



## Project Design Advance

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# Islamic Republic of Pakistan: Peshawar Sustainable Bus Rapid Transit Corridor Project

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**Asian Development Bank**

## CURRENCY EQUIVALENTS

(as of 10 November 2016)

Currency unit – Pakistan rupee (PRs/PRs)

PRs1.00 = \$0.00955  
\$1.00 = PRs104.655

## ABBREVIATIONS

ADB	–	Asian Development Bank
BRT	–	bus rapid transit
EPCM	–	engineering, procurement, and construction management
IEE	–	initial environmental examination
km	–	kilometer
LARP	–	land acquisition and resettlement plan
PDA	–	project design advance
TA	–	technical assistance

## NOTES

- (i) The fiscal year (FY) of the Government of Pakistan ends on 30 June. “FY” before a calendar year denotes the year in which the fiscal year ends, e.g., FY2017 ends on 30 June 2017.
- (ii) In this report, "\$" refers to US dollars.

<b>Vice-President</b>	W. Zhang, Operations 1
<b>Director General</b>	S. O’Sullivan, Central and West Asia Department (CWRD)
<b>Director</b>	Y. Ye, Urban Development and Water Division, CWRD
<b>Team leader</b>	D. Margonsztern, Senior Urban Development Specialist (Transport), CWRD
<b>Team members</b>	Z. Abbas, Senior Environment Specialist, CWRD A. Barry, Principal Procurement Specialist, Operations Services and Financial Management Department S. Campbell, Senior Social Development Specialist, CWRD M. Marcelino, Associate Project Officer, CWRD J. T. Nicolas, Senior Social Development Specialist (Safeguards), CWRD J. Pabis, Operations Assistant, CWRD D. Perkins, Senior Counsel, Office of the General Counsel M. S. Shafi, Senior Project Officer, CWRD
<b>Peer reviewer</b>	K. J. Kim, Senior Transport Specialist, East Asia Department

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## I. THE PROPOSED PROJECT

1. The proposed Peshawar Sustainable Bus Rapid Transit Corridor Project will help develop a sustainable urban transport system in Peshawar, the provincial capital of Khyber Pakhtunkhwa in Pakistan, through the delivery of an integrated bus rapid transit (BRT) corridor. The project outcome will be improved public transport in Peshawar, directly benefiting a population of at least 0.5 million.<sup>1</sup> The project will consist of two interlinked outputs: (i) full restructuring of a 30-kilometer BRT corridor, including BRT dedicated lanes, 33 stations, 2 depots, mixed traffic lanes, bicycle lanes, parking, sidewalks, green areas, energy-efficient streetlights and proper drainage to climate-proof the BRT infrastructure;<sup>2</sup> and (ii) effective project management and sustainable BRT operations through institutional and organizational developments.<sup>3</sup> The project is economically justified by major time savings for future BRT passengers, vehicle operating cost savings, and better air quality and savings in carbon emissions, which will in turn help improve the health of Peshawar's citizens and mitigate climate change. The project will also help make Peshawar safer and more livable, boost private sector investment, and foster gender equity.

2. The project is estimated to cost \$320 million. The project design advance (PDA) and the ensuing project loan are included in the country operations business plan, 2016–2018 for Pakistan and are proposed to be financed from the ordinary capital resources (OCR) of the Asian Development Bank (ADB), with an indicative financing of \$10 million for the PDA and \$180 million for the project loan.<sup>4</sup> The project follows priorities set in ADB's country partnership strategy, 2015–2019 for Pakistan, including (i) improving connectivity and access, especially for the poor, by promoting urban public transport systems; and (ii) reducing pollution through mass transit systems.<sup>5</sup>

3. The Government of Pakistan has approved a PC-II for counterpart financing of the PDA.<sup>6</sup> At the request and on behalf of the provincial Government of Khyber Pakhtunkhwa, ADB selected PDA consultants for (i) engineering, procurement, and construction management (EPCM); (ii) the operational design and business model; and (iii) project management, coordination, and capacity building. ADB communicated the results to the Transport and Mass Transit Department of the Government of Khyber Pakhtunkhwa, which is ready to sign the contracts upon effectiveness of the PDA agreement. The overall contract value (excluding taxes) for these consulting services is estimated at \$9 million, more than 80% of the estimated total contract value under the PDA. PDA implementation readiness, as per para. 8 of the ADB Staff Instruction on Project Design Advance, has therefore been demonstrated.<sup>7</sup>

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<sup>1</sup> The estimated initial demand for the proposed BRT system is 473,000 passengers per day. An estimated 519,000 people (17.5% of Peshawar's total population) live within a 1-kilometer (km) radius from a BRT station and can potentially benefit from the system.

<sup>2</sup> The Cities Development Initiative for Asia completed a pre-feasibility study on improving Peshawar's urban transport system in May 2014. The Asian Development Bank (ADB) subsequently approved a project concept paper and project preparatory technical assistance (TA) on 15 December 2014. The project preparatory TA draft final report, including preliminary engineering design and due diligence, was submitted in October 2016.

<sup>3</sup> Under the Cities Development Initiative for Asia TA and ADB's subsequent project preparatory TA, the draft legislation and supporting documentation have been drafted for the establishment of the Khyber Pakhtunkhwa Urban Mobility Authority and the TransPeshawar Company. The Khyber Pakhtunkhwa Urban Mobility Authority will be responsible for the development of policies and regulations, planning, coordination, and funding for all provincial urban transport projects. TransPeshawar will be responsible for BRT project design, procurement, and implementation; and for BRT operations and service contracts management.

<sup>4</sup> ADB. 2016. *Pakistan: Country Operations Business Plan, 2016–2018*. Manila.

<sup>5</sup> ADB. 2015. *Pakistan: Country Partnership Strategy, 2015–2019*. Manila.

<sup>6</sup> A PC-II is a Planning Commission pro forma that is used for the internal approval of studies and project designs.

<sup>7</sup> ADB. 2014. Project Design Advance. *Compendium of Staff Instructions*. Manila.

## II. ACTIVITIES TO BE FINANCED BY THE PROJECT DESIGN ADVANCE

4. The PDA will finance consulting services, distributed into five packages:

- (i) The EPCM package covers (a) the detailed engineering design of the BRT corridor and depots, including all required field surveys such as topographical and hydrological surveys; (b) the detailed project cost estimates; (c) updating of the safeguard documents prepared under ADB's project preparatory technical assistance (TA), such as the land acquisition and resettlement plan (LARP) and the initial environmental examination (IEE); and (d) procurement support for the implementing agency for all civil works contracts, including the preparation of draft bidding documents and the evaluation of proposals.<sup>8</sup>
- (ii) The operational design and business model package includes preparatory activities such as (a) the design and implementation of the BRT business plan, operations plan, and branding and marketing plan; (b) the development of a bus industry restructuring program; (c) the specification of technical standards and functional requirements for the BRT fleet and other equipment to be procured under the project; (d) the design of viable public-private partnership schemes to finance specific components of the BRT system, such as the BRT fleet; and (e) the preparation of start-up BRT services.
- (iii) The project management, coordination, and capacity building consultants will (a) undertake project management, including scheduling, cost control, and coordination of all preparatory work; (b) conduct institutional strengthening and capacity building of the Khyber Pakhtunkhwa Urban Mobility Authority and the TransPeshawar Company; (c) design and implement the project communication plan and community awareness and participation program; and (d) carry out legal and commercial aspects of all procurement-related activities, and provide procurement support to the implementing agency for all equipment contracts, including preparing draft bidding documents and evaluating proposals.
- (iv) The support team for the resettlement plan implementation will help the government implement the LARP prepared under the project preparatory TA and updated under the PDA. The specialists will be recruited individually or as staff of a local nongovernment organization to devise a strategy and mechanism to make certain that each group of affected people is properly compensated.
- (v) The consultants for the transit-oriented development plan will build on the four transit-oriented development conceptual schemes designed under the project preparatory TA to revise the land-use plan and increase density around the BRT stations, and will prepare a detailed plan, strategy, and financing mechanism to implement these schemes as part of the project design.

5. The PDA will result in a procurement-ready project, enabling contract awards and disbursements immediately after loan effectiveness, and potentially saving 2 years from loan effectiveness to the mobilization of contractors during the initial phase of implementation.

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<sup>8</sup> The PDA will not finance activities related to construction supervision. Footnote 7, para. 23.

### III. COST ESTIMATES AND FINANCING ARRANGEMENTS

6. The total cost of the project preparatory activities under the PDA is estimated at \$12.35 million. The government has requested a loan of \$10 million from ADB's OCR to help finance the PDA. The government will contribute \$2.35 million to cover taxes and duties. The PDA loan will have an annual interest rate determined in accordance with ADB's London interbank offered rate (LIBOR)-based lending facility, and other terms and conditions set forth in the PDA agreement. The refinancing date is 1 January 2019 or the actual date of effectiveness of the ensuing loan as may be agreed between ADB and the borrower. The estimated interest charge is \$500,000. The investment and financing plan is in Table 1.

**Table 1: Investment and Financing Plan for the Project Design Advance<sup>a</sup>**  
(\$ million)

Item	Cost <sup>b</sup>	ADB	Government <sup>c</sup>
<b>A. Base Cost<sup>d</sup></b>			
1. EPCM	4.94	4.00	0.94
2. ODBM	3.70	3.00	0.70
3. PMCCB	2.47	2.00	0.47
4. STRPI	0.37	0.30	0.07
5. TODP	0.62	0.50	0.12
<b>Subtotal (A)</b>	<b>12.10</b>	<b>9.80</b>	<b>2.30</b>
<b>B. Contingencies<sup>e</sup></b>	<b>0.25</b>	<b>0.20</b>	<b>0.05</b>
<b>Total (A+B)</b>	<b>12.35</b>	<b>10.00</b>	<b>2.35</b>

ADB = Asian Development bank, EPCM = engineering, procurement, and construction management; ODBM = operational design and business model; PDA = project design advance; PMCCB = project management, coordination, and capacity building; STRPI = support team for the resettlement plan's implementation; TODP = transit-oriented development plan.

<sup>a</sup> A PDA carries interest and commitment charges where applicable, and the payment of these charges is deferred until the PDA is repaid from the ensuing financing or other repayment terms take effect. Commitment charges are waived for 2 years from PDA signing. If the ensuing financing does not become effective within that period, commitment charges accrue thereafter.

<sup>b</sup> Includes taxes and duties of \$2.35 million for fiscal years 2016–2018, to be financed in cash from government resources.

<sup>c</sup> As part of the government's contribution, the audit of the annual PDA project financial statements will be performed free of cost by the auditor general of Pakistan.

<sup>d</sup> In mid-2016 prices.

<sup>e</sup> Output-based lump-sum contracts used for the EPCM, ODBM, and PMCCB assignments do not allow for the provision of price and physical contingencies. However, overall contingencies (or the unallocated amount) computed at 2% for the total cost of consulting services (excluding taxes) have been provisioned outside each package to allow for additional outputs that were not included in the initial corresponding terms of references but may appear necessary during the course of each assignment.

Source: ADB estimates.

### IV. IMPLEMENTATION ARRANGEMENTS

7. The borrower is the Islamic Republic of Pakistan, which will enter into a subsidiary loan agreement with the provincial Government of Khyber Pakhtunkhwa. The executing agency is the provincial government's Planning and Development Department, which will be replaced by the Khyber Pakhtunkhwa Urban Mobility Authority once operational and upon prior approval of ADB. The implementing agency is the provincial government's Transport and Mass Transit Department, which will be replaced by TransPeshawar once operational and upon prior approval of ADB. The implementation arrangements are summarized in Table 2 and described in detail in the PDA project administration manual.

**Table 2: Implementation Arrangements for Project Design Advance**

Aspects	Arrangements		
PDA implementation period	January 2017–December 2018		
Estimated completion date	31 December 2018		
<b>Management</b>			
(i) Oversight body	Project steering committee (details are in the PDA project administration manual)		
(ii) Executing agency	Government of Khyber Pakhtunkhwa's P&DD, which will be replaced by the Khyber Pakhtunkhwa Urban Mobility Authority once operational and upon prior approval of ADB		
(iii) Key implementing agency	Government of Khyber Pakhtunkhwa's TMTD, which will be replaced by TransPeshawar once operational and upon prior approval of ADB		
(iv) Implementation unit	Secretariat of the Government of Khyber Pakhtunkhwa, 15 staff		
<b>Consulting services<sup>a</sup></b>			
(i) EPCM	QCBS 90:10	120 person-months minimum	\$4.94 million
(ii) ODBM	QCBS 90:10	74 person-months minimum	\$3.70 million
(iii) PMCCB	QCBS 90:10	96 person-months minimum	\$2.47 million
(iv) STRPI	QCBS 80:20 or ICS	80 person-months	\$0.37 million
(v) TODP	QCBS 90:10	20 person-months	\$0.62 million
Advance contracting	Consultant recruitment		
Disbursement	Disbursements under the PDA will be made in accordance with ADB's <i>Loan Disbursement Handbook</i> (2015, as amended from time to time).		

ADB = Asian Development Bank; EPCM = engineering, procurement, and construction management; ICS = individual consultant selection; ODBM = operational design and business model; P&DD = Planning and Development Department; PDA = project design advance; PMCCB = project management, coordination, and capacity building; QCBS = quality- and cost-based selection; STRPI = support team for the resettlement plan's implementation; TMTD = Transport and Mass Transit Department; TODP = transit-oriented development plan.

<sup>a</sup> ADB completed the consultant selection for the EPCM, ODBM, and PMCCB packages using output-based terms of reference and lump-sum contracts. ADB will select TODP consultants at a later stage using the same method. The Government of Khyber Pakhtunkhwa will recruit STRPI consultants once the detailed engineering design has been completed under EPCM, either as national individual consultants (using ICS) or through a local nongovernment organization.

Source: Asian Development Bank.

## V. SAFEGUARDS

8. The expected safeguard classification for the ensuing project is *category B* for the environment and *category A* for involuntary resettlement, based on the IEE and the LARP prepared under the project preparatory TA. EPCM consultants will update the LARP and the IEE based on the detailed engineering design. An environmental management plan will also be devised under the PDA. No adverse impacts are expected on indigenous peoples.

## VI. DECISION

9. Management has approved the provision of a loan not exceeding \$10,000,000 to the Islamic Republic of Pakistan from ADB's ordinary capital resources, in the form of a project design advance (PDA) for the Peshawar Sustainable Bus Rapid Transit Corridor Project; and the President hereby reports this action to the Board.