



# Report and Recommendation of the President to the Board of Directors

---

Project Number: 48404-002  
September 2017

## Proposed Multitranche Financing Facility Islamic Republic of Pakistan: Central Asia Regional Economic Cooperation Corridor Development Investment Program

Distribution of this document is restricted until it has been approved by the Board of Directors. Following such approval, ADB will disclose the document to the public in accordance with ADB's Public Communications Policy 2011.

Asian Development Bank

## CURRENCY EQUIVALENTS

(as of 23 August 2017)

Currency unit	–	Pakistan rupee/s (PRs/PRs)
PRs1.00	=	\$0.009492
\$1.00	=	PRs105.345

## ABBREVIATIONS

ADB	–	Asian Development Bank
CAREC	–	Central Asia Regional Economic Cooperation
CPEC	–	China–Pakistan Economic Corridor
IRI	–	international roughness index
km	–	kilometer
m	–	meter
m <sup>2</sup>	–	square meter
MFF	–	multitranches financing facility
NHA	–	National Highway Authority
PRC	–	People’s Republic of China
TTFS	–	Transport and Trade Facilitation Strategy

## NOTE

In this report, "\$" refers to United States dollars.

<b>Vice-President</b>	W. Zhang, Operations 1
<b>Director General</b>	S. O'Sullivan, Central and West Asia Department (CWRD)
<b>Team leader</b>	D. Pyo, Officer-in-Charge, Transport and Communications Division, CWRD
<b>Team members</b>	N. Abbas, Senior Procurement Officer, CWRD A. Asif, Operations Assistant, CWRD N. Bustamante, Senior Operations Assistant, CWRD N. Djenchuraev, Senior Environment Specialist, CWRD R. Haider, Operations Assistant, CWRD P. Karki, Senior Transport Specialist, CWRD B. Khan, Senior Financial Control Officer, CWRD Z. Naqvi, Senior Project Officer (Infrastructure), CWRD L. Nazarbekova, Principal Counsel, Office of the General Counsel J. Nicolas, Senior Social Development Specialist (Safeguards), CWRD C. Tabernilla, Associate Project Officer, CWRD
<b>Peer reviewer</b>	J. Miller, Principal Transport Specialist, Southeast Asia Department

In preparing any country program or strategy, financing any project, or by making any designation of or reference to a particular territory or geographic area in this document, the Asian Development Bank does not intend to make any judgments as to the legal or other status of any territory or area.

## CONTENTS

	<b>Page</b>
INVESTMENT PROGRAM AT A GLANCE	
MAP	
I. THE PROPOSAL	1
II. THE INVESTMENT PROGRAM	1
A. Rationale	1
B. Impact and Outcome	5
C. Outputs	5
D. Summary Cost Estimates and Financing Plan	5
E. Implementation Arrangements	6
III. DUE DILIGENCE	7
A. Technical	7
B. Economic and Financial	8
C. Governance	8
D. Poverty, Social, and Gender	8
E. Safeguards	9
F. Summary of Risk Assessment and Risk Management Plan	9
IV. ASSURANCES AND CONDITIONS	10
V. RECOMMENDATION	10
APPENDIXES	
1. Design and Monitoring Framework for the Investment Program	11
2. List of Linked Documents	12

INVESTMENT PROGRAM<sup>a</sup> AT A GLANCE

<b>1. Basic Data</b>		<b>Project Number:</b> 48404-002		
<b>Project Name</b>	Central Asia Regional Economic Cooperation Corridor Development Investment Program	<b>Department /Division</b>	CWRD/CWTC	
<b>Country Borrower</b>	Pakistan Ministry of Finance	<b>Executing Agency</b>	National Highway Authority	
<b>2. Sector</b>		<b>ADB Financing (\$ million)</b>		
✓ <b>Transport</b>	<b>Subsector(s)</b> Road transport (non-urban)		800.00	
		<b>Total</b>	<b>800.00</b>	
<b>3. Strategic Agenda</b>		<b>Climate Change Information</b>		
Inclusive economic growth (IEG) Environmentally sustainable growth (ESG) Regional integration (RCI)	<b>Subcomponents</b>	Adaptation (\$ million)	13.34	
	Pillar 1: Economic opportunities, including jobs, created and expanded	Climate Change impact on the Project	Medium	
	Global and regional transboundary environmental concerns			
	Pillar 1: Cross-border infrastructure Pillar 2: Trade and investment			
<b>4. Drivers of Change</b>		<b>Gender Equity and Mainstreaming</b>		
Governance and capacity development (GCD)	<b>Components</b> Institutional development	No gender elements (NGE)	✓	
<b>5. Poverty and SDG Targeting</b>		<b>Location Impact</b>		
Geographic Targeting	No	Regional	High	
Household Targeting	No			
SDG Targeting	Yes			
SDG Goals	SDG9			
<b>6. Risk Categorization:</b> Complex				
<b>7. Safeguards Categorization [Tranche 1]</b>		<b>Environment: B Involuntary Resettlement: A Indigenous Peoples: C</b>		
<b>8. Financing</b>				
<b>Modality and Sources</b>	<b>Indicative Tranches (\$million)</b>			<b>Amount (\$million)</b>
	I	II	III	
<b>ADB</b>				<b>800.00</b>
Sovereign MFF-Tranche (Regular Loan): Ordinary capital resources	180.00	260.00	360.00	800.00
<b>Cofinancing</b>				<b>0.00</b>
None	0.00	0.00	0.00	0.00
<b>Counterpart</b>				<b>125.00</b>
Government	15.00	50.00	60.00	125.00
<b>Total</b>	<b>195.00</b>	<b>310.00</b>	<b>420.00</b>	<b>925.00</b>
<b>9. Country Operations Business Plan</b>				
<b>CPS</b>	<a href="https://www.adb.org/sites/default/files/institutional-document/171824/cps-pak-2015-2019.pdf">https://www.adb.org/sites/default/files/institutional-document/171824/cps-pak-2015-2019.pdf</a>			
<b>COBP</b>	<a href="https://www.adb.org/sites/default/files/institutional-document/215981/cobp-pak-2017-2019.pdf">https://www.adb.org/sites/default/files/institutional-document/215981/cobp-pak-2017-2019.pdf</a>			
<b>10. Investment Program Summary</b>				
The proposed multitranches financing facility (MFF) will enhance regional connectivity and trade in the Central Asia Regional Economic Cooperation (CAREC) Corridors in Pakistan by improving the efficiency for road traffic along the CAREC Corridors. For the purpose, the proposed MFF will rehabilitate and upgrade the road network constituting the CAREC Corridors mainly in Sindh, Punjab, and Khyber Pakhtunkhwa.				
<b>Impact:</b> Impact of the Program is aligned with: Regional connectivity and trade enhanced in the CAREC Corridors defined by project				
<b>Outcome:</b> Efficiency for road traffic along the CAREC Corridors improved				
<b>Outputs:</b> (i)Corridor along N55 constructed or rehabilitated, and (ii)NHA capacity strengthened				

## INVESTMENT PROGRAM<sup>a</sup> AT A GLANCE

**Implementation Arrangements:** National Highway Authority will be the executing agency.

**Project Readiness:** Tranche 1 Project will be made design- and procurement-ready when approved in September 2017.

### 11. Milestones

Modality	Estimated Approval	Estimated Completion <sup>b</sup>
Multitranche financing facility	26 September 2017	29 September 2026
Tranche I	11 October 2017	30 June 2022
Tranche II	27 September 2018	27 September 2024
Tranche III	30 September 2021	29 September 2026

### 12. Project Data Sheet (PDS)

PDS<sup>c</sup> <http://www.adb.org/projects/48404-002/main>

<sup>a</sup> Multitranche Financing Facility (MFF).

<sup>b</sup> For MFF, this refers to the end of the availability period; for tranches, this refers to the tranche closing date.

<sup>c</sup> Safeguard documents can be viewed by clicking the Document's hyperlink in the Project Data Sheet (PDS) page.

64°00'E

73°00'E

# PAKISTAN CENTRAL ASIA REGIONAL ECONOMIC COOPERATION CORRIDOR DEVELOPMENT INVESTMENT PROGRAM



0 50 100 200  
Kilometers

35°00'N

35°00'N

- National Capital
- Provincial Capital
- City/Town
- Airport
- Port
- Project Road T1
- Project Road T2
- Project Road T3
- CAREC Corridor
- National Highway
- Railway
- River
- Provincial Boundary

Boundaries are not necessarily authoritative.  
CAREC = Central Asia Regional Economic Cooperation



This map was produced by the cartography unit of the Asian Development Bank. The boundaries, colors, denominations, and any other information shown on this map do not imply, on the part of the Asian Development Bank, any judgment on the legal status of any territory, or any endorsement or acceptance of such boundaries, colors, denominations, or information.

64°00'E

73°00'E

## I. THE PROPOSAL

1. I submit for your approval the following report and recommendation on a proposed multitranche financing facility (MFF) to the Islamic Republic of Pakistan for the Central Asia Regional Economic Cooperation (CAREC) Corridor Development Investment Program.

2. The investment program will enhance regional connectivity and trade in CAREC corridors in Pakistan by improving road traffic efficiency along CAREC corridors. Specifically, the investment program will rehabilitate and upgrade the road network of 747 km constituting the CAREC corridors mainly in Sindh, Punjab, and Khyber Pakhtunkhwa.<sup>1</sup>

## II. THE INVESTMENT PROGRAM

### A. Rationale

3. **Background.** Located at the crossroads of Afghanistan, Central Asia, the People's Republic of China (PRC), India, and Iran, Pakistan has huge potential to become a regional transport and trade hub. It can maximize its national capabilities and resources to support trade-based economic growth mainly by playing the role of a transit trade hub. However, transit trade through Pakistan is still limited while trade remains maritime-centric, aligned with the southern gateway port of Karachi, and focused on major global developed markets like North America, Europe, and the Middle East. Poor transport and border cross-point infrastructure and costly transport and cross-border services pose an obstacle to exploiting the untapped potential.

4. Pakistan is putting its effort toward more land-based regional trade with neighboring countries through participation in regional programs. In 2011, Pakistan joined the CAREC Program. Pakistan's transport corridors offer the shortest route to the sea for landlocked Afghanistan, Central Asia, and the PRC's Xinjiang province. Pakistan's accession to CAREC enables subregions in Asia and Europe to be virtually integrated and seamlessly connected from East Asia through South Asia and Central Asia to Europe. In 2013, the CAREC transport corridors were extended to Pakistan to provide Afghanistan, Central Asia, and the PRC with connection to the ports of Gwadar and Karachi on the Arabian Sea. CAREC Corridor 5, extended to Pakistan along N55, links PRC and Afghanistan to the Arabian Sea and provides the PRC's Xinjiang province and landlocked countries in Central Asia the shortest trade route through the Karachi Port. Improving CAREC Corridor 5 along N55 in Pakistan will enable Pakistan to realize potential economic benefits from accelerated trade with surrounding countries. The CAREC Transport and Trade Facilitation Strategy (TTFS) 2020 endorsed by the CAREC ministers at the 12th ministerial conference in 2013 proposes investment projects to build the CAREC corridors in Pakistan.<sup>2</sup>

5. In 2013, Pakistan and the PRC agreed to develop the China–Pakistan Economic Corridor (CPEC) to improve transport and energy infrastructure in Pakistan and enhance trade links between the two countries. The CPEC will allow Pakistan to maximize its potential as a regional transport and trade hub while enabling the PRC to integrate its western regions and neighboring countries into the Silk Road economic belt initiatives. The synergy between the CAREC corridors and the CPEC could enable Pakistan to play the role of a regional transport and trade hub.

6. **Sector performance.** Transport contributes 10% to Pakistan's gross domestic product and more than 6% to the country's overall employment in 2013. Upgrading Pakistan's transport

---

<sup>1</sup> The MFF is included in ADB. 2016. *Country Operations Business Plan: Pakistan, 2017–2019*. Manila. ADB provided project preparatory technical assistance.

<sup>2</sup> ADB. 2014. *CAREC Transport and Trade Facilitation Strategy 2020*. Manila.

system is critical to both export competitiveness and economic growth. Roads are the predominant mode of transport in Pakistan, accounting for more than 92% of passenger and 96% of freight traffic in 2010; total inland traffic by road was estimated at 325 billion passenger-kilometers (km) and 59 billion freight ton-km by rail.

7. Pakistan's road network of 263,000 km consists of 12,500 km of national highways and 93,000 km of provincial highways, with the remainder classified as either district or urban roads. The national highway network, which is less than 5% of the total road network, caters to 80% of commercial traffic. The National Highway Authority (NHA) is responsible for national highways (including access-controlled motorways and expressways), while provincial and district administrators are responsible for provincial highways and district roads. Despite the high reliance on road transport, the quality of the road infrastructure severely constrains capacity. Although the quality of the national highways considerably improved from continuous investments and better road asset management, the overall condition is wanting—only 50% of highways are assessed to be in *good* or *fair* condition. The condition of the provincial highways is worse than that of the national highway network. Many are either permanently impassable or subject to closure during bad weather.

8. **Sector road map.** The government's transport sector strategy is highlighted in Vision 2025, which aims to establish an efficient and integrated transportation system that facilitates the development of a competitive economy.<sup>3</sup> Key related targets are to reduce transport costs and promote regional connectivity through enhanced infrastructure development (physical connectivity), effective institutional arrangements (institutional connectivity), and empowered people (people-to-people connectivity).

9. Vision 2025's strategic direction for promoting regional connectivity has evolved into two key regional cooperation and integration initiatives, i.e., the CAREC Program and the CPEC (paras. 4–5). In line with Vision 2025's strategic direction, the CAREC TTFS 2020 sets out the following operational priorities: (i) development of multimodal corridor network focusing on road and rail network development, logistics center development, and border crossing points improvement; (ii) improvement of trade and border crossing services focusing on coordinated border management, customs modernization, integrated trade facilitation, and single window development; and (iii) improvement of operational and institutional effectiveness focusing on road maintenance, road safety, designated rail corridor, and policies and institutional development. TTFS 2020 identifies 23 priority investment projects in Pakistan amounting to \$7.7 billion.

10. **Strategic context.** The country partnership strategy 2015–2019 for Pakistan highlights the focus on strengthening regional connectivity in transport and energy through ADB support for (i) the extension of CAREC corridors to the ports of Gwadar and Karachi, (ii) the Turkmenistan–Afghanistan–Pakistan–India natural gas pipeline project, and (iii) transport and trade facilitation with emphasis on developing economic corridors to expand economic opportunities for communities in surrounding areas.<sup>4</sup> This strategic direction is in line with ADB's Regional Cooperation and Integration Strategy (2006) and the Operational Plan for Regional Cooperation and Integration (2016), which aim to strengthen connectivity between economies and raise competitiveness in connected markets.<sup>5</sup>

<sup>3</sup> Government of Pakistan. 2014. *Pakistan Vision 2025*. Islamabad.

<sup>4</sup> ADB. 2015. *Country Partnership Strategy: Pakistan, 2015–2019*. Manila.

<sup>5</sup> ADB. 2006. *Regional Cooperation and Integration Strategy*. Manila; and ADB. 2016. *Operational Plan for Regional Cooperation and Integration, 2016–2020: Promoting Connectivity, Competitiveness, Regional Public Goods, and Collective Action for Asia and the Pacific*. Manila.



11. **Policy framework.** Through institutional capacity development and reforms aided by development partners, NHA has become a capable road agency despite structural constraints. It managed to (i) establish the road maintenance fund and secure a stable source of road maintenance expenditure; (ii) establish the road asset management system, which allows more efficient use of scarce resources; and (iii) establish the National Highway and Motorway Police, which contributes to controlling overloading and reducing traffic violations and accidents on motorways and national highways. Despite these achievements, sector reforms should continue, particularly for (i) establishing a national transport policy together with NHA's business plan; (ii) enhancing the sustainability of road networks and preserving road assets; and (iii) establishing a national policy for road safety and promoting public awareness.

12. **National transport policy.** A national transport policy is a prerequisite for the effective development of a sustainable and cost-effective transport system. Government efforts to develop a national transport policy in 2008 failed because of lack of strong ownership from the top; the draft national transport policy was shelved. In 2014, through policy dialogue, government's interest was revived and in November 2015, ADB approved capacity development technical assistance for Enabling Economic Corridors through Sustainable Transport Sector Development (\$15.4 million; financed by the Government of the United Kingdom) to help develop a national transport policy and master plan.<sup>6</sup> The government will prepare the national transport policy and make it endorsed by 31 December 2018.

13. **Sustainability of road network and road assets preservation.** In 2003 the government established a road maintenance fund, which was mainly financed by toll revenue from the motorways and national highways. Securing a stable source of funding for road maintenance expenditures (free from federal fiscal budget allocations that are usually influenced by political consideration) enabled NHA to adequately plan and effectively prioritize maintenance needs in accordance with the rankings of the road asset management system. The road maintenance fund has shown a consistent and stable increase each year; however, a huge backlog inherited from the past and exacerbated by repeated heavy floods distorts the effective use of scarce maintenance funds. To rectify this distortion, NHA plans to reconstruct 1,113 km of roads with residual life less than 2 years through the assistance of development partners including ADB.

14. **Road safety.** Road safety is a serious issue in Pakistan. Inadequate safety design, insufficient attention to safety, and inadequate traffic enforcement and driver training all contribute to Pakistan's poor safety record. In 2016, the government prepared a draft national road safety framework and action plan for national highways and motorways. With the support of road safety experts engaged in 2016 under ADB's technical assistance (footnote 6), the draft framework and action plan for national highways and motorways will be expanded to cover the entire road network in Pakistan as the National Road Safety Plan. A comprehensive road safety act will be developed and a national road safety body will be established to coordinate and monitor the implementation of the National Road Safety Plan.

15. **NHA's financial statements.** Since NHA was established as a corporate entity, the government budgetary support for road investment has been in the form of government loans to NHA. The practice leads to severe distortion of NHA's financial statements, accumulation of unserviceable debts and accrued interests in the balance sheet, and a huge net loss in the income statement because of NHA's meager revenues from tolling. With these distorted financial statements, NHA cannot mobilize funds from capital markets to promote public-private partnership. To correct the distortion, the government will consider (i) equitizing NHA's

---

<sup>6</sup> ADB. 2015. *Technical Assistance to the Islamic Republic of Pakistan for Enabling Economic Corridors through Sustainable Transport Sector Development*. Manila.

accumulated debt; (ii) revaluing NHA's road assets at current prices; and (iii) treating future government support to NHA for road investment either as government equity investment or as proper financing modalities that NHA can absorb and reflect in its financial statements.

16. **Development coordination.** ADB has been the lead agency for road subsector development in Pakistan and has coordinated its activities with development partners such as the World Bank, Japan International Cooperation Agency, and the Department for International Development of the United Kingdom. The collaboration of development partners was instrumental in overcoming previous constraints on the institutional transformation of NHA from a government administration to a service-oriented asset manager equipped with an effective road asset management system. As a bilateral development partner, the PRC has taken an active role in road subsector development in Pakistan since 2010. ADB will continue to take the lead in coordinating the different strategies and interests of development partners in Pakistan's road subsector to synergize resources and maximize their impact.

17. **Lessons.** Since 2005, ADB assistance has focused on trade corridors and regional connectivity to help the government take advantage of its strategic location and act as a hub for regional transport. Two MFFs provided in 2005 and 2007 were designed to improve key trade corridors connecting sea ports, industrial centers, and border crossing points.<sup>7</sup> Despite the high relevance of the MFF, both MFFs were not implemented as designed and left a considerable portion of MFF resources unutilized mainly because (i) NHA's capacity was not adequate to manage massive land acquisition and resettlement requirements and consequent startup delay followed; and (ii) security situation was beyond adequate control and cancellation of projects resulted in security-sensitive areas. NHA has developed its capacity for land acquisition and resettlement and established a standard timeline to complete the cycle of land acquisition and resettlement following the Land Acquisition Act. All tranches are designed in such a way that land acquisition and resettlement will be completed when contractors are mobilized so that necessary project sites are handed over to the contractors on time. In the process of selecting project roads, security risks were thoroughly assessed and security vulnerable areas were avoided. Contractors will be requested to develop a security mitigation and management plan.

18. **Value added by ADB assistance.** Since 1997, ADB has developed the CAREC Program into a premier regional cooperation program with a clear vision anchored on partnership and a comprehensive action plan that defines shared priorities for cooperation. ADB, as the CAREC Secretariat, played an instrumental role in defining CAREC corridors in Pakistan in 2013. From its experience in road network development in Pakistan, ADB knows transit traffic flow patterns and the network effects the CAREC corridors will create. ADB's sector road map in Pakistan will help the country become a regional transport and transit hub in line with the development of the CAREC corridors. ADB's active involvement in CAREC corridor development through the proposed MFF will encourage the government to accord high priority in terms of allocating national resources to build a seamless regional connectivity among CAREC countries.

19. **Suitability of financing modality.** The MFF is a suitable financing modality that allows ADB to program its assistance in line with the long-term needs of the government, especially since the sector road map and policy framework including sector reform measures are clearly set out in the context of the CAREC Corridor development initiative and the government investment

---

<sup>7</sup> ADB. 2007. *Report and Recommendation of the President to the Board of Directors on a Proposed Loan to the Islamic Republic of Pakistan for the National Trade Corridor Highway Investment Program*. Manila; and ADB. 2005. *Report and Recommendation of the President to the Board of Directors on a Proposed Loan to the Islamic Republic of Pakistan for the National Highway Development Sector Investment Program*. Manila.

projects are endorsed by the CAREC ministers.<sup>8</sup> NHA also has a good track record in institutional stability, governance, and project implementation. The investment activities in the subsequent tranches are similar to those under the tranche 1 project. No major security concerns are expected in the project area.

## B. Impact and Outcome

20. The investment program is aligned with the following impact: regional connectivity and trade in the CAREC corridors enhanced (footnote 2). The investment program will have the following outcome: efficiency for road traffic along the CAREC corridors improved.<sup>9</sup>

## C. Outputs

21. **Output 1: Corridor along N55 constructed or rehabilitated.** Output 1 will improve 747 km of the CAREC corridor along the western side of the Indus River and passing Sindh, Punjab, and Khyber Pakhtunkhwa (Table 1).

**Table 1: Output 1 of Each Tranche Project**

Tranche	Project Road	Type of Works	Length (km)	Estimated Cost (\$ million)	Indicative Safeguard Category	
					IR	ENV
T1 (2017)	Petaro–Sehwan	Building additional 2-lane carriageway	66	86.4	A	B
	Ratodero–Shikarpur	Building additional 2-lane carriageway	43	60.0	A	B
	Dara Adamkhel– Peshawar	Rehabilitating existing 4-lane carriageway	34	40.3	C	B <sup>a</sup>
	<b>Subtotal</b>		<b>143</b>	<b>186.7</b>		
T2 (2019)	Shikarpur–Rajanpur	Building additional 2-lane carriageway	<b>224</b>	<b>302.0</b>	A	B <sup>a</sup>
T3 (2021)	DG Khan–DI Khan	Building additional 2-lane carriageway	207	290.0	A	B <sup>a</sup>
	Jamshoro–Sehwan	Rehabilitating existing 2-lane carriageway	130	97.0	C	B <sup>a</sup>
	Ratodero–Shikarpur	Rehabilitating existing 2-lane carriageway	43	30.0	C	B <sup>a</sup>
	<b>Subtotal</b>		<b>380</b>	<b>417.0</b>		
	<b>Total</b>		<b>747</b>	<b>905.7</b>		

ENV = environment, IR = involuntary resettlement.

<sup>a</sup> Subsequent tranches may be upgraded to *category A* after the detailed environmental assessment to be conducted for each tranche.

Source: Asian Development Bank estimates.

22. **Output 2: National Highway Authority capacity strengthened.** Capacity development under both the investment program and project 1 will consist of (i) due diligence advisory services to help NHA prepare projects for subsequent tranches; and (ii) assistance with the implementation of projects approved under each tranche.

## D. Summary Cost Estimates and Financing Plan

23. The investment program is estimated to cost \$925 million (Table 2). The government has requested an MFF in an amount up to \$800 million from ADB's ordinary capital resources to help

<sup>8</sup> The government has committed itself to implement sector reform measures derived from policy framework (paras. 12–15) as part of loan covenants and undertakings of the MFF (refer to Schedule 6 of the framework financing agreement accessible from the list of linked documents in Appendix 2).

<sup>9</sup> The design and monitoring framework is in Appendix 1.

finance a part of the investment program. The MFF will consist of several tranches, subject to the government's submission of related periodic financing requests, execution of the related loan and project agreements for each tranche, and fulfillment of terms and conditions and undertakings set forth in the framework financing agreement. The first tranche of the MFF will comprise a regular loan of \$180 million, have a 25-year term, including a grace period of 5 years, an annual interest rate determined in accordance with ADB's London interbank offered rate (LIBOR)-based lending facility, a commitment charge of 0.15% per year, (the interest and other charges during construction to be capitalized in the loan,) and such other terms and conditions set forth in the draft loan and project agreements. Based on the custom-tailored method, the average maturity is 15.97 years, and the maturity premium payable to ADB is 0.10% per year.

**Table 2: Summary Cost Estimates (\$ million)**

Item	Tranche 1	Tranche 2	Tranche 3	Total <sup>a</sup>
<b>A. Base Cost<sup>b</sup></b>				
1. Corridor along N55 constructed or rehabilitated	161.5	255.6	349.6	766.7
2. National Highway Authority capacity strengthened	8.0	8.0	3.0	19.0
<b>Subtotal (A)</b>	<b>169.5</b>	<b>263.6</b>	<b>352.6</b>	<b>785.7</b>
<b>B. Contingencies<sup>c</sup></b>	<b>18.8</b>	<b>34.1</b>	<b>50.3</b>	<b>103.2</b>
<b>C. Financing Charges During Implementation<sup>d</sup></b>	<b>6.7</b>	<b>12.3</b>	<b>17.1</b>	<b>36.1</b>
<b>Total (A+B+C)</b>	<b>195.0</b>	<b>310.0</b>	<b>420.0</b>	<b>925.0</b>

<sup>a</sup> Includes taxes and duties of \$55.8 million to be financed from government cash contribution.

<sup>b</sup> In March 2017 prices.

<sup>c</sup> Physical contingencies computed at 10% for civil works. Price contingencies computed at 1.4%–1.5% on foreign exchange costs and 5.0%–5.5% on local currency costs.

<sup>d</sup> Includes interest and commitment charges.

Source: Asian Development Bank estimates.

24. The government will contribute \$125 million to finance expenditures related to land acquisition and resettlement, taxes and duties, and contingencies. The summary financing plan is in Table 3.

**Table 3: Summary Financing Plan**

Source	Tranche 1		Tranche 2 <sup>a</sup>		Tranche 3 <sup>a</sup>		Total	
	Amount (\$ million)	Share (%)	Amount (\$ million)	Share (%)	Amount (\$ million)	Share (%)	Amount (\$ million)	Share (%)
ADB (OCR regular loan)	180.0	92	260.0	84	360.0	86	800.0	86
Government	15.0	8	50.0	16	60.0	14	125.0	14
<b>Total</b>	<b>195.0</b>	<b>100</b>	<b>310.0</b>	<b>100</b>	<b>420.0</b>	<b>100</b>	<b>925.0</b>	<b>100</b>

ADB = Asian Development Bank, OCR = ordinary capital resources.

<sup>a</sup> If cofinancing is identified, it will be substituted for ADB loan.

Source: Asian Development Bank estimates.

25. Climate adaptation is estimated to cost \$14.5 million and ADB will finance 92% of such cost (para. 29).

## E. Implementation Arrangements

26. NHA will be the executing agency. A steering committee presided by the NHA chair will be responsible for monitoring the use of loan funds and for the overall implementation performance of the investment program. A project implementation unit will be established under NHA for overall implementation of construction, including supervision of contractors and supervision consultants. A general manager will head the unit, which will have suitably qualified staff including project directors and safeguard specialists.

27. Procurement of civil works and related services financed under the investment program will be done in accordance with ADB's Procurement Guidelines (2015, as amended from time to

time). Consulting services will be required for supervising construction and capacity development. Consultants will be recruited in accordance with ADB's Guidelines on the Use of Consultants (2013, as amended from time to time).

28. Advance contracting and retroactive financing will be pursued in line with ADB's Procurement Guidelines to facilitate project implementation. The government has been advised that advance contracting and retroactive financing do not commit ADB to finance the project. The project is categorized as procurement- and design-ready. The implementation arrangements are summarized in Table 4 and described in detail in the facility administration manual.<sup>10</sup>

**Table 4: Implementation Arrangements**

Aspects	Arrangements				
Implementation period	July 2018–December 2027				
Estimated completion date	31 December 2027				
Estimated loan closing date	30 June 2028				
Management					
(i) Oversight body	Steering committee under NHA chair				
(ii) Executing agency	NHA				
Procurement	International competitive bidding		Tranche 1: Two contracts for building an additional 2-lane carriageway and one contract for rehabilitating existing 4-lane road	\$149.5 million	
			Tranches 2 and 3	\$585.3 million	
Consulting services	Construction supervision	QCBS (90:10)	Tranche 1: 67 person-months (international) and 346 person-months (national)	\$9.0 million	
			Tranches 2 and 3	\$18.0 million	
	Due diligence advisory services	QCBS (90:10)	Based on NHA needs assessment		\$10.0 million
	Assistance with project implementation	QCBS (90:10)	Based on NHA needs assessment		\$9.0 million
Advance contracting and retroactive financing	Advance contracting and retroactive financing for goods, works, and consulting services. Retroactive financing will be allowed for goods, works, and consulting services expenditures incurred up to 12 months prior to the date of signing of the ADB loan, subject to a maximum of 20% of the loan amounts.				
Disbursement	The loan proceeds will be disbursed in accordance with ADB's <i>Loan Disbursement Handbook</i> (2017, as amended from time to time) and detailed arrangements agreed upon between the government and ADB.				

ADB = Asian Development Bank, NHA = National Highway Authority, QCBS = quality- and cost-based selection.  
Source: ADB estimates.

### III. DUE DILIGENCE

#### A. Technical

29. For building the additional two-lane carriageway for Petaro–Sehwan and Ratodero–Shikarpur roads, the carriageway will be 7.3 m wide with 3.0 m outer shoulder and 1.0 m inner shoulder with a design speed of 100 km/h, separated from the existing carriageway with concrete Jersey barriers. The additional carriageway including the shoulders will be benched into the existing width and pavement layers constructed and compacted as per NHA's technical specifications after checking the soil properties of pavement and shoulder. As for rehabilitating the existing four-lane carriageway for Dara Adamkhel–Peshawar road, the existing carriageway of 14.6 m wide with 2.0 m outer shoulder and 1.0 m inner shoulder will be upgraded with a design speed of 100 km/h. Climate change risks and adaptation measures were considered in the project

<sup>10</sup> Facility Administration Manual (accessible from the list of linked documents in Appendix 2).

design. The road embankment is sufficiently high to withstand flows of highest floods. The design provides adequate cross drainage and hydraulic structures (based on 100-year recurrence interval flood discharges), which were adopted by NHA after the 2010 mega-flood. The impact of temperature on asphaltic pavement layers has been mitigated by adopting pavement specifications suitable for the climate in the project areas.

## **B. Economic and Financial**

30. **Economic.** An economic analysis of project 1 was conducted in line with ADB's Guidelines for the Economic Analysis of Projects.<sup>11</sup> Costs of the project were compared against the benefits of vehicle operating cost savings, travel time savings, and reductions in maintenance and operating costs to NHA. The analysis shows that project 1 is highly and economically feasible, with an economic internal rate of return of 24.3% and a net present value of \$354.0 million, at a 9% discount rate. Sensitivity tests reveal that the project is robust against increases in cost and decreases in benefits. However, the project is sensitive to changes in future maintenance regimes, highlighting the importance of timely and appropriate maintenance.

31. **Financial.** The Road Maintenance Fund—a pool of toll revenues, penalties, and other funds provided by the government and established in 2003 through the Road Maintenance Account Rules—is earmarked to finance maintenance of the entire national highway network. The project roads will be maintained under NHA's annual maintenance plan generated by the road asset management system. The resources generated by the road maintenance fund are insufficient to maintain roads at the quality of newly paved roads with an international roughness index (IRI) of less than 2.0 m/km. With this constraint, NHA aims to maintain roads with an average IRI of 3.5 m/km (current average is 4.0 m/km).

## **C. Governance**

32. NHA's capacity for procurement, financial management, and project implementation was assessed and found to be sufficient to manage international procurement and maintain accounting systems, financial controls, and audit arrangements. Its financial accounting, auditing rules, and internal control systems follow generally accepted international practices. NHA maintains separate project records and accounts adequate to identify the works, goods, and services financed from loan proceeds, financing resources received, expenditures incurred for the project, and use of local funds, as well as adequate internal controls and financial reporting arrangements. The project accounts and related financial statements will be audited annually in accordance with national and international auditing standards by the auditor general of Pakistan and by a chartered accountant.

33. ADB's Anticorruption Policy (1998, as amended to date) was explained to and discussed with the government and NHA. The specific policy requirements and supplementary measures are described in the FAM (footnote 10).

## **D. Poverty, Social, and Gender**

34. The Pakistan Economic Survey 2015–2016 reports the latest headcount multidimensional poverty incidence at 38.8% for 2015, with a disparity of 9.43% (urban) and 54.6% (rural). Poverty is unequally distributed across the four provinces of Pakistan and between rural and urban populations. The multidimensional poverty incidence for Punjab province is 31.5%, followed by Sindh with 43.2%, Khyber Pakhtunkhwa with 49.1%, and Balochistan with 71%.<sup>12</sup> Areas with

<sup>11</sup> ADB. 2017. *Guidelines for the Economic Analysis of Projects*. Manila.

<sup>12</sup> Government of Pakistan, Ministry of Finance. *Pakistan Economic Survey 2015–2016*.

limited access to basic social amenities and off-farm livelihood opportunities have higher poverty incidences. Factors that affect the livelihood of the poor include (i) low literacy; (ii) lack of access to employment opportunity; and (iii) exclusion from benefit of development projects. The main direct beneficiaries of the investment program will be agricultural traders, freight forwarders, transporters, commuters, and those living and working along the project road sections. Indirect beneficiaries include large sectors of the population who will gain from more employment opportunities in trade and transport business and ready access to markets and resources across the country. The local population will get employment opportunities during the construction and operation phases of projects. Women will benefit through improved access to basic social services such as health, education, and social networking facilities. Additional assistance to households headed by women will be provided as part of the resettlement plan. During implementation, more gender elements fit for project site situations will be devised and included in construction contracts.

## **E. Safeguards**

35. **Resettlement.** A land acquisition and resettlement framework for the investment program and two draft land acquisition and resettlement plans for tranche 1 project have been prepared based on census and inventory of losses. Although most works will generally follow the available right-of-way limits, additional land will be needed to provide the required vertical and horizontal geometrical improvements for certain sections and to build the 2.32 km bypass near Dakkan in Ratodero–Shikarpur road. A total of 512,737.1 m<sup>2</sup> of agricultural land and 1,618.8 m<sup>2</sup> of residential and commercial land will be acquired. Around 356 households (with 2,411 members) will be affected. Of these, 548 persons will experience significant resettlement impacts, of which 412 persons will be physically displaced while 136 persons will lose 10% or more of their productive assets. For the rehabilitation of the 34 km Dara Adamkhel–Peshawar road, no involuntary resettlement impact is anticipated as all works will be limited to the existing right-of-way and will not impact on any existing fixed structure within the right-of-way. The draft plans will be updated based on the detailed design. Project 1 is classified *category A* for involuntary resettlement and *category C* for indigenous peoples safeguards.

36. **Environment.** Project 1 is classified *category B* for environment. An environmental assessment and review framework and draft initial environmental examinations were prepared and disclosed on the ADB website. The project roads do not cross or are not located near protected areas. The environmental assessment established that the project can have site-specific environmental impacts related to air and water pollution, noise and vibration, loss of roadside trees, and traffic disruptions during construction. Because of construction of additional lanes and increase in traffic, the project can split communities and disrupt farming patterns. Adequate mitigation measures will be included in and implemented through an environmental management plan. The project design will incorporate measures for preserving community cohesion such as improved crossings (underpasses and overpasses) and access to public facilities. Public consultations were conducted in October–November 2016. Overall responsibility for the implementation of the plan will rest with contractors. NHA's project implementation unit will hire an environmental and social officer to supervise the implementation of the project's environmental safeguards.

## **F. Summary of Risk Assessment and Risk Management Plan**

37. Significant risks and mitigating measures are summarized in Table 5 and described in detail in the risk assessment and risk management plan.<sup>13</sup> The risks are assessed to be

---

<sup>13</sup> Risk Assessment and Risk Management Plan (accessible from the list of linked documents in Appendix 2).

manageable once mitigating measures are adopted, and the integrated benefits and impacts are expected to outweigh the costs of mitigation.

**Table 5: Summary of Risks and Mitigating Measures**

Risks	Mitigating Measures
Weak financing arrangements on development and management of the road network	The practice of providing loans to NHA to finance its development program since its creation in 1991 undermines the authority’s financial standing. ADB-administered technical assistance approved in November 2015 will help build capacity and carry out analytical work on NHA balance sheet restructuring. The government also intends to expand the toll base, rationalize tolls, and allocate more revenue to the road maintenance account of NHA.
Lack of counterpart funds	The government will accord transport infrastructure as top priority in the country’s resource allocation. NHA will expand public-private-partnership-based road construction to reduce the government subsidy and make more fiscal resources available for counterpart funding.
Delayed land acquisition and resettlement, and inadequate safeguard arrangements	NHA has started consultation, land acquisition, and resettlement compensation for the affected people. A qualified and experienced external monitoring agency will verify the executing agency’s monitoring reports, monitor land acquisition and resettlement plan implementation, identify issues, and recommend corrective measures as needed.  NHA, assisted by the construction supervision consultant, will supervise the implementation of the environmental management plan, monitor the implementation process, and regularly submit safeguard monitoring reports to ADB.
Noneconomic consideration of contractor or consultant selection	The new government is strongly committed to eradicating corrupt practices. The National Accountability Bureau is fully empowered to enforce the National Anticorruption Ordinance to prevent, detect, investigate, and prosecute cases involving corruption, corrupt practices, misuse or abuse of power, misappropriation of property, kickbacks, and commissions. The National Accountability Bureau plays its role properly.

ADB = Asian Development Bank, NHA = National Highway Authority.  
Source: Asian Development Bank estimates.

**IV. ASSURANCES AND CONDITIONS**

38. The government and NHA have given ADB certain undertakings for the MFF, which are set forth in the framework financing agreement. Specific covenants agreed by the government and NHA with respect to individual tranches under the MFF are set forth in the loan agreement and project agreement for the respective tranches.

**V. RECOMMENDATION**

39. I am satisfied that the proposed multitranche financing facility would comply with the Articles of Agreement of the Asian Development Bank (ADB) and recommend that the Board approve the multitranche financing facility to the Islamic Republic of Pakistan for the Central Asia Regional Economic Cooperation Corridor Development Investment Program in an aggregate principal amount not exceeding the equivalent of \$800 million, which comprises the provision of loans from ADB’s ordinary capital resources, in regular terms, with interest and other terms to be determined in accordance with ADB’s London interbank offered rate (LIBOR)-based lending facility and is subject to such other terms and conditions as are substantially in accordance with those set forth in the framework financing agreement presented to the Board.

Takehiko Nakao  
President



## DESIGN AND MONITORING FRAMEWORK FOR THE INVESTMENT PROGRAM

<b>Impact the Investment Program is Aligned with</b>			
Regional connectivity and trade in CAREC corridors enhanced (CAREC Transport and Trade Facilitation Strategy 2020) <sup>a</sup>			
<b>Results Chain</b>	<b>Performance Indicators with Targets and Baselines</b>	<b>Data Sources and Reporting</b>	<b>Risks</b>
<b>Outcome</b> Efficiency for road traffic along the CAREC corridors improved	By 2027: a. Average daily vehicle-km of project roads increased to 6.62 million (2016 baseline: 4.26 million)  b. Average travel time on project roads reduced to 7.0 hours (2016 baseline: 9.8 hours)	a–b. NHA compiled statistics on the asset management system and performance monitoring report  a–b. Facility and project completion reports	Weak financing arrangements on development and management of the road network jeopardizes network sustainability.  Political instability and deteriorating security discourages development assistance.
<b>Outputs</b> 1. Corridor along N55 constructed or rehabilitated  2. NHA capacity strengthened	1a. 747 km of CAREC corridor along N55 improved by 2027 with international roughness index no higher than 2.0 m/km (2016 baseline: not applicable for new carriageways and 3.25 m/km for existing carriageways to be rehabilitated)  2a. Due diligence works for subsequent tranches completed as planned and subsequent tranche projects prepared in compliance with ADB Safeguard Policy Statement (2009) and categorized as procurement- and design-ready	1a–2a. NHA compiled statistics on the asset management system  1a–2a. Facility and project completion reports	Unfavorable political interference affects the implementation capacity of NHA.  Shifting government priorities causes insufficient budget allocation.
<b>Key Activities with Milestones</b> 1. <b>Corridor along N55 constructed or rehabilitated</b> 1.1 Sign financing framework agreement by August 2017. 1.2 Submit and approve periodic financing request for project 1 in Q4 2017. 1.3 Complete due diligence works for project 2 by March 2019. 1.4 Submit periodic financing request for project 2 in May 2019 and approve it in September 2019. 1.5 Completed due diligence works for project 3 by March 2021. 1.6 Submit periodic financing request for project 3 in May 2021 and approve it in September 2021. 1.7 Implement and complete all civil works by 2027. 2. <b>NHA capacity strengthened</b> 2.1 Mobilize due diligence advisory services for project 2 by September 2018 and project 3 by September 2020. 2.2 Prepare due diligence reports including feasibility assessment, detailed design, and safeguard-related review and assessment for project 2 by March 2019 and project 3 by March 2021. 2.3 Prepare terms of reference for assistance for project implementation as needed and recruit consultants following the project implementation schedule.			
<b>Inputs</b> ADB: \$800 million (regular ordinary capital resources loan) Government: \$125 million			
<b>Assumptions for Partner Financing</b> Not applicable			

ADB = Asian Development Bank; CAREC = Central Asia Regional Economic Cooperation; NHA = National Highway Authority.

<sup>a</sup> ADB. 2014. *CAREC Transport and Trade Facilitation Strategy 2020*. Manila.

Source: Asian Development Bank.

### **LIST OF LINKED DOCUMENTS**

<http://www.adb.org/Documents/RRPs/?id=48404-002-3>

1. Loan Agreement
2. Project Agreement
3. Framework Financing Agreement
4. Periodic Financing Request for Project 1
5. Sector Assessment (Summary): Transport (Road Transport [Nonurban])
6. Facility Administration Manual
7. Contribution to the ADB Results Framework
8. Development Coordination
9. Climate Change Assessment
10. Economic and Financial Analysis
11. Country Economic Indicators
12. Summary Poverty Reduction and Social Strategy
13. Initial Environmental Examination
14. Environmental Assessment and Review Framework
15. Resettlement Plan: Land Acquisition and Resettlement Plan
16. Resettlement Framework: Land Acquisition and Resettlement Framework
17. Risk Assessment and Risk Management Plan

#### **Supplementary Document**

18. Multitranches Financing Facility Comparative Matrix