Asian Development Bank

Southeast Asia Department

9 December 2011

H.E. Nguyen Van Binh
Governor
State Bank of Vietnam
16 Tong Dan Street
Ha Noi, Viet Nam

Dear Excellency:

**Re: Technical Assistance for Improvement of Road Safety and Climate Resilience on National Highways (TA 7900–VIE)**

We are pleased to inform you that on 27 October 2011 the Asian Development Bank (ADB) approved the provision of technical assistance (the Technical Assistance) to the Government of Viet Nam (the Government) in an amount not exceeding the equivalent of US$1,500,000 to be financed on a grant basis by the Japan Fund for Poverty Reduction for Improvement of Road Safety and Climate Resilience on National Highways. The Technical Assistance will be financed and carried out pursuant to (i) the Technical Assistance Framework Agreement between the Government and ADB dated 1 May 1996 (the Framework Agreement), and (ii) the arrangements described in paragraph 11 and Appendix 4 of the Final Concept Paper attached hereto as Annex 1. As indicated in the Final Concept Paper, the Ministry of Transport (MOT) is to serve as the Executing Agency for the Technical Assistance and Traffic Safety Project Management Unit (TSPMU) is to serve as the Implementing Agency for the Technical Assistance. The cost estimates and financing plan for the TA are attached as Annex 2 and the terms of reference of consultants to be engaged under the TA are attached as Annex 3.

The Technical Assistance will be provided entirely as a grant.

The Memorandum of Understanding signed by the Executing Agency and ADB is attached hereto as Annex 4 for your information.

If these arrangements are acceptable to you, kindly have both copies of this letter countersigned in the space indicated below. Please retain one copy for your records, and return one original copy to ADB. Please be advised that ADB's offer of the subject TA is valid for a period of one year from the date of approval. If the TA letter remains unsigned as of 26 October 2012, ADB's offer will be allowed to lapse.

Transport and Communications Division

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As Director of Transport and Communications Division, Mr. James Lynch will be responsible for all matters pertaining to the implementation of the Technical Assistance. All communications on this matter may therefore be addressed to him at jlynch@adb.org.

Sincerely yours,

Tomoyuki Kimura
Country Director for Viet Nam

Confirmed:

On behalf of the Government

Name: Le Minh Hung
Position: Deputy Governor, State Bank of Viet Nam
Date: 2 Dec. 2011

On behalf of the Executing Agency

Name: Lê Mạnh Hùng
Position: Deputy Minister, Ministry of Transport
Date: 2 Dec. 2011

Attachments: a/s

cc: Mr. Ngo Thinh Duc, Deputy Minister, Ministry of Transport
Ms. Nguyen Thanh Hang, Deputy Director General,
Department of Planning and Investment, Ministry of Transport
Mr. Nguyen Huu Long, General Director, Traffic Safety Project Management Unit
Mr. Tomoyuki Kimura, Country Director, ADB Viet Nam Resident Mission

ADB

Concept Paper

Project Number: 45044
October 2011

# Socialist Republic of Viet Nam: Improvement of Road Safety and Climate Resilience on National Highways

Asian Development Bank

## Cost Estimates and Financing Plan
($'000)

| Item | | | | Total Cost |
|---|---|---|---|---|
| **A.** | **Japan Fund for Poverty Reduction**[a] | | | |
| | 1. | Consultants | | |
| | | a. | Remuneration and per diem | |
| | | | i. International consultants (27 person-months) | 729.5 |
| | | | ii. National consultants (79 person-months) | 198.3 |
| | | b. | International and local travel | 83.2 |
| | | c. | Reports and communications | 68.0 |
| | 2. | Equipment (computer, printer, etc.)[b] | | 2.5 |
| | 3. | Meetings and training | | |
| | | a. | Tripartite meetings (2 meetings) | 18.0 |
| | | b. | Training program | 14.0 |
| | | c. | Seminar | 8.0 |
| | 4. | Vehicles[d] | | 27.2 |
| | 5. | Surveys | | 165.0 |
| | 6. | Miscellaneous administration and support costs | | 40.0 |
| | 7. | Representative for contract negotiations | | 6.0 |
| | 8. | Contingencies | | 140.3 |
| | | **Subtotal (A)** | | **1,500.0** |
| **B.** | **Government Financing** | | | |
| | 1. | Office accommodation and transport | | 110.0 |
| | 2. | Remuneration and per diem of counterpart staff | | 34.0 |
| | 3. | Surveys and Data Collection | | 12.0 |
| | 4. | Contingencies | | 14.0 |
| | | **Subtotal (B)** | | **170.0** |
| | | **TOTAL** | | **1,670.0** |

[a] Administered by the Asian Development Bank.

[b] Equipment: to be included in the consulting services contract as provisional sum and handed over to the executing agency at the end of the services.

| Type | Quantity | Cost |
|---|---|---|
| Notebook computers | 2 | $1,200 |
| Printer | 2 | $ 900 |
| Digital camera and accessories | 1 | $ 400 |

[c] Workshops, training, seminars, and conferences: to be included in the consulting services contract as provisional sum.

| Purpose | Number of Participants | Venue | Duration | Cost |
|---|---|---|---|---|
| Tripartite meetings after interim and draft final phases to obtain concurrence from TSPMU and provinces, and seek ensure coordination with World Bank and JICA | 50*2 | MOT, Hanoi | 2 days | $ 18,000 |
| Training course in traffic safety through improvement in highway infrastructure | 30 | MOT, Hanoi | 1 day | $ 7,000 |
| Training course in methodology of climate adaptation for coastal roads and bridges in Viet Nam | 30 | MOT, Hanoi | 1 day | $ 7,000 |
| Seminar on design of traffic safety campaign | 40 | PDOT, Ninh Thuan or Binh Thuan | 1 day | $ 8,000 |

[d] Vehicle

| Purpose | Duration |
|---|---|
| Covers monthly lease of 3 vehicles to carry out field surveys throughout 2 provinces, including cost of driver, fuel and minor maintenance | 8.5 months |

Source: Asian Development Bank estimate


VIET NAM
PROPOSED IMPROVEMENT OF
ROAD SAFETY AND CLIMATE RESILIENCE ON
THE NATIONAL HIGHWAY 1 PROJECT
107°30'E
109°00'E
12°00'N
10°30'N
0 5 10 20 30 40
Kilometers
National Capital
Provincial Capital
City/Town
Project Highway
National Road
Other Road
Railway
River
Provincial Boundary
International Boundary
Boundaries are not necessarily authoritative.
DAC LAC
KHANH HOA
LAM DONG
NINH THUAN
BINH THUAN
DONG NAI
BA RIA - VUNG TAU
Khan Vinh
Dien Khanh
Nha Trang
Da Lat
Cam Ranh
Cam Ranh Bay
Du Long
Duc Trong
Ninh Hai
Phan Rang-Thap Cham
Bao Loc
Di Linh
Thon Son Hai
Thon Lac Nghiep
Vinh Hoa
Ca Na
Padaran Bay
Xa Song Luy
Bac Binh
Phan Ri Bay
Tri An Reservoir
Duc Linh
Ap Long Hoa
to Ho Chi Minh City
Xuan Loc
Da Mai
Phan Thiet
Hai Long
Song Phan
Ke Ga
Tam Tan
Binh Chau
Chau Thanh
Phuoc Tuy
Long Dat
Dat Lo
Vung Tau
PROOF ONLY
Note : First Proof, 11 May 2011
Second Proof, 11 May 2011
This map was produced by the cartography unit of the Asian Development Bank. The boundaries, colors, denominations, and any other information shown on this map do not imply, on the part of the Asian Development Bank, any judgment on the legal status of any territory, or any endorsement or acceptance of such boundaries, colors, denominations, or information.
PEOPLE'S REPUBLIC OF CHINA
HA NOI
Hai Phong
Vinh
LAO PEOPLE'S DEMOCRATIC REPUBLIC
Da Nang
Hoi An
Quang Ngai
Pleiku
Quy Nhon
Tuy Hoa
CAMBODIA
Nha Trang
Da Lat
Phan Rang-Thap Cham
Phan Thiet
Ho Chi Minh City
Vung Tau
105°00'E
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# I. THE PROJECT

## A. Rationale

1. The government of Viet Nam (the government) has requested ADB support to design and implement a pilot road rehabilitation project that improves traffic safety and climate resilience of national highways (NH). The pilot project will target dangerous and vulnerable segments along a 180 kilometer (km) section of NH1 in the south-central coastal provinces of Ninh Thuan and Binh Thuan. This section of NH1 is part of the country's north-south arterial corridor and the Greater Mekong Subregion Eastern Corridor. ADB financed the rehabilitation of this section in 1993.[1] However, an unexpected rapid increase of traffic volume, a significant growth in human settlements, extreme weather events, frequent flooding, and land slides have all contributed to growing road safety risks. Through consultations in the preparation of ADB's assessment, strategy, and roadmap for the transport sector[2], the government highlighted the urgent need for a pilot road rehabilitation project that incorporates traffic safety and climate resilience features in both design and implementation.

2. Rapid motorization in Viet Nam, especially with the dramatic increase in the share of motorcycles, poses a huge and growing traffic safety challenges.[3] The number of traffic fatalities rose sharply in the early 2000's and the national fatality rate of 1.4 per 10,000 persons is among the highest in the world.[4] The fatality rate for the two project provinces is even higher at 2.0, with most accidents occurring on NH1. For the 180 km section of NH1 that comprises the project road, the Traffic Safety Project Management Unit (TSPMU) has identified 47 traffic accident "black spots" that were responsible for 103 casualties in 2008–2010 data; this section accounted for 76% of black spots and 84% of casualties against the provinces' totals. The high and increasing road safety risks on NH1 are attributable to (i) a rapidly changing composition of traffic, with a significantly higher proportion of motorcycles and heavy trucks, (ii) deteriorated road infrastructure and hazardous driving conditions due to overloading and severe weather events, and (iii) lack of sufficient safety measures such as easements, barriers, and other restrictions.

3. Because the project road is a coastal highway, it is extremely vulnerable to the impacts of climate change given its low-lying topography and proximity to the eastern coast of Viet Nam. The Ministry of Transport (MOT) has identified a number of road sections that are repeatedly flooded, and yearly floods are typically 30–100 centimeters in depth. During the monsoon seasons when flooding is most prevalent and severe, massive evacuations are common and traffic along NH1 is often interrupted for long periods of time. The flooding results from a combination of heavy rains that contribute to water flows from adjacent mountains and high tides in the sea. Flooding and its negative impacts are expected to increase in the coming years due to climate change and rising sea levels. The linkage between climate change and road safety is clearly evident from an increase in traffic accidents and fatalities on road sections subject to flooding and landslides.

4. The government's request to include road safety and climate resilience features in a project to rehabilitate a 180 km section of NH1 has four core objectives. First, there is strong interest to introduce new engineering approaches and techniques for improving the safety and climate resilience of roads. In addition to the installation of traffic signs, street lights, road markings, center barriers, and speed reduction strips on carriageways, innovative approaches to improve road safety that will be explored under the project will include motorcycle lanes with proper separators, crash barriers and crash cushions, light-emitting delineators, and semi-automatic road surveillance systems. New engineering solutions to improve climate resilience of

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[1] ADB. 1993. Loan 1272-VIE: Road Improvement (approved on 29 November 1993). Manila.
[2] Sector ASRs can be downloaded from the SERD's portal site.
[3] The number of vehicles has rapidly increased in Viet Nam in recent years. From 1990 to 2006, motorcycles have increased from 1.2 million to 18.6 million, and four-wheel vehicles from 0.2 million to 1.0 million.
[4] 2006 data.

the project road will also be explored, such as raising vertical alignments, increasing cross-drainage capacities, and stabilizing slopes.

5. The second objective is to define appropriate institutional arrangements to implement recent policies and initiatives in support of road safety and climate change. The National Traffic Safety Committee (NTSC) was established in 1997 to advise the Prime Minister on safety issues, policies, and regulations in the transport sector. TSPMU was established in 2004 as an administrative unit under NTSC.[5] NTSC and Provincial Traffic Safety Committees (PTSCs) were consolidated in 2010 to enhance coordination between national and provincial governments. The Directorate for Roads of Viet Nam (DRVN) was established in 2010, and it also has responsibility for traffic safety.[6] However, there is a need to clarify and coordinate the respective roles and responsibilities of DRVN, NTSC, TSPMU, and PTSC on emerging issues like road safety and adaptation to climate change, as well as to provide the requisite capacity building support.

6. The third objective of the project is to increase public awareness of road safety and climate change issues in order to reduce the vulnerability of local populations along the road corridor to the negative impacts of increased traffic and climate change. Road safety awareness campaigns will be conducted in corporation with PTSCs and local community organizations. These campaigns will be designed based on an analyses of social characteristics of local communities living along the corridors, and will include effective gender mainstreaming features to increase the role of women educating people about improving road safety and climate resilience.

7. As a pilot project to be replicated on NHs across the country, the fourth objective is to create a road safety and climate change implementation template. To this end, the template will incorporate innovative engineering approaches, defining appropriate institutional arrangements, and increasing public awareness to improve road safety and climate resilience. In preparing this template, the government will also draw upon road safety and climate change initiatives supported by other development partners. The World Bank has been implementing the Vietnam Road Safety Program since 2005.[7] Japan International Cooperation Agency (JICA) has supported establishment of a national traffic safety master plan. JICA has been implementing a technical assistance project for traffic police training and a loan project for infrastructure and other improvements on NHs in the northern provinces around Ha Noi.[8] Drawing upon these projects and programs supported by ADB, JICA, and the World Bank, TSPMU will serve as the apex agency for preparing the road safety and climate change implementation template.

## B. Impact, Outcome, and Outputs

8. The impact of the project will be reduced economic losses and increased social welfare of road users and residents in the project provinces of Ninh Thuan and Binh Thuan. The outcome will be safe and reliable road conditions (all-year access regardless of climate change impacts) of NH1 in the project provinces. The outputs will be (i) improved road safety and climate resilience of the NH1 in Ninh Thuan and Binh Thuan provinces; (ii) enhanced institutional coordination and capacity on road safety and climate resilience of TSPMU, DRVN, and PTSCs; (iii) increased public awareness of road safety and climate change issues among road users and local population; and (iv) template for implementing road safety and climate change measures on NHs across the country.

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[5] NTSC. 2004. Decision 305/2004/QD-UBATGTOG. Ha Noi.

[6] ADB is currently supporting DRVN's institutional capacity enhancement. ADB. 2010. *Technical Assistance to Viet Nam for Strengthening Institutional and Financial Arrangements, Operation and Maintenance, and Governance in Road Transport* (TA 7611-VIE). Manila.

[7] This project addresses engineering, education, enforcement, and emergency services aspects of traffic safety.

[8] JICA. The Project for Strengthening the Traffic Police Training in People's Police Academy and Various Police Training Institutions in Vietnam. and JICA. 2009. Northern Vietnam Traffic Safety Improvement Project.

## C. Investment and Financing Plans

9. The project cost is estimated at $80 million, including civil works, consulting services, land acquisition and resettlement, and other costs. The tentative financing plan is shown in Table 1.

**Table 1: Tentative Financing Plan**

| Source | Amount ($ million) | Share of Total (%) |
|---|---|---|
| Asian Development Bank | 50.00 | 62.50 |
| Cofinanciers[a] | 20.00 | 25.00 |
| Government | 10.00 | 12.50 |
| **Total** | **80.00** | **100.00** |

[a] To be determined before the loan processing.
Source: Asian Development Bank estimate

## D. Indicative Implementation Arrangements

10. The executing agency will be MOT. The implementing agency will be TSPMU given its mandate for traffic safety and related improvements. TSPMU will be responsible for identifying priority road segments for improvement, carrying out design works, and engaging contractors. TSPMU will work closely with relevant PTSCs to implement the community based awareness programs and to coordinate with local authorities, including traffic police and district people's committees. DRVN and its relevant Regional Management Units (RMUs) will have overall responsibility for maintenance of the project road, and capacity enhancement measures will be targeted not only to executing and implementing agencies but also to DRVN and relevant RMUs and PTSCs to enhance the sustainability of the project outcomes. The Government is expected to authorize the MOT as the line ministry and the TSPMU as the project owner in the project detailed outline. TSPMU will establish a division in charge of implementation of the loan project.

11. The PPTA is estimated to cost $1.67 million equivalent, of which $1.5 million equivalent will be financed on a grant basis by the Japan Fund for Poverty Reduction and administered by ADB. The Government will finance the remaining $0.17 million equivalent. The TA will be implemented over 8.5 months, beginning in December 2011. ADB will recruit a consulting firm using quality- and cost-based selection (QCBS) with the quality-cost ratio of 90:10 and full technical proposals. The higher quality-cost ratio is proposed because the PPTA requires enough technical expertise to coordinate well with various stakeholders including development partners, DRVN, PTSCs and is expected to produce more detailed output than normal road projects as described in the TOR. For the ensuing loan project, it is expected that an international consulting firm for project supervision will be selected by QCBS, and civil works contractors will be selected by international competitive bidding.

# II. DUE DILIGENCE REQUIRED

12. The due diligence required under the project includes the following:

(i) **Technical.** NH 1 is a major arterial corridor with a heavy and mixed traffic including large trucks and motorcycles. Smooth and safe traffic flow should be maintained throughout physical implementation. Emergency measures may be required if the highway section is damaged by floods or storms during implementation.

(ii) **Economic and financial.** Economic viability will be assessed during the PPTA.

(iii) **Governance.** The PPTA will look into public financial management, procurement, anticorruption, policy and legal, capacity, and other institutional issues and mechanisms, and necessary capacity enhancement measures will be incorporated into the project.

(iv) **Poverty and social.** The poor often have no choice but to use vulnerable transport modes (walking, bicycle, etc.) and are more affected by accident

damages. Pro-poor and gender mainstreaming measures will be assessed, and a gender action plan will be prepared during the PPTA.

(v) **Safeguards.** Most of the civil works are expected to be conducted within the existing right of way or with partial widening. Thus, involuntary resettlement and environment impacts will be limited. It is envisaged that there will be no impacts on indigenous peoples. The project is classified as category B for environment and involuntary resettlement, and category C for indigenous peoples.

## III. PROCESSING PLAN

### A. Risk Categorization

13. The project is low risk because (i) a loan amount is $50 million, (ii) ADB has a sound record of previous experience in the road transport subsector in Viet Nam, (iii) the executing agency has a reasonable capacity, and (iv) safeguard categorizations are B and C.

### B. Resource Requirements

14. The project team will comprise a transport specialist/mission leader, safeguard specialists (resettlement and environment), a financial specialist, and a project analyst. About 16 person-months of internal staff resources will be required. PPTA is required to design the project as described in Appendix 4.

### C. Processing Schedule

15. Table 2 shows the proposed processing schedule up to loan effectiveness.

**Table 2: Proposed Processing Schedule**

| Milestones | Expected Completion Date |
|---|---|
| Reconnaissance mission | 8 April 2011 |
| Departmental concept meeting | 13 May 2011 |
| JFPR application for the PPTA | 19 July 2011 |
| Peer review of concept paper | September 2011 |
| GOJ's informal approval on the PPTA | October 2011 |
| Concept clearance (PPTA approval) | October 2011 |
| Mobilization of PPTA consultants | February 2012 |
| Loan fact-finding mission | September 2012 |
| Staff review committee | November 2012 |
| Loan negotiations | January 2013 |
| Board consideration | February 2013 |
| Loan effectiveness | June 2013 |

GOJ = Government of Japan, JFPR = Japan Fund for Poverty Reduction, PPTA = project preparatory technical assistance
Source: Asian Development Bank estimate

## IV. KEY ISSUES

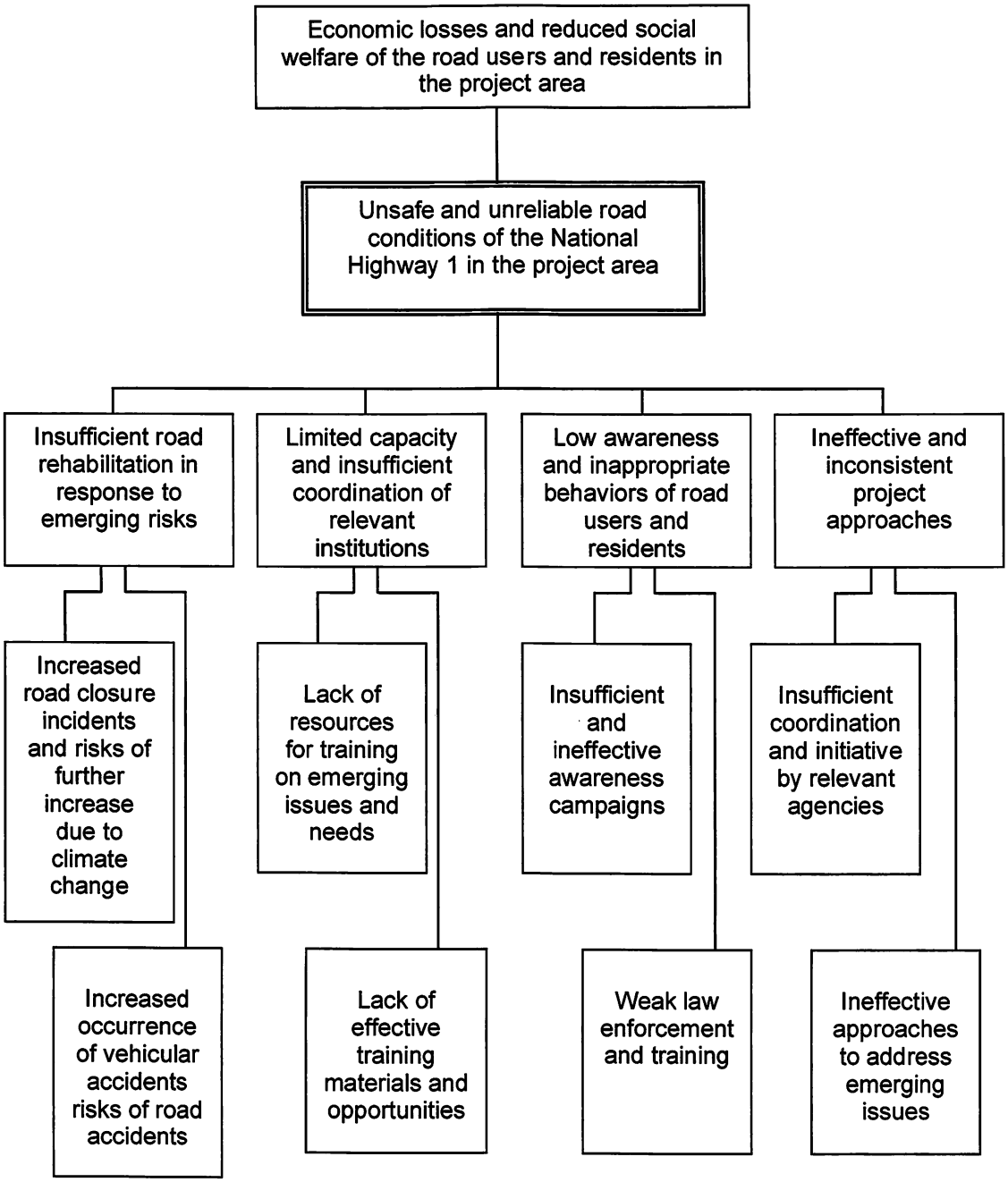
16. The project is expected to be a pilot project to demonstrate effective measures on road safety and climate adaptation. Thus, it should be implemented smoothly without delay while incorporating innovative measures and utilizing ADB's comparative advantages. Institutional coordination should be enhanced through capacity assessment and enhancement measures. Close coordination with government agencies and development partners and harmonization with their policies and guidelines are also important to prepare effective project implementation templates.

## BASIC PROJECT INFORMATION

| Aspects | Arrangements |
|---|---|
| Modality | Project loan |
| Financing | ADB financing of $50 million through an ADF loan and cofinancier's financing of $20 million |
| COBP/RCOBP | The project was identified in *Transport Sector Assessment, Strategy, and Roadmap for Viet Nam.* It is expected to be included in the COBP 2011–2013 for Viet Nam.<br><br>ADB. 2011. Transport Sector Assessment, Strategy, and Roadmap for Viet Nam. Manila. |
| Classification | Sector (subsectors): Transport and ICT (road transport)<br><br>Themes (subthemes): economic growth (promoting economic efficiency and enabling business environment), social development (disaster risk management), environmental sustainability (global and regional transboundary environmental concerns)<br><br>*Climate change: adaptation (high), mitigation (low)*<br><br>Targeting classification: general intervention<br><br>Gender mainstreaming category: effective gender mainstreaming<br><br>Location impact: rural (low), urban (low), national (high), regional (low)<br><br>Safeguards: environment B, involuntary resettlement B, indigenous peoples C |
| Risk categorization | low risk |
| Partnership(s) | The project preparatory technical assistance will be financed by the Japan Fund for Poverty Reduction. |
| Use of a PBA | N/A |
| Parallel PIU | A parallel PIU will not be used.<br>The implementing agency, the Traffic Safety PMU, is not parallel because it is an existing country institution. |
| Department and division | Transport and Communications Division, Southeast Asia Department |
| Mission leader and members | M. Nishimura, Transport Specialist/Mission Leader, SETC<br>C. Clark, Safeguards Specialist, SETC<br>R. Ishenaliev, Transport Specialist, SETC<br>T. Mella, Operations Officer, SETC<br>K. Leung, Finance Specialist, SETC<br>J. Nam, Safeguards Specialist, SETC<br>L. Thang, Senior Project Implementing Officer, VRM |

ADB = Asian Development Bank, ADF = Asian Development Fund, COBP = country operations business plan, DMC = developing member country, ICT = information and communications technology, MFF = multitranche financing facility, OCR = ordinary capital resources, PBA = programmatic based approach, PIU = project implementation unit, PMU = project management unit, RCOBP = regional cooperation operations business plan, SETC = Transport and Communications Division, TA = technical assistance

## PROBLEM TREE



## PRELIMINARY DESIGN AND MONITORING FRAMEWORK

| Design Summary | Performance Targets and Indicators | Data Sources and Reporting Mechanisms | Assumptions and Risks |
|---|---|---|---|
| **Impact**<br>Reduced economic losses and increased social welfare of the road users and residents in Ninh Thuan and Binh Thuan provinces | Economic loss of damages by traffic accidents, flooding, and land slides in the provinces reduces by 20% from 2013 to 2020.<br><br>Child mortality rate in the provinces reduces by 20% from 2013 to 2020. | National and provincial statistics data.<br><br>Provincial DOT and PTSC data.<br><br>Consultant's estimates (monetary calculation from accident data). | **Assumptions**<br>Traffic safety and disaster mitigation measures are taken on local roads and other national highways. |
| **Outcome**<br>Safe and reliable road conditions (all-year access regardless of climate change impacts) of the NH 1 in Ninh Thuan and Binh Thuan provinces | Road accidents and fatalities on the project highway decrease by 30% from 2013 to 2018.<br><br>Cumulative days and length of road closures (km-days) per year on the project highway decrease by 30% from 2013 to 2018. | DRVN data.<br><br>Provincial DOT and PTSC data.<br><br>Consultant's progress reports and project completion report. | **Assumptions**<br>Existing programs for traffic safety conducted by PTSCs remains valid.<br><br>**Risks**<br>Unexpectedly severe weather events occur. |
| **Outputs**<br>1. Improved NH1 on road safety and climate resilience in Ninh Thuan and Binh Thuan provinces<br><br>2. Enhanced institutional coordination and capacity of TSPMU, DRVN, and PTSCs<br><br>3. Increased public awareness of road safety and climate issues among road users and residents | XX road safety black-spots are improved.<br><br>XX segments of flood and land slide prone areas are improved.<br><br>At least XX% of unskilled laborers is provided to male/female.<br><br>XX staff participated in seminars and workshops on road safety and climate change, of which at least XX% are male/female.<br><br>XX road users and local residents participate in road safety and climate change awareness | Consultant's progress reports and TA and project completion reports. | **Assumptions**<br>Management of TSPMU and relevant RMUs and PTSCs remains committed to the project.<br><br>PPCs prepare action plans on climate change based on the National Target Program.<br><br>**Risks**<br>Increased construction costs reduce the scope of the project. |

Appendix 3

| Design Summary | Performance Targets and Indicators | Data Sources and Reporting Mechanisms | Assumptions and Risks |
|---|---|---|---|
| | programs, of which XX% are male/female.<br><br>At least XX% of facilitators are male/female. | | |
| 4. Template for implementing road safety and climate change measures on NHs across the country | The template is developed by TSPMU and accepted by the government. | | |
| **Activities with Milestones**<br>1.1 TSPMU selects a project consultant. (2013)<br>1.2 TSPMU procures civil works packages. (2013-2014)<br>1.3 Contractors complete civil works. (2017)<br><br>2.1 PPTA consultant conducts capacity assessment and trainings. (2012)<br>2.2 TSPMU selects a project consultant. (2013)<br>2.2 The project consultant conducts trainings. (2013-2016)<br><br>3.1 PPTA consultant prepares campaign plans and conduct initial campaigns. (2012)<br>3.2 TSPMU selects a project consultant. (2013)<br>3.3 The project consultant conducts campaigns. (2013–2016)<br><br>4.1 PPTA consultant review projects and activities of development partners. (2012)<br>4.2 The project consultant develops the template. (2015–16) | | | **Inputs**<br>ADB: $50 million<br>Government: $10 million<br>Cofinancing: $20 million |

DOT = Department of Transport, DRVN = Directorate of Roads in Viet Nam, km = kilometer, NH = National Highway, PPTA= project preparatory technical assistance, PTSC = Provincial Traffic Safety Committee, RMU = Regional Management Unit, TA = technical assistance, TSPMU = Traffic Safety Project Management Unit
Note: "XX" will be determined during the PPTA.
Source: Asian Development Bank estimate

## PROJECT PREPARATORY TECHNICAL ASSISTANCE

### A. Justification

1 The project will cover improvement of traffic safety and climate resilience for approximately 180 kilometer (km) of NH 1 in Ninh Thuan and Binh Thuan provinces.[9] The primary necessity for the PPTA is to assist the Government by providing a systematic and coordinated approach to (i) identify critical subproject traffic safety "black spots" and segments with high climate change risks; (ii) engineer solutions, and provide a set of detailed design guidelines to remedy the problems; (iii) develop capacity enhancement and other non-infrastructure solutions; and (iv) prioritize subprojects for implementation under the project loan.

2 The infrastructure solutions are expected to encompass a wide range of relatively large, mid-size and a number of small civil works and equipment subprojects covering such items as (i) replacing, upgrading and widening narrow unsafe bridges[10]; (ii) improving the safety and capacity of at-grade intersections; (iii) eliminating dangerous "black spots" by improving roadway geometry and facility (crash barriers, crash cushions, bus bays, semi-automatic traffic surveillance and information system, etc.) and increasing driver's sight distances and visibility (e.g. light-emitting delineator); (iv) introducing improved slope protection measures in areas of land and rock slides; (v) raising/reconstructing of highway embankments and bridges along sections prone to dangerous flooding; (vi) increasing cross-drainage capacity; (vii) providing a separated motorcycle lane along areas of high traffic density with a history of accidents involving motorcycles, bicycles and pedestrians; (viii) providing pedestrian bridges, traffic signals, signage, pavement markings and similar improvements to increase traffic safety; and (ix) reconstruction of roadways and bridges along selected sections of the highway that are prone to severe and repeated flooding.

3 Initial investigations by the Government indicate that the approximate cost of implementing the improvements of the major traffic safety corrective measures and reducing roadway flooding is in excess of $200 million. This PPTA will refine these costs, establish priorities, and provide detailed engineering solutions for incorporation in the detailed designs to be prepared by detailed design consultants.

### B. Major Outputs and Activities

4 The major outputs of the PPTA include a detailed feasibility study that prioritizes traffic safety improvements and reduces roadway flooding and other climate change risks along one of the most heavily traveled sections of NH1; capacity enhancement of relevant staff in the Traffic Safety Project Management Unit (TSPMU), Directorate of Roads for Viet Nam (DRVN), and Provincial Traffic Safety Committees in traffic safety and climate adaptation of coastal roads; and developing appropriate methodology and conducting seminars to assist in the design for a traffic safety campaign to be carried out during loan implementation. Major activities include: (i) review of current situations on traffic safety and climate change adaptation by the government and development partners including the International Road Assessment Programme (iRAP); (ii)

[9] The project covers upgrading of critical unsafe and flooded sections under Loan 1272-VIE: Road Improvement (ADB1).

[10] Under Loan 1272-VIE: Road Improvement (ADB1), the main roadway section and most of the longer bridge structures were rehabilitated and upgraded, but a large number of bridges (mostly those less than 20 m in length) were omitted from the project scope. Many of these shorter bridges have long ago outlived their design life and most have a very limited vehicle load carrying capability. All are narrow, and they constitute one of the primary causes of accidents.

feasibility study and design of the ADB's ensuing loan project and processing support; and (iii) capacity assessment and enhancement of TSPMU, DRVN, and Provincial Traffic Safety Committees.[11]

5 The major outputs and activities are summarized in Table A4-1.

**Table A4-1: Summary of Major Outputs and Activities**

| Major Activities | Expected Completion Date | Major Outputs | Expected Completion Date |
|---|---|---|---|
| Review of other donors' projects | End of Month 2 | Inception PPTA report | End of Month 1 |
| Field surveys | End of Month 3 | Interim report | End of Month 3 |
| Road safety audits | End of Month 5 | Interim phase tripartite meeting | W1, Month 4 |
| Climate change/hydrological analyses | End of Month 5 | Capacity development plan | End of Month 4 |
| Identification of subprojects | End of Month 6 | TS training | W4, Month 6 |
| Economic data collection & analyses | End of Month 7 | Climate adaptation training | W1, Month 7 |
| Subproject prioritization/costing | End of Month 7 | Seminar on design of TS campaign | W3, Month 7 |
| PCA and FMA | End of Month 7 | Draft final PPTA report | W3, Month 8 |
| RP, IEE, and gender action plan | W3, Month 8 | Draft final phase tripartite meeting | End of Month 8 |
| Detailed design guideline details | W3, Month 8 | Final PPTA report | W4, Month 9 |

FMA = financial management assessment, IEE = initial environmental examination, PCA = procurement capacity assessment, PPTA = project preparatory technical assistance, RP = resettlement plan, TS = traffic safety, W = week
Source: Asian Development Bank estimate

## C. Cost Estimate and Proposed Financing Arrangement

6 The TA is estimated to cost $1.67 million equivalent, of which $1.5 million equivalent will be financed on a grant basis by the Japan Fund for Poverty Reduction and administered by ADB. The Government will finance the remaining $ 0.17 million equivalent in kind. The detailed cost estimate is presented in Table A4-2.

**Table A4-2: Cost Estimates and Financing Plan**
($'000)

| Item | | | Total Cost |
|---|---|---|---|
| **A.** | **Japan Fund for Poverty Reduction[a]** | | |
| | 1. | Consultants | |
| | | a. Remuneration and per diem | |
| | | i. International consultants (27 person-months) | 729.5 |
| | | ii. National consultants (79 person-months) | 198.3 |
| | | b. International and local travel | 83.2 |
| | | c. Reports and communications | 68.0 |
| | 2. | Equipment (computer, printer, etc.)[b] | 2.5 |
| | 3. | Meetings and training | |
| | | a. Tripartite meetings (2 meetings) | 18.0 |
| | | b. Training program | 14.0 |
| | | c. Seminar | 8.0 |
| | 4. | Vehicles[d] | 27.2 |
| | 5. | Surveys | 165.0 |

[11] The PPTA consultant will be required to coordinate with other donors, primarily the World Bank and JICA, who are undertaking related projects along other sections of NH1, and elsewhere in Viet Nam. ADB and iRAP signed a Memorandum of Understanding on the framework of cooperation on 6 August 2010.

| | | |
|---|---|---|
| 6. | Miscellaneous administration and support costs | 40.0 |
| 7. | Representative for contract negotiations | 6.0 |
| 8. | Contingencies | 140.3 |
| | **Subtotal (A)** | **1,500.0** |
| **B.** | **Government Financing** | |
| 1. | Office accommodation and transport | 110.0 |
| 2. | Remuneration and per diem of counterpart staff | 34.0 |
| 3. | Surveys and Data Collection | 12.0 |
| 4. | Contingencies | 14.0 |
| | **Subtotal (B)** | **170.0** |
| | **V. Total** | **1,670.0** |

[a] Administered by the Asian Development Bank.

[b] Equipment: to be included in the consulting services contract as provisional sum and handed over to the executing agency at the end of the services.

| Type | Quantity | Cost |
|---|---|---|
| Notebook computers | 2 | $1,200 |
| Printer | 2 | $ 900 |
| Digital camera and accessories | 1 | $ 400 |

[c] Workshops, training, seminars, and conferences: to be included in the consulting services contract as provisional sum.

| Purpose | Number of Participants | Venue | Duration | Cost |
|---|---|---|---|---|
| Tripartite meetings after interim and draft final phases to obtain concurrence from TSPMU and provinces, and seek ensure coordination with World Bank and JICA | 50*2 | MOT, Hanoi | 2 days | $ 18,000 |
| Training course in traffic safety through improvement in highway infrastructure | 30 | MOT, Hanoi | 1 day | $ 7,000 |
| Training course in methodology of climate adaptation for coastal roads and bridges in Viet Nam | 30 | MOT, Hanoi | 1 day | $ 7,000 |
| Seminar on design of traffic safety campaign | 40 | PDOT, Ninh Thuan or Binh Thuan | 1 day | $ 8,000 |

[d] Vehicle

| Purpose | Duration |
|---|---|
| Covers monthly lease of 3 vehicles to carry out field surveys throughout 2 provinces, including cost of driver, fuel and minor maintenance | 8.5 months |

Source: Asian Development Bank estimate

## D. Consulting Services

7 An international consulting firm will be engaged. A total of 27 person-months of international experts and 79 person-months of national experts will be required. The consulting firm will be selected by quality- and cost-based selection using the quality–cost ratio of 90:10 and full technical proposals in accordance with ADB Guidelines on the Use of Consultants, April 2010.

**Table A4-3: Summary of Consulting Services Requirement**

| International Name of Positions | Person-months | National Name of Positions | Person-months |
|---|---|---|---|
| Team Leader/Transport Specialist | 8.5 | Highway Transport Specialist | 8.5 |
| Transport Economist | 2.0 | Transport Economist | 3.0 |
| Geotechnical Specialist | 2.5 | Financial Management Specialist | 1.0 |
| Bridge Engineering Specialist | 2.0 | Geotechnical Specialist | 6.5 |

| | | | |
|---|---|---|---|
| TS Design Specialist | 3.5 | Bridge Condition/Loading Specialist | 5.0 |
| CC/Hydrology Specialist | 2.5 | TS Design Specialist | 7.0 |
| Environmental Specialist | 1.5 | TS Campaign/CD Specialist | 3.5 |
| Resettlement Specialist | 1.5 | Drainage/Hydrological Specialist | 6.5 |
| Social and Gender Specialist | 1.0 | Environmental Specialist | 5.0 |
| TS Campaign/CD Specialist | 2.0 | Resettlement Specialist | 4.0 |
| | | Social and Gender Specialist | 3.0 |
| | | Civil Works Cost Specialist | 5.0 |
| | | Procurement/Document Specialist | 4.0 |
| | | Engineering CADD Specialist | 8.5 |
| | | Civil Engineering Specialist | 8.5 |
| Total (international) | 27.0 | Total (national) | 79.0 |

CADD = computer aided design and drafting, CC = climate change, CD = capacity development, TS = traffic safety
Source: Asian Development Bank estimate

8 The outline terms of reference for the required personnel are as following. The team leader shall have a strong background in project management, highway engineering, with pertinent experience in conducting road safety audits, traffic engineering and feasibility studies. Transport economists in addition to typical experience in highway transport economics, shall have the ability to develop unique routines to determine economic benefits based on improved traffic safety. Bridge engineering specialists shall have experience in bridge condition investigations, and experience in estimating bridge load carrying capacity and remaining bridge service life. Hydrology specialists shall be pertinent experience in the estimation of flood flows in tropical regions. Safeguard and gender specialists shall have a strong background in applications of ADB policies and guidelines, or those of similar internationally accepted entities. The traffic safety campaign and capacity development specialist shall have pertinent experience in the design and carrying out of traffic safety campaigns and institutional capacity development, particularly in the developing world.

## E. Implementation Arrangements

9 The executing agency will be the Ministry of Transport (MOT). DRVN and its relevant Regional Management Units will support by providing data on road conditions and accident/flooding records. The implementing agency will be TSPMU. The Government is expected to authorize the MOT as the line ministry and the TSPMU as the project owner in the project detailed outline. Disbursements under the PPTA will be done in accordance with the ADB's TA Disbursement Handbook (May 2010, as amended from time to time).

10 The proposed PPTA processing and implementation schedule is listed in Table A5-4.

**Table A5-4: Proposed Technical Assistance Processing and Implementation Schedule**

| Major Milestones | Expected Completion Date |
|---|---|
| Issuance of Request for Proposals to Shortlisted Firms | 19 October 2011 |
| Receipt of Proposals | 3 December 2011 |
| Selection of PPTA Consultant | 10 January 2012 |
| Negotiations with selected PPTA Consultant | 21 January 2012 |
| Commencement of PPTA Consulting Services | 15 February 2012 |
| Completion of PPTA Consulting Services | 31 October 2012 |
| Financial Closure | 31 March 2013 |

Source: Asian Development Bank estimate

# INITIAL POVERTY AND SOCIAL ANALYSIS

| | | | |
|---|---|---|---|
| Country: | Viet Nam | Project Title: | Improvement of Road Safety and Climate Resilience on the National Highway 1 |
| Lending/Financing Modality: | Project | Department/ Division: | SERD/SETC |

## I. POVERTY ISSUES

**A. Links to the National Poverty Reduction Strategy and Country Partnership Strategy**

The Country Strategy and Program (2007–2010) notes that market access is essential to attract the household and private business opportunities needed to reduce poverty. The project enhances safety and efficiency of the poor's access to markets.

**B. Targeting Classification**

☒General Intervention ☐Individual or Household (TI-H) ☐Geographic (TI-G) ☐Non-Income MDGs (TI-M1, M2, etc.)

The main beneficiaries of the project will be road users. The poor tend to rely more heavily on vulnerable modes of transport (i.e. walking and bicycles) and may benefit more.

**C. Poverty Analysis**

1. If the project is classified as TI-H, or if it is policy-based, what type of poverty impact analysis is needed?

2. What resources are allocated in the PPTA/due diligence?
   Safeguard specialists will be allocated to assess the poverty issues further.
3. If GI, is there any opportunity for pro-poor design (e.g., social inclusion subcomponents, cross subsidy, pro-poor governance, and pro-poor growth)? Please explain.
   Awareness raising may have opportunity for pro-poor design. It will be further assessed during the PPTA.

## II. SOCIAL DEVELOPMENT ISSUES

**A. Initial Social Analysis**

Based on existing information:

1. Who are the potential primary beneficiaries of the project? How do the poor and the socially excluded benefit from the project?
   Primary beneficiaries of the project will be vulnerable road users who have higher risks of traffic accidents, such as pedestrians and bicycle or motorcycle users living in the vicinity of the project highway. Poor households tend to rely heavily on these modes of transport for their daily trips.
2. What are the potential needs of beneficiaries in relation to the proposed project?
   Road users and people living along the project highway are affected by continuous flooding of the highway. The flood is expected to become more serious and frequent by impacts of future climate change. They will benefit from the climate resilience measures of the project.
   Poor households may benefit from the investment by engaging in simple labors.
3. What are the potential constraints in accessing the proposed benefits and services, and how will the project address them?
   Some road safety measures, such as tighter access control to roadside or reduced speed limit, may pose some constraints on some roadside shops or road users on their economic activities. The project preparatory technical assistance will also assess these constraints and negative impacts.

**B. Consultation and Participation**

1. Indicate the potential initial stakeholders.
   Road users (trucks, cars, motorcycles, bicycles, pedestrians, etc.); roadside residents, shops, and farmers; road management agency (Directorate for Roads in Viet Nam); provincial traffic safety committees; departments of transport; departments of natural resources and environment; traffic police.
2. What type of consultation and participation (C&P) is required during the PPTA or project processing (e.g., workshops, community mobilization, involvement of nongovernment organizations and community-based organizations, etc.)?
   Public consultations and roadside interviews will be conducted.

3. What level of participation is envisaged for project design?
☐ Information sharing ☒ Consultation ☐ Collaborative decision making ☐ Empowerment

4. Will a C&P plan be prepared during the project design for project implementation? ☒ Yes ☐ No Please explain.
The PPTA consultant will prepare a C&P plan.

**C. Gender and Development** **Proposed Gender Mainstreaming Category: Effective gender mainstreaming**

1. What are the key gender issues in the sector/subsector that are likely to be relevant to this project/program?
There are needs for (i) gender disaggregated use of the project road (modes, main purposes of the use, and vulnerability to road accidents/ injuries); (ii) current status regarding men/women's awareness on road safety issues; and (iii) appropriate methods or communication mediums to reach men/women.

2. Does the proposed project/program have the potential to promote gender equality and/or women's empowerment by improving women's access to and use of opportunities, services, resources, assets, and participation in decision making?
☒ Yes ☐ No Please explain. {If yes, a gender action plan should be prepared during PPTA/due diligence.}
There are opportunities to support income earning opportunities for men/women through employment in project generated jobs, for example providing labor for civil works and serving as facilitators for the road safety awareness campaign. A gender action plan will be prepared during PPTA.

3. Could the proposed project have an adverse impact on women and/or girls or to widen gender inequality?
☐ Yes ☒ No Please explain {If yes, actions/measures should be prepared during PPTA/due diligence.}
No adverse impact is expected.

**III. SOCIAL SAFEGUARD ISSUES AND OTHER SOCIAL RISKS**

| Issue | Nature of Social Issue | Significant/Limited/ No Impact/Not Known | Plan or Other Action Required |
|---|---|---|---|
| **Involuntary Resettlement** | Some partial widening of right of way may affect some households. | Limited Impact | ☒ Resettlement Plan<br>☐ None<br>☐ Uncertain |
| **Indigenous Peoples** | Some ethnic minorities live along the project highway (e.g. Cham in Ninh Thuan Province). However, no impact is expected. | No Impact | ☐ Indigenous Peoples Plan<br>☒ None<br>☐ Uncertain |
| **Labor**<br>☒ Employment Opportunities<br>☐ Labor Retrenchment<br>☐ Core Labor Standards | The project will bring employment opportunities. | Limited Impact | ☒ Plan<br>☐ Other Action<br>☐ No Action<br>☐ Uncertain |
| **Affordability** | | | ☒ No Action<br>☐ Uncertain |
| **Other Risks and/or Vulnerabilities**<br>☐ HIV/AIDS<br>☐ Human Trafficking<br>☐ Others (conflict, political instability, etc.), please specify | The project area is already exposed to heavy traffic along the National Highway 1. Some contractors' workers will be brought in from other areas, but these social risks will be limited. | | ☐ Plan<br>☐ Other Action<br>☒ No Action<br>☐ Uncertain |

| IV. PPTA/DUE DILIGENCE RESOURCE REQUIREMENT |
|---|
| 1. Do the TOR for the PPTA (or other due diligence) include poverty, social and gender analysis and the relevant specialist/s? ☒ Yes ☐ No If no, please explain why. |
| 2. Are resources (consultants, survey budget, and workshop) allocated for conducting poverty, social and/or gender analysis, and C&P during the PPTA/due diligence? ☒ Yes ☐ No<br>Social and resettlement specialist (international: 2 person-months and national: 7 person-months) will be allocated. |