

Report Number: ICRR0021948

## 1. Project Data

Project ID P106235 Country Vietnam		Project Name VN-EXPRESSWAY DEVEL DaNang-QNgai Practice Area(Lead) Transport			
L/C/TF Number(s) IBRD-80490,IDA-49410,IDA-49420,TF- 15072		Closing Date (Original) 31-Oct-2018	<b>Total Project Cost (USD)</b> 269,193,809.28		
Bank Approval Date 24-May-2011		Closing Date (Actual) 29-Apr-2019			
		IBRD/IDA (USD)	Grants (USD)		
Original Commitment		613,500,000.00	2,282,750.62		
Revised Commitment		284,017,518.86	2,279,638.62		
Actual		269,200,976.35	1,872,129.02		
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# 2. Project Objectives and Components

a. Objectives

The project's development objectives was **"to construct an expressway that will enhance efficiency and** safety for road users travelling between Da Nang city and Quang Ngai province and build institutional capacity for expressway development in Vietnam's Ministry of Transport".



For the purpose of the ICR Review, the objective is parsed into two sub-objectives: (a) "to construct an expressway that will enhance efficiency and safety for road users travelling between Da Nang city and Quang Ngai province", and (b) "build institutional capacity for expressway development in Vietnam's Ministry of Transport."

- b. Were the project objectives/key associated outcome targets revised during implementation? No
- c. Will a split evaluation be undertaken? No

#### d. Components

**Component 1: Da Nang-Quang Ngai Expressway** (appraisal cost: US\$67.8 million, actual cost: US\$87.5 million)

This component included the following four sub-components:

(a) the construction of a four-lane expressway from NH1A to the south of Da Nang city, to Quang Ngai province, including the construction of the main carriageway, bridges, viaducts, and culverts, a tunnel, connection and service roads, and intersections, and related maintenance. It also included rehabilitation of the local road network: (i) from Da Nang city to Tam Ky city in Quang Nam province, and (ii) from Tam Ky city to Quang Ngai province;

(b) construction of a two-lane highway, including bridges, from the southern end of the expressway to NH1A in Quang Ngai province;

(c) compensation, resettlement, and rehabilitation, including livelihood restoration of project-affected persons; and

(d) establishment of an integrated traffic management and toll collection facility system and design, installation, and commissioning of an intelligent transport system (ITS) for the operation, management, and maintenance of the expressway.

**Component 2: Project Implementation Support and Institutional Strengthening** (appraisal cost: US\$6.4 million, actual cost: US\$1.8 million)

This component involved two activities:

(a) *Project Implementation Support for the Vietnam Expressway Corporation (VEC)*. This sub-component financed the provision of technical assistance (TA) to VEC in relation to (i) project implementation, including construction supervision, integrated review and monitoring, financial auditing, and implementation of the governance, transparency, and anti-corruption plan; and (ii) capacity building for financial management.

(b) *Institutional Strengthening for the Ministry of Transport (MoT)*. This sub-component financed capacity building of (i) the MoT in relation to expressway planning and network management, including establishment and operationalization of an expressway planning and network management entity, and



operationalization of the ministry's Public private Partnership (PPP) cell, in addition to the provision of policy support; and (ii) the Inspectorate Department in relation to its governance mandate.

The Japan International Cooperation Agency (JICA) and AusAID financed the following activities in parallel with the Bank financing:

**JICA** planned to finance civil works for the Da Nang –Tam Ky section (64.6 km), an intelligent transport system (ITS) for the entire project, and consulting supervision services for the JICA-funded civil works.

AusAid supported the technical assistance to operationalize the PPP cell of MoT.

e. Comments on Project Cost, Financing, Borrower Contribution, and Dates Project Cost: The estimated project cost was US\$1,405 million. The cost was revised to US\$1,074 million, and the actual cost was US\$1,065 million (ICR, p. 2).

**Financing**: The project was financed by an IBRD loan (IBRD-80490) and two IDA credits (IDA-49420 and IDA-49410).

The actual IBRD disbursements were US\$144.3 million against the appraisal commitment of US\$470.5 million. The main reasons for the reduced cost was due to the cost savings of the civil works contracts (estimated at US\$166 million). US\$135 million was cancelled. The remaining US\$191.2 million was unused.

The actual IDA disbursements were US\$123.0 million compared to the original commitments of US\$143.01 million. The was primarily due to cost savings (US\$23.66 million).

**Borrower Contribution**: The estimated financing by the Government was US\$116.6 million, while the actual spending was US\$280.01 million. The main reason for the cost increase was the land acquisition and resettlement (US\$49.12 million) and civil works for Da Nang-Tam Ky and Tam Ky-Quang Ngai (US\$89.48 million).

### Co-financing:

AusAid provided a recipient executed trust fund of US\$1.87 (appraisal and actual financing are the same), which was administered by the World Bank (ICR p.12).

**Parallel Financing**. JICA provided parallel financing. The appraisal commitment for JICA was US\$ 673.6 million. Actual disbursement was US\$ 516.64 million. A primary reason for the reduction in cost was due to the cancellation of the ITS and O&M facilities (US\$54.8 million) and physical and price contingencies (US\$104.58 million). The reason for the cancellation was that the Vietnamese government was concerned about the risks of incompatibility of the Japanese system and initiated to develop the national technical guidelines and regulations for ITS and O&M equipment, resulting in the cancellation of the component as these guidelines could not be prepared within the project life (ICR p 14).

**Dates and Restructurings**: The project was approved on May 24, 2011, and became effective on February 23, 2012. The project closed on April 29, 2019, after a delay of six months.



The project undertook three restructurings:

**First restructuring** (June 2016) aimed to simplify the process of changing the results framework, which took place as part of a one-time amendment for 13 World Bank projects in Vietnam (ICR p 15). The PDO and results framework of the project were not changed..

**Second restructuring** (January 2019) extended the project closing date by six months to complete the works except for the Dung Quat interchange, which was not likely to be completed because of the construction delay.

**Third restructuring** (March 2019) was to cancel the unused loan amount of US\$135 million of the IBRD loan.

## 3. Relevance of Objectives

#### Rationale

**Country context**: The objective of the project was relevant to the country context. At the time of appraisal, the country had invested a large amount on infrastructure development to harness the economic development opportunities. In comparison to the Northern and Southern regions of the country, the Central Region had been lagging in infrastructure financing and economic and social development. The income per capita in the Central Region was about half of the Southern Region, and the poverty level was 1.5 times higher than the Northern Region. The country needed to connect the Central Region to the south and north economic centers to distribute economic benefits. Capacity constraints of the road network in the Central Region were one of the main hindrances to regional growth. The expressway development strategy by the government expanded its focus on the Central Region to strengthen the North-South corridor. The government, with its latest national strategy (Socio-Economic Development Plan 2016-2020), continued to support the development of the infrastructure system, including the construction of the roads and highways.

**Development Problem**: The development of the expressway in the Central Region would integrate the transportation network with the North and South Regions. This would reduce the logistic costs, facilitate both domestic and international trade, and contribute to the economic integration of the Central region. The expressway would also contribute to the development of Da Nang as a regional gateway to international markets through the East-West Economic Corridor (connecting Da Nang to Lao PDR and Thailand).

**Alignment with strategy**: The objective of the project aligns with the Bank's latest strategy. One of the focus areas in the Country Partnership Strategy (CPS) FY18-22 is to enable inclusive growth and private sector participation, to which improved planning, management, and delivery of infrastructure and land in cities contribute. The PDO was central to this strategy by constructing the highway, roads and bridges, which is expected to improve people's mobility and economic growth.

Rating Substantial



# 4. Achievement of Objectives (Efficacy)

# **OBJECTIVE 1**

Objective

To construct an expressway that will enhance efficiency and safety for road users traveling between Da Nang city and Quang Ngai province.

#### Rationale Theory of Change (ToC):

The ToC was well presented in the ICR (page 9). The outcome of enhancing efficiency and safety corresponded to reduced travel time for both 10-ton freight vehicles and passenger vehicles and the number of fatalities between Da Nang city and Quang Ngai province. Such outcomes were directly informed by the construction of highways, connecting roads, and the installation of an intelligent transport system (ITS). JICA planned to support the ITS and O&M equipment for the entire section, but it was canceled as presented in section 2d. While the causal attribution of the ITS cancellation was not presented in the ICR, the project team informed IEG that the original objective of the ITS component was toll collection and improved safety, which was met by the client who financed the tolling plaza and CCTV equipment. As such, the cancellation of the ITS did not affect the causal outcome of the project.

### Outputs

- 131.5 kms of the four-lane expressway was constructed. Achieved.
- 8 kms of two-lane highway connecting the expressway to National Highway 1A in Quang Ngai was constructed. **Achieved**.
- Only 5% of the civil works were not completed. This included (a) part of the Dung Quat interchange (due to prolonged soft soil treatment works), and (b) works on some of the access/frontage roads (due to delays in land acquisition). The ICR (para 26) reported that the government planned to fund these works with its own budget. **Substantially Achieved.**

### Outcome:

- Freight tariff for a 10-ton truck between Da Nang and Quang Ngai was reduced from US\$83.4 to US\$53.9, **substantially achieving** the target of US\$75.0.
- Travel time between Da Nang city and Quang Ngai province was reduced, exceeding the target for both freight and passenger vehicles:
  - For 10-ton freight vehicles, the travel time was reduced from 233 minutes to 149, surpassing the target of 186.4 minutes. This represented a 36 percent reduction in travel time against the target of 20 percent reduction.



- For Passenger vehicles, the travel time was reduced from 158 minutes to 102 minutes, exceeding the target of 126.4 minutes. This was a 35.4 percent reduction against the target of 20 percent reduction.
- The reduction in coefficient of variation of travel time along Da Nang-Quang Expressway between Da Nang and Quang Ngai was **achieved** based on the following two results (the coefficient was measured as the standard deviation of the number of trips divided by the mean travel time; therefore, the lower coefficient suggests similar travel speed and fewer incidents on the expressway such as traffic accidents or road blockages).
  - Freight vehicles: Reduced from 0.19 to 0.13 against the target of 0.17.
  - Passenger vehicles: Reduced from 0.08 to 0.07 against the target of 0.07.
- Road safety was improved. Fatalities due traffic accidents along Da Nang-Quang Expressway corridor
  were significantly reduced from 185 (2010-11, before project implementation) to 42 during the first 8
  month of operation (from the expressway opening to traffic to project closing i.e. from Sep. 2018 to
  Apr. 2019), a 77.3 percent reduction against the target of a 10 percent reduction. The ICR also
  provided the monthly number of fatalities, which were reduced from 15 (baseline) to 5 (after project
  closure), confirming the satisfactory achievement of the road safety objective.

Rating Substantial

# **OBJECTIVE 2**

**Objective** To build institutional capacity for expressway development in Vietnam's Ministry of Transport.

#### Rationale Theory of Change (ToC):

The project activities under component 2 were expected to improve the capacity of the key institutions in expressway network management, mobilization of private capital, tolling strategy, governance and anticorruption, internal audit, and preparation of financial reports. However, the causal outcome of the inputs was not clearly articulated in the results framework. The available outcome indicator was the adoption of a strategic plan for expressway network management, which was insufficient to understand the achievement of capacity improvement. The ICR recognized the limitation and proposed to evaluate the achievement against the level of capacity enhancement (ICR para 48).

To evaluate the achievement of this objective, IEG assesses the outcomes for each capacity element: human resources, procedures, and institutional strengthening.

### Outputs:



- The project successfully established the Vietnam Expressway Authority (VEA) under the Directorate of Road in Vietnam (DRVN) with operational and legal functions and technical expertise to manage the expressway network in Vietnam. **Achieved**.
- To build the capacity to maximize the use of PPP modalities in expressway development and to advise on structuring, implementing, and managing PPP contracts, the MoT established a specialized PPP Unit in 2012. According to the project team, the PPP unit included one Director, four Deputy Directors, and 16 experts. A consulting firm was recruited for providing knowledge, skills, and practical experience in managing and implementing PPP projects for the PPP Unit and the MoT's related department. International experts and experienced lecturers delivered a series of training courses/workshops to the unit on PPP related content. On-the-job training was also implemented by the consultant via working with and supporting the unit in preparation for bidding and contract forms for the PPP projects. The institutional capacity enhancement of the PPP unit was also supported by AusAID funds. This included development of: (i) the institutional framework to identify, manage, and operate PPP projects in the transport sector; (ii) specific procedures and guidance for the PPP unit; (iii) sample documents on procurement and contracts; and (iv) management information system for PPP projects (ICR para 53).
- The capacity of the Inspectorate Department of the MoT for preventing corruption and settling complaints, and enhancing the overall transparency of the MoT was strengthened through:
  - **The development of manuals**. The Inspectorate Department disseminated 14 manuals and reports to other agencies and departments for better inspection, settlement of complaints and denunciations, and corruption prevention (ICR para 56).
  - Training. The project organized five domestic training courses, which were attended by 180 participants. In addition, the project also organized three international study tours (two to China and one to the United Kingdom) to enhance openness and transparency in the transport projects. 24 inspectors from MoT Inspectorate participated in these study tours (ICR para 57). Achieved.
- The VEA established (i) legal tools and framework for the expressway management, (ii) policy, planning, technical standards, and economic-technical norms for expressway development, and (iv) procedures for inspection and supervision. Since the dissolution of the VEA, these were taken over by the Directorate of Road in Vietnam (DRVN).
- Nine senior staff and 18 officers in the Vietnamese Expressway Administration (VEA) received training on expressway management, which improved expressway management capacity. Although VEA was dissolved, the VEA staff were transferred to the DRVN to carry out similar functions, thus allowing DRVN to maintain the trained staff.
- A draft national strategy for tolling was prepared but not adopted because each BOT and PPP project had its own project-based tolling strategy (ICR para 55). **Not Achieved**.

# Outcomes

### 1) Human resources:

• The newly created PPP unit substantially improved its capacity. It was successful to plan and identify eight PPP sections for the ongoing north-south expressway.



• The Vietnam Expressway Corporation (VEC) developed a new function of Internal Audit (IA) and recruited IA staff. The project provided training and technical assistance for developing a model for financing management, debt management, and long-term fiscal planning. The model was put into practice by the end of the project (ICR para 60).

As per the above assessment, human resources for expressway management were substantially improved based on the evidence on the improved staffing of VEA/DRVN, the PPP unit, and VEC.

#### 2) Procedures:

- The PPP unit substantially improved relevant procedures on PPP projects in the transport sector. According to the WB task team, no PPP procedures for expressway development were prepared before the project. There were Build-operate-transfer (BOT) expressway projects with unsolicited proposals from a private investor, which assigned a project to a private investor without a competitive selection process. The project supported the development of sample procurement and contract documents to facilitate standardized, transparent, and efficient transactions.
- The MoT adopted 14 inspection procedures to prevent corruption and settle complaints. It also organized training for the 63 provincial-level inspectorates to streamline these procedures at the provincial level. The project team informed IEG that the MoT, beyond the project activities, provided training to provincial level staffs while developing provincial level inspection procedures.

As per the above assessment, the project achieved a substantial improvement in the procedures on the PPP procurement and contract management as well as inspection procedures.

#### 3) Institutional Strengthening:

- According to the task team, before the project, the central government only developed the expressway strategy, and the planning and development were not implemented in a coherent manner. The engagement of the project allowed the government to integrate strategy, policy, development plan, and network management of the expressways.
- The PPP unit planned and identified eight PPP sections for the ongoing north-south expressway, by following the policies and working procedures developed under the project, and through successful collaboration with other ministries. These transactions of private capital are estimated to cost US\$ 2.9 billion.
- VEC's financial strengthening was not achieved. According to the task team, the preparation of the financial statements was to allow VEC to access the international market to mobilize external financing. The intention was not achieved because the Vietnamese legal framework did not allow the state-owned entity, including VEC, to go to the international market. Financial statements prepared by the project were not used to improve financial health. It was only used for debt restructuring exercise led by the central government.



As per the above assessment, institutional strengthening was substantially improved given the results of improved institutional capacity of VEA/DRVN and the PPP unit, albeit limited achievements of tolling strategy and financial strengthening of VEC.

Given the substantial achievements in human resources, procedures, and institutional strengthening, objective 2 is rated substantial.

Rating Substantial

# **OVERALL EFFICACY**

#### Rationale

The efficacy of the first objective "to construct an expressway that will enhance efficiency and safety for road users traveling between Da Nang city and Quang Ngai province" was substantial. This conclusion was based on the substantial results of the project that reduced travel time, coefficients of variation of travel time, and fatalities from the traffic accidents along the Da Nang-Quang Expressway corridor. The efficacy of the second objective "to build institutional capacity for expressway development in Vietnam's Ministry of Transport" was substantial, given the improved human resources, procedures, and institutional capacity.

Therefore, this review concludes that the overall efficacy of the project's achievements is substantial.

**Overall Efficacy Rating** 

Substantial

### 5. Efficiency

**Economic and financial analysis:** The project team calculated the Economic Internal Rate of Return (EIRR) both at appraisal and at completion. The PAD estimated EIRR at 25% in the base case scenario and NPV at US\$2.2 billion, while the ICR's estimate was 12% and US\$0.19 billion respectively (NPV in VND billions in ICR Table 4.11 was converted to US\$ using an exchange rate in the second page of the ICR). The discount rate applied was 11% for appraisal and 10% for completion. The slight difference in the discount rate used is due to the application of the 2016 World Bank guidelines. The main reasons for the decreased EIRR are: (i) prolonged construction time, (ii) lower than projected traffic, (iii) a higher toll rate set at 1,500 VND/km against the original estimates of 800-1,000 VND/km.

The appraisal's estimate of Financial Internal Rate of Return (FIRR) was 2.6%, and the weighted average cost of capital (WACC) was 2.5%. With the additional analysis of the cash flows, the appraisal reported the necessity of additional financial support in order to compensate early deficits in the project life (PAD Annex 7 para 38).



The ICR, however, did not report any financial analysis, and no evidence was confirmed whether the project was financially efficient.

**Aspects of design and implementation**: The project design and implementation were substantially efficient with some shortcomings. The project design was optimal in terms of objective and supported activities. A great success of the project during design was the adoption of an integrated project monitoring plan and safeguard policies on the entire expressway (i.e. both JICA and World Bank sections). The Bank and JICA signed a Procedure Agreement for the project in 2012, which streamlined the project management and coordination between the two entities.

During implementation, the project successfully managed to reduce the cost of bidding for civil works contracts by a total of US\$166 million due to effective contract packaging (ICR para 78). However, the implementation entailed two shortcomings. One, the client was motivated to complete the construction component, but less to capacity building activities because: (i) the change in the management of MoT and VEC resulted in less understanding of the capacity building activities; and (ii) benefits of technical assistance were not well perceived by the client since numerous capacity-building activities by donors had not operationalized due to changes in the government administration system (ICR para 76). Two, the project implementation progress was prolonged due to: (i) the lack of experience and weak institutional capacity of MoT and VEC and (ii) slow resettlement and land acquisition.

Because of these reasons, efficiency is rated modest.

## Efficiency Rating

Modest

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	$\checkmark$	25.00	100.00 □ Not Applicable
ICR Estimate	$\checkmark$	12.00	100.00 □ Not Applicable

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

### 6. Outcome

Relevance to the country priorities and the Bank's strategy and was **substantial**. Overall efficacy was **substantial**, given the sound results of the construction of the Da Nang-Quang Expressway corridor and improved MoT's capacity. Efficiency was **modest** due to the lower estimated economic rate of return compared to the appraisal estimate, and inefficient implementation factors. Hence, the outcome of the project is rated **moderately satisfactory**.



a. Outcome Rating Moderately Satisfactory

#### 7. Risk to Development Outcome

The main risks to development outcome are related to the completion of the remaining construction works, financial sustainability, and institutional sustainability.

**Completion of the Remaining construction works**: The risk of remaining construction works not being completed are modest. The ICR reported that the delay in completing the remaining construction works might mitigate the efficiency of expressway operation in the short-term. At project closure, the remaining civil works of Dung Quat interchange and access roads were still pending approval from the higher-level. If approved, these works will be financed by the government and will take ten months for the interchange and three months for access roads to be completed. The construction will interrupt the traffic flow (ICR para 100).

**Financial sustainability**: The risks of financial sustainability remain substantial for future operation and maintenance of the roads constructed by the project. Appraisal estimated the FIRR at 2.6% and recommended future financial support to Vietnam Expressway Corporation (VEC) for operation and maintenance of the road. The total investment was reduced by 24% from US\$1,405.6 million to US\$1,065.8 million, and the FIRR might have been enhanced. The toll revenue from expressways is supposed to fund the maintenance. There is a risk that financial support for future maintenance will not be sufficient as the tolls for the World Bank-financed section will not be collected until the completion of all civil works. However, the ICR reports (para 1010) that this risk is considered manageable and temporary as the maintenance works are at very small scale at this stage and will be covered under the overall maintenance source. This is, however, not evidenced by financial analysis.

**Institutional sustainability**: The risk of institutional sustainability are modest, based on the results shown in section 4. The Vietnamese Expressway Administration (VEA) was dissolved, and the VEA staff was absorbed by the Directorate of Road in Vietnam (DRVN) and therefore has adequate capacity for expressway planning and management.

The Vietnam Expressway Management Administration (VEMA) was set up under VEC as a specialist subsidiary to provide operation and maintenance services for expressways for which VEC is responsible. VEC's capacity has been strengthened through technical assistance and training from JICA on maintenance.

### 8. Assessment of Bank Performance

a. Quality-at-Entry

The ICR (para 91) noted that the project design was informed by earlier project experience, which included (i) the optimum size of the procurement packaging and slice-packaging, (ii) limiting the number of contracts to a manageable level, and (iii) providing hands-on support to supervision and social



safeguards implementation. Necessary studies and documents focusing on the social and environmental aspects of the project, as well as fiduciary assessments, were initiated early during the project preparation (ICR para 92).

The Bank team also established a well-coordinated framework for project preparation and supervision with concerned stakeholders such as JICA and AusAid. The Bank set up agreements with JICA and AusAid, assessed the capacity gaps of the various departments of the MoT and PMUs, and incorporated consensus into capacity-building activities (ICR para 93).

The project, however, had a shortfall in the causally linked results framework. The outcomes, outputs, and indicators of PDO1 were well articulated; however, there were limitations with regards to the second PDO. The outcome level indicator "adoption of a strategic plan for expressway network management" was limited to "senior staff appointed to VEA and make it become operational", which was insufficient to account for the achievement of the PDO. Also, outputs of the second PDO were not reflected in the outcome-level indicator, such as an integrated tolling system, better institutional governance, improvement of anti-corruption, and mobilization of private capital (ICR para 94).

Quality-at-Entry Rating Moderately Satisfactory

### b. Quality of supervision

Project supervision was largely adequate. The task team conducted 18 supervision missions (including additional safeguard missions), site visits, and regular communications, and provided recommendations for improving the effectiveness of the project. The task team proactively engaged with the client in providing feedback on technical inputs and in responding to the government's requests, including the cancellation of the unused amount of US\$135 million (ICR para 95). The ICR notes (para 96) that the project also benefited from higher-level management support (site visits by the Country Director and managers and regular communication with high-level government representatives), which helped keep the momentum and facilitated progress.

The ICR reported two shortcomings of supervision: (i) a lack of effective instruments to enforce timely compliance with safeguards requirement (see section 10); and (ii) insufficient consideration to restructure some M&E indicators (see section 9) (ICR para 83). It should also be noted that despite the appraisal's assessment to provide financial support to ensure the project's financial sustainability, none of the discussion nor analysis on financial sustainability were implemented.

Quality of Supervision Rating Moderately Satisfactory

Overall Bank Performance Rating Moderately Satisfactory



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

#### a. M&E Design

The project established an efficient M&E framework for joint monitoring with the co-financer. The abovementioned procedure agreement between IBRD, IDA, and JICA streamlined the information exchange and coordination of project management and contributed to developing a mechanism to assess coordination of progress on both the World Bank and JICA funded sections.

The M&E framework was, however, not well defined as partly reported in the quality at entry section. The causal link of PDO1 was most apparent in the results framework yet missed assigning the contribution of ITS in its framework. The definition of PDO2 was not well defined in terms of what institutional capacity was to be improved. The results framework only indicated its PDO level outcome by "adoption of a strategic plan for expressway network management," where "adoption" and "a strategic plan" were not defined (ICR para 82). Its indicator "senior staff appointed to VEA and make it become operational" was not supported by the project activities (ICR para 94). In addition, some intermediate outcomes were not clearly linked to the inputs. For example, inputs of an intermediate indicator, "adoption of a national strategy for tolling," were not identified in the institutional strengthening component reported in PAD Annex 2 (para 12 through 14).

### b. M&E Implementation

The ICR reported that the implementation of M&E was challenging mainly due to inadequate data collection and assessment of results indicators and ineffective communication of the M&E consultants. The ICR indicated the consultants' report was too mechanical and lacked an evaluation of the extent of capacity building. In addition, there was a lack of coordination between PMUs and beneficiary agencies, which sometimes led to delayed project updates (ICR para 83).

At the same time, it was recognized that better coordination between the M&E consultants and beneficiary departments would enhance the effectiveness of M&E utilization. The ICR reports (para 84) that with more effort in coordination between the M&E consultants and beneficiary departments, the effectiveness of M&E reports was enhanced with more timely updated indicators in the M&E reports submitted by the VEC. For example, VEC requested the M&E consultant to more frequently conduct the surveys and meetings, which improved the quality of road fatalities data (ICR para 84).

#### c. M&E Utilization

M&E utilization was difficult due to inadequate data and results measurement as stated in M&E Implementation section.

M&E Quality Rating Modest

#### 10. Other Issues



a. Safeguards

The project was classified as Environmental Category "A" and triggered the Bank's safeguard policies on Environmental Assessment (OP/BP 4.01), Physical Cultural Resources (OP/BP 4.11), and Involuntary Resettlement (OP/BP 4.12). The environmental safeguards were compliant with the Bank's requirement. Although there was non-compliance by the contractors during construction on worker's safety and construction waste management, Project Management Unit (PMU) and the task team developed action plans which were approved by VEC, and helped strengthen the compliance of the contractors (ICR para 86).

The social safeguards were, on the other hand, not fully implemented, while the deviation from the Bank guidelines was minor. At project closure, about US\$ 300,000 compensation payments to around 3,000 affected households were outstanding. This non-compliance occurred in some districts in Quang Nam. Due to the risk in non-compliance implementation, due diligence was carried out to review the compensation standard policies and practices (ICR para 97). The due diligence survey provided a comprehensive analysis to all government agencies. It suggested that non-compliances were minor and dispersed and did not equate to evidence that households had been left worse off by land acquisition associated with the expressway, but rather that the receipt of compensation and allowance benefits had differed (ICR para 87).

# **b. Fiduciary Compliance**

**Financial Management:** There were some gaps in the financial management requirements. The financing agreement required two financial statements, one of which was the project-audited financial statements, which was acceptable. Another was the VEC entity-audited financial statements, which were considered not acceptable because the auditor issued an adverse opinion due to the non-application of the International Financial Reporting Standards (IFRS). The reason for the non-compliance (as explained in the ICR para 59) was that the VEC as a state-owned enterprise had to apply the national accounting standard called Vietnam Accounting Standards (VAS). VAS and IFRS were different in financial positions and performance and were not compatible. Given that the VEC would be technically insolvent if it used IFRS, the VEC entity-audited financial statements did not apply IFRS.

**Procurement:** The project was compliant with the World Bank procurement guidelines. The project properly designed the procurement packages and satisfactorily implemented procurement activities in accordance with the Bank's requirements. The Integrity Vice President (INT) reported fraud when an international consulting entered into a subcontract with a local firm and negotiated a contract amendment with the PMU that resulted in an increase in the scope of work. This expansion mainly included a lump sum item in the Independent Verification Laboratory Test Work of the expressway construction works packages supervised by the consultant (ICR para 90).

c. Unintended impacts (Positive or Negative) N.A.



### d. Other

The ICR reported that the project contributed to climate change adaptation. Historical data on flooding along the NH1 corridor suggests a 50% probability in road closure of 6-10 hours every other year. The engineering design of the project road ensured that the vertical alignment of the expressway was consistent with appropriate flood levels, which generated about 1,434 million VND of flood damage mitigation benefits in 2019. (ICR para 69)

## 11. Ratings

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

#### 12. Lessons

The ICR provided seven lessons with the reflection on procurement and contract management, safeguard, institutional coordination, M&E framework, and co-financing framework, which are all useful for the future project preparation and supervision of the transport projects. In addition to the ICR's lessons, IEG further expands two specific lessons on the M&E framework and co-financing framework.

1. Complex and multilevel engagements need a more nuanced causal theory than a linear process. The project was clear enough to ensure the causal mechanisms of the expressway development because it provided a linear mechanism, which reduced travel time, smoothed the traffic, and improved road safety. On the other hand, the project was not sufficient to design the causal mechanism for capacity improvement due to the complex interventions and multiple levels of engagements. A tolling strategy, for instance, involved various stakeholders, including a high-level government entity and private investors, which required extensive consultations and careful consideration of their interests. The project needed a detailed causal framework on how the project intended to engage with different levels of entities and to nudge these stakeholders.

2. A systematic framework and engagement with co-financers are strengthened when considering risk management. The project demonstrated effective coordination with the co-financer (JICA). Such coordination was enabled with the signed procedure agreement, which detailed the coordination mechanism between the two entities. It established the integrated project review and monitoring services and served as a mechanism to monitor the progress of the entire section of the roads. While effective overall, the lack of risk assessment undermined the effectiveness of the framework. The framework was not responsive to the cancellation of the JICA's



ITS component. Risks associated with each entity should be identified at an early stage and should be incorporated into the framework.

#### 13. Assessment Recommended?

No

### 14. Comments on Quality of ICR

The ICR was clearly written and carefully examined the project contribution to achieving the PDO. One of the key challenges of the ICR was to assess objective 2, whose results chain was poorly designed. The ICR demonstrated a compelling rationale to assess the results differently. The assessment could have been improved by focusing on the outcome rather than the intermediate outcome. Efficiency analysis was conducted from the point of economic efficiency and implementation efficiency; however, the ICR did not report financial efficiency, which was an important factor in ensuring the project's financial sustainability.

a. Quality of ICR Rating Substantial