



Technical Assistance Report

Project Number: 49063-001
Capacity Development Technical Assistance (CDTA)
October 2015

Islamic Republic of Pakistan: Enabling Economic Corridors through Sustainable Transport Sector Development (Financed by the Government of the United Kingdom)

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 1 October 2015)

Currency unit	–	Pakistan rupee/s (PRe/PRs)
PR1.00	=	\$0.009577
\$1.00	=	PRs104.4163

ABBREVIATIONS

ADB	–	Asian Development Bank
CAREC	–	Central Asia Regional Economic Cooperation
DFID	–	Department for International Development of the United Kingdom
NHA	–	National Highway Authority
NH&MP	–	National Highways & Motorway Police
NTP	–	national transport policy
PECP	–	Pakistan Economic Corridors Programme
QCBS	–	quality- and cost-based selection
RAM	–	road asset management
TA	–	technical assistance
TOR	–	terms of reference

NOTE

In this report, “\$” refers to US dollars.

Vice-President	W. Zhang, Operations 1
Director General	S. O’Sullivan, Central and West Asia Department (CWRD)
Director	X. Yang, Transport and Communications Division, CWRD
Team leader	K. Sakamoto, Transport Economist, CWRD
Team members	A. Arenas-Poblete, Senior Operations Assistant, CWRD P. Karki, Senior Transport Specialist, CWRD Z. Naqvi, Project Officer (Transport), CWRD S. Paracha, Senior Programs Officer, CWRD D. Pyo, Lead Transport Specialist, CWRD O. Samukhin, Transport Specialist, CWRD M. Sison, Associate Project Analyst, CWRD F. Trace, Transport Economist, CWRD Z. Wu, Transport Specialist, CWRD
Peer reviewer	T. Duncan, Technical Advisor (Transport), Sustainable Development and Climate Change 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

	Page
CAPACITY DEVELOPMENT TECHNICAL ASSISTANCE AT A GLANCE	
I. INTRODUCTION	1
II. ISSUES	1
III. THE PROPOSED CAPACITY DEVELOPMENT TECHNICAL ASSISTANCE	2
A. Impact and Outcome	2
B. Methodology and Key Activities	2
C. Cost and Financing	4
D. Implementation Arrangements	4
IV. THE PRESIDENT'S RECOMMENDATION	5
APPENDIXES	
1. Design and Monitoring Framework	6
2. Cost Estimates and Financing Plan	9
3. Outline Terms of Reference for Consultants	10
SUPPLEMENTARY APPENDIXES (available on request)	
A. Procurement Plan	
B. Government of the United Kingdom–ADB Memorandum of Understanding	

CAPACITY DEVELOPMENT TECHNICAL ASSISTANCE AT A GLANCE

1. Basic Data		Project Number: 49063-001	
Project Name	Enabling Economic Corridors through Sustainable Transport Sector Development	Department /Division	CWRD/CWTC
Country	Pakistan	Executing Agency	Ministry of Communications, Ministry of Planning, Development and Reform
2. Sector	Subsector(s)	Financing (\$ million)	
✓ Transport	Transport policies and institutional development		15.41
		Total	15.41
3. Strategic Agenda	Subcomponents	Climate Change Information	
Inclusive economic growth (IEG) Environmentally sustainable growth (ESG) Regional integration (RCI)	Pillar 1: Economic opportunities, including jobs, created and expanded Environmental policy and legislation Pillar 1: Cross-border infrastructure	Climate Change impact on the Project	Low
4. Drivers of Change	Components	Gender Equity and Mainstreaming	
Governance and capacity development (GCD)	Client relations, network, and partnership development to partnership driver of change Civil society participation Institutional development Organizational development Public financial governance	Some gender elements (SGE)	✓
Knowledge solutions (KNS)	Application and use of new knowledge solutions in key operational areas Knowledge sharing activities Pilot-testing innovation and learning		
Partnerships (PAR)	Bilateral institutions (not client government) Civil society organizations Implementation International finance institutions (IFI) Official cofinancing Private Sector United Nations organization		
Private sector development (PSD)	Conducive policy and institutional environment		
5. Poverty Targeting		Location Impact	
Project directly targets poverty	No	Not Applicable	
6. TA Category:	A		
7. Safeguard Categorization	Not Applicable		
8. Financing			
Modality and Sources		Amount (\$ million)	
ADB		0.00	
None		0.00	
Cofinancing		15.41	
Government of the United Kingdom		15.41	
Counterpart		0.00	
None		0.00	
Total		15.41	
9. Effective Development Cooperation			
Use of country procurement systems		No	
Use of country public financial management systems		No	

I. INTRODUCTION

1. The Government of Pakistan has requested the Asian Development Bank (ADB) to provide capacity development technical assistance (TA) for Enabling Economic Corridors through Sustainable Transport Sector Development to help it meet its development goals of Pakistan Vision 2025. The TA is part of the Pakistan Economic Corridors Programme (PECP), financed by the Government of the United Kingdom and jointly delivered by ADB and the Department for International Development of the United Kingdom (DFID) to promote regional trade and connectivity. Following a reconnaissance mission to Islamabad in February 2015 and a follow-up consultation mission in June to July 2015, ADB and the government agreed on the general impact, outcome, outputs, cost, financing arrangements, implementation arrangements, and terms of reference for consultants. The design and monitoring framework is in Appendix 1.¹

II. ISSUES

2. Pakistan's transport sector continues to suffer from inadequate transport infrastructure. The inefficiency of the transport sector costs Pakistan's economy 4%–6% of gross domestic product every year.² These infrastructure difficulties continue to be addressed by various projects and programs financed by the government, ADB, and other development partners. However, there is a strong need to couple infrastructure investments with institutional and policy improvements to resolve underlying structural issues that prevent Pakistan from developing the transport sector in a coordinated, efficient, sustainable, and safe manner. These efforts are needed to foster the development of economic corridors, which connect economic nodes in Pakistan with each other, and with those in the region.

3. **Lack of a coherent transport policy and master plan.** Responsibilities for planning and development of transport infrastructure are divided between ministries. Urban transport also remains uncoordinated, resulting in heavy congestion and long journey times. Investments are allocated to projects without sufficient attention to network integration and long-term strategic goals. An overarching transport policy laying out the vision, objectives, and principles for the sector is needed to align the work of various federal, provincial, and municipal authorities. A master plan that prioritizes projects and integrates different modes according to the transport policy is also needed. Pakistan has made several efforts in this regard, including the drafting in 2008 of a national transport policy (NTP) by the Ministry of Communications with assistance from ADB, and several phases of work assisted by the Japan International Cooperation Agency to develop transport master plans. Such efforts have fallen short of being translated into official policy, due in part to their overly ambitious scope and lack of buy-in from all stakeholders.

4. **Limited level of cross-border transport facilitation.** Located at the crossroads of Afghanistan, Central Asia, the People's Republic of China, India, and Iran, Pakistan has huge potential to become a hub for regional transport and trade. As a member of the Central Asia Regional Economic Cooperation (CAREC) program, and following the priorities of the CAREC Transport and Trade Facilitation Strategy 2020, Pakistan is attempting to increase transit traffic with its neighboring countries. For example, Pakistan has acceded to key international transport agreements such as the Convention on International Transport of Goods Under Cover of Transports Internationaux Routiers Carnets, and the Quadrilateral Traffic in Transit Agreement with the PRC, Kazakhstan, and Kyrgyz Republic. However, considerable challenges remain to

¹ The TA first appeared in the business opportunities section of ADB's website on 18 September 2015. The TA is included in ADB's country operations business plan for Pakistan, 2015–2017 as Pakistan Economic Corridor Program (Transport).

² Government of Pakistan, Ministry of Finance. 2011. *Pakistan Economic Survey 2010–2011*. Islamabad.

fully operationalize such agreements. Border crossing point infrastructure is in poor condition, and customs and other procedures have yet to be harmonized with neighboring countries.

5. **Poor condition of safety for all road users.** The World Health Organization estimates that about 30,000 persons were killed in road collisions in Pakistan in 2010.³ Prerequisites for sustained improvements in road safety include the establishment of a coordinated structure on road safety across government ministries, high-level political support, data for monitoring and target setting, appropriate legislation, and capacity for enforcement. Pakistan is making efforts to address road safety. The creation of a specialized unit on the federal road network, the National Highways & Motorway Police (NH&MP), has resulted in a significant reduction in the number of crashes. In 2010, efforts were made to develop a National Road Safety Council and its secretariat, consisting of all relevant authorities. These efforts, however, have fallen short of providing a sustained improvement to road safety mainly due to lack of commitment at high political level, and lack of reliable funding for road safety institutions.

6. **Insufficient capacity to manage existing road assets.** Road conditions in Pakistan are poor due to insufficient funding for road maintenance, chronic overloading of vehicles, and lack of road asset management systems to systematically plan and implement maintenance works. The government has taken some important steps to address these issues. A road maintenance account has been set up and is being replenished from tolls and the government's annual maintenance grant. The National Highway Authority (NHA) applies technically sound practice on RAM and determines maintenance needs every year. Despite these efforts, an estimated funding gap of about PRs10.0 billion per year for road maintenance remains, which equates to about one half of the total road maintenance financing needs. Roads managed by the provincial governments are not yet subject to the same RAM practices as the NHA. NHA's financial state remains inadequate to attract resources to finance necessary road expenditures.

7. Addressing these constraints is important, especially since large investments in transport infrastructure are expected in the coming few years, financed both by domestic funds as well as international partners, including ADB. The NTP and master plan will help guide these investments according to a consistent policy framework. The enhanced capacity of the government on transport facilitation, road safety, and asset management will ensure that these investments are more effective, safe, and sustainable. These investments, in turn, will improve the competitiveness of the country's exports and internal trade, reduce the cost of doing business, enhance Pakistan's capability to integrate into global supply chains, and foster economic corridors within Pakistan and with neighboring countries.

III. THE PROPOSED CAPACITY DEVELOPMENT TECHNICAL ASSISTANCE

A. Impact and Outcome

8. The impact will be a coordinated, efficient, safe, and sustainable transport system in Pakistan, supporting Pakistan's Vision 2025, and the objectives of the PECP. The outcome will be improved capacity of the government to develop and manage its transport system in a coordinated, efficient, safe, and sustainable manner.

B. Methodology and Key Activities

9. To achieve the impact and outcome of the TA, four outputs will be delivered.

³ This equates to 17.4 deaths per 100,000 population, which is comparable to Afghanistan and India. Countries with extensive road safety measures have a much lower rate, for example 3.7 in the United Kingdom.

10. **Output 1: National transport policy and master plan developed.** A holistic NTP covering all modes of transport will be developed containing, among others, (i) an assessment of the current and future transport patterns and needs; (ii) a guiding vision, principles, and objectives for the sector; and (iii) an assessment of and strategies for addressing institutional, financial, and technological constraints. The NTP will provide certainty to private sector investors, and promote economic corridor development by linking transport infrastructure investments with the needs of economic agents. An accompanying master plan will also be developed, consisting of a prioritized set of projects in line with the NTP. To achieve this output, all existing efforts by the government and development partners will be assessed, and consensus-building workshops held. Based on these discussions, the NTP and master plan will be fully developed for adoption by the cabinet. Detailed subsector and thematic policies and plans will then be formulated or improved, including provision for equitable tolling. A national transport data observatory will also be developed to support evidence-based policy making and to conduct periodic monitoring and evaluation of the NTP and master plan.

11. **Output 2: Multimodal transport facilitated within Pakistan and with its neighboring countries.** The TA will support the effective implementation of the Transports Internationaux Routiers Convention and other international transport agreements to which Pakistan is a signatory. It will also prepare the country for accession to other key agreements such as the Convention on the Contract for the International Carriage of Goods by Road. For this purpose, the TA will first scope the needs and potential of Pakistan to increase traffic in transit with neighboring countries. This will be followed by capacity building of relevant government staff and private sector stakeholders on international transport agreements. Furthermore, the TA will identify key bottlenecks in infrastructure that limit multimodal transport facilitation, and prepare prefeasibility studies for new projects to alleviate such infrastructure bottlenecks. This will complement other efforts by the government, ADB, and other development partners, including the rehabilitation and construction of regional corridors and border crossing points designated under the CAREC program.

12. **Output 3: National road safety program implemented.** The TA will support Pakistan to improve the safety of its road network through a holistic set of measures addressing (i) road safety management systems, (ii) road user behavior, (iii) infrastructure improvements, (iv) vehicle improvements, and (v) post-crash response. An interministerial body will be set up to coordinate activities to improve road safety, and a national road safety action plan will be developed. The TA will support awareness-raising campaigns and training of enforcement officials. The TA will also support the government to review road standards for all classes of roads from a road safety angle. The revised standards will be piloted through equipment procured under the TA. The TA will support the government in drafting national guidelines on vehicle and driver licenses, as well as post-crash response.

13. **Output 4: National road asset management system made functional.** The TA will support the government in solving the causes of road deterioration, and scaling up resources for road maintenance across Pakistan. The TA will procure equipment and software needed to perform road asset management to a higher standard, and to improve the budgeting process for road maintenance. Training on the use of such equipment and software will also be provided. Together with NHA staff, the TA will conduct outreach and training sessions to provinces on the principles of RAM for replication at provincial level. The TA will also work with the NH&MP and NHA to enforce rules on overloading on the national highway and motorway network. The TA will also help create mechanisms for increased allocation of funding toward road maintenance, e.g., through the further allocation of vehicle user fees and taxes for road maintenance. The TA will improve the financial viability and sustainability of the NHA, by assessing the underlying

reasons behind the inadequate financial standing of the NHA, and preparing a detailed plan for the financial restructuring of its balance sheet. The TA will support the implementation of actions identified in this plan.

14. A risk in carrying out the above activities is that stakeholder consultation (at provincial level and between government agencies) takes time and could delay TA outputs. Changes in government can reduce commitment to the TA and its outputs at high level. Other issues, such as energy and security, may prevent stakeholders from investing time and effort in transport sector priorities. Government ownership of TA outputs may not be sustained over time. These risks will be mitigated by adopting lessons from other ADB projects in Pakistan and in other countries, including close engagement with the government throughout the TA implementation. The TA will benefit from the high level of government ownership of the proposed activities, as witnessed through the formation of a unit in the Ministry of Planning, Development and Reform dedicated to integrated transport infrastructure planning, and recent efforts by the Ministry of Communication to reconvene the National Road Safety Council.

C. Cost and Financing

15. The TA is estimated to cost \$16,406,266 equivalent, of which \$15,406,266 (£9,809,160) will be financed on a grant basis by the Government of the United Kingdom, acting through DFID. The memorandum of understanding between DFID and ADB confirming these funds was signed on 25 June 2015. TA funds will be administered by ADB. The government will provide counterpart support in the form of staff, logistics support, office accommodation, and other in-kind contributions.

D. Implementation Arrangements

16. The Ministry of Planning, Development, and Reform will be the executing agency for the NTP and master plan, as well as the multimodal transport facilitation components of the TA. It will liaise closely with Pakistani authorities, including but not limited to (i) Ministry of Communications for road transport, (ii) Ministry of Railways for rail transport, (iii) Ministry of Ports and Shipping for maritime transport, (iv) Cabinet Secretariat and/or Civil Aviation Authority for air transport, and (v) Federal Board of Revenue on issues relating to transport and trade facilitation. Coordination with provincial governments will be facilitated through the established channels and procedures of the Ministry of Planning, Development, and Reform.

17. The executing agency for the road asset management and road safety components will be the Ministry of Communications, which is the ministry in charge of the NHA, NH&MP, and National Transport Research Center. The road safety component will be jointly implemented by NHA (on aspects relating to safe roads), NH&MP (on aspects related to enforcement) and National Transport Research Center (on aspects related to research and development). The road asset management component is expected to be implemented primarily by the NHA's Directorate for Road Asset Management. There will be close consultation with the Ministry of Finance and other relevant authorities regarding funding of road maintenance.

18. TA activities will be guided by a steering committee, suggested to be convened by the secretary of the Ministry of Planning, Development, and Reform and including high-level representatives of the ministries of Communications, Finance, Railways, Ports and Shipping, Cabinet Secretariat, Industry, Commerce, and Climate Change. The government will provide technical staff and experts from relevant institutions including but not limited to the NHA, NH&MP, and the National Transport Research Center to join the core implementation team of the TA. They will work jointly with, and assist ADB staff and TA consultants by providing access

to existing data, publications, etc.; collecting data in support of the TA implementation; and taking part in the communication and dissemination of the TA activities and outputs.

19. Research agencies, universities, and private transport associations are expected to take part in the implementation of the TA. Their roles may include (i) providing data on transport and trade, (ii) conducting assessments of transport user needs, and (iii) facilitating dissemination and outreach of TA outputs. Involvement of such organizations will be subject to government clearance, and through consultant contracts (sector specialists or resource persons), letters of intent, or memoranda of understanding depending on the nature of the organization and engagement.

20. The TA will be implemented over 4 years and 4 months, from December 2015 to March 2020. The TA activities will require a combined 738 person-months of consultant services (international, 322 person-months; national, 416 person-months). An international firm will be mobilized to support TA activities on the NTP and master plan, while another will support the national road safety program. In addition, a group of firms will be mobilized through an indefinite delivery contract to carry out prefeasibility studies of specific projects that may ensue from the NTP and master plan. Additional sector specialists and resource persons may be recruited on an individual basis based on need. Appendix 3 provides an outline of consultants' terms of reference. The TA will be administered by the Transport and Communications Division of the Central and West Asia Department, who will be responsible for the financial management functions including budgeting, disbursements, and internal control over receipts and payments. The Pakistan Resident Mission will closely support the implementation of the TA.

21. The consultants will be engaged by ADB in accordance with the Guidelines on the Use of Consultants (2013, as amended from time to time). Procurement will be done in accordance with ADB's Procurement Guidelines (2015, as amended from time to time). Proceeds of the TA will be disbursed in accordance with ADB's *Technical Assistance Disbursement Handbook* (2010, as amended from time to time) and in alignment with procedures set within the memorandum of understanding between DFID and ADB on the PECP.

22. The TA will be monitored at least on a quarterly basis using established ADB procedures and DFID's delivery plan for the PECP and associated tools for monitoring and reporting. Corrective measures will be taken should such monitoring and reporting find impediments to the implementation of the TA. Evaluation and financial audit of the TA will equally follow both ADB and DFID procedures, as outlined in the aforementioned memorandum of understanding between DFID and ADB.

23. Good practices and lessons from TA activities will be disseminated across the government (including all provinces) through existing and new channels to be set up by the TA. Similarly, efforts will be undertaken to disseminate findings to the international development community, through established knowledge networks such as the Multilateral Development Banks' Working Group on Sustainable Transport, and the Partnership on Sustainable Low Carbon Transport.

IV. THE PRESIDENT'S RECOMMENDATION

24. The President recommends that the Board approve ADB administering technical assistance not exceeding the equivalent of \$15,406,266 to the Government of Pakistan to be financed on a grant basis by the Government of the United Kingdom for Enabling Economic Corridors through Sustainable Transport Sector Development.

DESIGN AND MONITORING FRAMEWORK

Impact the Project is Aligned with			
A coordinated, efficient, safe, and sustainable transport system in Pakistan, in support of realizing Pakistan's Vision 2025 and the objectives of the Pakistan Economic Corridors Programme (Pakistan Vision 2025, 2014). ^a			
Results Chain	Performance Indicators with Targets and Baselines	Data Sources and Reporting	Risks
Outcome Improved capacity of the Government of Pakistan to develop and manage its transport system in a coordinated, efficient, safe, and sustainable manner	By 2020 a. Transport projects are formulated based on principles of the NTP and master plan (from zero in 2015) b. Pakistan truck operators utilized at least 20,000 TIR carnets per annum (from zero in 2014) c. Financing gap for road maintenance is reduced to 40% of needs (from 50% in 2014)	a. MPD and MOC annual reports b. United Nations Economic Commission for Europe statistics c. Annual maintenance plan of NHA	Other issues, such as energy and security, prevent stakeholders from investing time and effort in transport sector priorities Changes in government reduce buy-in at high level Government ownership of TA outputs are not sustained over time
Outputs 1. NTP and master plan developed	1a. NTP and master plan adopted by the cabinet by 2019 (from none in 2015)	1a. Cabinet records	Stakeholder consultation (including at provincial level and in-between government agencies) necessitates time and may delay acceptance of TA outputs
2. Multimodal transport facilitated within Pakistan and with its neighboring countries	2a. At least three new project prefeasibility studies completed with multimodal features by 2019 (from none in 2015) 2b. At least three capacity building workshops are completed on the implementation of international transport agreements by 2019 (from none in 2015)	2a–b. TA monitoring reports	
3. National road safety program implemented	3a. An interministerial body for coordination on road safety matters is operational by 2016 (from none in 2015) 3b. A national road safety action plan is adopted by MOC by 2017 (from none in 2015).	3a. MPD and MOC annual reports 3b, d, e. MOC annual reports	

Results Chain	Performance Indicators with Targets and Baselines	Data Sources and Reporting	Risks
	<p>3c. A national awareness-raising campaign on road safety is completed by 2019 (from none in 2015)</p> <p>3d. By 2019, road standards for all classes of roads updated with road safety features (from none in 2015)</p> <p>3e. National guidelines on vehicle standards and periodic testing, driver licensing and post-crash response are adopted by MOC by 2019 (from none in 2015)</p>	3c. TA monitoring reports	
4. National road asset management system made functional	<p>4a. At least 20 NHA staff trained on the use of new equipment and software for RAM by 2017 (from none in 2015)</p> <p>4b. Financial restructuring plan of NHA's balance sheet approved by relevant authorities by 2017 (from none in 2015)</p>	4a–b. MOC and NHA annual reports	

Key Activities with Milestones

1. National transport policy and master plan developed

- 1.1 Review all existing and ongoing efforts on the development of the NTP and master plan (by June 2016).
- 1.2 Conduct consensus-building workshops on the contents of the NTP and master plan (by December 2016).
- 1.3 Develop the NTP and master plan for adoption by the cabinet (by December 2018).
- 1.4 Develop subsector and thematic policies including on equitable tolling under the NTP (by December 2019).
- 1.5 Create a national transport data observatory (by December 2019).

2. Multimodal transport facilitated within Pakistan and with its neighboring countries

- 2.1 Scope out the needs and potential for Pakistan to increase traffic in transit with neighboring countries (by December 2016).
- 2.2 Conduct capacity building of relevant government staff and private sector on multilateral and bilateral transport agreements (by December 2017).
- 2.3 Conduct at least three prefeasibility studies of projects with multimodal features (by December 2019).

3. National road safety program implemented

- 3.1 Set up an interministerial body for coordination of road safety (by December 2016).
- 3.2 Develop a national road safety action plan accompanied by a crash database (by December 2017).
- 3.3 Conduct awareness-raising campaigns and training of enforcement officials (by December 2019).

Key Activities with Milestones
<p>3.4 Develop new road standards for all classes of roads, and pilot them in three locations (by December 2019).</p> <p>3.5 Develop national guidelines on vehicle and driver licenses as well as post-crash response (by December 2019).</p> <p>4. National road asset management system made functional</p> <p>4.1 Conduct training of NHA staff on new equipment and software (by June 2017).</p> <p>4.2 Assess the underlying causes of NHA's inadequate financial standing (by December 2017).</p> <p>4.3 Prepare a detailed financial restructuring plan of NHA's balance sheet (by June 2017).</p> <p>4.4 Conduct outreach and training sessions to provinces on principles of RAM (by December 2017).</p> <p>4.5 Enforce rules on overloading on the national highway and motorway network (by December 2017).</p>
<p>Inputs</p> <p>Government of the United Kingdom: \$15,406,266</p> <p>Note: The government will provide counterpart support in the form of staff, office and housing accommodation, office supplies, secretarial assistance, domestic transportation, and other in-kind contributions.</p>
<p>Assumptions for Partner Financing</p> <p>Not Applicable</p>

MOC = Ministry of Communications, MPD = Ministry of Planning, Development, and Reform, NHA = National Highway Authority, NTP = national transport policy, RAM = road asset management, TA = technical assistance, TIR = Transports Internationaux Routiers.

^a Government of Pakistan, Planning Commission. 2014. *Pakistan Vision 2025*. Islamabad.

Source: Asian Development Bank.

COST ESTIMATES AND FINANCING PLAN
((\$'000))

Item	Amount
Government of the United Kingdom^a	
1. Consultants	
a. Remuneration and per diem	
i. International consultants	6,560.0
ii. National consultants	2,050.0
b. International and local travel	300.0
c. Reports and communications	250.0
2. Equipment ^b	100.0
3. Training, seminars, and conferences ^c	385.3
4. Surveys ^d	500.0
5. Miscellaneous administration and support costs	50.0
6. Pilot testing of software and equipment for road safety and road asset management	2,900.0
7. Contingencies	2,311.0
Total	15,406.3

Note: The TA is estimated to cost \$16,406,266, of which contributions from the Government of the United Kingdom are presented in the table above. The Government of Pakistan will provide counterpart support in the form of staff, logistics support, office accommodation, and other in-kind contributions. The value of these contributions is estimated to account for 6% of the total TA cost.

^a Administered by the Asian Development Bank (ADB). This amount is inclusive of bank charges and foreign exchange fluctuation for currency conversion of the Government of the United Kingdom funds from £ to \$ from time to time. Estimated using the prevailing exchange rate, i.e., £1=\$1.5706, at the ADB–Government of the United Kingdom memorandum of understanding signing date.

^b Office and telecommunication equipment will be procured by ADB in coordination with the Office of Administrative Services and the Office of Information Systems and Technology. Equipment will be procured pursuant to ADB's Project Administration Instructions (PAI No. 5.09, section L on purchasing equipment and vehicles). After implementation of the technical assistance, all procured items will remain with the executing agency.

^c Includes tripartite meetings, as well as stakeholder and training workshops. Also includes representation expenses of \$10,000.

^d Includes surveys to improve quality of data on transport characteristics in Pakistan.

Source: Asian Development Bank estimates.

OUTLINE TERMS OF REFERENCE FOR CONSULTANTS

1. The technical assistance (TA) will require the services of two international firms; one to carry out activities for the formulation and implementation of a national transport policy and master plan; one to carry out the development and implementation of a national road safety program. In addition, a group of firms will be mobilized through an indefinite delivery contract (IDC) to carry out prefeasibility studies of specific projects that may ensue from the national transport policy. Additional sector specialists and resource persons may be recruited on an individual basis depending on need. Performance-based terms of reference (TOR) will be employed for all firms.

2. It is important that the TA be implemented in a flexible manner. Hence, the TOR, duration, and schedule of TA inputs will be adjusted as necessary. Such adjustments may also be undertaken during implementation in order to better meet capacity building needs and to ensure TA funds are utilized in a cost-effective manner. ADB's Guidelines on the Use of Consultants (2013, as amended from time to time) will be applied in the selection and engagement of consultants. The following presents an outline of the TOR.

A. Transport Policy and Management Firm

3. The TA will require around 100 person-months of international and 175 person-months of national consultants from a transport policy and management firm, who will work with and under the guidance of the government and ADB officers to

- (i) develop a holistic national transport policy, which will include an assessment of the current and future transport patterns and needs, a guiding vision, principles, and objectives for the sector; and an assessment of and strategies for addressing institutional, financial, and technological constraints;
- (ii) develop a corresponding master plan with a prioritized list of projects in line with the national transport policy;
- (iii) create a transport data observatory;
- (iv) support Pakistan in accession to and implementation of international transport agreements;
- (v) assess the causes of the inadequate financial standing of the National Highway Authority and prepare a detailed financial restructuring plan in respect of its balance sheet; and
- (vi) support efforts to implement sound road asset management in Pakistan.

4. The firm will be recruited using the quality- and cost-based selection (QCBS) method with a quality to cost ratio of 90:10. Full technical proposals are to be used. The firm is expected to carry out the majority of the work in Pakistan. It will also help design the detailed terms of reference of firms to be employed for prefeasibility studies (Section C) and additional sector specialists and resource persons based on need (Section D). The firm will also provide overall coordination and quality control of all deliverables under the TA (including the work of other consultants on road safety, project preparation, and other tasks) and support ADB officers in maintaining close communication and coordination with government counterparts and development partners. The indicative positions to be provided by the firm and their total inputs (person-months) are summarized in Table A3.1.

Table A3.1: Consultant Team Composition of Transport Policy and Management Firm

International Consultants	Key or Non-key	National Consultants	Key or Non-key
Transport policy and planning specialist and team leader	Yes	Transport policy and planning specialist and deputy team leader	Yes
Transport and trade facilitation specialist	Yes	Transport and trade facilitation specialist	No
Transport economist	Yes	Transport economist	No
Transport data specialist	No	Transport data analyst	No
Railway policy and planning specialist	No	Railway policy and planning specialist	No
Ports, shipping and inland waterway policy and planning specialist	No	Ports, shipping, and inland waterway policy and planning specialist	No
Aviation policy and planning specialist	No	Aviation policy and planning specialist	No
Asset management specialist	Yes	Asset management specialist	No
Social development policy specialist	No	Social development policy specialist	No
Environmental policy specialist	No	Environmental policy specialist	No
		Data analysts	No
		Legal expert	No
		External relations specialist	No
Total Person-Months	100	Total Person-Months	175

Source: Asian Development Bank.

B. Road Safety Firm

5. The TA will mobilize a reputable international firm, which will provide approximately 80 person-months of international consultant inputs and 105 person-months of national consultant inputs on road safety. The firm will work under the guidance of ADB project officers and in close coordination with counterpart government staff to carry out activities in support of a national road safety program in Pakistan. The firm will

- (i) support the creation or revival of an interministerial body for coordination of road safety matters,
- (ii) develop and implement a national road safety action plan,
- (iii) develop and implement legislative changes in support of road safety,
- (iv) conduct a national road safety campaign,
- (v) develop and/or improve road standards compatible with best practices on road safety and piloting thereof,
- (vi) develop national guidelines on vehicle and driver licensing,
- (vii) develop national guidelines on post-crash response, and
- (viii) create a national crash database.

6. The firm will be recruited using the QCBS method with a quality to cost ratio of 90:10. Full technical proposals are to be used. The firm is expected to carry out the majority of the work in Pakistan. The indicative positions to be provided by the firm and their total inputs (person-months) are summarized in the Table A3.2.

Table A3.2: Consultant Team Composition for Road Safety Firm

International Consultants	Key or Non-key	National Consultants	Key or Non-key
Road safety policy specialist and team leader	Yes	Road safety policy specialist and deputy team leader	Yes
Crash database specialist	No	Crash data analyst	No
Road safety enforcement specialist	No	Road safety enforcement specialist	No
Road safety campaign specialist	No	External relations specialist	No
Road safety engineering specialist	Yes	Road safety engineering specialist	No
Post-crash response specialist	Yes	Post-crash response specialist	No
Vehicle safety specialist	Yes	Vehicle safety specialist	No
		Legal expert	No
		External relations expert	No
Total Person-Months	80	Total Person-Months	105

Source: Asian Development Bank.

C. Transport Project Preparation Firms

7. The TA will mobilize several reputable international firms, which will collectively provide approximately 100 person-months of international consultant inputs and 100 person-months of local consultant inputs to prepare prefeasibility studies for specific transport projects. These firms will be mobilized through an indefinite delivery contract modality. Firms or consortia will be prequalified using the consultants' qualification selection method. An indicative composition for these firms or consortia is provided in Table A3.3.

Table A3.3: Indicative Consultant Team Composition for Transport Project Preparation Firms

International Consultants	Key or Non-key	National Consultants	Key or Non-key
Civil or transport engineer and team leader	Yes	Civil or transport engineer and deputy team leader	Yes
Transport economist	No	Transport economist	No
Road transport specialist	No	Road transport specialist	No
Rail transport specialist	No	Rail transport specialist	No
Shipping and port specialist	No	Shipping and port specialist	No
Aviation specialist	No	Aviation specialist	No
Urban transport specialist	No	Urban transport specialist	No
		Environment specialist	No
		Social development specialist	No
		Financial analyst	No
Total Person-Months	100	Total Person-Months	100

Source: Asian Development Bank.

8. It is envisaged that between four to eight firms or consortia would be prequalified, and indefinite delivery contracts offered. Based on specific needs of the prefeasibility studies, three of the prequalified firms or consortia would be invited on a rotational basis to submit bio-data

technical proposals within an abbreviated period of time. Selection methods would be quality-based selection, QCBS, fixed-budget selection or least-cost selection, depending on the specific requirement of the prefeasibility study. All firms mobilized through this modality will work under the guidance of ADB project officers and the transport policy and management firm, and in close coordination with counterpart government staff.

D. Sector Specialists

9. The TA will mobilize a number of sector specialists (international, 30 person-months, combined; and national, 30 person-months, combined), who will provide ad hoc and high-level support in the areas supported by this TA. These sector specialists will be recruited on an individual basis on merit of their highly specialized skills. Their roles include provision of high-level advisory support to the steering committee, resolution of matters of highly technical nature, and provision of specialist services, which may be unavailable through firms.

E. Resource Persons

10. The TA will also receive inputs by resource persons (international, 12 person-months, combined; and national, 6 person-months, combined). They will take part in training, seminars, and conferences as speakers to share specific knowledge.