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INTERNATIONAL DEVELOPMENT ASSOCIATION

PROJECT APPRAISAL DOCUMENT

ON A

PROPOSED CREDIT

IN THE AMOUNT OF SDR 257.3 MILLION
(US\$358 MILLION EQUIVALENT)

TO THE

PEOPLE'S REPUBLIC OF BANGLADESH

FOR A

BANGLADESH ROAD SAFETY PROJECT

March 4, 2022

Transport Global Practice
South Asia Region

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CURRENCY EQUIVALENTS

(Exchange Rate Effective January 31, 2022)

Currency Unit =	Bangladesh Taka (BDT)
1 US\$ =	85.98 BDT
1 SDR =	1.39178 US\$

FISCAL YEAR
July 1 - June 30

Regional Vice President: Hartwig Schafer

Country Director: Mercy Miyang Tembon

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ABBREVIATIONS AND ACRONYMS

ARI	Accident Research Institute
ATLS	Advance Trauma Life Support
BP	Bangladesh Police
BRTA	Bangladesh Road Transport Authority
BRTC	Bangladesh Road Transport Corporation
BTLS	Basic Trauma Life Support
BUET	Bangladesh University of Engineering and Technology
CASE	Clean Air and Sustainable Environment (project)
CERC	Contingent Emergency Response Component
CPF	Country Partnership Framework
DGHS	Directorate General of Health Services
DNCC	Dhaka North City Corporation
DPM	Deputy Project Manager
EROM	Emergency Response Operations Manual
ESCP	Environmental and Social Commitment Plan
ESMF	Environmental and Social Management Framework
FM	Financial Management
GCC	Gulf Cooperation Council
GDP	Gross Domestic Product
GoB	Government of Bangladesh
GRID	Green, Resilient and Inclusive Development
GRM	Grievance Response Mechanism
iRAP	International Road Assessment Program
ITMIDS	Integrated Traffic Management and Incident Detection System
LAR	Land Acquisition and Resettlement
LGED	Local Government Engineering Department
LMP	Labor Management Procedures
MAAP	Microcomputer Accident Analysis Package
MoHA	Ministry of Home Affairs
MoHFW	Ministry of Health and Family Welfare
MoRTB	Ministry of Road Transport and Bridges
MSME	Micro, Small, and Medium Scale Enterprises
NGO	Non-government Organization
NMT	Non-Motorized Transport
NPL	Non-performing Loans
NRSC	National Road Safety Council
NRSSAP	National Road Safety Strategic Action Plans
PD	Project Director
PIC	Project Implementation Committee

PIU	Program Implementation Unit
PLR	Performance and Learning Review
PM	Project Manager
PPSD	Project Procurement Strategy for Development
PSC	Project Steering Committee
RHD	Roads and Highways Department
RMG	Readymade Garment
RPF	Resettlement Policy Framework
RSA	Road Safety Audit
RSSAT	Road Safety Screening and Assessment Tool
RTI	Road Traffic Injuries
SDG	Sustainable Development Goals
SEP	Stakeholders Engagement Plan
STEP	Systematic Tracking of Exchanges in Procurement
TSIP	Trauma System Improvement Programs
UHC	Upazila Health Complexes
VIC	Vehicle Inspection Centres
VRU	Vulnerable Road Users
WeCARE	Western Economic Corridor & Regional Enhancement Program

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DATASHEET

BASIC INFORMATION

Country(ies)	Project Name	
Bangladesh	Bangladesh Road Safety Project	
Project ID	Financing Instrument	Environmental and Social Risk Classification
P173019	Investment Project Financing	Substantial

Financing & Implementation Modalities

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

Expected Approval Date	Expected Closing Date
28-Mar-2022	30-Jun-2027

Bank/IFC Collaboration

No

Proposed Development Objective(s)

The Project Development Objective is to build road safety management capacity and achieve targeted reduction in traffic fatalities and serious injuries in Bangladesh.

Components

Component Name	Cost (US\$, millions)
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Multi-sectoral Road Safety Pilot Projects	108.30
Priority Road Safety Investments	349.30
Technical Assistance	69.40

Organizations

Borrower:	People's Republic of Bangladesh
Implementing Agency:	Roads and Highways Division Directorate General of Health Services Bangladesh Police Bangladesh Road Transport Authority

PROJECT FINANCING DATA (US\$, Millions)**SUMMARY**

Total Project Cost	527.00
Total Financing	527.00
of which IBRD/IDA	358.00
Financing Gap	0.00

DETAILS**World Bank Group Financing**

International Development Association (IDA)	358.00
IDA Credit	358.00

Non-World Bank Group Financing

Counterpart Funding	169.00
National Government	169.00

IDA Resources (in US\$, Millions)

	Credit Amount	Grant Amount	Guarantee Amount	Total Amount
Bangladesh	358.00	0.00	0.00	358.00



National PBA	358.00	0.00	0.00	358.00
Total	358.00	0.00	0.00	358.00

Expected Disbursements (in US\$, Millions)

WB Fiscal Year	2022	2023	2024	2025	2026	2027	2028
Annual	0.00	51.68	53.87	66.64	70.30	58.43	57.11
Cumulative	0.00	51.68	105.54	172.18	242.47	300.90	358.00

INSTITUTIONAL DATA**Practice Area (Lead)**

Transport

Contributing Practice Areas

Digital Development, Education, Health, Nutrition & Population

Climate Change and Disaster Screening

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

SYSTEMATIC OPERATIONS RISK-RATING TOOL (SORT)

Risk Category	Rating
1. Political and Governance	● Moderate
2. Macroeconomic	● Moderate
3. Sector Strategies and Policies	● Moderate
4. Technical Design of Project or Program	● Moderate
5. Institutional Capacity for Implementation and Sustainability	● Substantial
6. Fiduciary	● Substantial
7. Environment and Social	● Substantial
8. Stakeholders	● Substantial
9. Other	● Substantial
10. Overall	● Substantial

**COMPLIANCE****Policy**

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

☐ Yes ☒ No

Does the project require any waivers of Bank policies?

☐ Yes ☒ No

Environmental and Social Standards Relevance Given its Context at the Time of Appraisal

E & S Standards	Relevance
Assessment and Management of Environmental and Social Risks and Impacts	Relevant
Stakeholder Engagement and Information Disclosure	Relevant
Labor and Working Conditions	Relevant
Resource Efficiency and Pollution Prevention and Management	Relevant
Community Health and Safety	Relevant
Land Acquisition, Restrictions on Land Use and Involuntary Resettlement	Relevant
Biodiversity Conservation and Sustainable Management of Living Natural Resources	Relevant
Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities	Not Currently Relevant
Cultural Heritage	Relevant
Financial Intermediaries	Not Currently Relevant

NOTE: For further information regarding the World Bank's due diligence assessment of the Project's potential environmental and social risks and impacts, please refer to the Project's Appraisal Environmental and Social Review Summary (ESRS).

Legal Covenants



Sections and Description

The Recipient shall establish within three (3) months of the Effective Date, and thereafter maintain throughout the course of Project implementation, a Project Steering Committee (PSC) with a mandate, functions, composition and resources, as set forth in the Project Operations Manual. Without limitation on the foregoing, said committee shall: (a) be headed by the Secretary of RTHD of MoRTB; (b) include representatives from the Health Services Division of MoHFW, Public Security Division, ERD, IMED, and Planning Commission; and (c) be responsible for, inter alia, overseeing the overall Project.

Sections and Description

The Recipient shall establish within three (3) months of the Effective Date, and thereafter maintain throughout the course of Project implementation, a Project Implementation Committee (PIC) with a mandate, functions, composition and resources, as set forth in the Project Operations Manual. Without limitation on the foregoing, said committee shall: (a) include technical heads of the Project Implementation Agencies; and (b) be responsible for, inter alia, supporting coordination across the Project Implementing Agencies.

Sections and Description

The Recipient shall establish within three (3) months of the Effective Date, and thereafter maintain throughout the course of Project implementation, a Project Implementation Unit (PIU) with a mandate, functions, composition and resources, as set forth in the Project Operations Manual. Without limitation on the foregoing, said unit shall: (a) be headed by a Project Director; (b) include technical specialists, financial management specialist, procurement specialist, social and environmental specialists, accountant and administrative assistants; (c) include Additional Project Directors from RHD, BRTA, DGHS and Bangladesh Police; and (d) be responsible for the overall implementation and monitoring of the Project, including ensuring compliance with procurement, fiduciary, and social and environmental standards requirements for the Project.

Sections and Description

The Recipient shall, within three (3) years of the Effective Date, prepare and approve a comprehensive National Road Safety Strategic Action Plan, which shall: (a) comprise of a time-bound action plan for undertaking road safety interventions by the relevant ministries; (b) include provision for indicative budget for each activity under the action plan; and (c) include provision for establishment of an independent road safety lead institution responsible for national-level road safety management functions, including inter-ministerial coordination, supervision of the multi-sectoral and monitoring of road safety related data.

Sections and Description

The Recipient shall prepare, approve and adopt, in a manner satisfactory to the Association within four (4) months of the Effective Date, a Project Operations Manual, setting forth the rules and procedures for implementing the Project, including, inter alia: implementation and institutional arrangements, requirements and procedures for financial management and procurement, and terms and conditions related to use of vehicles financed under the Project.

Sections and Description

For the purpose of carrying out activities under Part 3.5 of the Project, the Recipient shall prepare and submit for the Association's consent, every two years, a training plan for the following two years, which shall include time-bound action plan for training in road safety management, and thereafter implement the activities under Part 3.5 in accordance with the training plan agreed upon by the Association.



Sections and Description

Use of Bangladesh Police

1. The Recipient shall ensure that:
 - a. the Financing proceeds are used exclusively for the objective of the Project;
 - b. any vehicles and equipment financed under Part 2(d) of the Project (“traffic-enforcement vehicles and equipment”) are utilized only for enforcing the Recipient’s road traffic laws and regulations;
 - c. the Financing proceeds and traffic-enforcement vehicles and equipment are not utilized for:
 - i. any law-enforcement purposes, activities, or reason other than those described in sub-paragraph (b) above; and/or
 - ii. any specific investigation, prosecution, or enforcement activities except for those described in sub-paragraph (b) above; and
 - d. the Financing Proceeds are not utilized for the purchase of arms, weapons, ammunition, or other lethal equipment, or to train any personnel in the use of arms, weapons, ammunition, or lethal equipment.
2. In the event there is any allegation(s) of any offensive behavior or breach of law by any personnel deployed under or by the Bangladesh Police, relating to the activities under this Project, the Recipient shall promptly review and diligently investigate such allegation(s), and thereafter, if/when warranted: (i) take appropriate disciplinary action reporting such behavior to the relevant authorities and sanctioning the responsible party; and (ii) adopt any necessary measures to preempt their recurrence.
3. The Recipient, through RHD or RTHD, shall enter into a Memorandum of Understanding (“MoU”) with the Bangladesh Police or Public Security Division, in form and substance satisfactory to the Association, which shall include, inter alia, (i) terms and conditions related to the use of traffic-enforcement vehicles and equipment under Part 2(d) of the Project, including appropriate mitigation and monitoring arrangements regarding the use of such traffic-enforcement vehicles and equipment; (ii) provision to ensure adequate training for Bangladesh Police, including on the use of force and appropriate behavior/conduct; and (iii) grievance redressal processes to address any allegations of unlawful or abusive behavior by the Bangladesh Police with respect to any activities under or in relation to the Project including the use of traffic-enforcement vehicles and equipment.

Conditions

Type	Financing source	Description
Disbursement	IBRD/IDA	No withdrawal shall be made for Emergency Expenditures under Category (6), unless and until all of the following conditions have been met in respect of said expenditures: (A) the Recipient has determined that an Eligible Crisis or



		Emergency has occurred, and has furnished to the Association a request to withdraw Financing amounts under Category (2); and (B) the Association has agreed with such determination, accepted said request and notified the Recipient thereof; and (C) the Recipient has adopted the CERC Manual and Emergency Action Plan, in form and substance acceptable to the Association.
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I. STRATEGIC CONTEXT

A. Country Context

- Bangladesh has made rapid social and economic progress in recent decades and reached lower middle-income status in 2015.** Officially reported annual growth of gross domestic product (GDP) averaged close to six percent since 2000. Strong labor market gains contributed to a sharp decline in poverty, with the national poverty rate falling from 48.9 to 24.5 percent between 2000 and 2016, while extreme poverty declined from 34.3 to 13.0 percent.¹ However, the pace of poverty reduction slowed in recent years even as growth accelerated, particularly in urban areas and in the west of the country. Similarly, progress on shared prosperity slowed between 2010 and 2016 after a decade of improvements, with annual consumption growth of the bottom 40 percent trailing that of the overall population (1.2 versus 1.6 percent).
- The COVID-19 pandemic caused major disruptions to economic activity in FY20 and FY21.** The initial phase of the pandemic in early 2020 disrupted the supply of intermediate goods from China, reducing manufacturing output. As the pandemic intensified abroad, export orders from Europe and the United States declined precipitously. The government implemented control measures that resulted in a sudden stop of economic activity in many sectors. Consequently, real GDP growth decelerated to 3.5 percent in FY20. Early signs of a recovery emerged in the first half of FY21 after movement restrictions were progressively lifted. Merchandise exports grew by 15.4 percent as readymade garment (RMG) export orders were reinstated and factories remained open despite recurrent lockdowns. On the demand side, growth was primarily supported by private consumption, underpinned by a recovery in labor income and robust remittance inflows. Growth in imports of consumer goods and capital goods point towards a broad-based recovery. Declining imports and large inflows of official remittances, which increased by over a third in FY21, contributed to a balance of payments (BoP) surplus in FY21. At 5.4 percent in July 2021, inflation remained benign.
- The COVID-19 pandemic has put the substantial poverty reduction gains of the past decade at risk, and vulnerability to economic shocks has risen.** Poverty increased from 11.9 percent in FY19 to an estimated 12.9 percent in FY20, using the international poverty rate (US\$1.9 per person per day in 2011 PPP). A nationally representative phone survey showed income losses and high levels of self-reported food insecurity in FY20. In poor areas of Dhaka and Chittagong, surveys showed that adults who stopped working due to COVID-19 were 11 percent more likely to report food insecurity. As growth strengthened in FY21, household surveys point to a gradual recovery in employment and earnings. Estimated poverty remained flat, although food security improved across the country.
- Bangladesh is extremely vulnerable to the effects of climate change.** The Global Climate Risk Index ranks Bangladesh as the world's seventh most affected country over the period 2000-2019.² Rising temperatures leading to more intense and unpredictable rainfalls during the monsoon season and a higher probability of catastrophic cyclones are expected to result in increased tidal inundation. It is estimated that a one-meter rise in sea levels would submerge 18

¹ Household Income and Expenditure Surveys, 2000/01 and 2016/17.

² Germanwatch (2021) Global Climate Risk Index 2021.



percent of arable land in coastal areas.³ Recent studies estimate that by 2050 Bangladesh could have 13.3 million internal climate migrants.⁴ Additional rural-urban migration would have significant consequences for air and water pollution and unsustainable consumption of natural resources while putting additional pressure on urban labor markets. Addressing climate risks is increasingly urgent to ensure the sustainable economic development of the country. In the region, and in particular, in Bangladesh, the climate is known to have a multiplying effect on the magnitude and occurrence of road accidents. Natural disasters can easily cause extreme damage to transport infrastructure, as well as on drivers. Harsh weather and natural disasters make driving conditions very dangerous, even deadly, whether it's a landslide, heavy rainfall, hurricane, or earthquake. There is a need to have a clearer understanding of the proportion of vehicle crashes and fatalities that are due to adverse weather and climatic events for enhanced decision making and improved emergency planning, as well as to implement relevant measures to increase road safety and improve emergency planning in vulnerable locations.

5. **As Bangladesh recovers from the COVID pandemic and restores economic activities in all sectors, addressing the existing challenge of road traffic injuries is integral to the country's development.** Addressing road traffic deaths and injuries is integral to saving lives, in line with Green, Resilient, and Inclusive Development (GRID). Before the COVID pandemic, global studies indicate that road crashes killed more than 4,000 people and seriously injured or disabled an estimated 200,000 in Bangladesh every year. This has impacted the working-age population, with road traffic crashes responsible for ~12 percent of all deaths among men in the 15-49 age bracket. Injuries from road crashes are the leading cause of permanent disability in the country and the lack of adequate safety nets implies that the affected families, already impacted by the pandemic significantly, would face even greater loss of income. Children, too, face risks: in 2017, road crashes were the fourth leading cause of death among children. From a gender perspective, inclusive development of roads is vital – while the road fatality ratio is skewed toward males across all ages, this pattern reflects the deeper issues of limited mobility, access, and opportunity for women. More women, particularly women with lower incomes, have fewer alternatives to walking compared to men, making them more risk-prone.⁵

6. **Improving road safety in Bangladesh is vital to national health, well-being, and economic growth.** The road safety situation has been worsening in the past decades - between 1990 and 2017, the increase in the country's road crash fatality rate has been three times that of the South Asia region. With a growing motorization rate, the trend may worsen when transport activities are restored to normal levels. Further, over half of all road death victims are the poor and vulnerable, with pedestrians accounting for almost half of these deaths, mainly due to the lack of adequate pedestrian infrastructure. Road crashes also affect the poor rural families disproportionately, with a greater percentage falling into economic distress than others⁶. Economic losses from inaction could be substantial – a World Bank report estimates that the costs

³ UNFCCC (2007) United Nations Framework Convention on Climate Change.

⁴ World Bank (2018) Groundswell: Preparing for Internal Climate Migration.

⁵ Peters D. Gender Issues in Transportation: A Short Introduction. In UNEP Regional Workshop Deals on Wheels: Sustainable Transportation Initiatives in Developing Countries. San Salvador: The Institute for Transportation and Development Policy (ITDP); 1999.

⁶ Aeron-Thomas et al (2004). The involvement and impact of road crashes on the poor: Bangladesh and India case studies. TRL Limited. July 2004.



related to traffic crashes can be as high as 5.1 percent of the national GDP⁷. A long-term commitment and sustained vision from the highest level of the Government of Bangladesh (GoB), along with commensurate investments in effective road crash fatality and injury prevention, will contribute to the accumulation of human capital in Bangladesh, and in turn, will contribute to sustainable and inclusive economic growth and overall well-being.

7. **GoB is committed to addressing road safety and transport issues.** While road safety statistics in Bangladesh have been a concern for several decades, recent events since 2018 have pushed for stronger political ownership and urgent actions to improve road safety. This led to the subsequent inclusion of road safety in the political campaigns of the 2019 elections and has set up a favorable context for road safety interventions in the country. The resulting media attention and strong advocacy by civil society have prompted a demand for broader reforms in the overall management of the transport sector to address road safety. In response, GoB constituted a high-powered committee in 2019 for reducing crashes by focusing on multi-sectoral implementation and road safety management. A new Road Transport Act, with a substantial focus on road safety, came into effect in November 2019 to replace the Motor Vehicle Ordinance of 1983. The new Act mandates stricter punishment for traffic offenses, greater accountability from the operators and designers for safety performance, and increased enforcement of road safety behavior through the deployment of mobile courts. To enforce these provisions on the ground, significant improvements in management, coordination, governance systems, procedures, processes, tools, and facilities are necessary at every level of operation and every government tier, specifically to ensure safer infrastructure, certification of the roadworthiness of vehicles and improvements in licensing drivers, enforcing good user behavior, and prompt post-crash recovery and rescue.

B. Sectoral and Institutional Context

8. **Institutions for road safety management in Bangladesh are not adequately empowered or held accountable for safety outcomes.** The National Road Safety Council (NRSC) was established in 1995, with Bangladesh Road Transport Authority (BRTA) as the secretariat, which is responsible for the planning, management, and coordination of road safety in the country. It comprises representatives from all key agencies and stakeholders, including BRTA, the Police, the Roads and Highways Department (RHD), transport owners, workers' associations, and professionals in the field. However, this institutional arrangement has had limited effectiveness in coordinating with all stakeholder agencies to achieve improved road safety outcomes. District Road Safety Committees have been established at the district and metropolitan levels with representatives from similar agencies as in the NRSC. However, their functioning was affected by a lack of coordination and integration between them and the NRSC, and a general paucity of resources to support their effective engagement. This has affected the National Road Safety Strategic Action Plans (NRSSAP): interventions and targets are not set through evidence-based data, are not well aligned with maximizing road safety gains, and suffer from inadequate funding and unrealistic timelines. Organizations undertaking pertinent research on road safety issues are also limited.

9. **Weak road safety performance in Bangladesh is a symptom of underinvestment in targeted initiatives.** General tax revenues provide the only source of sustainable funding for road

⁷ World Bank (2019). Guide for Road Safety Opportunities and Challenges: Low- and Middle-Income Countries Country Profiles. Washington, DC., USA



safety in Bangladesh and are allocated to the road safety units at RHD, BRTA, and the police through their respective ministries. However, this funding is insufficient and not prioritized. Funding sources for road safety action plans have never been institutionalized. Several private organizations and NGOs support road safety activities through multilateral development bank assistance, but in an uncoordinated manner; insurance companies do not contribute significantly to road safety. A recent WB analysis suggests that Bangladesh will require an estimated additional investment of US\$7.8 billion over the coming decade to achieve the Sustainable Development Goal 3.6 target of halving its road fatalities. Growing motorization means that the upward trend in fatalities and injuries would continue unless rapid, scaled-up, inclusive road safety investments are made.

10. Inadequate quality of data on crash deaths and injuries impede proper road safety management. The current system of recording, analyzing, and reporting crashes in Bangladesh is cumbersome, error-prone, time-consuming, and is unsuitable for analysis and benchmarking. Crash data is characterized by irregular and unreliable year-on-year changes, indicating incompleteness and a lack of consistent procedures. Weak coordination between the ministries and inadequate internal organizational capacity result in crashes not being recorded and consequent severe underreporting of fatalities and injuries: a comparison of the recorded fatalities with the WHO estimated fatalities from 2010-2015 shows a discrepancy of more than 90 percent. Official crash fatality data from 2016 up to the present is still unavailable. Further, the Highway Police is invariably short of qualified and trained manpower, logistics, and equipment, including vehicles and other transport facilities, which affects its mobility.⁸ As such, it has been primarily engaged in awareness programs for school children, driver training programs, and the coordination of meetings with public transporters and other stakeholders⁹.

11. Road crash fatalities in Bangladesh are predominant on highways and in urban areas. Nearly 60 percent of road crashes are on inter-urban national and regional highways, highlighting the need to systematically tackle highway and district-level safety issues; the rest are in urban areas. A substantial number of highway crashes occur at uncontrolled junctions of these highways and minor roads. Contributing factors include built-up areas close to the highways without adequate road safety treatments and safe facilities for Vulnerable Road Users (VRU, e.g., pedestrians, cyclists, and motorcyclists). Unsafe and under-invested road infrastructure remains one of the key risk factors for road safety in Bangladesh: International Road Assessment Program (iRAP) pilot assessments in 2010 highlighted the high safety risks for VRUs and the massive road safety investments required for upgrading infrastructure. Almost half of the urban crash fatalities occur in the Dhaka metropolitan area, with buses involved in a majority of these; other metropolitan cities account for another 30 percent of fatalities.¹⁰ VRUs account for 45 percent of all urban road fatalities¹¹; an observational study in Dhaka also revealed that pedestrians are at risk even on footpaths due to their poor condition, presence of driveways, and encroachments. This underlines the need for systematically addressing VRU safety and broader bus operational

⁸ Mahmud, S.M. Sohel, Md. Shamsul Hoque, and Abdus Shakur Qazi. 2009. "Road Safety Problems in Bangladesh: Some Major Initiatives, Constraints and Requirements." *Transport & Communications Bulletin for Asia and the Pacific*, UNESCAP

⁹ Ahmed, Imtiaz. 2016. "Road Safety Situation in Bangladesh." Presentation by Bangladesh Police, Seoul.

¹⁰ Rahman Md M (2018), 'Urban Road Safety and Traffic Management: Introduction and Issues', Accident Research Institute, Bangladesh University of Engineering & Technology, Dhaka.

¹¹ Global Status Report on Road Safety, 2015, World Health Organization, Geneva, 2015



issues in metropolitan areas.

12. **Vehicle regulations and inspections are inadequate to cater to the rapid growth in vehicle ownership.** About 3,000 vehicles are registered daily in Dhaka alone; vehicle inspections that are a prerequisite for registration are done visually by motor vehicle inspectors at testing centers. According to the BRTA, in 2018 more than 55,000 vehicles did not have the vehicle fitness certificate renewed for more than 10 years; the number of unregistered vehicles in Bangladesh is around 1.5 million¹². Lack of compliance with safety standards also applies to other protective equipment such as two-wheeler helmets, where the local supplier market mainly offers cheap and sub-standard helmets. Lack of technological know-how and trained personnel are key constraints in the introduction and operation of automated vehicle inspection centers (VICs)¹³. GoB plans to have 21 automated VICs for testing both fitness and emissions within the next five years; this includes the rehabilitation of four of the five original VICs established two decades ago.

13. **Post-crash care systems in Bangladesh are at a nascent stage of development.** Post-crash care involving pre-hospital care systems, appropriate hospital-based care, and adequate rehabilitation services are all rudimentary. There is no formal pre-hospital emergency response system for road crash victims; no laws or policies are in place to protect bystanders who provide care to crash victims from civil or criminal liability¹⁴. There are multiple numbers to access emergency care, and ambulances operate in a disjointed way, providing at best, limited coverage. According to the Bangladesh Health and Injury Survey 2016, two-thirds of all road crash victims die on the way to a hospital and three-fourths do not receive any form of pre-hospital care. Systematic bystander care to road crash victims is non-existent except for some services by NGOs such as Traumalink. Essential trauma care is provided only in large tertiary care hospitals and medical colleges, as primary and secondary care facilities lack adequately trained human resources and/or necessary equipment and supplies. There is no emergency room-based injury surveillance system, and no system of trauma registries to monitor the quality of trauma care. Women face additional difficulties when providing or receiving bystander care.¹⁵ Also, given that Bangladesh has only about a third of the number of hospital beds recommended by WHO, augmentation of this would be important to better cater for other public health emergencies and disasters.

14. **There is little recognition of the road safety risks associated with gender-differentiated mobility patterns and little response to the prevailing problem of sexual harassment that female road users face.** This limited attention is rooted in the weak institutional capacity to understand and respond to the priorities and needs of female road users. The paucity of gender-disaggregated data on road crashes, injuries, post-crash care, and road behavior has led to limited understanding of the nature and extent of risks that female road users face, and the socio-economic impact of high male death and injuries on women in the household. Road safety responses tend to overlook the gender differences in mobility patterns and needs. While unsafe and under-invested roads and infrastructure affect all, the specific design needs of women tend

¹² According to a survey of the Bangladesh Passengers' Welfare Association (BPWA)

¹³ EST for Resiliency – Building Safe, Smart, Low-carbon and Resilient Cities in Asia, Bangladesh Country Report, November 2015

¹⁴ Assessment study of Post-Crash Care System in Bangladesh conducted by the James P Grant School of Public Health, BRAC University

¹⁵ BRAC. 2021. Assessment of post-crash care system in three districts with high-frequency of road-traffic accidents and Dhaka Metropolis, Bangladesh



to be ignored.¹⁶ Weaknesses in enforcing safe road user behavior also affect women more. For instance, women are more likely to be pillion riders without a helmet. In terms of access to post-crash care, service providers are predominantly men. While there is limited information on the utilization of such services by female road crash survivors, studies show that women prefer receiving healthcare from female providers due to comfort and social norms¹⁷. A rapid gender assessment confirmed that sexual harassment is the top concern for female road users—both pedestrians and public transport passengers.¹⁸ Ninety-four percent of female public transport users in Dhaka have reported facing verbal, physical, or other types of sexual harassment.¹⁹ Despite the ubiquity of harassment in public transport, the reporting and response mechanisms, usually limited to the police and helpline (999), are weak. Women cited social stigma, fear of retribution, limited knowledge on and complexity of reporting processes, and lack of perceived benefits as their top reasons for not reporting GBV. Moreover, bus employees are not aware of their responsibilities and many also commit these offenses. Efforts to improve road safety must consider these gender-specific issues.

C. Relevance to Higher Level Objectives

15. **The project will support Bangladesh in achieving the road safety targets set out in the Sustainable Development Goals (SDGs) that call respectively for a halving of global road deaths and universal access to safe transport in cities by 2030.** It will directly help reduce the number of deaths and injuries from road traffic crashes (SDG 3.6). The project will also contribute to making cities and human settlements inclusive, safe, resilient, and sustainable (SDG 11.2). Scaled-up road safety investment in South Asia is an urgent priority and an important focus of the global dialogue on regional and country performance expectations.

16. **The proposed project is consistent with the World Bank Group Bangladesh Country Partnership Framework FY16–20 (Report No. IDA/R2016-0041) discussed at the Board on April 5, 2016, and extended by the Performance Learning and Review (PLR) to FY22.** The project will contribute primarily to the **CPF Focus Area 1 Objective 1.2** Improved transport connectivity, by rehabilitating the entire national highway (NH) and regional highway (RH) networks, and related mass action treatments, especially in high-risk corridors, major and minor junctions, bazaar areas, locations connecting feeder roads to these highways, and at railway crossings in Bangladesh. The project will also contribute to **Focus Area 2 Objective 2.2**, by improving pre-hospital and hospital-based emergency care. This will help avoid preventable death and disability, limit the severity of the injury, and reduce catastrophic health expenditures for road crash victims, the large majority of whom are from the poorer sections of society.

17. **The project is well aligned with all four thematic pillars of the World Bank Group crisis response.** It is expected to reduce crash-related fatalities and injuries, which will free up beds and

¹⁶ Sultana, Sharmin, et. al. 2020. Redesigning the interiors of public buses in Dhaka city: Exploring the gender-based perceptions and preferences of young public bus users. *Asian Transport Studies* Vol. 6. Global

¹⁷ Mahumud, R. A., Alamgir, N. I., Hossain, M. T., Baruwa, E., Sultana, M., Gow, J., Alam, K., Ahmed, S. M., & Khan, J. (2019). Women's Preferences for Maternal Healthcare Services in Bangladesh: Evidence from a Discrete Choice Experiment. *Journal of clinical medicine*, 8(2), 132. <https://doi.org/10.3390/jcm8020132>

¹⁸ A rapid gender assessment was conducted by Power and participation Research Center and completed in September 2021 to support the BRTA.

¹⁹ Kotikula, Aphichoke, Ruth Hill, and Wameq Azfar Raza. 2019. What works for working women? Understanding female labor force participation in urban Bangladesh. Washington, DC: World Bank.



critical care capacity of health facilities for effective management of COVID-19 cases. It will establish a system of mobile emergency medical services accessible through a toll-free number with dedicated ambulances for the transportation of crash victims and COVID-19 patients. It will also strengthen the emergency departments of district hospitals through triaging protocols and negative pressure isolation rooms for the management of crash victims and COVID-19 patients. These efforts will improve system capacity to manage a potential surge in COVID-19 cases and thus help save lives. The long-term road safety engagement will support the strengthening of policies, institutions, and investments for resilient, inclusive, and sustainable recovery by rebuilding better and saving lives.

II. PROJECT DESCRIPTION

A. Project Development Objective

PDO Statement

18. The objective of the Project is to build road safety management capacity and achieve targeted reduction in traffic fatalities and serious injuries in Bangladesh.

PDO Level Indicators

19. Achievement of the PDO will be measured through the following key indicators:
- a. Reduction in fatal crashes per year on the highway pilot corridors and mass-action treatment roads
 - b. National Road Safety Authority or equivalent is established and operational with adequate resource provision

B. Project Components

20. The project will finance three components toward meeting the project development objectives (see Annex 2 for details including cost breakdown):

Component 1: Multi-sectoral Road Safety Pilot Projects (IDA: US\$65.9 million, GoB: US\$42.4 million): Undertaking road safety pilot projects on selected national highways, urban areas and districts, to enhance coordination between road agencies, Bangladesh Police, health agencies and civil society, including:

- (a) national highway safe corridor demonstration pilot project for engineering road safety treatments and physical traffic calming measures, and implementing measures to improve post-crash care;
- (b) urban road safety pilot project for improvement of post-crash care and implementation of targeted awareness programs; and
- (c) district road safety pilot initiatives to improve road safety at the district level.

Component 2: Priority Road Safety Investments (IDA: US\$247.2 million, GoB: US\$102.1 million): Implementing priority activities in the areas of infrastructure, vehicle and user safety and post-crash care, and help establish ICT systems, including: (a) implementation of mass action engineering treatment programs to improve infrastructure safety; (b) development of crash database system; (c) implementation of integrated traffic management and incident detection system; (d) strengthening of Bangladesh Police



to manage traffic and respond to crash situations, including through support for traffic vehicles and equipment including patrol vehicles, crash scene clearing equipment and ambulances; (e) integration of existing information systems/databases of vehicle registration, driver licensing and payments; (f) implementation of road safety awareness and behavior change communication campaigns; (g) development and delivery of commercial drivers' training program; (h) implementation of trauma registries and trauma system improvement programs; and (i) training of medical providers on essentials of trauma care.

Component 3: Technical Assistance (IDA: US\$45.0 million, GoB: US\$24.4)

- 3.1 (a) Provision of technical assistance to BRTA for strengthening of NRSC; (b) development of roadmap to establish a National Road Safety Authority; (c) preparation of National Road Safety Strategic Action Plan; (d) review of current driver licensing, vehicle registration, and inspection regime; (e) review of existing commercial driver training regime and development of a comprehensive driver training program; (f) development of various technical manuals related to road safety; (g) development of rules/sub-national legislation for the Transport Act; (h) development of standard design and specification guidelines for set up of new vehicle inspection centers; and (i) development of a gender and inclusion strategy.
- 3.2 (a) Support for RTHD to set up a system for road safety audit accreditation/certification; and (b) developing and upgrading road safety engineering technical manuals.
- 3.3 Establishment of a training center for Bangladesh Police to strengthen capacity on modern road safety enforcement.
- 3.4 Support for DGHS in developing standards, protocols and operational policies for emergency care services with the aim of setting up a formal emergency medical service.
- 3.5 Provision of training and capacity building on road safety management practices for staff from BRTA, RHD, Bangladesh Police, DGHS, BRTC and PIU staff including technical, fiduciary and safeguard experts.

Component 4: Contingent Emergency Response: Provision of immediate response to an Eligible Crisis or Emergency, as needed.

C. Project Beneficiaries

21. **Primary beneficiaries include the communities, industries, and businesses within the project influence area, particularly vulnerable road users along (i) the national highway and urban road safety pilot projects and (ii) district areas where road safety programs will be undertaken.** The project will contribute socio-economic benefits specifically aimed at VRUs and low-income families. Further, drivers of freight vehicles and their families hailing from poorer sections of society are also severely impacted by the loss of income and medical expenses from a crash that can often spell financial disaster for them as social safety nets are limited. Additionally, reduced road traffic injuries (RTIs) would also benefit women and children by reducing their burden as caregivers of the injured male family members. The project will benefit at least 235,000 road users in the influence area of the highway pilots, of whom 85,000 are poor, and 65,000 are women.

22. **Scaled-up road safety investments envisioned under the project will contribute to the achievement of other sustainable mobility goals such as improved universal accessibility, climate change mitigation and adaptation, and reduced local air and noise pollution.** The adoption of a national



program for periodic inspection of all categories of vehicles will have a significant impact on air quality in the project jurisdictions and the overall reduction of GHG emissions. Beneficiaries of the project will include urban road users who will benefit from improvements in safe access and mode share for pedestrians, cyclists, and public transit users.

D. Results Chain

23. The figure below indicates the Results Chain of the project.

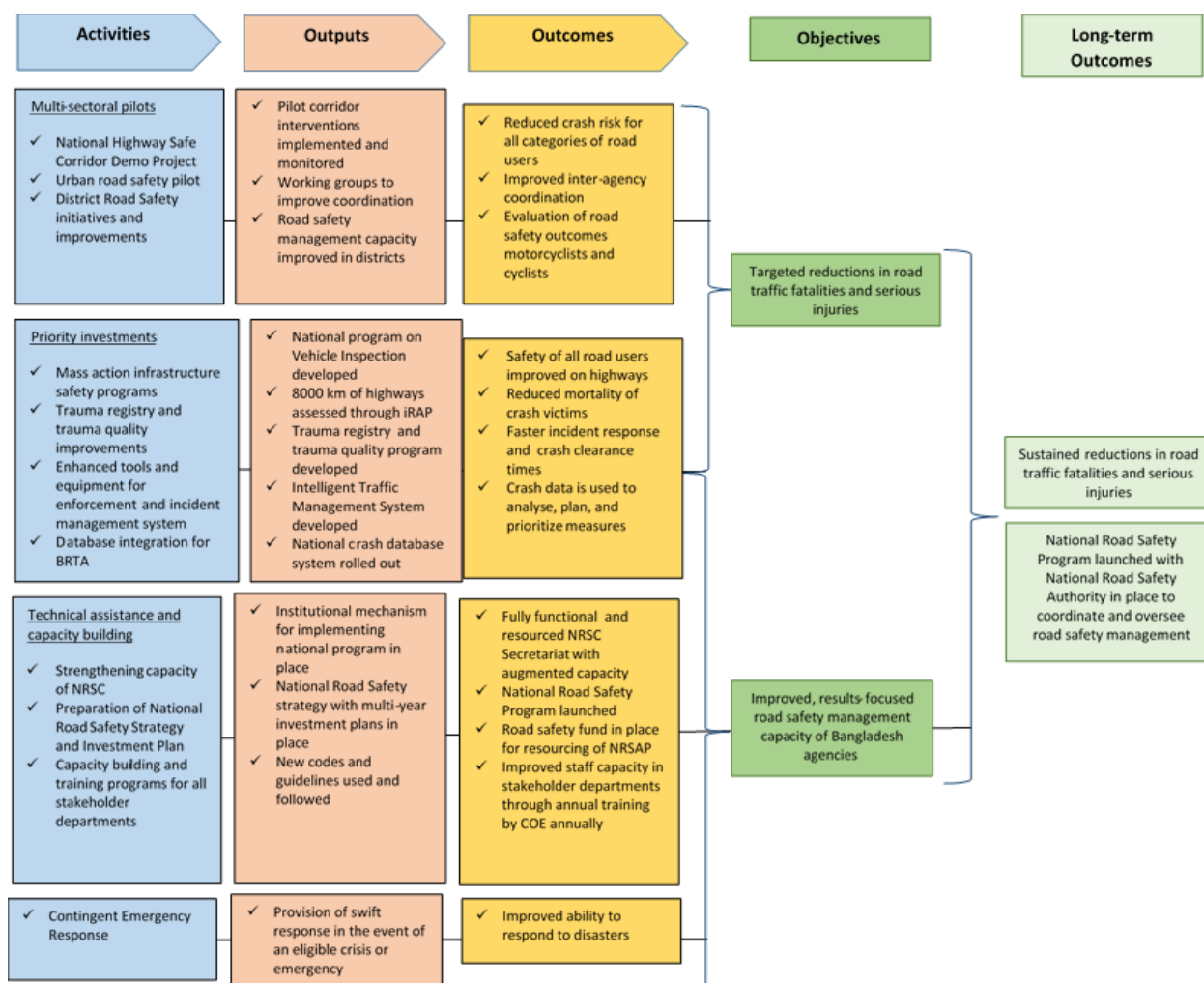


Figure 1. Results Chain for the Bangladesh Road Safety Project

Critical assumptions include high-level political will and inter-ministerial coordination, availability of funds including for upkeep of centers/digital equipment, adequate focus on capacity building, training, support, and facilities for women, and change in public attitudes toward road safety

E. Rationale for Bank Involvement and Role of Partners

24. **A proposed project provides the Bank a unique opportunity to support GoB in addressing Road Safety.** The Bank is uniquely placed to provide comprehensive road safety support through this first stand-



alone multi-sectoral road safety project in the region. It has the potential to demonstrate improved road safety outcomes through improved agency coordination, road safety management at the national and local levels, capacity building, and evidence-based financing support, which can be replicated in other developing economies.

25. **The WBG adds value by bringing in multi-sector technical expertise** from the Transport, Environment, and Health Global Practices to help implement an ambitious project drawing on experience from similar sectoral projects currently ongoing in Bangladesh and elsewhere in the region.

26. **Potential for involving other multilateral development institutions and stakeholders.** The project provides an opportunity for other development institutions and civil society to scale-up road safety interventions based on technical assistance, financing, as well as advocacy, through the proposed formulation of a long-term investment strategy.

F. Lessons Learned and Reflected in the Project Design

27. **As outlined in best practices for road safety management in low-capacity settings, the sequencing of road safety investments is critical for countries to reap positive safety outcomes from investments.** As such, a long-term investment strategy must be designed to overcome inherent capacity weaknesses by first establishing core capacity under the *Establishment Phase* through targeted high-risk demonstration projects, in corridors and urban areas, and taking up high-priority reforms and investments. Subsequently, in the *Growth Phase*, the focus should be on scaling up comprehensive multi-sectoral measures to realize national targets. The components and activities under this project have been designed along with these principles.

28. **Two relevant lessons from the Clean Air and Sustainable Environment (CASE) project in Bangladesh are the criticality of a combination of policy, institutional and demonstration investments in an urban context for building capacity and well-developed M&E systems and data collection for efficient project implementation.** These apply to road safety as well and this project has been designed with an emphasis on developing institutional and coordination capacity with the short-term goal of adopting and rolling out a government-owned road safety program aligned with a long-term strategy and investment plans. This will be complemented by the series of pilot demonstration projects (including in the urban area) which entail coordination between the various stakeholders to engender positive road safety outcomes. The Technical Assistance activities would serve as enablers for the preparation of the national road safety program.

29. **Lessons from several safe corridor demonstration projects in the region indicate that the engineering measures must necessarily be accompanied by robust programs for enforcement, public communication campaigns, and post-crash care for improved road safety outcomes.** This approach requires designing projects in close coordination with programs implemented by other stakeholder departments to derive synergies in cost and execution. Yet another key lesson is to adopt an incremental approach towards road safety management centered on developing a policy framework, a road safety strategy and actions plans, road safety engineering measures, and finally, pilot demonstration corridors with multi-stakeholder interventions based on the globally accepted safe system approach. These projects have also highlighted the importance of road safety cells/units to help coordinate activities. As such, this project will implement a holistic set of measures for all-around road safety improvements, with complementary support for programs, systems, and processes for BRTC, BRTA, and the Police and Health departments.



III. IMPLEMENTATION ARRANGEMENTS

A. Institutional and Implementation Arrangements

30. A Project Implementation Unit (PIU) will be established in the Roads and Highways Department (RHD) in coordination with the Ministry of Road Transport and Bridges. The mandate, functions, composition, and resources, for the PIU, will be outlined in the Project Operations Manual. The PIU will be headed by a Project Director (PD) and supported by Technical Specialists, a Financial Management Specialist, a Procurement Specialist, Social and Environmental Specialists, and Accountant and Administrative Assistants. The PIU will include four Additional Project Directors (APD) on deputation from each of the implementing agencies: Roads and Highways Department (RHD), Bangladesh Road Transport Authority (BRTA), Directorate General of Health Services (DGHS), and Bangladesh Police (BP). The APDs will assist the PD in the satisfactory implementation of the project activities under their purview, including compliance with fiduciary and safeguard requirements. A coordination unit in DGHS will also support the APD Health and support staff on all health-related activities. The PD will be supported by Project Management Consultants (PMC) for regular supervision, monitoring, and reporting of project activities including the coordination of pilot initiatives involving multiple implementing agencies. RHD will implement the construction of a Training Center for the Traffic Police in Shibchar, Madaripur within land identified by the Police. Civil works for the renovation of the health centers will be carried out by the Public Works Department (PWD) using GoB funding. The PIU will prepare a Project Operations Manual, setting forth the rules and procedures for implementing the Project, including, inter alia: implementation and institutional arrangements, requirements and procedures for financial management and procurement, and terms and conditions related to the use of vehicles financed under the Project.

31. The PIU structure will be supported by a Project Implementation Committee (PIC) which will include the technical heads of all involved implementing agencies to support working-level coordination across agencies and to provide the linkages and updates of project-financed activities to the secretariat of the National Road Safety Council. At an executive level, a Project Steering Committee (PSC), headed by the Secretary RTHD, with participation from the secretaries of the three concerned ministries, will oversee the overall project. Further details of implementation arrangements are provided in Annex 1.

32. For the Contingent Emergency Response Component (CERC), GoB will prepare an “Emergency Response Operations Manual” (EROM) acceptable to the Bank, which will constitute a disbursement condition for the CERC. RTHD is expected to be the implementing agency for the CERC component unless the EROM specifies otherwise.

B. Results Monitoring and Evaluation Arrangements

33. **Monitoring of Project progress, outcomes, and result indicators will be the responsibility of all four implementing agencies.** The progress and performance of the Project will be monitored and evaluated semi-annually against the outcome and output indicators established and agreed upon as part of the Results Framework. Overall outcome metrics, such as the number of crash deaths and fatalities for specific pilot corridors, will be collected from the Traffic Police Crash Data System (which will be improved under the project). Such monitoring and evaluation shall also include a qualitative assessment of the Project’s performance concerning the quality of works, governance and transparency in procurement and contract management, compliance with the commitments related to fiduciary, environmental, and social safeguards agreed, for example, through the Environmental and Social Management Framework (ESMF)



and the Environmental and Social Commitment Plan (ESCP). The monitoring and evaluation strategy will be pivoted on the timely conduct of studies and assessments to establish baseline data and progress data, where applicable, with a particular focus on measuring impacts on poverty reduction, shared prosperity, and gender.

34. **It is anticipated that during the project, GOB will develop and launch a comprehensive long-term National Road Safety Program, which will include a rigorous prior evaluation of the existing road safety initiatives (including those supported under the current project).** The World Bank will support the GOB in the development of the design of the evaluation in consultation with all three ministries and other relevant stakeholders, including civil society and government-affiliated academic institutes. The results of the evaluation will identify intermediate outcome results for adaptive learning under the program and at the same time strengthen the capacity of the relevant agencies in establishing their M&E systems focused on road safety.

C. Sustainability

35. **The proposed activities support the GoB's long-term vision of a sustained results-oriented program for road safety.** The Project's strong emphasis on capacity building and priority investments for the key stakeholder agencies will support the establishment of empowered and accountable road safety institutions. It is envisioned the strengthened institutional framework, policy changes, and adequate funding, all supported under the project, will lead to the development of a National Road Safety Program that will be sustained beyond the course of the project.

IV. PROJECT APPRAISAL SUMMARY

A. Technical and Economic Analysis

Technical Analysis

36. **Safe Corridor Demonstration Projects.** Based on a comprehensive exercise, two national highways - N4 (Gazipur-Elenga) and N6 (Natore to Nawabganj) - have been selected as safe corridor demonstration pilots, with several engineering road safety treatments, e.g., improved signing and marking, pedestrian facilities, and physical traffic calming measures. The World Bank's Road Safety Screening and Appraisal Tool (RSSAT) analysis tool estimated a net reduction of about 42 percent and 45 percent in fatalities from the proposed road safety treatments in N4 and N6 respectively. The highest fatality reductions are projected for pedestrians and motorcyclists due to the new design measures, such as crossing facilities in habitations, improved motorcycle and cyclist facilities, paved shoulder widths, and enhanced traffic calming measures.

37. **Enforcement Programs.** Targeted enforcement programs include equipment to modernize the capacity of the Traffic Police and highway patrol to manage speeding, axle-load control and to deter risky road user behavior through a combination of automated enforcement systems (CCTV and control room, and electronic messaging) and physical measures, e.g., traffic calming, weigh stations. A systematic review using the Global Road Safety Facility (GRSF) guidelines indicated a 15 percent reduction in fatal and serious injury crashes by enforcement through fixed speed cameras and a 43 percent reduction in such crashes through point-to-point cameras.

38. **Vehicle Safety.** The project would support technical studies aimed at creating an enabling environment for the private sector, especially in the areas of periodic technical inspection of vehicles and



commercial driver training. The GOB intends to build new vehicle inspection centers (VICs) built under the proposed WB-financed Bangladesh Environmental Sustainability and Transformation Project and have the private sector operate them. The project will support BRTA in developing the technical framework and guidelines for the national program for the VIC and a roadmap of a sequenced rollout of the program based on the findings of the pilot study.

39. **Improving the Quality of Road Safety Data.** Towards modernization of the existing crash database system, a review of the current system maintained by the Traffic Police was undertaken, including stakeholder consultations from all concerned ministries. The output of the study presents an overview of the crash data collection process and its legal basis, including delineation of roles and sharing of information among the stakeholders. This has been supplemented through a separate enforcement capacity review carried out in consultation with Highway Police and Dhaka Police to assess their capability to undertake enforcement activities and resources required for mobilization on the pilot corridors.

40. **Risk Assessment of Bangladesh Police.** A risk assessment was done as per World Bank guidelines to assess the risk of political interference, and misuse of the Project's support to the Traffic Police for enforcing traffic safety rules. The project implementation arrangements were designed to minimize the risk of misuse of Traffic Police activities and equipment financed by the Project. Key interventions include a centralized procurement management structure for the entire project under RHD. Social Marketing Campaigns designed and linked to the traffic enforcement activities will support in improving public confidence and acceptance of the enforcement activities. Further, a specific MOU will be signed between RHD and Police on the use of vehicles and equipment procured under the project. During the Project implementation support, this is will closely be monitored and reported in periodic project progress reports.

41. **Post-crash Care System.** The current post-crash care system is fragmented, uncoordinated, and rudimentary. To address the critical deficiencies, an improved pre-hospital response is planned through a free ambulance service via a toll-free number and upgraded emergency care services in selected jurisdictions in district hospitals, and Upazila Health Complexes (UHC) along the two national highway corridors. Training provided to medical providers on Advanced Trauma Life Support (ATLS) and Basic Trauma Life Support (BTLS) is expected to show measurable benefits from such trauma training with a CMF of 0.79 and can yield 21 percent more live savings at hospitals. This benefit is not restricted to road crash trauma victims but will be available for all trauma victims brought to the hospitals.

Economic Analysis

42. **The Project is expected to have substantial economic benefits by reducing road traffic crash-related deaths and serious injuries.** Investment in effective road crash fatality and injury prevention programs will contribute to the accumulation of human capital in Bangladesh, which in turn will contribute to sustainable and inclusive economic growth and increased country wealth. Further, road crashes also have a significant impact on freight transport and logistics that are crucial to the Bangladesh economy. On average, every truck is involved in a crash each year; evidence indicates that these crash costs can constitute 7-11 percent of the total cost of transport operations. Reducing these crashes would reduce revenue losses as well.

43. **Benefits are derived from all proposed investments on the selected national highway (plus district) improvements, the mass action program for intersection improvements, speed camera-based enforcement, and trauma care training.** Economic analysis was undertaken to quantify the benefits and impacts using a discount rate of 6 percent (except for the mass action program where a rate of 12 percent



was used, in alignment with the economic analysis done by RHD). As interventions on highways and district roads do not involve any major civil works (which might affect traffic growth, modal shift, or reduce travel time), the economic analysis does not include benefits from travel time savings, reduction in CO2 emissions, or savings from vehicle operating costs. Rather, economic benefits stem from traffic safety benefits in terms of reduced crashes and related direct costs associated with the interventions. Safety benefits were calculated based on the number of crashes prevented due to the implementation of countermeasures, using a variety of methods including project safety impact analysis from RSSAT and economic evaluation methods adapted to Bangladesh conditions. Assumptions included 70 times GDP per capita to estimate the cost of deaths, and 17 times GDP per capita to estimate the cost of serious injuries. As indicated above, when the N4 and N6 highway corridors are opened to traffic in 2023, they are expected to have about 42 percent and 45 percent fewer deaths respectively compared to the existing conditions; the associated economic benefits are estimated at US\$151 million and US\$136 million respectively over the next twenty years. The benefits from the mass action program for 70 intersections indicated a median EIRR of about 44 percent. The economic analysis of speed cameras yielded a net present value of ~US\$36 million, with an EIRR of 291 percent even assuming that only 30 percent of N4 and N6 will be adapted with speed surveillance.

B. Fiduciary

Financial Management

44. **Financial Management Risk Assessment.** The FM risk assessment of RHD, conducted in 2020 for the WeCARE project, was updated for this project. Based on the assessment and the agreed set of mitigation measures to be applied during project implementation, the FM arrangements of all the implementing agencies are acceptable to the World Bank (details on risk and mitigation measures discussed in Section VI and Annex 1).

45. **Institutional Arrangements and Staffing.** The PIU will be responsible for financial management, with no funds transfer to other agencies. The Project Director will play the role of drawing and disbursement officer for the project following the guidelines of the government for development-partner projects. At least three project accountants at various grade levels will be hired from the market to discharge day-to-day FM responsibilities and reporting requirements of both IDA and the Government. The Project Operations Manual will be prepared for the project by RHD which will contain references to the Government's financial rules and regulations, along with the requirements of the project.

46. **External Audit.** External audits of the Project will be carried out by the Foreign Aided Project Audit Directorate (FAPAD) of CAG. The annual audit reports will be submitted within six months of the end of the financial year. The audited financial statements will be publicly disclosed in Bangladesh and by the Bank. The Project Director will be responsible for following up and taking remedial actions, with assistance from the project accountants and deputed APD/DPDs in the respective agencies relevant to the audit objections. The PIU, with the help of the respective ministries, will arrange tripartite meetings to resolve outstanding audit objections within three months from the receipt of the audit reports and improve the internal control arrangements to prevent the recurrence of issues that triggered the audit objections. To facilitate the resolution of audit observations, the PIU will constitute an "Audit Observation Resolution Committee" within three months of credit effectiveness. The terms and forms will be agreed upon with the Bank in due course.

47. The project will involve procurement of special vehicles for enforcement and emergency care



through an approved exception to the revised Country Financing Parameters for Bangladesh circulated on April 12, 2016 (and included in the Country Partnership Framework FY2016-2020). Appropriate measures for monitoring and supervision of the usage of special vehicles are discussed in Annex 1.

Procurement

48. Procurement under the proposed project will be carried out following the World Bank Procurement Regulations for IPF Borrowers, Fourth Edition, November 2020 (“Procurement Regulations”) and the provisions stipulated in the Project Procurement Strategy for Development (PPSD) and the procurement plan that may be updated from time to time. The project will be subject to the World Bank’s Anticorruption Guidelines, dated October 15, 2006, revised in January 2011, and as of July 1, 2016. The project will use the Systematic Tracking of Exchanges in Procurement (STEP) to plan, record, and track procurement transactions. RHD has drafted the Project Procurement Strategy for Development (PPSD) along with the initial procurement plan for the project.

49. Procurement under the proposed project will include various goods, works, non-consulting, and consulting services as indicated in Annex-1. All the procurement will be carried out centrally by the PIU. The Additional Project Directors (APDs) will assist the Project Director (PD) in procurement for their respective agencies. The Procurement risks and mitigation measures are mentioned under the Fiduciary risks section. The details of the procurement arrangements are mentioned in Annex 1.

C. Legal Operational Policies

	Triggered?
Projects on International Waterways OP 7.50	No
Projects in Disputed Areas OP 7.60	No

D. Environmental and Social

50. **Environmental and Social risks.** The project would follow the World Bank Environmental and Social Framework (ESF) and E&S standards, in addition to the national legal framework. The overall environmental and social (E&S) risks are rated Substantial as both environmental and social risks are rated Substantial. These are discussed in Section VI below, along with the corresponding risk mitigation measures.

51. **SEA/SH Risks.** A preliminary assessment of the project’s SEA/SH risks suggests a ‘low’ rating as the project sites are in urban, peri-urban, and rural areas along highways and the small scale of labor influx. However, the non-local workers may reside in labor camps at project sites. Sites in peri-urban and rural areas will potentially be near school routes or pedestrian access that women and girls use for their daily activities; these could induce SEA/SH risks in the adjacent communities. The project will raise awareness among the beneficiary communities, stakeholders, and the PIUs to mitigate the low SEA/SH risks. The risk will be reassessed when more information on labor influx and displacement of informal settlers and land acquisition becomes available. Preventive measures will be included in the Gender Action Plan, e.g., mapping of service providers, signing CoC, and training for the workers, as well as capacitating the GRM to deal with project-related GBV/SEA/SH complaints.

52. **E&S management adopts a framework approach.** The exact location of project activities will only



be known, and the designs of the interventions will only be available during project implementation. Given this, an Environmental and Social Management Framework (ESMF) and a Resettlement Framework (RF) have been prepared to guide E&S assessment of the works' sites during implementation, including land acquisition, involuntary resettlement, and construction-related E&S impacts and their management. The ESMF will guide the preparation of site-specific E&S Management Plans (ESMPs) and the RF will guide the preparation of site-specific Resettlement Plans (RPs). The project has prepared a Stakeholders Engagement Plan (SEP) and the Labor Management Procedures (LMP). A Grievance Redress Mechanism (GRM) has been designed that builds on the Government's centralized Grievance Redress System (GRS) to respond to all grievances, including E&S related grievances and GBV complaints. The E&S Commitment Plan (ESCP) for the assessment and management of E&S risks during identification, design, and implementation of sub-projects has been agreed with the Bank. Adequate resources have been proposed in the RF for Land Acquisition and Resettlement (LAR) management that will be provided by counterpart funds. The ESMF includes a negative list for any contingent emergency response (CER) work. The ESMF will be updated with an addendum when the CER is activated.

53. **Institutional capacity for E&S management.** The PIU, with guidance from the RHD Social and Environmental Circle (SEC), will undertake E&S management of project activities through an E&S Unit (ESU) in the PIU. The ESU will have a Senior Environmental Specialist and a Senior Social Development Specialist under an E&S Officer (ESO). PIU would also engage an E&S consulting firm and a LAR consulting firm to support project-level E&S and LAR management. The PIU's Project Management Consultant (PMC) will have expertise in environmental, social, communication, gender, and disability matters. The Sub-PIUs will assign a technical staff under the APDs as the E&S focal person; these focal persons will receive training on E&S management, stakeholder participation, and grievance resolution.

54. **Disclosure of E&S instruments.** The ESMF, RF, SEP, LMP and ESCP have been prepared, consulted on, and disclosed publicly by the project on 29 December 2021 (<https://rhd.portal.gov.bd/site/view/notices>) and in the World Bank external website on 14 December 2021. The approved ES instruments will also be made available in all field offices during project implementation. The summaries of the ESMF and the RF will be translated into the local language and made publicly available. The negotiated ESCP sets out the appropriate time frame for plans and actions required for the Project to meet the requirements of the Bank ESF and other guidelines.

E. Gender

55. **The project design provides multiple avenues to address gaps (see sectoral context) in institutional capacity to understand and respond to the priorities and needs of women.** Technical assistance under the project will develop a Gender and Inclusion Strategy and Action Plan as part of the National Road Safety Program. The Strategy and Action Plan will lay the foundations to ensure a gender-inclusive approach to road safety and will: (i) disaggregate data in the crash-data system and the monitoring system on safety by gender; (ii) include sexual harassment offenses as a violation and link them to the driver licensing database; (iii) assess the impacts of male deaths and injuries on women; (iv) promote basic gender-specific designs in vehicle inspections of public transport vehicles, (v) address gender dimensions of post-crash care by adopting measures to alleviate the additional hurdles faced by female household members and provide training programs for women bystanders as first responders; (vi) make a provision for at least one female team member in hospital-based care, and (vii) integrate sensitizing and capacity building for multiple stakeholders (especially drivers and the police) on sexual harassment prevention and response. The project will promote communications that address norms around masculinities, which influences road behavior and risk-taking among men.



56. **The project will address sexual harassment of female road users by implementing the following set of integrated actions:** (i) training for drivers and other bus employees with a focus on bystander intervention techniques; (ii) training for the police on a stronger response to reports of sexual harassment in public transport; (iii) awareness-raising campaigns to sensitize road users and stakeholders on laws, regulations, and reporting channels, as well as to encourage wider adoption of codes of conduct; and (iv) strengthening existing reporting mechanisms and building stronger referral pathways in collaboration with civil society organizations. The indicators to capture gender outcomes are described in Section VII: Results Framework.

F. Climate Change Adaptation and Mitigation

57. **Climate risk screening.** The overall climate risk of this project is **Moderate**. An in-depth screening tool for climate and disaster risk was used to identify the major climate risks affecting the project and to identify the mitigation measures. The project locations - Dhaka urban area, the districts of Dhaka (Tangail), Chottagram (Cumilla), Rajshahi (Bogura), and Khulna (Jhenaidah), and National Corridors of Dhaka (N4) and Rajshahi (N6) - are all highly exposed to extreme temperatures. The continued emission of greenhouse gases will cause further warming, and it is virtually certain that there will be more frequent high-temperature extremes over most land areas during the next fifty years. Rajshahi (Bogura) and Khulna (Jhenaidah) are moderately exposed to flooding hazards, while the rest are at high risk. The roads and roadside facilities are also susceptible to flooding and relative natural hazards, and thus cause road safety concerns for motorized and NMT road users. Climate change risks of the project can be mitigated if adequate climate adaptation measures are incorporated in the designs of the project's physical and non-physical interventions. Such measures will include ensuring that all road rehabilitation and construction designs incorporate climate adaptation standards and engineering solutions such as appropriate drainage facilities, and all design documents are reviewed and approved by drainage experts.

58. **Climate Co-benefits.** The project is expected to generate modest climate co-benefits from adaptation and mitigation-related measures associated with road safety civil works as well as planning or system initiatives. On the *adaptation* front, the project seeks to address current and future climatic vulnerabilities through physical and non-physical interventions: the road design standards and the construction manual will be adaptive to natural hazards and climate disasters and will incorporate climate-resilient features where needed, and the data system and enforcement support will identify the black spots and locations affected by natural hazards. The response system, including the police team and post-crash care team, will alleviate road crash-induced traffic congestion, and enhance the response system to accidents related to natural hazards. On the *mitigation* front, the provisions/guidelines for improved parking, vehicle repairs, and inspection will improve fuel efficiency, thereby reducing fuel consumption and GHG emissions. Activities in urban areas will promote infrastructure and safety features for Non-Motorized Transport (NMT) and would encourage and contribute to a shift towards more sustainable modes, such as walking, cycling, and public transport.

G. Citizen Engagement

59. The Project will engage with stakeholders based on the agency-specific Stakeholders Engagement Plans (SEPs) prepared by the PIU. Under the COVID-19 constraints, two virtual consultations were conducted during project preparation involving the representatives of beneficiaries, including transport owners' associations, road safety activist organizations, rights groups (representing vulnerable groups), road crash victims, local governments, and a resettlement NGO in the presence of Government stakeholders. At least five of the 50 stakeholder representatives who participated in the two consultation



events were women. Participants expressed concerns on land acquisition, involuntary resettlement, grievances, and engagement of the stakeholders in the project cycle. These concerns have been duly reflected in the E&S documents. The consultation process has been documented in the SEPs. The Project will conduct surveys to track the satisfaction of users of the pilot activity corridors from all road user groups. The project RF includes a specific indicator in this regard. RHD will establish the GRM to be adopted by each IA as per their respective SEPs.

V. GRIEVANCE REDRESS SERVICES

60. Communities and individuals who believe that they are adversely affected by a World Bank (WB) supported project may submit complaints to existing project-level grievance redress mechanisms or the WB's Grievance Redress Service (GRS). The GRS ensures that complaints received are promptly reviewed in order to address project-related concerns. Project affected communities and individuals may submit their complaint to the WB's independent Inspection Panel which determines whether harm occurred, or could occur, as a result of WB non-compliance with its policies and procedures. Complaints may be submitted at any time after concerns have been brought directly to the World Bank's attention, and Bank Management has been given an opportunity to respond. For information on how to submit complaints to the World Bank's corporate Grievance Redress Service (GRS), please visit <http://www.worldbank.org/en/projects-operations/products-and-services/grievance-redress-service>. For information on how to submit complaints to the World Bank Inspection Panel, please visit www.inspectionpanel.org.

VI. KEY RISKS

61. **The overall risk to achieving the PDO is rated "Substantial".** The risk categories rated Substantial are discussed below.

- (i) **Institutional Capacity for Implementation and Sustainability – Substantial.** There is a lack of internal coordination between the stakeholder agencies, primarily the RTHD, BRTA, and external coordination with the Health Department and the Police. Road actions are often identified and selected independently along with departmental silos through separate ministries without a comprehensive, coordinated, and continuous planning process. In addition, a Bank-financed road safety project will be a relatively new experience for BRTA and the Police. The project aims to build the expertise and capacity of all stakeholder agencies across the five UN pillars of road safety management, i.e., safer infrastructure, safer vehicles, safer users, and post-crash care.
- (ii) **Fiduciary Risk – Substantial.** The FM risk areas include a shortage of qualified professionals; a weak internal audit environment; delays in resolving audit observations; and a previous history of expenses being declared ineligible. Mitigation measures to address the above include a centralized fiduciary management structure, recruitment of FM staff within the PIU, and strengthening of internal control measures. Residual FM risk after mitigation measures applied during implementation is 'Substantial'. Procurement risks include the multisectoral nature of the project, possible delays in procurement due to the lack of technical preparation before the start of the procurement process, reduced participation of and competition from firms due to the prevailing COVID-19 pandemic situation, slow decision making, and approval processes within the Government, and the risk of fraud and corruption primarily due to weak



internal control functions and limited accountability. The procurement risk mitigation measures include: (i) implementing the Project Procurement Strategy for Development (PPSD) with the specified procurement and contract management approaches; (ii) Bank prior- and post-reviews based on the risks; and (iii) timely completion of procurement processes including bid/ proposal evaluation and contract awards. to ensure compliance with the Efficiency principle of the World Bank's Procurement Policy. Residual procurement risk after mitigation measures is 'Substantial'.

- (iii) **Environment and social – Substantial.** Key environmental risks are associated with construction works which may include air pollution due to dust emission, surface water pollution from construction debris, and Occupational Health and Safety (OHS) related issues. The movement of high-speed vehicles on the highways where civil works will be in progress would pose an additional safety concern for workers. Labor influx associated with the civil works contracts on the highway corridors may induce issues of community health and safety (CHS). Renovation of the emergency section of existing hospitals may induce risks to the health and safety of patients, including COVID-19 patients, along with the OHS of the project workers. Potential social risks of the project are associated with the activities for the improvement of selected highway sections and modification of junctions, some of which may require small scale acquisition of private land and repossession of existing public land leading to the involuntary physical and economic displacement of titled and non-titled affected persons, including informal settlers/occupiers. Indicative mitigation measures have been included in the ESMF, the vulnerable sections of communities and affected persons will be engaged in the identification, design, and implementation of site-specific activities.
- (iv) **Stakeholder Risks – Substantial.** The project is likely to involve a broad range of stakeholders at local, regional, and national levels, including not only the beneficiary communities but also NGOs, civil society, media organizations, chambers of commerce, trade bodies, and transport associations at all levels. The SEP includes an extensive mapping of the relevant stakeholders and a stakeholders' engagement framework/plan.
- (v) **Other Risks – Substantial.** Other risks reflect the risks of the impact of COVID-19 on project implementation. These may range from the short term to the more medium-term impacts of the pandemic, such as possible shifts from public transport to private modes that may result in more private vehicles on the road, thus elevating crash risks, public healthcare systems becoming overcrowded by the COVID-19 pandemic, with less attention and resources for emergency care to road crash victims. Project through its support for safety in all modes of road transport and strengthening of the health care systems will aim at addressing the above risks.



VII. RESULTS FRAMEWORK AND MONITORING

Results Framework
COUNTRY: Bangladesh
Bangladesh Road Safety Project

Project Development Objectives(s)

The Project Development Objective is to build road safety management capacity and achieve targeted reduction in traffic fatalities and serious injuries in Bangladesh.

Project Development Objective Indicators

Indicator Name	PBC	Baseline	Intermediate Targets	End Target
			1	
Sustained reduction in traffic crash fatalities and serious injuries				
Reduction in fatal crashes per year on the highway pilot corridors and mass-action treatment roads (Percentage)		0.00	15.00	30.00
Improved road safety management capacity				
National Road Safety Authority or equivalent is established and operational with adequate resource provision (Text)		Not established	Draft legislation/rules for the road safety lead agency developed	Road Safety authority or equivalent agency fully operational



Intermediate Results Indicators by Components

Indicator Name	PBC	Baseline	Intermediate Targets	End Target
			1	
Multi-sectoral road safety pilot projects				
Multi-sectoral Safe Corridor Pilot Program on N4 and N6 highway section implemented (Text)		Not implemented	Multi-sectoral interventions designed, necessary procurement completed and initiative launched	Regular monitoring on the demonstration corridor commenced
Launch of the motorcycle ambulance program in urban pilot areas (Yes/No)		No		Yes
Development and launch of district road safety action plan in both pilot districts (Yes/No)		No		Yes
User satisfaction with road safety condition (Text)		Not Available	Baseline survey for road user satisfaction completed	Road user satisfaction rate increased by 50% compared to baseline results
Roll-out of free ambulance services accessible through a toll-free number (Text)		Not established	Toll free number fully operational	Ambulance services fully operational in at least 2 district hospitals and upazilla health complexes along pilot highways
Improved incident response times on N4 and N6 highways (Minutes)		30.00		20.00
Priority Road Safety Investments				
Number of Police Stations recording and managing crash data using the developed system (Number)		0.00	10.00	20.00
Gender-disaggregated data collection on road crashes (Yes/No)		No		Yes
Trauma registries and trauma system improvement programs (TSIP) implemented in district hospitals (Number)		0.00		4.00
Number of km with enhanced highway patrol capacity and surveillance equipment (Number)		0.00	50.00	100.00
Share of trained bus employees reporting on intervening during an incident or taking action to		0.00	30.00	50.00



Indicator Name	PBC	Baseline	Intermediate Targets	End Target
			1	
improve female users' safety (Percentage)				
Portion of the surveyed mass action program network implemented with safety recommendation (Percentage)		20.00	30.00	50.00
Technical Assistance				
National Road Safety Program launched along with budget allocated for a multi-year investment plan (Yes/No)		No		Yes
Gender Strategy and Action Plan implemented (Yes/No)		No		Yes
Share of project-related grievances received that are processed within the stipulated service standards (Percentage)		0.00		80.00

Monitoring & Evaluation Plan: PDO Indicators

Indicator Name	Definition/Description	Frequency	Datasource	Methodology for Data Collection	Responsibility for Data Collection
Reduction in fatal crashes per year on the highway pilot corridors and mass-action treatment roads	The indicator will include crashes that either cause victims to lose their lives at the scene of crash, and/or causes fatality from injury within 30 days of crash. The baseline for the indicator will be calculated based on	Annual	Survey and national crash database	Surveys/published reports and crash database system.	Bangladesh Police



	3-year average rate of fatal crashes on these sections measured during pre-pandemic duration.				
National Road Safety Authority or equivalent is established and operational with adequate resource provision	The indicator requires that an independent and legislated agency or authority is established in Bangladesh which will be responsible for performing all road safety management functions at the national level including establishing a secretariat to carry out inter-ministerial coordination.	At mid-term and at end of project.	National budget documents and government notifications.	Review of national budget documents and government notifications	BRTA, RHD

Monitoring & Evaluation Plan: Intermediate Results Indicators

Indicator Name	Definition/Description	Frequency	Datasource	Methodology for Data Collection	Responsibility for Data Collection
Multi-sectoral Safe Corridor Pilot Program on N4 and N6 highway section implemented	Multi-sectoral pilot program implies execution of interventions related to (i) infrastructure improvement to make highways safer, (ii) enhanced enforcement by police, and (iii) enhanced post crash care.(iv) awareness campaign launched to promote on-	Annual	Project progress report	Review of Project reports	RHD, BRTA, Highway Police, DGHS



	going road safety initiatives				
Launch of the motorcycle ambulance program in urban pilot areas	Motorcycle ambulances mean motorcycles manned by trained emergency medical technicians and equipped with kits to stabilize crash victims	Annual (after launch)	Project progress report	Review of Project reports	RHD, DGHS
Development and launch of district road safety action plan in both pilot districts	The indicator implies that the District Road Safety Council must develop a road safety action plan including a corresponding investment plan with the approval of relevant stakeholders.	Annual (after launch)	Project progress report	Minutes of District road safety committee meetings	RHD
User satisfaction with road safety condition	This indicator will measure the satisfaction of road users of the improved investments on safety	At the start, middle, and end of project	Survey	Data from surveys conducted before start of civil works, midterm, and at the end of project	RHD
Roll-out of free ambulance services accessible through a toll-free number	The indicator will measure the deployment of a free ambulance service via a toll-free number and upgraded emergency care services in selected jurisdictions in district hospitals, and Upazila Health Complexes (UHC) along the two national highway corridors.	Annual	Project Progress Report	Review of Project reports	DGHS



Improved incident response times on N4 and N6 highways	This indicator measures the Emergency service response time for ambulances has reduced to 20 minutes on the selected highway corridors.	Annual	Project report and ambulance service provider report	Review of relevant reports	RHD, DGHS
Number of Police Stations recording and managing crash data using the developed system	This indicator will demonstrate the extent to which crash data is being used by police	Annual	Project progress report and crash data system report	Review of relevant reports	Traffic Police
Gender-disaggregated data collection on road crashes	This indicator would require that all crash data related information is recorded with gender information available for the victim	Annual	Crash data system report	Review of relevant reports	Traffic Police
Trauma registries and trauma system improvement programs (TSIP) implemented in district hospitals	This indicator will measure the implementation of trauma registries and trauma system improvement programs (TSIP) in district hospitals in the districts with high road crash fatality based on the WHO Injury Surveillance and Trauma Quality Improvement guidelines.	Annual	Project Progress Report	Review of Project reports	DGHS
Number of km with enhanced highway patrol capacity and surveillance	This indicator would measure the number of km	Annual	Project progress	Review of Project reports	RHD, Highway Police



equipment	of national highway patrolled by highway police with adequate training and equipment resources as provisioned under the project.		report		
Share of trained bus employees reporting on intervening during an incident or taking action to improve female users' safety	Share of bus employees, who took training on preventing sexual harassment in public transport provided by the program, reporting on intervening during an incident of sexual harassment or taking action to improve female users' safety such as suggesting a different seat or stopping ahead of a dark bus stop.	Annual	Project progress report	Review of Project reports	BRTA
Portion of the surveyed mass action program network implemented with safety recommendation	This indicator measures percentage of mass-action plan network with elimination of high-risk sections by engineering intervention as identified in the assessments	Annual	Project Progress report, Annual report of RHD	Review of Project reports	RHD
National Road Safety Program launched along with budget allocated for a multi-year investment plan	This indicator measures that a country-owned multi-year national program on road safety is developed and launched. The national program should be multi-	Annual	NRSC annual reports and project progress reports	Review of reports and government announcements	NRSC, RHD, Police, DGHS



	sectorial with time-bound targets developed in line with the UN and SDG targets and based on crash-data analytics. The national program should include a investment strategy that is approved by all relevant stakeholder ministries.				
Gender Strategy and Action Plan implemented	The indicator will measure the development and launch of a comprehensive gender action plan across the transport sector	Annual	Annual report	Review of reports	BRTA, RHD
Share of project-related grievances received that are processed within the stipulated service standards	The indicator measures the functionality of the grievance redress mechanism for the Project. Standards for different type of grievances to be setup as a part of the GRM processing protocols.	Biannually	Project Progress Report	Collated based on GRM reports	RHD



ANNEX 1: Implementation Arrangements and Support Plan

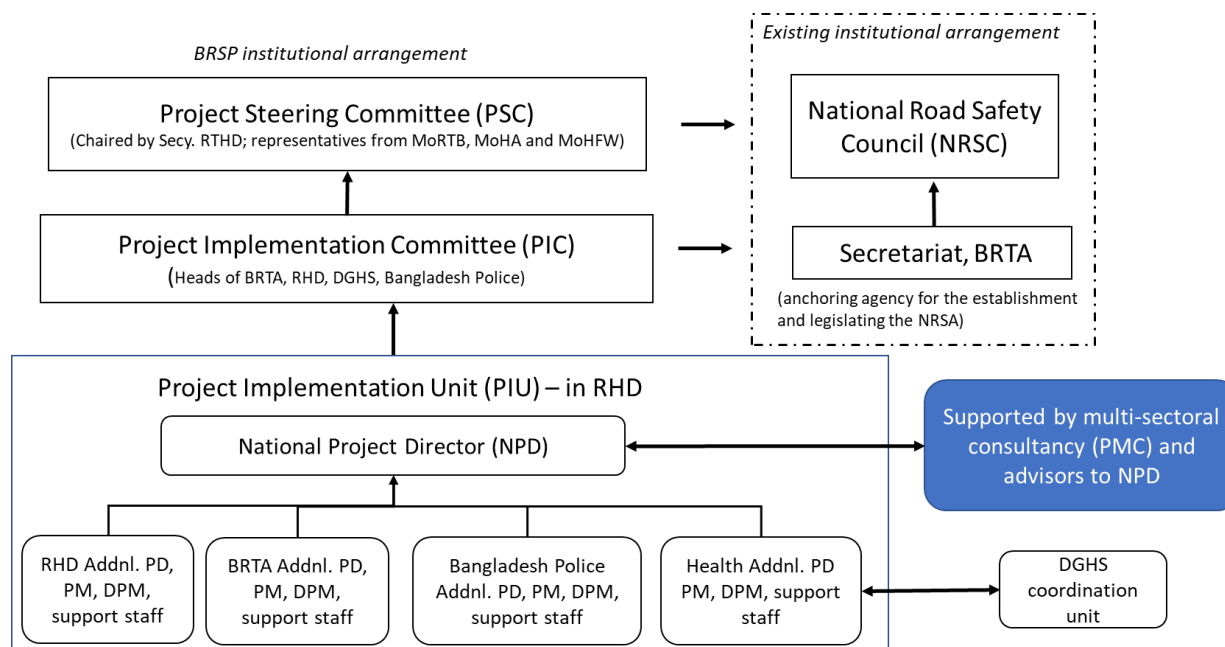
COUNTRY: Bangladesh Bangladesh Road Safety Program

Project Administration and oversight

1. **For oversight and advisory, the project will be guided by the inter-ministerial Bangladesh Road Safety Project Steering Committee (PSC)** chaired by the Secretary of RTHD of MoRTB. The PSC will include the representatives from Health Services Division of MoHFW, Public Security Division, ERD, IMED, and Planning Commission Ministry of Road Transport and Bridges (MoRTB), from Ministry of Health and Family Welfare (MoHFW), and Ministry of Home Affairs (MoHA), and representatives from the ERD and Planning Commission. The PSC will be supported by an inter-departmental Project Implementation Committee (PIC). The PIC will include representation by the technical heads of all involved implementing agencies: Roads and Highways Department (RHD), Bangladesh Road Transport Authority (BRTA), Directorate General of Health Services (DGHS), and Bangladesh Police. The PIC will support working-level coordination across all agencies for all project-based activities through the PIU, including the multi-sectoral pilot initiatives for the selected urban areas, national highways, and districts.
2. **The proposed format for the institutional arrangement of the project aligns well to strengthen the current institutional structure led by the National Road Safety Council (NRSC), with the secretariat hosted by BRTA.** The inter-ministerial NRSC constituted in 1995 has not been effective in supporting the overall institutional functions, including coordination among the relevant line ministries as well as lack of budgetary resources to carry out a national road safety program. The proposed PSC, with representation from all relevant secretaries, would mitigate the risks of lack of coordination as well as ownership of the road safety agenda at the highest level. The common linkage between the Project Steering Committee and the NRSC will also ensure that NRSC, in its development of the National Road Safety Action Plans, is fully cognizant of the activities supported by the project and will have a better understanding of investment priorities of other line ministries besides the nodal ministry, Transport. In addition, the NRSC is itself limited in terms of its empowered role to regulate all stakeholders and take legislative action. The project envisions the need to support a National Road Safety Authority (NRSA) or equivalent agency at an arms-length from the ministries but is legally constituted and empowered to make decisions on all road safety-related policies and regulations. The role of the Authority is also to monitor the performance of all stakeholders and be accountable for the national agenda on-road safety performance. To ensure the sustainability and leadership of the NRSA, it will be served by a Board of Directors headed directly by the PMO office with key figures from the private and public spaces. The project will support the current secretariat of the NRSC – BRTA to lay the groundwork and lead the necessary capacity-building efforts towards the formation of the NRSA. The overall institutional structure is presented in the figure below.



Figure A-1. Project Institutional Arrangements



Procurement

3. **Procurement under the proposed project will include goods, works, non-consulting, and consulting services.** Key procurement activities will include, but not limited to: (i) RHD - Civil works for Safe Corridor Demonstration and mass action treatment, supply of equipment such as computers, vehicles for video recording, consulting services for IRAP assessment of the pilot corridors and network for mass action programs, design of N4, N6 treatments and mass action treatments, project management, development of RSA manual, and construction of training center for the Traffic Police; (ii) BRTA - services for the development of guidelines for VICs and formulating designs, study of existing systems and recommend the architecture for the integration of standalone systems, communication campaigns and training; (iii) DGHS – Improvement works for emergency care in different hospitals, supply of goods such as ambulances, equipment for the improvement of emergency care in hospitals, services for trauma registry and trauma quality improvement programs, and TA support for the development of standards, protocols etc., (MoHFW will designate PWD to carry out the renovation works of health centers using GoB counterpart funding); (iv) BP - Establishment of ITMIDS, control rooms, laying of OFC, equipment such as CCTV, red lights, speed cameras, metal cutters, cranes, chain-pulley set up, tow trucks, interceptors, GPS, radar guns, search lights etc.

4. The procurement responsibilities of the APDs for each agency will include the preparation of procurement documents, such as Terms of Reference (ToR), technical specifications, BoQs, bidding documents, and contract management to ensure quality, timeliness, and task completion. They will also work as evaluation committee members for relevant activities. The responsibility of the PIU for procurement will include, but not limited to: (i) uploading and maintaining the procurement plan in STEP and updating it from time to time with approval from the World Bank; (ii) carrying out procurement, including finalizing the bid/ RFP documents, inviting bids/ proposals/ applications, evaluation of bids/ proposals/ applications, awarding and signing contracts, making payments to contractors/ suppliers/



consultants after certification by the respective APDs; (iii) uploading procurement documents in STEP; and (iv) keeping a record of all procurement documents and make them available for Bank review.

5. **Project Procurement Strategy for Development (PPSD):** RHD has drafted the Project Procurement Strategy for Development (PPSD), along with the initial procurement plan that includes the activities of all implementing agencies. The PPSP spells out the detailed procurement arrangements for the project, including the identification of procurement-related risks and detailed risk mitigation measures (including the established timelines for completion of the key milestones in the procurement process as outlined in the issued Minutes of the GOB-WB Country Portfolio Review Meeting dated March 23-24, 2021). The initial procurement plan specifies each contract to be financed under the proposed project, the procurement method, market approach, estimated cost, evaluation options, contract modality, and Bank review requirements for each procurement activity, and the timelines for completion of the key milestones in the procurement process. The procurement plan will be uploaded and maintained in STEP and will be updated during implementation as and when necessary.

6. The World Bank's procurement supervision will be ensured through implementation support in the form of prior review and post review. The prior review contracts will be those which are relatively complex, high-value contracts and will be agreed upon in the procurement plan using a risk-based approach. The key procurement steps for these activities will be prior reviewed by the World Bank before proceeding to the next procurement step. For post review contracts, the TORs for consulting services and technical specifications/ BoQs of some of the goods/ works packages may require technical review by the Bank. The Bank Procurement Post Review (PPR) will be conducted on a sample of contracts selected based on associated risks, at least on an annual basis or more frequently based on need.

Financial Management

7. **Planning and Budgeting.** The annual budget will be prepared by PIU based on the procurement plan and other relevant annual work plans for each agency in keeping with the DPP provisions. These budgets will be monitored periodically to ensure that expenditures are in line with budgets, and to provide inputs for necessary revisions.

8. **Project Operation Manual including FM guidelines.** A Project Operation Manual will be prepared for the project by RHD within four months of credit effectiveness. The manual will contain references to the Government's financial rules and regulations, along with the requirements of the project.

9. **Internal Control.** The PIU will preserve all accounting, procurement, and other transaction processing records and documents following the provisions of the PPA 2006 and Government Financial Rules (GFR). These records must be made available on request for audit/investigation/review by the Government and the Bank.

10. **Funds Flow.** The project will primarily use the "advance" method of disbursement from the Bank, while all other options will remain open for use if needed. An initial advance will be provided to the designated account to be opened in a nationalized commercial bank acceptable to IDA, to cover expenses for the initial six months. The direct payments option will be applicable for high-value contracts if needed. The Bank will finance all expenses at 100 percent, except for salaries and allowances of civil servants, purchase of vehicles (other than special purpose vehicles), fuel, VAT & taxes more than 15 percent of credit financing. The project will use "Statement of Expenditure" (in the format attached to the DFIL) as a basis for disbursement.

11. **Financial Management System.** The PIU will use iBAS++ for accounting and financial reporting



purposes in the longer term as soon as the IBAS PMAP becomes ready for use for development projects. Until such time, the project will use off-the-shelf accounting software for project accounting and financial reporting. The PMU will submit Interim Unaudited Financial Reports (IUFRs) within 45 days from the end of each calendar quarter.

12. **Outstanding Audit issues.** There are no overdue audit reports or ineligible expenditures under Bank-financed projects with any of the implementing agencies. However, there are outstanding audit observations on the part of MoHFW that require resolution. The Bank will follow up on the resolution of these observations within the agreed timeframe under the country system.

13. **Monitoring of special vehicles:** Procurement of special vehicles was allowed under the project as an exception, as stated in the procurement plan, with the condition that the vehicles will be managed and maintained properly using best practices. All vehicles will have a logbook duly signed by the user and each user must write their mobile numbers in the logbook while signing off for the trip. The invoices to be generated for the maintenance and running cost must tally the logbook and should be supported by invoices for purchases if any.

Implementation Support Plan

14. The World Bank will support project implementation based on the risks identified and the mitigation measures proposed in the risk section. The Bank will undertake regular semi-annual implementation support missions to confirm project performance and areas of concern. These missions will, inter alia, be based on the reports of implementation agencies. The World Bank team will include specialists in key functional areas, viz., technical, fiduciary management, safeguards, and project management (see table below).

15. Support will be provided through regular communication and review of documents and semi-annual support reviews, and thematic reviews. Project progress and performance will be monitored and evaluated semi-annually against the outcome and output indicators established and agreed as part of the Results Framework. Such monitoring and evaluation shall also include a qualitative assessment of the Project's performance concerning the quality of works, governance and transparency in procurement and contract management, compliance with the commitments related to fiduciary, environmental, and social safeguards as agreed, for example, through the Environmental and Social Management Framework (ESMF) and the Environmental and Social Commitment Plan (ESCP). The monitoring and evaluation strategy will be pivoted on the timely conduct of studies and assessments to establish baseline and progress data, where applicable, with a particular focus on measuring impacts on poverty reduction, shared prosperity, and gender.

16. A mid-term review (MTR) will be conducted 30 months from credit effectiveness. The MTR would assess the overall implementation performance and progress towards the achievement of PDO, and if necessary, recommendations for amendments to the project would be discussed and proposed.

Time	Focus	Skills needed	Resource Estimate
First 12 months	Multi-sectoral road safety pilot projects	Transport Sector Specialist Road Safety Specialist Health Specialist Highway Specialist	8 SW 6 SW 6 SW 6 SW
	Priority Road Safety Investments	Transport Sector Specialist	4 SW



		Road Safety Specialist	4 SW
		IT/ICT Specialist	4 SW
		Health systems specialist	4 SW
	Technical Assistance Component	Institutional Specialist	4 SW
	Fiduciary and safeguards	Procurement Specialist	10 SW
12 – 60 months		Environment Specialist	8 SW
		Social Development Specialist	8 SW
		FM Specialist	6 SW
	Team Leadership	Task Team Leaders	8 SW
	Multi-sectoral road safety pilot projects	Transport Sector Specialist	4 SW/year
		Road Safety Specialist	2 SW/year
		Health Specialist	2 SW/year
		Highway Specialist	2 SW/year
	Priority Road Safety Investments	Transport Sector Specialist	4 SW/year
		Road Safety Specialist	2 SW/year
		IT/ICT Specialist	2 SW/year
		Health systems specialist	2 SW/year
	Technical Assistance Component	Institutional Specialist	4 SW/year
	Fiduciary and safeguards	Procurement Specialist	4 SW/year
		Environment Specialist	6 SW/year
		Social Development Specialist	6 SW/year
		FM Specialist	4 SW/year
	Team Leadership	Task Team Leaders	8 SW/year



ANNEX 2: Detailed Project Activity Description

COUNTRY: Bangladesh Bangladesh Road Safety Project

1. The project comprises four components, which are described in the following paragraphs.
2. **Component 1: Multi-sectoral road safety pilot projects:** Safe-system based road safety pilot projects are designed to demonstrate the effectiveness of multi-sectoral interventions, coordinated and supervised under the aegis of a dedicated institutional body, on a high-risk, high-visible section of the network, for the targeted reduction in road deaths over the project period. These aim to enhance coordination between the road agencies (RHD, LGED, District authorities), Highway and Metropolitan Police, health agencies, and civil society. These measures will be independently monitored over the project period to determine the change in road safety outcomes, so that they can be replicated over the wider-geographical area through greater coordination between all stakeholders, and eventually scaled up country-wide. These measures will allow reducing disaster-related accidents in vulnerable zones to be reduced through safer and resilient design features and support the enhancement of emergency services enhancement with post-crash care (including for disaster-related emergency events). The traffic calming measures and road safety civil works will have a positive impact on congestion reduction and will facilitate NMT travel patterns. Three distinct pilot projects will be undertaken.

(a) National Highway Safe Corridor Demonstration Project: This activity aims to enhance coordination between RHD, Police, health agencies, and NGOs such as Traumalink on national highway safety. Based on a comprehensive road safety assessment of the highway network²⁰, two corridors that are representative of about 90 percent of the country's national highways - N4 from Gazipur to Elenga (70 km), and N6 from Natore to Nawabganj (70 km) - have been selected for this pilot for multi-sectoral interventions over the project period. N4 is a two-lane highway with a width of 7.3 m, average daily traffic (ADT) of 15,286, and six major intersections that are currently being upgraded to a 4-lane highway²¹; N6 is also a two-lane highway with a width of 7.3m, ADT of 9747 and six major intersections; both these highways are high-risk with fatality rates of 0.24 deaths/km and 0.08 deaths/km. Support for three sets of interventions are envisaged in these pilots: (i) engineering interventions including minor civil works, required road safety treatments (including provisions for parking and repair of vehicles) and physical traffic calming measures; (ii) targeted enforcement programs including equipment to modernize the capacity of the Traffic Police and highway patrol to manage speeding, axle-load control and to deter risky road user behavior through a combination of automated enforcement systems (surveillance cameras and control room, and electronic messaging) and physical (traffic calming, weigh stations) measures; formulation and execution of complementary targeted communication programs to enhance driver/user awareness on the selected sections as applicable in the vicinity of the selected highway corridor; (iii) deployment of free, on-call basic life support ambulances manned by trained personnel to provide pre-hospital care to crash victims and transport them to the nearest healthcare facility; improved spot bystander care to crash victims in collaboration with local NGOs and augmentation of emergency care in district hospitals or medical colleges along N4 and N6

²¹ Under the SASEC Road Connectivity Project



corridors. This would include augmenting physical resources such as infrastructure, equipment, and supplies and updating knowledge and skills of doctors and nurses as per standards laid out in WHO essential trauma care guidelines.

(b) Urban road safety pilot project: This activity aims to enhance post-crash care (including for victims of disaster-related road accidents) and enforcement/awareness in the Dhaka Metropolitan Area. Key stakeholders for this pilot would be city health agencies, BRTA, and the Dhaka Metropolitan Police (DMP). As GOB is already implementing some urban improvement projects and bus route rationalization studies in the selected areas, the project will support iRAP assessments in these areas (together with the assessments under Mass Action programs under Component 2). As such these pilots will complement GOB's engineering improvements with post-crash care and targeted communication measures as under:

- i. **Motorcycle ambulances.** Given the traffic congestion in Dhaka city and the delayed ambulance response time, motor-cycle ambulances will be deployed at selected locations in Dhaka to provide medical support within minutes of the crash. These motor-cycle ambulances will be manned by trained emergency medical technicians and equipped with kits to stabilize crash victims till ambulances reach the crash spot. Basic Life Support (BLS) ambulances with trained personnel will be deployed to transport RTC victims to the nearest trauma care facility. Both the motorcycle ambulance and BLS ambulance services will be provided free of cost and will be accessible through a toll-free hotline linked to a call center. Exclusive ambulance lanes may be earmarked on major roads of the demonstration area for rapid movement of ambulances. The emergency department of the Mugda Medical College Hospital in Dhaka will be strengthened using GoB counterpart funding.
- ii. **Targeted Preventative Enforcement Programs and Communication Programs.** This activity would finance the development and implementation of targeted proactive deterrence enforcement plans, through the use of the equipment and patrol vehicles (purchased under Component 2 below), in combination with communication/awareness programs (under Component 2) to foster improved road user compliance in the pilot sites.

(c) District Road Safety Initiatives: This pilot is aimed at district-level ownership and implementation of road safety interventions that are often difficult to manage at the central level. Based on prioritization criteria, four districts namely Tangail, Bogura, Cumilla, and Jhenaidhah representing the divisions of Dhaka, Chottagram, Rajshahi, and Khulna were assessed. The districts of Tangail and Bogura that have the highest fatality rates have been selected for intensive road safety treatments. These two districts also have high motorization rates, high rates of economic development, and witness a high percentage of freight traffic. Tangail has a population density of 1056/sq.km and more than half of the population is female. N4 (selected in the NH pilot), which connects Dhaka to north Bangladesh passes through Tangail. Being home to the Jamuna Bridge connecting east and west Bangladesh, it experiences heavy traffic including freight movement. Bogura is a major connecting point for traffic movements to points north in Bangladesh. It is connected to Dhaka by N5 and Rajshahi by N502, both of which experience heavy traffic volumes. It has two hospitals – Bogura Medical College Hospital (with 500 beds) and Bogura Mohammad Ali Hospital (with 250 beds).

A combination of treatments listed above including corridor enhancements, local area safety improvements and NMT improvements, improved bystander care, and training in essentials of



trauma care for hospital staff would be undertaken in these two districts. The capacity of District Road Safety Committees would also be developed to enable them to identify, prioritize and implement effective and evidence-based road safety interventions in their jurisdictions.

3. **Component 2: Priority Road Safety Investments:** This component seeks to support the expedited implementation of some stand-alone priority activities as per the provisions of the recently enacted Road Transport Act. The idea is to demonstrate quick wins that can be had under infrastructure, vehicle and user safety, and post-crash care, and help establish best-in-class systems. These infrastructure improvements, along with improved systems/facilities and templates would likely then provide the means to replicate the pilot projects to more corridors, urban areas, and districts. The proposed activities will help reduce disaster-related accidents in vulnerable zones with safer and resilient design features, support the enhancement of emergency services enhancement and better assess vulnerabilities (with an improved crash data system). The proposed activities will also have a positive impact on reducing congestion reduction and will promote NMT use. Key activities include:

(a) Mass Action Programs to improve infrastructure safety (RHD): This activity would include: (i) systematic road safety surveys and assessments (using iRAP) of the national highway (NH) and regional highway (RH) networks, (in five divisions of Bangladesh – Dhaka, Khulna, Rajshahi, Rangpur, and Mymensingh), totaling about 5,000 km, and selected roads under the urban area pilots in Component 1, selected based on an analysis of existing crash data; and (ii) mass action treatments (based on iRAP and other assessments) including (a) junction improvements for intersections identified as high-risk and high-volume, and (b) minor civil works and installation of road furniture, signage, and markings, especially on high-risk corridors and access roads connecting to these highways, at railway crossings, and bazaar areas. Specifically, at least 70 high-risk junctions of minor roads with national and regional highways that comprise around 10 percent of all the intersections on the national and regional highway network (with a benefit-cost ratio greater than two and involving minimal land acquisition²²) will be initially improved under the project. These are based on a recent comprehensive RHD study that assessed road safety hazards at 693 intersections, interchanges, flyovers, and side roads through road safety audits, traffic and speed studies, traffic violation data, and video data.²³ More junctions fulfilling the set criteria may be selected for improvements based on the effectiveness of the measures undertaken. Efforts will be made to ensure that gender issues are suitably integrated into the road safety infrastructure activities. The design will also consider 32 customized conceptual and detailed designs with safety countermeasures already prepared to specifically enhance the safety of vulnerable road users.

(b) Crash Data Systems (Bangladesh Police): A national crash database system will be developed to replace the current Microcomputer Accident Analysis Package System (MAAP). This system will be primarily be used by the local police to enter crash data on-site, will pull and integrate data from other sources such as the District Health Information System 2 and the Open Medical Record System of the DHIS as well as road infrastructure, licensing, and vehicle registration database systems, provide analytical tools that respond to government needs and will facilitate the sharing of data among agencies and other stakeholders. Bangladesh police will enter into MOU for crash data sharing with the stakeholders to ensure that the agencies can make

²² Less than US\$1.3 million per junction

²³ *Study on Road Safety Hazards including Design of Countermeasures at Intersections on National and Regional Highways of Bangladesh* - Final Report of DevConsultants Limited submitted to Road Design and Safety Circle, RHD, GOB, May, 2019



data-driven decisions to enhance road safety. This will be done based on a comprehensive study of current operating procedures/processes/MIS to identify software/ hardware/ apps and other resource requirements initially for piloting in the national, urban area, and district pilots and eventually for country-wide rollout. In addition, it would support GOB to standardize definitions, and methods for collecting data (including collecting and reporting data on weather and disaster-related road accidents which are increasing and must be assessed for better planning of road safety/emergency interventions), and to design a crash data format that responds to the capacities and needs of ministries, and to provide training. Data systems can also support the driver licensing database on the violation, where a violation is defined to include sexual harassment offenses.

(c) Integrated Traffic Management and Incident Detection System (ITMIDS, Bangladesh Police): The ITMIDS will be undertaken along with the National Highway Safe Corridor Demonstration Project Sites (N4 and N6) with CCTV, video, and audio feeds, Automatic Number Plate Recognition (ANPR) technology to detect speed and traffic violations and enable traffic flow analysis and real-time monitoring will be replicated along some of the highway corridor pilots.

(d) Strengthening Highway and Metropolitan Police: The activity would finance patrol vehicles, crash scene clearing equipment to extricate victims, radio communication equipment, chemical/alcohol detection kits, and enforcement-related training to the Highway Police to enhance proactive highway policing. RHD shall sign a Memorandum of Understanding (“MoU”) with the Bangladesh Police, which shall set forth the terms and conditions related to the use of vehicles and equipment for the implementation of activities.

(e) Integration of Standalone Management Information Systems (BRTA): This activity would seek to integrate BRTA’s existing information systems/databases of vehicle registration, driver licensing, and payments to streamline its operations and improve efficiency, based on a comprehensive study on the As-Is systems, the To-Be architecture, the gaps, timeline, and implementation arrangements. It will also be linked to the proposed crash database system.

(f) Road awareness and communication campaigns (BRTA): These overarching objectives of the awareness campaign are to establish safer road behavior and raise awareness on sexual harassment prevention and response. The campaign will be rooted in social norms and will be tailored for male and female users. This activity will seek to: (i) deliver customized awareness and communication campaigns along the pilot corridors and areas to enhance user awareness of road safety features and foster enhanced road user compliance; (ii) establish an annual program of campaigns focusing on the core risk factors, using quantitative and qualitative data to influence themes and messages; and (iii) awareness-raising on sexual harassment prevention and response.

(g) A comprehensive commercial driver’s training Program (BRTA): The activity would involve reviewing the current driver training regime for commercial drivers and establishing a sustainable system including institutional mechanisms, the role of private sector/civil society, the development of training modules, driving license training of trainers, further school training of US\$0.15 million commercial drivers per year for three years following modified manuals by the trainers. Driving training will include modules on sexual harassment prevention and response.

(h) Trauma Registry and Trauma Quality Improvement (DGHS): This component will implement trauma registries and trauma system improvement programs (TSIP) in district



hospitals in the districts with high road crash fatality based on the WHO Injury Surveillance and Trauma Quality Improvement guidelines. This intervention will be implemented in an integrated manner using existing human resources. This component aims to improve injury surveillance and enhance the quality of hospital-based trauma care.

(i) Training of Medical Providers on Essentials of Trauma Care (DGHS): Doctors, nurses, and sub-assistant community medical officers (SACMO) staffing emergency room in all UHCs, District Hospitals and Medical Colleges along National Highways N4 and N6 and in high-crash-risk districts will be trained on Advanced Trauma Life Support (ATLS) and Basic Trauma Life Support (BTLS).

4. **Component 3: Technical Assistance.** This component will focus on technical capacity building and tools for all departments and implementing agencies to enable them to formulate a robust National Road Safety Program with a targeted vision and concrete investment plans in the short, medium, and long term. It would include:

(a) Technical Assistance to BRTA – This activity would finance services and goods required for; (i) strengthening the NRSC secretariat housed in BRTA; (ii) development of a blueprint to establish a National Road Safety Authority, including its vision, mission, organizational structure, the draft Act and regulations; (iii) preparation of a National Road Safety Strategy and Investment Plan - consolidation of the current fragmented NRSC action plan into a coherent national strategy and develop investment plans for a prioritized set of actions for each of the implementation agencies. The strategy will mainstream gender and disability considerations and contain specific recommendations to improve road safety for women, girls, and persons with disabilities. The investment plan will provide an environmental and social management approach for the sustainability of any investment in infrastructure; (iv) review of the existing commercial driver training regime and develop a comprehensive driver training program; (v) development of various technical manuals, e.g., traffic signs, vehicle inspection, crash investigation, driver testing, vehicle design manual prioritizing women, the elderly and people with disabilities; (vi) developing rules/sub-national legislation for the Transport Act of 2018; (vii) the development of standard design and specification guidelines for the setting up of new Vehicle Inspection Centers; (viii) developing and operationalizing hazard maps that integrate both climate and safety risk vulnerability maps for better planning of road infrastructure maintenance or investments, and for improved emergency planning; (ix) the review of existing mechanisms to respond to sexual harassment in public transport to plan for its strengthening, and to assess the socioeconomic impacts of road injuries and deaths of men on women in the household; and (x) a comprehensive training and capacity building program for BRTA staff at HQ and in the field.

(b) Support to RHD: The activity would finance the setting up a system of Road Safety Audit (RSA) accreditation/certification; development of pre-construction, construction-stage, and post-construction RSA manuals; updates to design standards and the development of technical manuals, incorporating safer and climate-resilient features; and training and capacity building of RHD's road safety unit as well as other RHD staff based in HQ and the field.

(c) Support to the Highway Police: The project will support the construction of a Training Center complete with a training ground and demonstration road for practical training in Shibchar and Madaripur within land already identified by the Police. Training will include modules on modern road safety enforcement and strengthening the response to reports of sexual harassment.



(d) **Support to the Directorate General of Health Services (DGHS):** The project will develop standards and protocols and operational policies for all aspects of pre-hospital and hospital-based emergency care services to set up a formal emergency medical service in the country in line with international standards as well as provide training and capacity building on road safety aspects and specific emergency measures during weather and disaster-related road accidents.

(e) **Training programs for all implementing agencies –** This activity would finance technical, fiduciary, and safeguard experts, training and capacity building; goods, and consulting services for the Program Implementation Unit (PIU) as well as to all the implementation agencies to ensure smooth implementation of the project.

5. **Component 4: Contingent Emergency Response.** This component will improve the GoB's ability to respond effectively in the event of an emergency in line with WB procedures on disaster prevention and preparedness. Following an eligible crisis or emergency, the Recipient may request the Bank to re-allocate project funds to support emergency response and reconstruction. This component would draw from other project components to cover the cost of emergency response.

6. Project Costs and Financing:

Bangladesh Road Safety Project - Costs and Financing							
#	Component/Sub-Component	Total Cost	IDA Financing (US\$, Million)				GoB Fund*
		US\$, million	RHD	BRTA	Police	Health	
1	Multi-sectoral Road Safety Pilot Projects						
1a	<i>National Highway Safe Corridor Demonstration Project</i>	29.3	27.4		0.4	1.6	25.7
1b	<i>Urban road safety pilot project</i>	23.2				23.2	11.1
1c	<i>District Road Safety Initiatives</i>	13.4	13.4				5.7
	Sub-total (Component 1)	65.9	40.8		0.4	24.8	42.4
2	Priority Road Safety Investments						
2a	<i>Prioritized Mass Action Programs to improve infrastructure safety</i>	196.8	196.8				81.0
2b	<i>Crash Data Systems</i>	14.7			14.7		4.9
2c	<i>Integrated Traffic Management and Incident Detection System (ITMIDS)</i>	6.2			6.2		2.0
2d	<i>Strengthening Highway and Metropolitan Police</i>	1.2			1.2		0.5
2e	<i>Integration of standalone Management Information Systems</i>	7.0		7.0			2.2
2f	<i>Road awareness and communication campaigns</i>	3.5		3.5			1.3



2g	A comprehensive commercial driver’s training Program	14.8		14.8			9.3
2h	Trauma Registry and Trauma Quality Improvement	2.6				2.6	0.8
2i	Training of Medical Providers on Essentials of Trauma Care	0.5				0.5	0.3
	Sub-total (Component 2)	247.2	196.8	25.2	22.1	3.1	102.1
3	Technical Assistance						
3a	Support to BRTA and NRSC	3.5		3.5			1.9
3b	Support to RHD	4.2	4.2				1.7
3c	Support to Bangladesh Police	7.6			7.6		2.7
3d	Support to DGHS	2.1				2.1	0.9
3e	Training and capacity building support to all agencies	27.5	27.5				17.2
	Sub-total (Component 3)	45.0	31.7	3.5	7.6	2.1	24.4
	Total IDA	358.0	269.3	28.7	30.1	30.0	169.0
	Total Project Cost (IDA financing and GoB funding)	527.0					
* GoB financing includes staff salary, utility, vehicles, fuel, land acquisition, resettlement, utility shifting, VAT, and other taxes							