

Solomon Islands

FY2024 Ex-Post Evaluation Report of Japanese Grant Aid Project

“The Project for Upgrading of Kukum Highway”

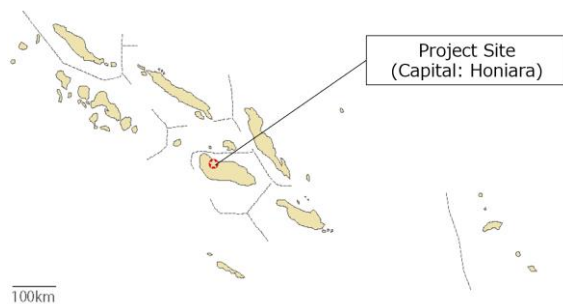
External Evaluator: Kosuke Tomoshige, Fortience Consulting Inc.

0. Summary

This project aimed to mitigate traffic congestion and to enhance traffic safety on the Kukum Highway, a major road in the Solomon Islands, thereby contributing to disaster recovery, disaster prevention, and logistics improvement and to upgrade the existing bridges and roads, as well as improving the operation and management of the road facilities to enhance safety and convenience. Although no specific linkages or synergies with other JICA projects, projects implemented by other Japanese institutions, nor projects by other donors were identified during the planning and implementation period of the project, the project was consistent with the development plan and development needs of the Solomon Islands at the time of planning and ex-post evaluation, and the consistency with the Japan's ODA Policy at the time of planning were also confirmed. Therefore, the relevance and coherence of this project are high. Regarding the project implementation, while both the total project cost and project period slightly exceeded the plan, the efficiency of the project is high. Regarding the effectiveness of the project, none of the quantitative indicators achieved their target values. It was confirmed that qualitative effects such as improved safety and convenience have been secured, but the effectiveness in ensuring smooth traffic during rainfall remained limited to a certain degree. Regarding the impact, it was confirmed that this project improved logistics. Regarding disaster prevention measures for rivers etc., it was confirmed that bridges constructed under this project no longer arise problems even during river flooding caused by heavy rains. Furthermore, while roads still flood during rainy weather, recovery after flooding takes less time compared to before this project, indicating that the anticipated impact has achieved to a certain extent. In light of the above, this project has achieved its objectives only to a certain extent. Therefore, effectiveness and impacts of the project are moderately low. Regarding the sustainability of the project, some issues have been observed in the financial and the current status of operation and maintenance. They are not expected to be improved/resolved. Therefore, sustainability of the project effects is moderately low.

In light of the above, this project is evaluated to be partially satisfactory.

1. Project Description



Project Location
(Source: Prepared by the external evaluator)



Upgraded road and improved roundabout
(Source: Photo taken by the external evaluator)

1.1 Background

The Kukum Highway, which connects the central area of Honiara, the capital of the Solomon Islands, with Honiara International Airport, is a four-lane main road. However, the smooth flow of traffic has been impeded due to several factors. These include insufficient capacity of the busiest intersections to accommodate current traffic volumes, a reduction in the number of lanes at the New Mataniko Bridge in the city centre, which consists of only two lanes (one in each direction), and frequent stopping and parking of buses in front of the Central Market, where vehicles encroach onto the roadway and block one of the two lanes in one direction during peak hours. In addition, deterioration of the pavement has further contributed to these issues, resulting in chronic traffic congestion. Furthermore, due to inadequate drainage facilities, road flooding during the rainy season contributed to increased traffic congestion and accelerated pavement deterioration. Due to inadequate pedestrian crossing facilities, the risk of traffic accidents was high. In April 2014, Honiara was severely affected by a storm, resulting in the Old Mataniko Bridge being washed away, damage to the New Mataniko Bridge, and flooding of roads. This disaster caused a complete disruption of traffic and paralyzed the functioning of the capital. Subsequently, the Old Mataniko Bridge was temporarily restored, and the New Mataniko Bridge was also repaired. However, further measures were required to address the impact of heavy rainfall and to alleviate traffic congestion.

1.2 Project Outline

The objective of this project is to mitigate traffic congestion and to enhance traffic safety by upgrading the existing bridges and roads on the Kukum Highway, a major road in the Solomon Islands, and improving safety and convenience through better operation and management of the road facilities, thereby contributing to disaster recovery, disaster prevention, and logistics improvement.

<Grant Aid Project>

Grant Limit / Actual Grant Amount	3,277 million yen / 3,250 million yen
Exchange of Notes Date / Grant Agreement Date	(Detailed Design) December 2014 / December 2014 (Construction) May 2015 / May 2015
Executing Agency	Ministry of Infrastructure Development
Project Completion	November 2018
Target Area	Honiara City
Main Contractors	The Joint venture of Kitano Construction Corp. and WORLD KAIHATSU KOGYO CO.,LTD.
Main Consultant	Katahira & Engineers International
Preparatory Survey	November 2013–August 2014 (Preparatory Survey) / December 2014–June 2015 (Detailed Design Survey)
Related Projects	[Technical Cooperation Project] • Advisor for Capacity Improvement of Urban Transport Management in Honiara (2024–2026 (Plan)) [Grant Aid Project] • The Project for Reconstructing the Lungga Bridge (1990) • The Project for the Reconstruction of Bridges in East Guadalcanal (2006) [Other International Organization, Aid Agency, etc.] • (Asian Development Bank (hereinafter referred to as “ADB”), Australia, New Zealand) Road Improvement (Sector) Project (2007–2011) • (ADB, Australia, New Zealand, European Commission) Second Road Improvement (Sector) Project (2010–2013) • (ADB, Australia) Transport Sector Development Project (2011–2016) • (ADB) Land and Maritime Connectivity Project (Tranche 1) (2021–Present), (Tranche 2) (2024–Present)

2. Outline of the Evaluation Study

2.1 External Evaluator

Kosuke Tomoshige, Fortience Consulting Inc.

2.2 Duration of Evaluation Study

This ex-post evaluation study was conducted with the following schedule.

Duration of the Study: October 2024–January 2026

Duration of the Field Study: 16 February–27 February 2025, 8 June–14 June 2025

3. Results of the Evaluation (Overall Rating: C¹)

3.1 Relevance/Coherence (Rating: ③²)

3.1.1. Relevance (Rating: ③)

3.1.1.1 Consistency with the Development Plan of the Solomon Islands

At the time of planning of this project, the development plan in the Solomon Islands was the “*National Development Strategy 2011 to 2020*” (hereinafter referred to as “*NDS 2011–2020*”), which identified “infrastructure development” as a priority issue and emphasized the need to revitalize logistics through upgrading the existing roads. In addition, the “*National Transport Plan 2011–2030*” (hereinafter referred to as “*NTP 2011–2030*”) highlighted the importance of upgrading the Kukum Highway connecting international ports and urban hubs to the international airport, as well as upgrading the Old Mataniko Bridge and New Mataniko Bridge. Furthermore, the “*National Infrastructure Investment Plan*” (hereinafter referred to as “*NIIP*,” Target Period: 2013–2023) identified this project, along with other main road development projects, as the highest-priority project in the road sector among the 93 infrastructure development projects expected to be implemented.

At the time of ex-post evaluation, the Solomon Islands' development plan is the “*National Development Strategy 2016 to 2035*” (hereinafter referred to as “*NDS 2016–2035*”), which is a revision of the *NDS 2011–2020*. It sets forth the direction of national development for the 20 years starting from 2016. *NDS 2016–2035* presents five long-term objectives, and for one of them—“Sustained and inclusive economic growth”—to be achieved, it sets forth four medium-term strategies. As one of the medium-term strategies, it sets forth “Expanding and upgrading weather resilient infrastructure and utilities focused on access to productive resources and markets and to essential services” including upgrading road infrastructure. In addition, the “*National Transport Plan 2017–2036*” (hereinafter referred to as “*NTP 2017–2036*”), which was formulated based on the *NDS 2016–2035*, also identifies road rehabilitation

¹ A: Highly satisfactory, B: Satisfactory, C: Partially satisfactory, D: Unsatisfactory

² ④: Very High, ③: High, ②: Moderately Low, ①: Low

as a key priority.

Therefore, this project is in line with these directions both at the time of planning and at the time of ex-post evaluation.

3.1.1.2 Consistency with the Development Needs of the Solomon Islands

The Kukum Highway was the only main road, consisting of four lanes, that connected the central area of Honiara, the capital of the Solomon Islands, with Honiara International Airport. However, the smooth flow of traffic has been impeded due to several factors. These include insufficient capacity of the busiest intersections to accommodate current traffic volumes, a reduction in the number of lanes at the New Mataniko Bridge in the city centre, which consists of only two lanes (one in each direction), and frequent stopping and parking of buses in front of the Central Market, where vehicles encroach onto the roadway and block one of the two lanes in one direction during peak hours. In addition, deterioration of the pavement has further contributed to these issues, resulting in chronic traffic congestion. Furthermore, due to inadequate drainage facilities, road flooding during the rainy season contributed to increased traffic congestion and accelerated pavement deterioration. Due to inadequate pedestrian crossing facilities, the risk of traffic accidents was high. In April 2014, Honiara was severely affected by a storm, resulting in the Old Mataniko Bridge being washed away, damage to the New Mataniko Bridge, and flooding of roads. This disaster caused a complete disruption of traffic and paralyzed the functioning of the capital. Subsequently, the Old Mataniko Bridge was temporarily restored, and the New Mataniko Bridge was also repaired. However, further measures were required to address the impact of heavy rainfall and to alleviate traffic congestion.

According to the executing agency, the Highway remains the only main road connecting the central area of Honiara and Honiara International Airport even at the time of the ex-post evaluation. The New Mataniko Bridge, widened in this project, is also a key infrastructure for easing traffic congestion. Together with the replaced Old Mataniko Bridge, they play a vital role as a resilient infrastructure facility not only in terms of post-disaster recovery but also in implementing disaster prevention measures against river flooding, etc.

The Kukum Highway, which was upgraded in this project, remains a very significant facility for socioeconomic activities in Honiara, the capital of the Solomon Islands. This project, which implemented these upgrades, is consistent with the development needs of the Solomon Islands both at the time of planning and at the time of the ex-post evaluation.

3.1.1.3 Appropriateness of the Project Plan and Approach

As mentioned below, although some issues were observed in the manifestation of project's effectiveness, there were no major differences between the planned and actual implementation.

Overall, the project plan and approach are considered appropriate.

The results of ex-post evaluations of similar projects in the past have revealed the need for designing roads and bridges with consideration for high temperatures and heavy rainfall typical of tropical regions, as well as current height of road surface and issues related to drainage. Based on the lessons learned, the road's longitudinal alignment was upgraded to prevent the road flooding, and drainage analysis was conducted using local rainfall and other natural conditions to determine the appropriate size of drainage structures. In addition, since garbage is often discarded into roadside drains, the drainage system was designed to prevent clogging and to ensure that the required flow rate can be discharged without delay. Furthermore, it was confirmed that necessary measures were taken, such as setting material specifications that take into account the local tropical weather conditions (including adjustments to the hardness of the asphalt).

3.1.2 Coherence (Rating: ②)

3.1.2.1 Consistency with Japan's ODA Policy

At the time of the planning of this project, the importance of securing reliable transport links was highlighted at the 6th Pacific Islands Leaders Meeting held in May 2012. For the Solomon Islands, "Overcoming vulnerability, including the development and maintenance of social and economic infrastructure" was set out as a priority area in the "*Country Assistance Policy for the Solomon Islands*" (December 2012). JICA also identified "strengthening the infrastructure for economic activities / maintaining lifelines" as a priority area in the "*JICA Country Analysis Paper for the Pacific Region*" (December 2014). Therefore, this project is in line with these development cooperation policies.

3.1.2.2 Internal Coherence

At the time of planning and implementation, it was not expected to be linked with other JICA projects, and there was no particular effect of collaboration. Therefore, no internal coherence was identified.

3.1.2.3 External Coherence

The Old Mataniko Bridge was washed away by a flood that occurred in April 2014. Approximately two months later, a single-lane bailey bridge (temporary bridge) of nearly the same design was urgently restored with assistance from the Government of New Zealand. As the bridge was a temporary emergency structure, it was replaced under this project after obtaining consent from the Government of New Zealand.

No other specific coordination or collaboration with other projects implemented by other Japanese agencies occurred during the planning or implementation of this project. Although

coordination with New Zealand, as mentioned above, was undertaken, it was limited to obtaining consent for dismantling and replacement. Since no tangible outcomes materialized, external consistency was not confirmed in this project.

This project is in line with the development plan of the Government of Solomon Islands, which emphasizes the importance of upgrading road infrastructure, both at the time of planning and at the time of ex-post evaluation, and also meets the development needs of the Solomon Islands, as the project supports the only main road, consisting of four lanes, that connects the central area of Honiara, with Honiara International Airport. In addition, the project plan and approach were considered to have been appropriate. As for the coherence, although this project was in line with Japan's development cooperation policies for the Pacific region and the Solomon Islands at the time of planning, no tangible outcomes were observed from coordination or collaboration with other JICA projects, projects implemented by other Japanese agencies, or projects implemented by other donors. As a result, internal and external coherence were not confirmed.

Therefore, its relevance and coherence are high.

3.2 Efficiency (Rating:③)

3.2.1 Project Outputs

The planned and the actual outputs were as shown in Table 1.

Table 1: The Planned and the Actual Outputs of the Project

Items		Plan	Actual
Civil Engineering Works	Upgrading of the Kukum Highway	- Highway length: 3.00 km (Section from the City Council Roundabout to the Ministry of Fishery office building) - Cross sectional component: Carriageway (3.5 m×4 lanes), Sidewalk (2.0 m×2), Median (3.0 m) - Drainage: Roadside ditches (6.0 km), Drainpipes (0.4 km), Catch basins (499 units), New box culvert (2 nos, 68.5 m) - Improvement of Intersection: Roundabout installation (1 location), Traffic island installation (1 location) - Bus bay: 16 locations - Other road facilities: Street light repair (9 units), Street light new installation (5 units) Guardrail and fence (1,108 m), Road markings, Grassing and planting (Median, Roundabout)	Implemented according to the plan.
	Countermeasure against Traffic Congestion around the Central Market	- Bus bay: 3 locations (8-berth×2 locations, 5-berth×1 location) - Pedestrian crossing: 1 location - Median fence: 340 m - Renovation of underpass: Installation of lights, corner mirror and entrance roofs and repainting	Implemented according to the plan.

	Improvement of City Council Roundabout	- Length of ring road: 270 m, Diameter of ring road: 12 m (minimum) - Width of ring road: 11.0 m - Pavement of ring road: Concrete pavement (2,000 m²)	Implemented according to the plan.
	Widening of the New Mataniko Bridge	- Bridge length: 66 m (22 m×3 span) - Bridge width: Carriageway 8 m, Sidewalk 2 m×1 - Superstructure type: 3-span continuous plate girder (Integral type) - Substructure type: Cast-in-place concrete pile-bent (with diaphragms) - Abutment protection type: Steel sheet piles (right riverbank), Concrete wall (left riverbank)	Implemented according to the plan.
	Replacement of the Old Mataniko Bridge	- Bridge length: 60 m (30 m×2 span) - Bridge width: Carriageway 7 m, Sidewalk 2 m×2 - Superstructure type: Plate girder (simple supported) - Substructure type: Cast-in-place concrete pile-bent (with diaphragms) - Abutment protection type: Steel sheet piles (right riverbank), Concrete wall (left riverbank) - Approach roads: Right side 73.8 m, Left side 72.3 m	Implemented according to the plan.
Consulting Services		Detailed design and construction supervision for road and bridge construction	Technical assistance for utility relocation was added.
Capacity Building Program (Soft Component)		Establishment of traffic management systems and promotion of traffic safety awareness in front of the Central Market	Implemented according to the plan.

Source: The Preparatory Survey Report, the Ex-ante Evaluation Report, and documents provided by JICA

As shown in Table 1, “technical assistance for utility relocation” was added to the “Consulting Services”. This assistance was newly added due to the need for technical assistance in the proper relocation of utilities—such as power cables, communication lines, and water pipes—buried along the target road section, which were the responsibility of the Solomon Islands side.

In front of the central market, a pedestrian crossing was installed. However, due to a request from the Police, no white lines were painted on the road. In front of the central market, median fences were installed along the road. However, no median fences were placed at the pedestrian crossing section to allow pedestrians to cross the road. The request from the Police included concerns such as “painting white lines would give priority to pedestrians, potentially increasing the risk of traffic accidents” and “pedestrian crossings on the only main road could obstruct traffic flow, raising concerns about traffic congestion”.



Photo 1: Upgraded Kukum Highway and installed bus bay
(Source: Photo taken by the external evaluator)



Photo 2: Widened New Mataniko Bridge (the lane on the far side is the widened two lanes)
(Source: Photo taken by the external evaluator)

3.2.2 Project Inputs

3.2.2.1 Project Cost

The project cost was planned to be 3,472 million yen, of which 3,277 million yen was on the Japanese side and 195 million yen on the Solomon Islands side.

The actual project cost was 3,889 million yen, with 3,250 million yen on the Japanese side and 639 million yen³ on the Solomon Islands side. Japan's project cost remained within the budget, but Solomon Islands' project cost significantly exceeded the plan. This is because utility relocation and temporary site rental costs significantly exceeded the plan. To cover the substantial increase in project costs, the Solomon Islands side adopted a payment arrangement under which the fees to the company contracted for utility relocation were paid in instalments through 2022, after the project's completion. This approach helped to level out the annual payment amounts.

The actual project cost slightly exceeded the plan (112% of the plan).

3.2.2.2 Project Period

The project period was planned to be 41 months, from November 2014 to March 2018, including the detailed design and tender period. The actual project period⁴ was 49 months, from December 2014 to December 2018, which was an 8-month delay compared to the plan. The main reasons for the delay include (1) inability to use the originally planned quarry, which required re-selection of the site, and (2) delays in the implementation of items to be borne by the Solomon Islands side, such as payment of compensation, relocation of water pipes, approval procedures for the quarry, and relocation of power cables.

³ The project costs in Solomon Islands Dollars were converted to yen for the project period, December 2014 to November 2018, using the International Financial Statistics (IMF) average exchange rate (SBD 1=JPY 14.30).

⁴ The project period is defined as starting from the Grant Agreement date of detailed design and ending on the inspection and handover date. The inspection and handover date is set as the date of the handover ceremony.

The actual project period slightly exceeded the plan (120% of the plan).

From the above, this project slightly exceeded the planned project cost and duration. Therefore, efficiency of this project is high.

3.3 Effectiveness and Impacts⁵ (Rating: ②)

3.3.1 Effectiveness

3.3.1.1 Quantitative Effects (Operation and Effect Indicators)

At the time of planning of this project, it was assumed as effect indicators that the project would (1) reduce the length of traffic congestion and (2) improve the average travel speed. The actual results of these indicators were confirmed in the ex-post evaluation, and are shown in Table 2.

Table 2: Values of the Target and the Actual of the Effect Indicators of the Project

	Baseline value	Target value	Actual value						
	2014	2021	2019	2020	2021	2022	2023	2024	2025 ^{Note}
		3 years after completion	1 year after completion	2 years after completion	3 years after completion	4 years after completion	5 years after completion	6 years after completion	7 years after completion
(1) Traffic congestion length (m) (from City Council Roundabout to airport side during peak traffic hours (8:00-9:30))	1,500	300	500	500	200	800	1,400	1,400	1,200
(2) Average travel speed (km/h) (between 3.2 km from the Vura intersection to the Hot Bread intersection during peak traffic hours (8:00-9:30))	20	31	25	25	35	20	10	10	15

Note: The 2025 value is the one at the time of the ex-post evaluation (June 2025, at the time of field study).

Source: The Ex-ante Evaluation Report, information provided by the executing agency

In 2021, three years after the completion of the project (target year), both Indicators (1) and (2) achieved their respective target values. However, according to the executing agency, this achievement was impacted by mobility restrictions due to COVID-19, which led to a decrease in traffic volume. Therefore, when reviewing the indicators for 2022, both Indicators (1) and (2) fell below their target values. The situation subsequently worsened, and at the time of the

⁵ When providing the sub-rating, Effectiveness and Impacts are to be considered together.

ex-post evaluation in 2025 (at the time of field study in June 2025), although slight improvements were observed, the target values had still not been achieved. According to the executing agency, the deterioration of the road in front of the Central Market, which is outside the scope of the upgrade works under this project, began to become noticeable around 2022. This has had a significant impact, causing the values to worsen. At the time of planning, the road in front of the Central Market was in relatively good condition, so this section was not included in the scope of the upgrade works under this project. However, given the recent deterioration, it is scheduled to be renovated with ADB support. Once the renovation is completed, traffic congestion caused by the road's deterioration in front of the Central Market is expected to improve. In addition to the deterioration of the road in front of the Central Market, factors that hindered the achievement of the target values include “increase in the number of vehicles in Honiara (refer to Table 3)” and “buses that cannot fit within the bus bay in front of the Central Market, resulting in parking or stopping on the road”.

Regarding the increase in the number of vehicles owned in Honiara, as shown in Table 3, over the 10 years from 2009 to 2019, the number of passenger cars and buses in Honiara increased significantly by 393% compared to 2009, while the number of trucks increased by 165%. When estimating the future number of vehicle registrations by taking past data and economic growth into account, it is predicted that the number of registered vehicles will continue to increase, reaching 290% of the 2019 level by 2036⁶. This growing vehicle ownership in Honiara is considered one of the factors that may hinder the achievement of target values.

Table 3: Changes in Vehicle Ownership in Honiara

	2009	2019	In comparison with 2009
Vehicles ownership in Honiara (passenger cars/buses)	2,082 units	8,179 units	393%
Vehicles in Honiara (trucks)	803 units	1,326 units	165%

Source: Solomon Islands National Statistics Office, Ministry of Finance and Treasury (2023) “2019 POPULATION AND HOUSING CENSUS NATIONAL REPORT (Volume 1)”

⁶ Japan International Cooperation Agency (2022) “The Project for Greater Honiara Transport Masterplan Study Final Report”



Photo 3: Condition of road deterioration in front of the Central Market (red circle indicates deteriorated road surface)
(Source: Photo taken by the external evaluator)



Photo 4: Bus bay in front of the Central Market (Bus bay is on the left side of the curb in the centre of the photo)
(Source: Photo taken by the external evaluator)

In addition, all buses operating within Honiara are managed by individual operators. They tend to wait at bus bays until the buses are as full as possible before departing, and they often remain parked for extended periods to wait for passengers. As a result, the bus bay in front of the Central Market becomes overcrowded with buses waiting for passengers, leading to situations where vehicles encroach onto the road, park or stop outside designated areas, and cause congestion at the entrance to the bus bay. During peak hours when many buses are parked or stopped, it is often observed that one of the two lanes in one direction is blocked. This situation has become a contributing factor to congestion in front of the Central Market following the lifting of COVID-19 travel restrictions (Regarding this issue, hereinafter referred to as the “Parking and Stopping Management Issue in front of the Central Market”). Parking and Stopping Management Issue in front of the Central Market was recognized during the planning stage of this project, but it was confirmed that the issue still remained at the time of the ex-post evaluation and ADB is supporting to improve this issue.

At the time of ex-post evaluation (during the field study in February and June 2025), measurements were taken under the same conditions as those during the planning phase, through actual driving. For traffic congestion length (Indicator (1)), the range was between 500 m and 1,200 m. On some days in February, which is the rainy season, it reached as far as 1,800 m. For average travel speed (Indicator (2)), the range was between 11 km/h and 21 km/h. On some days in February, which is the rainy season, it dropped to as low as 4.9 km/h. It was confirmed, as with the information provided by the executing agency, that the target value had not been achieved.

At the time of ex-post evaluation, interviews were conducted with various highway users⁷.

⁷ In this ex-post evaluation, individual interviews were conducted with a total of 6 organisations (bus operator: 1, taxi company: 2, wholesale / retailer: 1, chamber of commerce: 1) in addition to the Solomon Islands government agencies including the executing agency to identify changes in safety, transportation of people and goods, economic activity, and environmental and social impacts associated with the improvement of the highway.

As a result, it was confirmed that although congestion during peak hours continues to occur, congestion outside peak hours has significantly improved. Measurements were also taken outside peak hours during the ex-post evaluation through actual driving. As a result, it was confirmed that for traffic congestion length (Indicator (1)), there were time periods with 0 m of congestion. For average travel speed (Indicator (2)), there was no significant change compared to the actual driving results during peak hours.

As mentioned above, while the length of traffic congestion (Indicator (1)) has been reduced and congestion outside peak hours has improved significantly, due to the impact of the aforementioned factors, none of the indicators have achieved their target values.

Therefore, it can be considered that the quantitative effects have been achieved only to a limited degree and are deemed insufficient.

3.3.1.2 Qualitative Effects (Other Effects)

At the time of project planning, the implementation of the project was expected to generate qualitative effects such as “improvement in logistics,” “enhancement of traffic safety and convenience,” “ensuring smooth traffic during rainfall,” “disaster prevention measures against river flooding etc.,” and “improvement of operational management capacity for pedestrian crossings and underpasses”. Among these, “improvement in logistics” and “disaster prevention measures against river flooding” were analyzed in “3.3.2 Impacts” in the ex-post evaluation. “Improvement of operational management capacity for pedestrian crossings and underpasses” was analyzed in “3.4.7 Status of Operation and Maintenance” in the ex-post evaluation. Regarding the two qualitative effects, “(1) enhancement of traffic safety and convenience” and “(2) ensuring smooth traffic during rainfall,” the following is a summary of these effects as confirmed at the time of ex-post evaluation.

(1) Enhancement of traffic safety and convenience

In this project, improvement and development of bus bays, pavement markings, and the installation of street lighting were implemented, and it was confirmed that these measures led to an improvement in road safety. As shown in Table 4, the number of traffic accidents in Honiara was 406 in 2016, prior to the project's completion. However, in 2019, immediately after the project completion, it fell below 300. In recent years, the number has continued to decrease, confirming that improvements have been made.

In the interview survey with various highway users, improvements in “predictability of arrival time” and “ease of driving” were also confirmed, indicating that traffic safety and convenience have been enhanced.

Table 4: Number of Traffic Accidents in Honiara (Unit: cases)

	Year										
	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Number of traffic accidents	328	378	406	119 Note 1	NA Note 2	295	223	NA Note 2	87	119	138

Note 1: For 2017, the data covers only the period from January to May.

Note 2: No data is available for 2018 and 2021.

Source: Data provided by the Police

(2) Ensuring smooth traffic during rainfall

Compared to the planning stage of this project, improvements have been observed in the degree of road flooding and the speed of recovery after road flooding. However, it was confirmed that during rainfall, flooding still occurs due to sediment, gravel, and garbage clogging the roadside ditches, as well as blockages in drainage channels caused by inflowing sediment and gravel, thereby hindering the smooth flow of traffic. According to the executing agency, road flooding may partly be due to changes in natural conditions, particularly the amount of rainfall, since the drainage analysis was conducted to determine the size of drainage structures. However, this is primarily considered an issue related to maintenance and will be analyzed in “3.4 Sustainability”. While some positive effects have been observed in ensuring smooth traffic during rainfall, they are considered insufficient.

From the above, the qualitative effects anticipated at the planning stage, “(1) enhancement of traffic safety and convenience” and “(2) ensuring smooth traffic during rainfall,” have only manifested to a limited extent and are deemed insufficient.



Photo 5: Road flooding during rainfall
(Source: Photo taken by the external evaluator)



Photo 6: Clogged roadside ditch
(Source: Photo taken by the external evaluator)

3.3.2 Impacts

3.3.2.1 Intended Impacts

At the time of planning of this project, no indicators for measuring impacts were set. However, for this ex-post evaluation, the qualitative effects listed in the Ex-ante Evaluation Report, specifically “(1) improvement in logistics” and “(2) disaster prevention measures for river flooding etc.,” were analyzed as impacts.

(1) Improvement in logistics

According to interviews with the executing agency and users of the Kukum Highway, although traffic congestion still occurs, it has been confirmed that the traffic congestion, which at the time of project planning sometimes resulted in a complete standstill, has improved since the project's completion. Moreover, as the road surface has become smoother, driving has become more seamless, and comments such as “damage to goods during transportation has been eliminated” and “costs related to vehicle maintenance have been reduced” have been heard, indicating that the intended impacts have been realized.

(2) Disaster prevention measures for river flooding etc.

In April 2014, Honiara was severely affected by a storm, resulting in the Old Mataniko Bridge being washed away, damage to the New Mataniko Bridge, and flooding of roads. This disaster caused a complete disruption of traffic and paralyzed the functioning of the capital. Therefore, at the planning stage, it was expected that implementing measures to withstand disasters of a similar scale in the future would contribute to reducing the vulnerability of the capital's transportation functions. Due to the erosion of the revetment works on the right bank (downstream side) of both the Old Mataniko Bridge and the New Mataniko Bridge caused by the flood, this project installed robust steel sheet pile revetment works on the right bank. As a result of implementing these measures, it was confirmed that even during river flooding caused by events such as heavy rains, no issues occurred with the bridges constructed under this project. Although flooding still occurs during rainfall due to sediment, gravel, and garbage clogging the roadside ditches, as well as blockages in drainage channels caused by inflowing sediment and gravel, it has been confirmed that recovery after flooding is faster compared to before the project, indicating that the intended impacts have been realized to a certain extent.

3.3.2.2 Other Positive and Negative Impacts

1) Impacts on the Environment

At the time of project planning, in accordance with the “*JICA Guidelines for Environment and Social Considerations*” (April 2010), the project was deemed not to fall within the category of large-scale projects in the road sector, and its potential adverse environmental impacts were considered insignificant. Furthermore, as the project did not exhibit characteristics likely to cause such impacts nor was it located in areas vulnerable to such impacts as stipulated in the guidelines, it was classified as Category B.

During the implementation of this project, Solomon Islands government conducted environmental assessment procedures (Public Environment Report: corresponding to an Initial Environmental Examination). The Environment and Conservation Division issued a Development Consent to the executing agency, and the environmental procedures were completed in October 2014. No special conditions were imposed. During construction, some complaints were received from nearby residents regarding dust. However, regular watering was implemented as a dust control measure, and the issue was resolved. In addition, as a result of appropriate monitoring by the project consultant and contractors, which paid due attention to (1) proper disposal of surplus soil, concrete debris, and asphalt-concrete debris, (2) prevention of river pollution, and (3) environmental measures for noise, vibration, and dust, no major problems occurred.

In the user interviews conducted as part of the ex-post evaluation, questions were also asked about the occurrence of environmental impacts. The results showed that there were no particular negative impacts on the environment, even after the project was completed.

Therefore, no significant negative impacts occurred during and after the completion of the project, and overall, the adverse impact on the environment can be considered minimal.

2) Resettlement and Land Acquisition

The land acquired under this project did not involve any resettlement. The land value was assessed, and compensation was paid based on replacement cost in accordance with Solomon Islands’ domestic laws and JICA Guidelines for Environment and Social Considerations. However, there was a delay in the payment of compensation by the Ministry of Finance and Treasury, as the payment was not completed by the planned deadline of March 2015, and complaints from landowners were received by the executing agency. As stated in “3.2.2.2 Project Period,” this delay in payment was one of the factors contributing to the delay of the project.

As mentioned above, although complaints were received by the executing agency regarding delays in compensation payments from the Ministry of Finance and Treasury, it was confirmed that the payments were ultimately made and that land acquisition was carried

out in accordance with proper procedures, thus it is considered that there were no significant issues.

3) Gender Equality, Marginalized People, Social Systems and Norms, People's Well-being and Human Rights

In the user interviews conducted as part of the ex-post evaluation, questions were also asked about the presence or absence of negative impacts regarding gender equality, marginalized people, social systems and norms, people's well-being and human rights. The results showed that there were no particular negative impacts.

The quantitative indicators of this project showed that the length of traffic congestion was reduced, and it was confirmed that congestion had significantly improved outside peak hours. However, including this indicator, the target values were not achieved. As for qualitative effects, it was confirmed that "(1) enhancement of traffic safety and convenience" occurred as expected. However, regarding "(2) ensuring smooth traffic during rainfall," while some positive effects were observed, the situation cannot be considered fully satisfactory. Regarding the impact, this project has achieved improvements in logistics, and it was confirmed that even during river flooding or increased water levels caused by disasters, no issues occurred with the bridges constructed under this project. Although flooding still occurs during rainfall due to sediment, gravel, and garbage clogging the roadside ditches, as well as blockages in drainage channels caused by inflowing sediment and gravel, it has been confirmed that recovery after flooding is faster compared to before the project, indicating that the intended impacts have been realized to a certain extent. Furthermore, it was confirmed that there were no negative impacts on the environmental and social aspects.

This project has achieved its objectives only to a certain extent. Therefore, effectiveness and impacts of the project are moderately low.

3.4 Sustainability (Rating:②)

3.4.1 Policy and System

Both "*NDS 2016–2035*" and "*NTP 2017–2036*" are regarded as valid policy documents even at the time of the ex-post evaluation. Furthermore, the "*Greater Honiara Transport Master Plan*" (hereinafter referred to as "*GHTMP*"), formulated in 2022 with JICA's support, identifies "road maintenance improvement" as a key goal to realize its vision of "organized and optimized road and transport system for Greater Honiara Area".

In addition, the Ministry of Infrastructure Development (hereinafter referred to as "MID") is the organization responsible for the development, operation, and maintenance of road infrastructure and has clear jurisdiction within the government.

Therefore, sustainability for policy and system of the project is high.

3.4.2 Institutional/Organizational Aspect

The Transport Infrastructure Management Services Division of MID is divided into three sections: (1) the Transport Policy and Planning Section, (2) the Quality Assurance, Research and Development Section, and (3) the Operation and Maintenance Section. (3) The Operation and Maintenance Section is responsible for operation and maintenance, and under its head, the Deputy Director, it is divided into three regional units: Region 1 Unit, which covers Central; Region 2 Unit, which covers Western; and Region 3 Unit, which covers Eastern.

Road maintenance is carried out by private contractors commissioned by MID. Each unit is staffed with six to seven personnel, and it has been confirmed that the required personnel have been secured to manage the contractors. At the time of the ex-post evaluation, it was confirmed that the contractors were being properly managed, and it was concluded that sufficient personnel had been assigned. At the time of planning of this project, the combined number of personnel in the Transport Policy and Planning Section and the Operation and Maintenance Section was 21. Compared to the figure at the time of this project's planning, the number of personnel in the Operation and Maintenance Section at the time of the ex-post evaluation is either equivalent or has increased. Therefore, no issues are observed in terms of staffing.

In light of the above, since no particular issues were observed in institutional and organizational aspects of maintenance, it is considered that the sustainability of the effects achieved by this project is high.

3.4.3 Technical Aspect

The private contractors commissioned by MID are properly managed by MID, and it has been confirmed that there are no issues with the technical capabilities of these contractors. Meanwhile, the project implemented a soft component related to establishing a traffic management system in front of the Central Market and promoting traffic safety awareness. However, after the implementation of this soft component, no manuals were developed, and the awareness posters and pamphlets produced under the soft component were no longer in use at the time of the ex-post evaluation. Moreover, MID does not have its own training program and mainly seeks to enhance its capacity by participating in training provided by donor agencies.

Although further improvements are needed in the training system, there is potential for future enhancements, and therefore, the technical sustainability for maintaining the project's effectiveness is considered to be high.

3.4.4 Financial Aspect

The amount of the road-related budget for MID is as shown in Table 5. MID does not reserve fund for large-scale road repairs and typically spends the budget allocated for each fiscal year in full. However, if there is any surplus, it is pooled together with donor funding into the “National Transport Fund” (hereinafter referred to as “NTF”). When the “Sustainable Transport Infrastructure Improvement Program” (hereinafter referred to as “STIIP”) was implemented by ADB and the Government of Australia (2016–2022), STIIP funds were pooled into the NTF, resulting in operation and maintenance budgets during this period being more abundant than at the time of the ex-post evaluation. In 2025, Australian Department of Foreign Affairs and Trade (hereinafter referred to as “DFAT”) announced its commitment to contribute funds to the NTF.

Table 5: Trends in MID’s Road-Related Budget (Unit: Thousand Solomon Islands Dollars)

	2019	2020	2021	2022	2023
MID’s road-related budget	71,200	28,000	49,200	59,600	25,100

Note 1: The above amount includes both construction and operation & maintenance budgets, but the amounts allocated to each are not available.

Note 2: The annual expenditure amounts are also not available.

Source: Data provided by MID

Cleaning of roadside ditches and drainage channels along the Kukum Highway is currently carried out once a month by private contractors commissioned by MID. However, according to MID, this work needs to be performed twice a month, which will require revising the current contract that stipulates a monthly schedule to allow for twice-monthly work. MID has identified the necessary measures and an estimated budget to enhance the sustainability of the project effects and prepared negotiation materials for the Ministry of Finance and Treasury to increase the operation and maintenance budget. Although contributions to the NTF from DFAT were secured in 2025, coordination with the Ministry of Finance and Treasury has not been achieved at the time of the ex-post evaluation. Therefore, financial sustainability for maintaining the project’s effectiveness is considered to be a challenge.

3.4.5 Environmental and Social Aspect

There have not been any environmental and social issues at the time of ex-post evaluation, and particular concerns are not anticipated in the future, thus it is considered that there will be no issues in the future.

3.4.6 Preventative Measures to Risks

No specific risks have appeared or are anticipated.

3.4.7 Status of Operation and Maintenance

All the sections of the Kukum Highway upgraded under this project are in use, and the road pavement is being adequately maintained. On the other hand, the frequency of cleaning roadside ditches and drainage channels is insufficient, resulting in road flooding during rainfall. As stated in “3.4.4 Financial Aspect,” cleaning is carried out once a month by private contractors commissioned by MID. However, according to MID, this work needs to be performed twice a month, and securing additional budget allocation is necessary to carry out the increased cleaning frequency.

On the Kukum Highway, which was upgraded under this project, some streetlights are not functioning. At the time of the ex-post evaluation, MID had initiated coordination with the Solomon Islands Electricity Authority, which is responsible for streetlight maintenance. It has been confirmed that the Solomon Islands Electricity Authority has secured the necessary repair budget and has commenced the procurement of parts and related items.

Through the soft component of this project, the managing entity for traffic-related facilities in front of the Central Market was clarified. As shown in Table 6, it was confirmed that, at the time of the ex-post evaluation, management was generally in line with the agreements made during the implementation of the soft component. Although this falls outside MID’s scope of responsibility, due to a personnel shortage at Honiara City Council (hereinafter referred to as “HCC”) and the Police, traffic controllers are not always stationed. In particular, the shortage of personnel to manage the bus bays is one of the factors preventing resolution of the Parking and Stopping Management Issue in front of the Central Market, as stated in “3.3.1.1 Quantitative Effects (Operation and Effect Indicators)”.

Table 6: Management Responsibilities for Traffic-Related Facilities
in Front of the Central Market

Facilities	Responsible entity
Underpass	HCC is responsible for maintenance.
Pedestrian crossing	Traffic control is carried out jointly by HCC and the Police, but traffic controllers are not always stationed. They only conduct traffic control during congestion.
Bus bay	Traffic control is carried out jointly by HCC and the Police, but traffic controllers are not always stationed. They only conduct traffic control during congestion. MID is responsible for maintenance.

Source: Information provided by MID

The ongoing JICA individual expert assignment, “Advisor for Capacity Improvement of Urban Transport Management in Honiara” (2024–2026), includes activities such as surveys on parking management, study and proposal of improvement measures. Improvements based on

the proposals developed through this assignment are expected. One specific measure is the organization of bus operators in Honiara, which operates independently at the time of ex-post evaluation. By organizing the individual bus operators, timetables can be established, and the current practice of waiting until buses are full before departure can be eliminated. This measure would help improve the situation in which bus bays are overcrowded with buses waiting for passengers. Another measure is the strengthening of enforcement by HCC and the Police regarding bus and taxi parking and stopping, etc.

Regarding the resolution of the Parking and Stopping Management Issue in front of the Central Market, improvements are expected based on proposals made through the aforementioned JICA project. However, with respect to increasing the frequency of cleaning roadside ditches and drainage channels, MID had not identified any measures to increase the operation and maintenance budget at the time of the ex-post evaluation. Therefore, the sustainability of the effects generated by this project remains a challenge (same as the analysis stated in “3.4.4 Financial Aspect”).

Some issues have been observed in the financial aspects and the current status of operation and maintenance. They are not expected to be improved/resolved. Therefore, sustainability of the project effects is moderately low.



Photo 7: HCC staff controlling traffic at the pedestrian crossing in front of the Central Market

(Source: Photo taken by the external evaluator)



Photo 8: MID contractor cleaning the roadside ditches

(Source: Photo taken by the external evaluator)



Photo 9: Renovated and reused underpass
(Photo 1)
(Source: Photo taken by the external evaluator)



Photo 10: Renovated and reused underpass
(Photo 2)
(Source: Photo taken by the external evaluator)

4. Conclusion, Lessons Learned and Recommendations

4.1 Conclusion

This project aimed to mitigate traffic congestion and to enhance traffic safety on the Kukum Highway, a major road in the Solomon Islands, thereby contributing to disaster recovery, disaster prevention, and logistics improvement and to upgrade the existing bridges and roads, as well as improving the operation and management of the road facilities to enhance safety and convenience. Although no specific linkages or synergies with other JICA projects, projects implemented by other Japanese institutions, nor projects by other donors were identified during the planning and implementation period of the project, the project was consistent with the development plan and development needs of the Solomon Islands at the time of planning and ex-post evaluation, and the consistency with the Japan's ODA Policy at the time of planning were also confirmed. Therefore, the relevance and coherence of this project are high. Regarding the project implementation, while both the total project cost and project period slightly exceeded the plan, the efficiency of the project is high. Regarding the effectiveness of the project, none of the quantitative indicators achieved their target values. It was confirmed that qualitative effects such as improved safety and convenience have been secured, but the effectiveness in ensuring smooth traffic during rainfall remained limited to a certain degree. Regarding the impact, it was confirmed that this project improved logistics. Regarding disaster prevention measures for rivers etc., it was confirmed that bridges constructed under this project no longer arise problems even during river flooding caused by heavy rains. Furthermore, while roads still flood during rainy weather, recovery after flooding takes less time compared to before this project, indicating that the anticipated impact has achieved to a certain extent. In light of the above, this project has achieved its objectives only to a certain extent. Therefore, effectiveness and impacts of the project are moderately low. Regarding the sustainability of the project, some issues have been observed in the financial and the current status of operation and maintenance. They are not expected to be

improved/resolved. Therefore, sustainability of the project effects is moderately low.

In light of the above, this project is evaluated to be partially satisfactory.

4.2 Recommendations

4.2.1 Recommendations to the Executing Agency

The frequency of cleaning roadside ditches and drainage channels by private contractors commissioned by MID is insufficient, resulting in road flooding during rainfall. MID is aware of the need to increase the frequency of cleaning roadside ditches and drainage channels, and many residents have also expressed the necessity of increasing the cleaning frequency. Therefore, it is important for MID to coordinate with the Ministry of Finance and Treasury to secure the necessary budget without delay.

In addition to sediment accumulation in the side ditches, garbage blockage has also been identified as a cause of road flooding. Therefore, it is important for MID to coordinate with HCC to carry out awareness-raising activities aimed at preventing littering.

Furthermore, since the Parking and Stopping Management Issue in front of the Central Market is one of the causes of traffic congestion, it is important for MID, in coordination with the ongoing support provided by ADB, to collaborate with the JICA project “Advisor for Capacity Improvement of Urban Transport Management in Honiara” which began in 2024, to examine improvement measures. In addition, MID should coordinate with HCC and the Police to implement the proposed measures and work toward strengthening parking and stopping management capacity.

4.2.2 Recommendations to JICA

As stated in “4.2.1 Recommendations to the Executing Agency,” the Parking and Stopping Management Issue in front of the Central Market is one of the causes of traffic congestion. The ongoing JICA individual expert assignment, “Advisor for Capacity Improvement of Urban Transport Management in Honiara” includes activities such as surveys on parking management, study and proposal of improvement measures. Improvements based on the proposals developed through this assignment are expected. However, this assignment does not include activities to implement the proposed measures, such as implementation of pilot projects etc. Therefore, it is important to provide necessary support, including the implementation of pilot projects etc., to realize the proposed measures. It is also important to ensure proper coordination with the ongoing support provided by ADB.

4.3 Lessons Learned

Setting target values based on predictions and considerations of the impact of changes in the surrounding environment

Under this project, road upgrades were carried out along a 3-kilometer section between the roundabout in front of the City Hall and the Ministry of Fisheries and Marine Resources' office building, where road flooding and pavement deterioration were prominent due to non-functioning drainage facilities. At the time of the ex-post evaluation, it became clear that the impact of changes in the surrounding environment of the upgraded road was one of the factors preventing the alleviation of traffic congestion in the road section upgraded under this project. At the time of project planning, the effect indicators “(1) reduce the length of traffic congestion” and “(2) improve the average travel speed” were set as effect indicators. However, partly due to this impact, neither indicator was able to achieve its target value. Therefore, when setting target values for effect indicators at the planning stage, it is desirable to predict and consider, as much as possible, the impact of changes in the surrounding environment of the road section to be improved under the project, and to set target values that take this impact into account.

5. Non-Score Criteria

5.1 Performance

5.1.1 Objective Perspective

None.

5.2 Additionality

None.

(End)