	PISR	Mark 'Yes' when the RAMS with climate module is completed and handed over to MIPU.	PIU
Percentage of the road network covered under the RAMS	Measures the percentage of Vanuatu's 2,900km road network that has been covered in the operationalized RAMS at project completion.	Quarterly.	PISRs	Counting the kilometers of road managed in the operationalized RAMS with full road inventory and asset condition data.	PIU
Bridges and large box culverts constructed and repaired	Monitoring the completion of the bridge and large box culverts.	Continuous	PISR	Counting the number of the completed bridge and large box culverts..	PIU
Culverts installed	Monitoring the completion of box and pipeline culverts designed along the project road for effective flood/water crossing and	Continuous	PISR	Counting the number of culverts (box and pipe) installed.	PIU



	passage.				
South Santo Road under piloting of multi-year performance-based maintenance contracts supported by VCRTTP		Continuous	PISR	Reviewing PISR	PIU
Satisfactory road safety audit at design, construction, and post-construction phases	Monitoring the numbers of road safety audit carried by the PIU Road Safety Auditor for all three work packages for three times - at design stage, at construction phase, and at post-construction phase.	Three times	PISR	Counting the number of road safety audit completed at each stage.	PIU
Number of people with enhanced access to transportation services		Annual	PISR for the distance of road upgraded and 2016 mini-census for the number of beneficiaries	The number of people with enhanced access to transportation services will be measured by multiplying the total number of beneficiaries by the proportion of the road upgraded.	PIU
The MIPU-PWD's construction material testing laboratory accredited		Once	PISR	Reviewing PISR	PIU
Technical specifications for road design updated		Continuous	PISR	Reviewing PISR	PIU
An MoU signed between MIPU and MCCA for inter-ministerial collaboration	Measuring the signing of the MoU between MIPU and MCCA on data exchange and collaboration.	Once	PISRs.	Mark 'Yes' when the MoU between MIPU and MCCA is signed.	PIU



Proportion of Contractor staff who sign Codes of Conduct	Monitoring the proportion of contractor staff signed the Code of Conduct.	Annually	PISRs	Counting the percentage of cumulative Contractor staff who signed Codes of Conduct over cumulative total Contractor Staff.	PIU
Proportion of Contractor staff who attend GBV & VAC training	Monitoring the proportion of contractor's staff who have been trained on GBV/VAC.	Annually	PISRs	Counting the percentage of cumulative Contractor staff who were trained on GBV/VAC over cumulative total Contractor Staff.	PIU
Development of the Gender Responsive Policy Inputs to VISIP M&E	The indicator will measure whether the gender gap of women's employment in transport related agencies and projects is addressed.	Continuous	PISR	Reviewing PISR	PIU
People benefitting from greater gender equality	Monitoring the accumulative percentage of female-employed-days over total employed-days paid by the project for PIU/PST, DSC, and Contractors.	Continuous	PISR	Reviewing PISR	PIU
Public transport providers and drivers trained in GBV prevention		Once	PISR	Reviewing PISR	PIU
Institutional and policy arrangements provided to support the GoV in establishing the Vanuatu Road Safety Authority	Measuring the delivery of institutional and policy inputs that support the establishment of the	Annual	PISR	Mark 'Yes' when the inputs are delivered contributing to the establishment of the	PIU



	Vanuatu Road Safety Authority			Road Safety Authority.	
Enhanced ICT-based Construction Site Inspection and Monitoring System	Measuring the delivery of the ICT tool enhancement for construction site inspection and monitoring for PWD.	Annual	PISR	Mark 'Yes' when the ICT tool for is delivered to MIPU/PWD.	PIU
Grievances registered related to delivery of project benefits that are addressed	Monitoring the percentage of grievances registered that are addressed timely.	Continuous (project website); every month (monthly PISR)	Project website and PISR	Counting the percentage of grievances that are addressed within the timeframe required by the GRM over total grievances received.	PIU

**Annex 1: Legal Covenants**

Loan/Credit	Description of Legal Covenants	Status
IDA-65310	The Recipient shall, by no later than three months after the Effective Date, establish and thereafter maintain, until the Closing Date, a Project Implementation Unit within the Ministry of Infrastructure and Public Utilities, with a mandate, composition and resources satisfactory to the Association, which shall be responsible for day-to-day implementation of the Project. The Recipient shall ensure that Project Implementation Unit includes the following minimum personnel: (i) a Project Implementation Unit head; (ii) a finance manager; and (iii) a community liaison officer; each with terms of reference, qualifications and experience satisfactory to the Association. (Section I.A.1 and I.A.2 of Schedule 2 to the Financing Agreement)	Substantially complied with. Pending the recruitment of the new Deputy Head of the PIU. The previous Deputy Head of the PIU resigned recently in Feb 2024.
IDA-65310	The Recipient shall, by no later than six months after the Effective Date, establish and thereafter maintain, until the Closing Date, a Project Support Team within the Project Implementation Unit, with a mandate, composition and resources satisfactory to the Association, which shall be responsible for supporting the Project Implementation Unit to implement the Project. The Recipient shall ensure that Project Support Team includes the following minimum personnel: (i) a road and bridge engineer/Project Support Team coordinator; (ii) a procurement specialist; (iii) a financial management specialist; and (iv) an environmental safeguards specialist; each with terms of reference, qualifications and experience satisfactory to the Association. (Section I.A.3 and I.A.4 of Schedule 2 to the Financing Agreement)	Substantially complied with. Pending the recruitment of the new IPS and IFMS. The incumbent IPS has agreed to stay in service until the replacement is hired while the resignation of the IFMS will be effective in May 2024.
IDA-65310	The Recipient shall: (a) by not later than six months after the Effective Date, prepare and adopt a Project Operations Manual; and (b) thereafter ensure that the Project is carried out in accordance with the Project Operations Manual. (Sections I.B.1 and I.B.2 of Schedule 2 to the Financing Agreement)	Complied with. The POM was approved by the Minister of MIPU on January 18, 2021 and remain sufficient and applicable to the proposed AF-II.
IDA-65310	The Recipient shall, by no later than twelve months after the Effective Date, execute a Memorandum of Understanding, under terms and conditions satisfactory to the Association, between the Ministry of Infrastructure and Public Utilities Public Works Department and the Vanuatu Meteorology and Geo-Hazards Department and National Disaster Management Office within the Ministry of Climate Change Adaptation. (Section I.C.1 of Schedule 2 to the Financing Agreement)	Complied with. MIPU and MCCA have an MoU in place and data exchange and collaboration has been on going.
IDA-65310	The Recipient shall carry out, jointly with the Association, not later than three years after the Effective Date, or such other	Complied with. The MTR was carried out between



Loan/Credit	Description of Legal Covenants	Status
	period as may be agreed with the Association, a mid-term review of the Project. (Section II.2 of Schedule 2 to the Financing Agreement)	May 29 – June 2, 2023.
IDA-65310	The Recipient shall prepare and furnish to the Association, by not later than six months from the Effective Date and July 31 of each subsequent year during the implementation of the Project, for the Association’s review and no-objection, an Annual Work Plan and Budget for the Project. The Recipient shall ensure that the Project is implemented in accordance with the Annual Work Plan and Budget accepted by the Association for the respective fiscal year. (Sections I.D.1 and I.D.2 of Schedule 2 to the Financing Agreement)	Complied with The Annual Work Plan and Budget for the Project have been submitted on time and cleared by the World Bank.



Annex 2: Detailed Revisions to the Project Activities

Component Activities		Proposed Changes	Rationale and Notes
Component 1: Sectoral and Spatial Planning Tools			
1	Upgrading Road Inventory System into RAMS	No change	Some activities originally under subcomponent 3.1 related to RAMS are integrated into this activity for efficient implementation, including (i) develop road asset condition data collection; (ii) develop road/bridge asset condition inspection manual; (iii) develop inputs to support MIPU establishing an Asset Management Unit.
Component 2: Climate Resilient Infrastructure Solutions			
1	Construct 10 new bridges, repair 3 existing bridges, and replace 1 existing bridge	No change	This activity was appraised and approved under AF-I.
2	Rehabilitate 60 km of road sections between Saint Michel and Tasiriki	No change	—
3	Rehabilitate 5 km of road sections between Sarakata Bridge and Saint Michel	No change	This activity was appraised and approved under AF-I.
4	Construction of 102 single and multicell box culverts	Revised	Specific numbers of culverts are taken out as these numbers were estimates at the appraisal stage, subject to change in the detailed engineering design.
5	Design and Supervision Consultancy (DSC) services	No change	—
6	Piloting multi-year performance-based road maintenance after the defect liability period	Dropped	Due to delays in initial project implementation, there won't be sufficient time left under the project, even after the proposed extension, to cover a multi-year maintenance program.
7	Establishment of a small-sized quality control laboratory near the project site	Integrated into DSC works	The initial intention of this activity was to enable PWD to carry out material tests for gravel from the Navaka River for project use. The PIU eventually decided to have the material testing carried out by the DSC.
Component 3: Strengthening the Enabling Environment			
1	Road condition assessment on SSR	Integrated into Component 1	To streamline for efficient implementation, as the road condition data will be fed into the RAMS. The coverage of the road asset condition data collection is expanded from project road to the entire road network in Vanuatu (about 2,900 km).
2	Update technical specifications based on the 2016 Vanuatu Resilient Road Manual	Dropped	Another development partner has developed a Climate Resilient Road Design Guide and handed it over to the PWD in November 2023.
3	Implement the transition plan to operationalize the RAMS	Integrated into Component 1	To streamline for efficient implementation. The support to operationalize the RAMS will be provided to the MIPU by the consultant responsible for the RAMS



			development.
4	Strengthen road maintenance supervision capacity of PWD	Integrated into Component 1	To streamline for efficient implementation. The activity will focus on develop road/bridge asset condition inspection manuals for effective maintaining planning.
5	Undertake road safety audits and road safety awareness raising	No change	—
6	Build climate change capacity within MIPU in collaboration with MCCA	No change	—
7	Implement the Gender Action Plan and the GBV/VAC Strategy	No change	Implemented by the CLO/Gender Specialist under the PIU.
8	Provide institutional and policy support to GoV to establish a Road Safety Authority	Added	Requested by the GoV as a new priority area for TA.
9	Develop an ICT system for PWD for Construction Site Inspection and Monitoring	Added	Requested by the GoV as a new priority area for TA.
10	Finance the project operating costs, including PIU/PST	No change	—
Component 4: Contingent Emergency Response			



Annex 3. Economic Analysis

1. **A traditional Cost Benefit Analysis conducted at appraisal in 2019 and at the AF-I in 2021 was updated using the Roads Economic Decision (RED) Model and the Road Safety Screening and Appraisal Tool (RSSAT).³** The analysis follows the same methodology used at appraisal and the AF-I and focuses on the economic appraisal of Component 2, for which investments amount to 94 percent of project cost at the second AF. It based on the latest capital investment costs, construction schedule, and 2021 traffic. The benefits quantified included the reduction of VOC, travel time costs, carbon dioxide (CO₂) emission costs, road safety costs, and road maintenance costs.

2. **The updated economic analysis at the second AF included the following assumptions:**
 - (a) Evaluation period of 20 years from 2023 to 2042;
 - (b) Discount rate of 6 percent;
 - (c) Conversion factor of 0.87 to estimate economic costs;
 - (d) The commencement of the road works in 2024 for the Sarakata Bridge–Saint Michel road section and 2023 for the Saint Michel–Tasiriki road section.
 - (e) The average daily traffic annual increase rate of 2.7 percent per year for passenger vehicles and trucks over the evaluation period, based on estimated GDP growth projections;⁴
 - (f) Generated traffic of 50 percent due to decrease in transport costs;
 - (g) Diverted traffic of 0 percent due to the absence of an alternative road along South Santo Road;
 - (h) Induced traffic of 0 percent to be analytically conservative; and
 - (i) Social cost of carbon of US\$86 per ton equivalent in 2023 increasing to US\$131 per ton equivalent in 2042, based on high scenario for the social cost of carbon derived from the 2017 World Bank guidance note on shadow price of carbon in economic analysis.⁵

3. **The total financial capital cost for the road works on the whole road section is estimated at US\$112.44 million.** Table 1.1 presents the road works characteristics.

Table 1.1. Road Works Characteristics and Costs

Road Section	Road Work	Construction Cost (US\$ million)	Total Cost per Kilometer (US\$ million/km)
Sarakata Bridge –Saint Michel	Resealing	8.24	1.62
Saint Michel–Tasiriki	Upgrading to sealed road, including construction or repair of 14 bridges	104.20	1.76
Total/Average		112.44	1.75

³ RED estimates the annual road agency and user’s costs (vehicle operating costs, travel time costs, and CO₂ emission costs), and RSSAT estimates the road safety costs.

⁴ The IMF predicts that the Vanuatu’s GDP will increase on average by 2.7 percent per year from 2023 to 2028 according to the World Economic Outlook Database, October 2023.

⁵ The guidance note presents low and high scenarios of the social cost of carbon over time, from which the high scenario was used due to positive net CO₂ emission of the project (i.e., analytically conservative).



4. **The overall economic internal rate of return (EIRR) of the project is 8.4 percent and the net present value (NPV) is US\$20.1 million corresponding to the benefit-cost ratio of 1.2.**⁶ These are down from the EIRR of 9.8 percent, the NPV of US\$32.3 million, and the benefit-cost ratio of 1.4 at the AF-I due mainly to the increase of the construction costs. Normal traffic benefits account for 80.4 percent of the project benefits, generated traffic benefits for 20.1 percent, road safety benefits for 1.1 percent, and CO₂ emissions benefits for -1.6 percent.

5. **Sensitivity analysis shows that the project is economically justified even if construction cost is 10 percent higher or if the project benefits are 10 percent lower or both.** If construction costs were 10 percent higher and the project benefits were 10 percent lower, the EIRR would drop to 6.0 percent. Switching values analysis shows that construction costs would have to increase by 23 percent for the NPV to be equal to zero. Table 1.2 presents the results of sensitivity analysis.

Table 1.2. Sensitivity Analysis Results

Indicator	Sensitivity Analysis			
	Base	A: Cost+10%	B: Benefit-10%	C: A & B
EIRR (%)	8.4	7.3	7.2	6.0
NPV (US\$ million)	20.1	11.2	9.2	0.3

6. **A separate road safety impact appraisal was conducted using the RSSAT and the road safety benefits were incorporated in the updated economic analysis.** The project is expected to reduce the fatalities by up to 17 percent per year through road infrastructure upgrading. It is also expected to achieve the Project Safety Impact score of 0.84 on the Sarakata Bridge–Saint Michel section, 0.83 on the Saint Michel–Maniao River section, and 0.99 on the Maniao River–Tasiriki section. The overall road safety benefits are estimated to be US\$2.5 million during the infrastructure lifecycle of 20 years.

7. **The net increase of CO₂ emissions over the 20-year evaluation period are 34,763 tons, corresponding to 1,738 tons per year.** The gross CO₂ emissions without the project are 94,629 tons while those with the project are 129,392 tons. The increase in GHG emissions is attributed to the traffic generated by the road upgrade.

⁶ If the low scenario for the social cost of carbon (i.e., US\$43 per ton equivalent in 2023 increasing to US\$65 per ton equivalent in 2042) is applied, the overall EIRR is 8.5 percent and the NPV is US\$21.0 million corresponding to the benefit-cost ratio of 1.2.