



Report Number: ICRR0024760

## 1. Project Data

<b>Project ID</b> P159238	<b>Project Name</b> Central Highlands Connectivity	
<b>Country</b> Viet Nam	<b>Practice Area(Lead)</b> Transport	
<b>L/C/TF Number(s)</b> IDA-61080,IDA-61090	<b>Closing Date (Original)</b> 30-Jun-2023	<b>Total Project Cost (USD)</b> 117,796,867.13
<b>Bank Approval Date</b> 22-Jun-2017	<b>Closing Date (Actual)</b> 31-Dec-2024	
	<b>IBRD/IDA (USD)</b>	<b>Grants (USD)</b>
Original Commitment	150,000,000.00	0.00
Revised Commitment	130,069,452.42	0.00
Actual	117,825,930.02	0.00

<b>Prepared by</b> C.Y. Nunez-Ollero	<b>Reviewed by</b> Vibecke Dixon	<b>ICR Review Coordinator</b> Avjeet Singh	<b>Group</b> IEGSD (Unit 4)
---	-------------------------------------	---	--------------------------------

## 2. Project Objectives and Components

### a. Objectives

According to the Financing Agreement (FA, p. 5) and the Project Appraisal Document (PAD, Section 2, paragraph) the Project Development Objective of the VIETNAM: Central Highlands Connectivity Project was “to improve the connectivity, safety, and climate-resilience of National Highway 19.” National Highway 19 is from Quy Nhon Port to the Le Tanh border gate, which is located at the border with Cambodia.



This review will assess project performance against this objective, which is parsed into the following three sub-objectives:

- to improve the connectivity of National Highway 19.
- to improve the safety of National Highway 19.
- to improve the climate-resilience of National Highway 19.

**b. Were the project objectives/key associated outcome targets revised during implementation?**

No

**c. Will a split evaluation be undertaken?**

No

**d. Components**

The project had two components:

**1: Road Improvements** (US\$141.30 million at appraisal, US\$114.45 million, actual). This component was to finance: (i) physical improvements of selected sections of NH19, such as pavement rehabilitation, road/lane widening, improvement of intersections and bridges, construction of bypasses, reinforcement of road slopes, and other road safety features; and (ii) resettlement activities such as compensation and assistance to displaced persons resulting from land acquisition and rights of way.

**2: Implementation Support** (US\$ 8.7 million at appraisal, US\$3.35 million actual) This component was to finance technical support for project implementation, including overall detailed engineering design, construction supervision, financial audits, environmental and social management, and monitoring and evaluation. In addition, Bank- executed technical assistance (TA) was to finance the following: (i) the Global Road Safety Facility (GRSF) for a Road Safety Audit on NH19, to assess impacts of motorcycle lanes to update the draft manual for motorcycle lane design and specifications and to strengthen the institutional capacity of the implementing agency for managing road safety and physical works; and (ii) the Global Facility for Disaster Reduction and Recovery (GFDRR) to finance a landslide risk assessment of the project area. The assessment was to identify suitable climate resilient measures, design options for NH19, and recommend technical standards to improve road resilient design.

**e. Comments on Project Cost, Financing, Borrower Contribution, and Dates**

**Project Cost:** The original total project cost was US\$150 million (equivalent to SDR 104,900,000). The credit disbursed US\$118.3 million by the time the project closed. The balance was cancelled per the 2024 restructuring paper (see below).

**Financing:** The International Development Association (IDA) financed this project with two credits equivalent to US\$140.5 million and US\$9.5 million. In addition, a US\$2.1 million grant from the Australian Department of Foreign Affairs and Trade (DFAT) financed the detailed design and documentation (DDD) needs of the project. This was fully disbursed.



**Borrower Contribution:** The government committed US\$3.7 million in counterpart contributions and disbursed US\$3.24 million by the time the project closed.

**Dates:** The Board approved the project on June 22, 2017. The project was made effective on May 22, 2018. The Mid Term Review (MTR) was conducted on December 3, 2021. The project was to close originally on June 30, 2023. The following level 2 restructurings extended the project by an additional 18 months to close on December 31, 2024.

- On August 2, 2023, to provide a retroactive extension. Prolonged government processing in accessing counterpart funding to complete all outstanding civil works to ensure road safety and stability of project's structures, necessitated this extension. The extension was also to complete all remaining land acquisition and orderly resettlement.
- On May 14, 2024, to partially cancel US\$ 19.7 million (equivalent to SDR 14,981,764) due to procurement savings, foreign exchange savings, and unused contingencies. The cancelled amount was to be recommitted to finance other project(s) in Viet Nam.

**SPLIT RATING:** The PDO, outcome indicators, components, and targets were unchanged throughout the implementation period. A split rating will therefore not be applied.

### 3. Relevance of Objectives

#### Rationale

**Context.** The 243 km National Highway 19 (NH19) is an integral part of Asian Highway 21 (AH21) in the Mekong region that connects Viet Nam to Cambodia. This East-West corridor connects the Central Highland provinces, Central Coastal provinces, Quy Nhon Seaport, and Le Thanh (in Viet Nam)/ O'Yadav (in Cambodia) international border gate. Many heavy trucks, high speed vehicles, motorcycles, non-motorized traffic, and local pedestrians traverse NH19. During the 2012 World Bank-financed Viet Nam Road Safety Project (P085080), an International Road Assessment Programme (iRAP) assessment concluded that most of NH19 sections were given low safety ratings or were considered safety standards ranking of Star 1 and 2 or critically unsafe. Sections of NH19 had poor connectivity, inadequate safety, and insufficient capacity to manage the increasing traffic volume. NH19 was also vulnerable to climate impacts, such as flooding and instability under extreme weather events. Many narrow sections had carriageway ranging from 6 to 7 meters wide with degraded road pavements, unfavorable geometric elements (such as small curbs, high gradients, short sight distances, etc.) and insufficient road safety facilities, especially the road section at An Khe mountain pass, where heavy trucks were able to travel at only walking speeds and traffic was frequently congested due to landslides in the rainy season. The Government requested to rehabilitate/upgrade three key road sections of NH19 to improve its connectivity, safety, and climate-resilience: (i) Section 1: Binh Lien - Dak Po (Km50-Km90); (ii) Section 2: Chau Khe-Pleiku (Km131-Km167); and (iii) Section 3: Ham Rong - Le Thanh Border Gate (Km180-Km243).

**Country Plans:** The PDO remains relevant to the country's 10-Year Socio-Economic Development Strategy (SEDS, 2021 – 2030) and the current Socio-Economic Development Plan (SEDP, 2021–2025). These plans prioritize the development of road transport infrastructure to improve connectivity between Central Highlands provinces and Central Coastal provinces, and to connect with southern Laos and northeastern Cambodia. The current SEDP also focused on adapting the modernization of the transport



infrastructure to climate change as a key focus of the country's socio-economic development. The PDO also remains relevant to the country's Road Network Planning 2021 - 2030, with a vision to 2050.

**World Bank Group Country Partnership Framework:** The PDO is aligned with the World Bank Group Country Partnership Framework (CPF) FY18– 22. A new CPF for Viet Nam is under preparation. The PDO was relevant to Focus Area 1 'Enable Inclusive Growth and Private Sector Participation' and Focus Area 3 'Ensure Environmental Sustainability and Resilience'. The PDO directly contributed to Objective 3 "Enhance trade competitiveness, multi-modal transport connectivity, and logistics service" and Objective 10 "Increase climate resilience and strengthen disaster risk management". The PDO contributed to improving connectivity of the key East-West corridor between the Central Highlands region to Central Coastal region of Viet Nam, to enhance multi-modal connectivity among road transport, sea transport (with Quy Nhon deep seaport), and airport transport (with Pleiku airport and Phu Cat airport). As an integral part of the Asian Highway 21 (AH 21) in the Mekong region, the PDO supported the promotion of international trade activities and trade cooperation between Central Highlands/Central Coastal regions of Viet Nam with the neighboring countries (Cambodia, Laos, and Thailand) through a more efficient and safer roadway connectivity with Le Thanh international border gate (in Viet Nam) or O'Yadav international border gate (in Cambodia). The PDO also contributed to increased access to jobs, markets and social services, and improving climate-resilience for selected vulnerable road sections and structures of NH19.

**Overall,** the PDO is substantially relevant to the country's plans in modernizing its transport sector and establishing climate resilient roads for vulnerable sections. The PDO would modernize the NH19 for safer, faster, more dependable, and efficient services in transporting people, goods, and services. Relevance of PDO is thus rated as High.

## Rating

High

## 4. Achievement of Objectives (Efficacy)

### OBJECTIVE 1

#### Objective

To improve the connectivity of National Highway 19.

#### Rationale

**Theory of Change:** The improved connectivity along NH19 was to be enhanced by rehabilitating roads, widening travel lanes, upgrading bridges, and improving geometric road elements to improve the direction and smooth ride along NH19. The new An Khe town and Pleiku city bypasses were to increase the road links and connections along NH19. These improvements in connectivity would favorably impact traffic volumes and traffic flow quality. People and communities would benefit from safer, faster, and efficient roads to transport both passengers and goods and services. Costs of transport and related coordination would be reduced overall. The improvements include widening roads, lanes, rehabilitating pavements, building, and upgrading



bridges, and improving drainage systems. These improvements would reduce travel time, accommodate the increase in traffic volume and result in a smoother ride.

**Input:** would be the financing of connectivity improvements of sections of NH19.

**Output:** would include the length of improved roads, number of emergency roads, bypasses, bridges, bus stops constructed, and the participation of constituents in project consultations.

**Outcome:** would be an increase in annual average daily traffic, a reduction in travel time along the corridor, and the corporate indicator representing the number of people who benefit from access to improved transport services.

The following **Critical Assumptions**, which, if realized, were to enhance the likelihood of achieving the expected outcomes: (i) timely availability of counterpart budget allocation and funding; (ii) counterpart agencies commitment to apply good practices in connectivity, safety, and climate resilience; and (iii) proper implementation and sufficient budget available for operations and maintenance (O&M).

The TOC was logical and the outputs and expected outcomes convincing.

#### **OUTPUTS:**

- 143.6 km of non-rural roads were rehabilitated or constructed, not fully achieving the target of 153 km of non-rural roads:
  - 116.7 km of roads were rehabilitated.
  - 26.9 km of constructed bypasses were operationalized.
- 74 percent of citizens from affected communes participated in consultations, exceeding the target of 70 percent.
- 36 percent of these participants were women, exceeding the target of 20 percent.
- 16 Bridges were constructed or upgraded to higher standards (no target was provided)

#### **OUTCOMES:**

- Annual average daily traffic (AADT) reached 6,744 passenger car unit (PCUs) against a baseline of 4,950 PCUs, exceeding the target of 6,600 PCUs.
- Average travel time on the NH19 Corridor was reduced to 4.5 hours, against a baseline of 6 hours, exceeding the target of 5 hours.
- 935,316 people had enhanced access to transportation services, achieving the target of 935,000 people.

Overall, the efficacy of the project to achieve this objective is rated Substantial with minor shortcomings. According to the ICR, the two bypasses improved connectivity along NH19, and minimized adverse social and environmental impacts (including road congestion, environmental pollution, and traffic accidents) caused by heavy traffic of trucks and large vehicles in An Khe town and Pleiku city. The ICR also reported that almost all road sections, except for the Pleiku city bypass due to the pending handover, were opened to traffic (ICR, paragraph 26).



**Rating**  
Substantial

## **OBJECTIVE 2**

### **Objective**

To improve the safety of National Highway 19.

### **Rationale**

**Theory of Change:** People and communities would benefit from safer, faster, more dependable, and efficient transport services for both people and goods and services. The construction, rehabilitation, or upgrading of NH19 would improve safety for all users of the corridor. These activities included installing road safety features on roads and intersections, school zones, and reinforcing, and stabilizing slopes. These improvements were expected to reduce the risk of traffic accidents and reduce loss of life.

**Input:** would be the financing of the design and construction of the safety features of roads, intersection, school zones, and slopes, including training and technical assistance in planning and design of these improvements.

**Output:** were to include the length of these road improvements, the number of improved school zones, intersections, and protected slopes. Other expected outputs included manuals, audits and assessment of road conditions required to inform design of the road improvements.

**Outcome:** was expressed as the length of roads that received a 3-star rating or above, according to the iRAP standards. The iRAP standards measure the level of safety of the roads using more than 50 attributes that do not rely on crash data. The ratings from a low of 1 to a high of 5 estimate the level of risk faced by road users – from vehicle occupants, bicyclists, motorcyclists, to pedestrians- indicating the likelihood that these users might be killed or seriously injured because of a crash. This PDO indicator was designed to focus on motorcyclists and vehicle users, who were the largest road user groups and most involved in road crashes. According to the Traffic Police Department, motorcycles and cars were the main vehicles involved in road crashes in 2016, accounting for 66.7 percent and 27 percent of the total means of road transport, respectively. However, the reduced incidence of accidents, and reduced road fatalities along the improved sections of NH19 were not included as outcome indicators in the results framework, not monitored, or reported.

**Critical Assumptions:** The same assumptions that applied to the objective above also applied here

**Overall,** the TOC provided a reasonable causal link between the inputs, outputs and expected outcomes. There were some missing outcome indicators that could have supported the measurement of the achievement of the outcome.

### **OUTPUTS:**

- A manual for motorcycle lane design and specifications was completed, as targeted.
- 136 km of roads with dedicated motorcycle lanes were designed and constructed. Baseline was 75 kms with an end target of 228 km. According to the ICR the end target was revised to 218 kms,



consisting of the 143 km of improved roads and the 75 km baseline (ICR, footnote 22). The target was partially achieved.

- Audited and assessed 143.6 km of roads (baseline was 75 km, target was 218 km, target was partially achieved).
- Retrofitted 143.6 km of roads with improved safety features (baseline was 75 km, target was 218 km, target was partially achieved). The following outputs under these 143.6 km were reported as additional achievements but were not specified in the results framework and therefore had no target values.
  - 857 intersections with improved safety interventions,
  - 12 traffic signals 106 warning flashing lights,
  - 119 bus-stops bays,
  - 2 emergency escape ramps at An Khe mountain-pass section,
  - other necessary safety facilities (guardrails, road signs, markings, rumble strips, and guideposts)

The following additional outputs were reported in the ICR. However, since they were not specified in the results framework, there are no target values:

- 131.2 km of roads received road safety rating of iRAP 3-star or above for vehicle occupants and motorcyclists.
  - 74.2 km of the project's roads met the iRAP 3-star or better standard for pedestrians (baseline 61 km)
  - 121.7 km of the project's roads met the iRAP 3-star or better standard for bicyclists, (baseline 71.9 km)
- Improved 17 School zones with traffic safety interventions and facilities to provide safer accessibility for children/students to their schools, and sufficient warnings to road users to pay attention and reduce travel speeds (at maximum of 40 km/h) around school zone areas.
- Improved road geometric elements (including gradient, curve radius, and sight distance), travel lane's width, and pavement's quality, for safer travel conditions. noticeably along the previously considered most dangerous road section of NH19 – the An Khe mountain-pass road section (baseline narrow road surfaces associated with unfavorable geometric elements and poor pavement conditions).
- 7,355 m of slopes were reinforced/protected

## **OUTCOMES:**

- 206.2 km on the NH19 Corridor received International Road Assessment Program (iRAP) 3-star rating or above for both cars and motorcycles (baseline 75 km, target of 228 km almost achieved). At completion, the target was revised from the initial value of 228 km at appraisal to 218 km, to reflect 143 km of roads realistically improved by the project added to the baseline of 75 km.
- The number of fatalities and serious injuries (FSI) was estimated to have been reduced by over 55 percent (According to the Task Team in their February 13, 2026, email to IEG, the baseline was 374 and the target was to reduce this by 51 percent preventing 298 deaths and serious injuries each year. The target was almost achieved. The government aims to reduce fatalities and injuries caused by road accidents by 5 to 10 percent annually. It is unclear whether this is achieved or not.
- According to the ICR, (paragraph 29) several pavement defects (including crocodile cracks, depressions, raveling, and potholes) were to be rectified or repaved to avoid safety risks for road users. At closing, repair work was underway as part of the defect liability (warranty) period. These pavement defects had been fully repaired in a proper manner as of June 5, 2025, and documented in



the PCAP. That work was requested to be completed in an adequate manner and as soon as possible to minimize any impact on road safety. Furthermore, the project's handover to competent road management authorities as of June 2025, was ongoing and will be completed by September 2025 to ensure effective O&M in place.

Actual numbers of road accidents were not reported even as iRAP star ratings were assigned to specific road segments. The iRAP rating provided a basis for indicating the risk of losing lives or being injured, but there was no report on actual events that would have been helpful in the assessment of the achievement of the objective.

Overall, the efficacy of the project to achieve this objective is rated Substantial with minor shortcomings. The RF could have included additional outcome indicators to measure the achievement of the PDO, however the ICR reported a reduction of over 55 percent in fatalities and serious injuries without providing supporting data.

### Rating

Substantial

## OBJECTIVE 3

### Objective

To improve the climate-resilience of National Highway 19.

### Rationale

**Theory of Change:** The improved climate-resilience along NH19 was to be evident in road sections through An Khe mountain-pass with 14 landslide-prone locations, the two bypasses via An Khe town and Pleiku city, road sections vulnerable to erosion and instability, flood-prone road sections near bridges and bridge structures. Guidelines for resilient road design and standards were to be developed and implemented to select the most effective climate-resilient interventions. Climate-resilient interventions for protection and stabilization of steep slopes, included retaining walls, rock gabions, soil nailing, rock bolts, ground anchors, wire nets, shotcrete, cast-in-place concrete blocks, slope grading, and vegetation. These interventions were expected to stabilize vulnerable road sections and structures to make them resilient against extreme weather events in the Central Highlands. These improvements were expected to reduce travel time, respond to increase in traffic volume, and contribute to road safety.

**Input:** was to be the financing of technical assistance to inform the design and standards for climate resilient roads, bridges, and slopes and of investments to implement such design along the sections of NH19.

**Output:** was to be the completed guidelines, the constructed bridges, slopes, and roads that incorporated climate and disaster resilient features.

**Outcome:** was to be the length of upgraded roads that comply with these climate resilient standards. Other relevant indicators that could have helped boost the expected outcome were a proxy feature of reduced travel disruption for goods and services and people along the NH19 following a climate event, accident savings, or vehicle emergency repair savings.



**Critical Assumptions:** The same assumptions that applied above also applied here.

**Overall,** the TOC provided a reasonable causal link between the inputs, outputs and expected outcomes, with a shortcoming in the lack of other relevant indicators that could have strengthened the measurement and reporting of the expected outcomes.

**OUTPUTS:**

- Guidelines for resilient road design and standards were completed, as targeted.
- 20 km of roads were designed and constructed in compliance with climate/disaster resilient design standards. The target of 20 km was achieved.

The following outputs were reported as additional achievements but were not specified in the results framework and therefore had no target values.

- 16 bridges with climate-resilient features were completed.
- 29 slope sites with climate-resilient features were built.

**OUTCOMES:**

- 20 km of roads were upgraded to comply with climate/disaster resilient design standards, against a baseline of 0, achieving the target of 20 km.

Overall, the efficacy of the project to achieve this objective is rated Substantial. The outcome indicator was achieved, despite the lack of additional relevant indicators, such as accident savings or vehicle repair savings following an event that could have strengthened the evidence base to measure and demonstrate the achievement of this objective. Several small-scale works for road sections under contract CW1 were completing the construction of the drainage system, rectifying eroded spots, and fixing weathered areas on slope's surfaces. Works involving the completion of the drainage system and the remediation of slope defects had been completed by June 5, 2025, as documented in the PCAP. The PMU reported that the CW1 contractor has finalized as-built documents, assessments of final stability, and resilience based on complete conditions.

**Rating**  
Substantial

**OVERALL EFFICACY**

**Rationale**

The overall efficacy of the project to achieve its objectives is rated **Substantial**.



**Overall Efficacy Rating**

Substantial

**5. Efficiency**

**Economic Efficiency.** At appraisal, economic efficiency was calculated applying conventional methodology for road improvement using “with” and “without” scenarios. Five typical benefits of a road improvement were: (i) vehicle operating cost savings as result of better road or/and shorter road, (ii) value of time savings both passengers and freight as result of better road or/and shorter road, (iii) accident savings as result of safer road, (iv) Green House Gas (GHG) savings as result of better road or/and shorter road, (v) emergency repair savings as result of better and more resilient road. Using a 10 percent discount rate, the Net Present Value (NPV) at appraisal was estimated at US\$64.8 million with an Economic Internal Rate of Return (EIRR) estimated at 15.72 percent. Sensitivity analysis using a worst-case scenario where costs increase by 20 percent and benefits decrease by 20 percent resulted in an EIRR of 11 percent, still above the 10 percent discount rate. At closing, the project applied the same methodology used at appraisal. Using a 10 percent discount rate, the NPV was estimated at US\$64.8 million, and the EIRR at 17.71 percent. The sensitivity analysis confirmed that faced with a 20 percent increase in O&M costs and a 20 percent reduction in benefits, the project retained a positive EIRR at 14.42 percent.

**Implementation efficiency.** The total cost of the project was completed at lower than anticipated cost because of savings from competitive procurement, favorable foreign exchange earnings, and unused contingencies. The project closing date was extended by 18 months because of initial delays in budget allocation, difficulties in land acquisition and resettlement (LAR), and the impact of COVID19 and adverse weather conditions. During the COVID-19 pandemic, travel restrictions and lockdowns delayed the completion of survey works, detailed design, procurement, LAR, and construction.

Efficiency is rated as Substantial.

**Efficiency Rating**

Substantial

a. If available, enter the Economic Rate of Return (ERR) and/or Financial Rate of Return (FRR) at appraisal and the re-estimated value at evaluation:

	Rate Available?	Point value (%)	*Coverage/Scope (%)
Appraisal	✓	15.72	94.20 <input type="checkbox"/> Not Applicable
ICR Estimate	✓	17.71	95.60 <input type="checkbox"/> Not Applicable

\* Refers to percent of total project cost for which ERR/FRR was calculated.



## 6. Outcome

The relevance of the objective is rated High. The efficacy of the project to achieve the first, second, and third objectives and overall, is rated Substantial with moderate shortcomings due to the lack of additional relevant indicators in the results framework. Efficiency is rated Substantial. Overall outcome is thus rated Satisfactory.

### a. Outcome Rating

Satisfactory

## 7. Risk to Development Outcome

The following pose risks to development outcome:

- **Financial Risk:** There is a moderate risk that financial resources would not be available to operate and maintain the assets turned over to the relevant authorities. This risk is mitigated by a Post Closure Action Plan (PCAP) agreed to by all stakeholders indicating actions that must be completed to resolve outstanding issues. The government has adequate arrangements for operations and maintenance (O&M) once the assets are handed over to pertinent agencies.
- **Technical Risk:** This is a low risk. Completed assets were designed using the latest design features practiced globally, like the factors associated with reaching star ratings under iRAP. The project designed and completed these assets in compliance with relevant national/international standards and good practices in road connectivity, safety, and climate-resilience. Central and local authorities were assessed with sound technical capabilities to operate and maintain similar national highways and have a rich experience to back them up. Risks to road safety caused by increasing traffic flow, traffic violations, overloaded/oversized vehicles, and pavement's degradation are mitigated by government commitment to implement road safety regulations, and an increasing awareness in traffic safety.
- **Risk of wavering government ownership or commitment.** This is a low risk. The government endorsed the project as part of its national priorities and to meet regional needs. The government showed ownership, initiating for example, the cancellation of remaining resources brought about by procurement and foreign exchange savings and recommitting these for future projects in Vietnam. Initial challenges in committing counterpart budgetary resources delayed implementation. These challenges were eventually overcome.
- **Risk from natural disasters.** This continues to be a high risk for the region. The frequency and intensity of extreme weather events continue. This risk is mitigated by having adopted climate resistant features of the improvements completed under this project. The O&M commitments made by the authorities also mitigate this risk.

## 8. Assessment of Bank Performance

### a. Quality-at-Entry



The Bank team designed this project in support of the government's priorities to improve connectivity for the Central Highlands region. At the same time, project design incorporated climate resilient and safety features based on global best practices available to the Bank team. The team adequately completed the technical, financial, and economic assessments. Risks were identified. Mitigating measures were sufficient although readiness risk was overlooked. The delay in obtaining the budget for counterpart funds delayed implementation. A lack of output indicators to monitor site clearing contributed to implementation delay. Poverty, gender, and social development issues were prepared. The key fiduciary, technical, environmental, and social, and institutional risks were identified. Risk assessment featured appropriate mitigating measures except for minor shortcomings in assessing readiness to implement due to the social risk associated with land acquisition, compensation, and resettlement needs (see Section 12 Lessons below).

Overall, the Bank team performance at entry is rated Satisfactory.

### **Quality-at-Entry Rating**

Satisfactory

### **b. Quality of supervision**

The World Bank task team included staff with adequate expertise in safeguard, fiduciary, and technical aspects, and was led by a team leader with support from co-team leaders to ensure at least one of them being in the country office. The World Bank team conducted 15 regular semi-annual implementation support missions over the eight-year project period. Technical missions supplemented these regular missions with expertise to help identify emerging challenges and recommend corrective measures to achieve outcomes. The presence of World Bank team members in the field ensured close coordination with the government agencies and relevant stakeholders, and responding to issues in a timely manner. The World Bank team continues to support the government with the Post Completion Action Plan to ensure the timely resolution of outstanding issues after the project closed.

Overall, the performance of the Bank at supervision is rated Satisfactory.

### **Quality of Supervision Rating**

Satisfactory

### **Overall Bank Performance Rating**

Satisfactory

## **9. M&E Design, Implementation, & Utilization**



### a. M&E Design

The Theory of Change (TOC) outlined the activities and how these are linked to outputs and expected outcomes of the project. Indicators were appropriate, although some relevant outcome indicators were not included even as these were identified in Annex 4 of the ICR to assess project efficiency (e.g., savings in vehicle operating costs, reduced incidence of fatal accidents) and some useful output indicators, such as site clearing, if monitored would have warned of implementation delays. Baselines were established where needed. Targets were specific, relevant, measurable, time bound, and achievable, although minor corrections were required at closing (e.g., length of the roads improved). The project used the iRAP star ratings to measure the level of safety that is built into a road based on more than 50 attributes. The Star Rating System reflects the likelihood that an individual road user might be killed or seriously injured in the event of a crash. 1-star roads represent the highest risk while 5-star roads represent the lowest risk. Despite this, counting and reporting on actual incidents would have been possible, and preferred.

### b. M&E Implementation

The government's Project Management Unit No 2 implemented the M&E system as designed. A World Bank required Transport Sector Corporate Results Indicator (CRI) "People with enhanced access to transportation services" was added for all IDA-funded transport projects and monitored throughout the project period. The ICR reported that the correct end target value of the roads to be improved was 218 km and not 228 km set at appraisal. The 218 km consisted of the 75 km baseline plus the 143 km achieved (ICR, Annex 1). The relevant output and outcome indicators lacking in project design were not added during the restructurings.

### c. M&E Utilization

The project team used M&E data to inform the government, the World Bank, beneficiaries and other relevant stakeholders about the project's performance and progress. These data provided evidence of PDO achievement. M&E data also informed the Mid-Term Review (MTR) Report and the Completion Report. The M&E data provided the team with information on how to address mobility restrictions during COVID 19 and weather events that would affect achieving the PDO. In addition, the M&E data was used to monitor contractor performance and appropriately applied corrective measures for contractor poor performance expressed in the M&E data.

### M&E Quality Rating

Substantial

## 10. Other Issues

### a. Safeguards

**Environmental Safeguards:** The project was classified as Category "B" due to the potential moderate to substantial adverse environmental and social impacts associated with the physical investments under Component 1 Road Improvements. The project triggered the following policies: (i) Environmental Assessment (OP/BP 4.01); (ii) Natural Habitats (OP/BP 4.04); and (iii) Physical Cultural Resources (OP/BP



4.11). Potential adverse environmental impacts from construction activities included: temporary traffic disruptions, effects on small household businesses along the road, and the generation of dust, noise, vibration, and waste. There were also potential impacts on natural habitats of rivers (including the loss of benthic habitats and disturbance of benthic organisms) and several small spiritual structures. The project team prepared an Environmental and Social Impact Assessment (ESIA), and an Environmental and Social Management Plan (ESMP). The ESIA was disclosed both locally and on the World Bank website. The project complied with these environmental safeguards (ICR, paragraph 59). Residents participated in community consultations to monitor construction and provide feedback on ESMP compliance. Several civil work activities under package CW1 were reported to have caused difficulties and temporary obstructions for traffic flows and residential access during construction time. At closing, the construction of CW1 civil work package had an outstanding environmental issue. Nine affected households with small, cracked damages to their structures disagreed on the compensation amount and were not compensated by the time the project closed. A post-closure action plan (PCAP) for follow up by the Bank team for resolution was drawn up. Compliance with safeguards depends on resolving this issue.

**Social Safeguards:** The project triggered the following social safeguard policies: (i) Involuntary Resettlement (OP/BP 4.12); and (ii) Indigenous Peoples (OP/BP 4.10) (ICR, paragraph). Compensation, resettlement, and livelihood restoration activities complied with the Resettlement Policy Framework (RPF) and Resettlement Action Plans (RAPs). All 1,906 affected households (AHs) in Binh Dinh and Gia Lai provinces received compensation for their land. Under the livelihood restoration program 145 severely affected households reported that their livelihoods and incomes were restored, and in some cases, improved. 138 people registered for the vocational training courses in cooking, car driving, and tailoring in Vocational Training Center of Pleiku city and An Khe district. The World Bank team interviewed AHs beneficiaries from Cham Aneh village (Chi Lang ward, Pleiku city), who expressed satisfaction with the compensation and livelihood restoration support benefits they received. Significant delays in land acquisition and compensation were noted, particularly in the CW1 contract (An Khe Pass section). All land issues were resolved at closing. Ethnic minority affected households were compensated for affected land and non-land assets following the Resettlement Action Plan (RAP) and Ethnic Minority Development Plan (EMDP) with no complaints or pending issues reported. The project rated risk in gender-based violence (GBV) is low. No sexual exploitation and abuse issues (SEA) and sexual harassment (SH) were reported. All requirements of GBV, SEA/SH were included in the contract of contractors and C-ESMP for implementation and monitoring. The RAP and Environmental and Social Management Plan (ESMP) set up the Grievance Redress Mechanism (GRM) prior to the commencement of civil works establishing access through various channels. A few formal complaints were received or processed by April 2023. At closing, 72 grievance cases were recorded. The PMU and local implementing agencies resolved these cases. The project complied with the social safeguards policies (ICR, paragraph 61).

## b. Fiduciary Compliance

**Financial management:** The project's financial management complied with the World Bank's requirements (ICR, paragraph 66). Initial substantial delays caused by the unavailability of the Government's budget allocation for the project were eventually overcome. Financial statements, financial audit reports, and interim unaudited financial reports (IFRs) were submitted and approved in a timely manner. There were no overdue IFRs or overdue audits by the time the project closed. The ICR does not



specify whether the independent audits had any qualified opinions. The Task Team clarified in their email to IEG on February 13, 2026, that all the audits were clear with no qualified opinions.

**Procurement:** Procurement of works, goods, and selection of consultants under the project complied with the World Bank Procurement Regulations (ICR, paragraph 67). The team used the Systematic Tracking of Exchanges in Procurement (STEP) to prepare and update Procurement Plans; and procure, track, and monitor procurement activities online. STEP information was available to both the Client and the WB team. The project did not receive any complaints, indications of fraud or corruption during PMU implemented procurement, or integrity investigations regarding the project. The project did experience initial procurement and implementation delays of civil works packages, particularly CW4A and CW1 (the largest package). Procurement implementation improved after EProcurement System (Viet Nam National Electronic Procurement System) was in place.

**c. Unintended impacts (Positive or Negative)**

---

**d. Other**

---

**11. Ratings**

Ratings	ICR	IEG	Reason for Disagreements/Comment
Outcome	Satisfactory	Satisfactory	
Bank Performance	Satisfactory	Satisfactory	
Quality of M&E	Substantial	Substantial	
Quality of ICR	---	High	

**12. Lessons**

The project operation offered the following lessons, slightly edited below for brevity:

- **Extracting a strong commitment from relevant stakeholders can help address implementation challenges.** This project required extensive stakeholder involvement. The relevant stakeholders were the central governmental authorities, the Ministry of Transport (MOT), other ministry-level agencies, the project implementing agency, local authorities, contractors, beneficiary communities and donor partners such as the Australian Department of Foreign Affairs and Trade (DFAT) committed to implement this project. The strong commitment from these stakeholders was useful in addressing implementation challenges such as delayed counterpart budget allocation, difficulties in land acquisition and resettlement, supply chain and mobility impacts of COVID-19 pandemic and adverse weather conditions. For example, the project mobilized grant resources from the



Australian DFAT to finance detailed design and documentation (DDD) while the budget allocation for counterpart funds was being processed with delay. For another, grants from trust funds such as the Global Road Safety Facility (GRSF) and the Global Facility for Disaster Reduction and Recovery (GFDRR) financed the assessments that would enhance the institutional capacity of agencies to implement road safety measures and point to suitable climate resilient road design options.

- **Leveraging global knowledge, experience, and best practices can enhance the achievement of Project Development Objectives.** Technical assistance informed the design of road improvements that enhanced the achievement of the PDOs. For example, applying internationally recognized standards for road safety assessments and audits (such as iRAP), deploying dedicated motorcycle lanes, arranging bus stops at convenient locations, enhancing school zone safety, utilizing the Observational Method (OM) for slope design and stabilization, and retrofitting roads, bridges, and their structures with climate-resilient features. These enhanced the achievement of connectivity, safety, and resilience of the improvements by integrating global good practices into road rehabilitation design. These TA activities informed the construction activities and expanded its impact beyond a standalone effort.
- **Implementation delays caused by challenges in land acquisition could be mitigated by a pre-assessment of affected household's resettlement.** Teams need to acknowledge that affected households and communities at large may trigger complex and difficult considerations when dealing with Land Acquisition and Resettlement (LAR). Project design and preparation may require matching risks to possible choke points to formulate creative solutions. One may involve budgeting for contingencies upfront. Another may involve moveable design features that could minimize land acquisition or the need to resettle affected households. Still another may involve sponsoring consultative processes that would enjoin beneficiaries, local leaders, government officials to periodically update the community on design considerations that best address their local needs without losing sight of the connectivity or safety objectives. To achieve strong coordination, the project may require a LAR Steering Committee with the participation of affected communities, implementing entities, government agencies. Such a committee may require a joint leadership, one from a convening authority such as a line ministry (e.g., a Vice Minister of MOT) and another from the relevant provinces (e.g., two Vice Chairmen from Binh Dinh and Gia Lai provinces). PMU management could be a member and others from relevant provincial departments, implementing agencies, and district/commune authorities. In addition, strengthening the results framework with indicators such as "Number of kilometers of Right of Way secured for the project" may allow stakeholders to monitor progress and identify timely actions to address implementation challenges as these emerge.

### 13. Assessment Recommended?

No

### 14. Comments on Quality of ICR



The ICR provided a comprehensive and well-structured overview of the project. It adhered to reporting guidelines and included annexes that offered a full picture of project evolution, explaining the causes of delays and the corrective measures taken to achieve the objectives. The narrative was internally consistent, results-oriented, and clearly articulated progress toward the PDOs, with evidence that supported the assigned ratings. The lessons distilled from implementation effectively illustrated operational challenges, particularly the need to deploy the full range of mitigation measures to address land acquisition and resettlement constraints. The ICR also incorporated photos that demonstrated the link between project activities and outcomes, including safety features and climate-resilient slopes. Figure 5 was especially useful in showing how partners such as DFAT supported design activities while the government addressed delays in counterpart funding. The annexes strengthened the assessment of efficiency. The report was candid about shortcomings in the results framework and noted references to outcome indicators that were not formally included or supported by data (e.g., reduced fatalities attributed to safety improvements). Overall, the quality of the ICR is rated High.

**a. Quality of ICR Rating**  
High