Report and Recommendation of the President to the Board of Directors

Project Number: 48424-002
August 2016

Proposed Loan
Republic of Kazakhstan: CAREC Corridors 1 and 6 Connector Road (Aktobe–Makat) Reconstruction Project

Asian Development Bank

CURRENCY EQUIVALENTS

(as of 21 July 2016)

Currency unit	–	tenge (T)
T1.00	=	$0.00292
$1.00	=	T342.170

ABBREVIATIONS

ADB	–	Asian Development Bank
CAREC	–	Central Asia Regional Economic Cooperation
COR	–	Committee of Roads
EMP	–	environmental management plan
ha	–	hectare
IDB	–	Islamic Development Bank
IDSP	–	Infrastructure Development State Program (*Nurly Zhol*)
km	–	kilometer
LARP	–	land acquisition and resettlement plan
MID	–	Ministry of Investments and Development
PAM	–	project administration manual
PMC	–	project management consultant
PRC	–	People's Republic of China

NOTES

(i) The fiscal year (FY) of the Government of Kazakhstan ends on 31 December.
(ii) In this report, "$" refers to US dollars.

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PROJECT AT A GLANCE

1. Basic Data — **Project Number:** 48424-002

Project Name	CAREC Corridors 1 and 6 Connector Road (Aktobe-Makat) Reconstruction Project	**Department /Division**	CWRD/CWTC
Country	Kazakhstan	**Executing Agency**	Ministry of Investment and Development
Borrower	Kazakhstan		

2. Sector	**Subsector(s)**	**ADB Financing ($ million)**
✓ **Transport**	Road transport (non-urban)	240.30
	Total	**240.30**

3. Strategic Agenda	**Subcomponents**	**Climate Change Information**	
Inclusive economic growth (IEG)	Pillar 1: Economic opportunities, including jobs, created and expanded	Adaptation ($ million)	10.23
Environmentally sustainable growth (ESG)	Global and regional transboundary environmental concerns	Climate Change impact on the Project	Medium
Regional integration (RCI)	Pillar 1: Cross-border infrastructure		

4. Drivers of Change	**Components**	**Gender Equity and Mainstreaming**	
Governance and capacity development (GCD)	Institutional development	Some gender elements (SGE)	✓
Partnerships (PAR)	International finance institutions (IFI) Official cofinancing		

5. Poverty Targeting		**Location Impact**	
Project directly targets poverty	No	Nation-wide	High

6. Risk Categorization: Complex

7. Safeguard Categorization **Environment:** B **Involuntary Resettlement:** B **Indigenous Peoples:** C

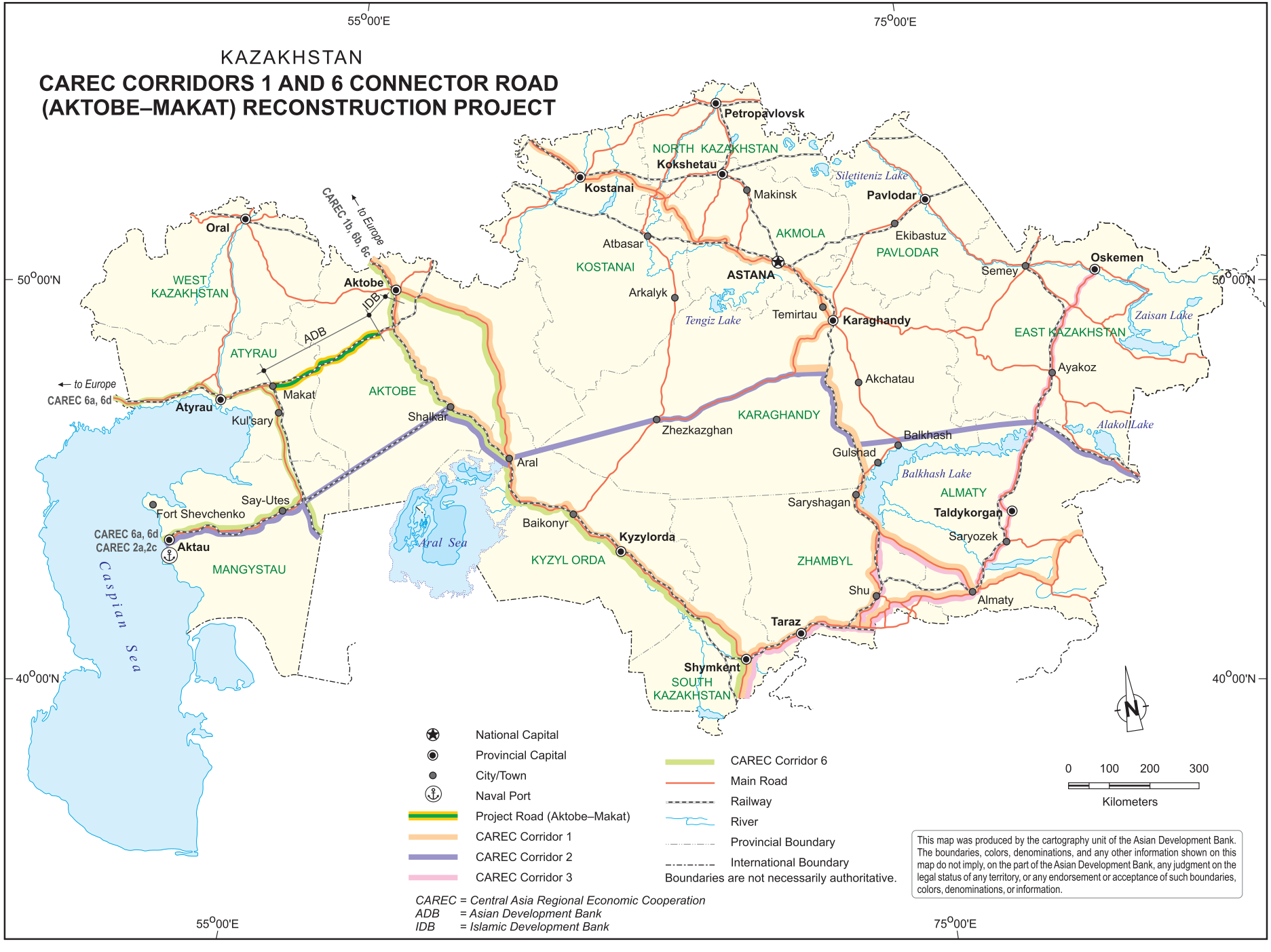
8. Financing

Modality and Sources	Amount ($ million)
ADB	**240.30**
Sovereign Project loan: Ordinary capital resources	240.30
Cofinancing	**273.00**
Islamic Development Bank - Loan	273.00
Counterpart	**42.70**
Government	42.70
Total	**556.00**

9. Effective Development Cooperation

Use of country procurement systems	No
Use of country public financial management systems	No

Source: Asian Development Bank



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I. THE PROPOSAL

1. I submit for your approval the following report and recommendation on a proposed loan to the Republic of Kazakhstan for the CAREC Corridors 1 and 6 Connector Road (Aktobe–Makat) Reconstruction Project.[1]

2. The proposed project will reconstruct a road section of about 299 kilometers (km) between the capitals and administration centers of Aktobe and Atyrau provinces in western Kazakhstan, and introduce key features of a transport information system.[2] It will upgrade part of a strategic transport corridor[3] and improve transport system operation. The project will thus strengthen overall road sector efficiency, boost connectivity, and promote regional trade and inclusive economic growth, particularly in the western part of Kazakhstan.

II. THE PROJECT

A. Rationale

3. Roads enable connectivity and mobility, which are essential conditions for economic growth and development. This is particularly relevant for Kazakhstan—the world's largest landlocked country with a resource-rich economy and, at about six persons per square kilometer, a population density among the lowest in the world. Kazakhstan's main natural resources—hydrocarbons, oil, gas, ferrous, and nonferrous metals—are unevenly spread over the country and remain largely untapped because of infrastructure constraints. Landlocked countries suffer most from high transport costs, which can be much higher than the tariffs on imported and exported goods. A World Bank study estimated that transport costs account for 8%–11% of the final cost of goods—almost double the cost for most industrialized countries.[4] As such, the development of transport infrastructure, together with sector efficiency improvements, can play a catalytic role in the sustainable social and economic development of the country. Continued public sector investments are needed to modernize the infrastructure base, which strongly correlates with economic diversification and more robust growth.[5]

4. The Government of Kazakhstan has been upgrading its national transport system since 2007, to better integrate Kazakhstan into the world economy. This includes the reconstruction of the 2,787 km Western Europe–Western People's Republic of China (PRC) international transit corridor (also known as the Central Asia Regional Economic Cooperation [CAREC] corridors 1b and 6b,c) to improve its efficiency and effectiveness.[6] The country is already capturing a significant volume of transit traffic through roads and railways.[7] Strategically, Kazakhstan has

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[1] The design and monitoring framework is in Appendix 1.

[2] The project is included in Asian Development Bank (ADB). 2015. *Country Operations Business Plan: Kazakhstan, 2016–2018.* Manila.

[3] The project road is part of the Trans-Caspian Sea Transit Corridor Baku–Astrakhan–Atyrau–Aktobe–Aktau–Turkmen border, which connects Kazakhstan with Azerbaijan and Europe in the west, with the Russian Federation in the north, and with Turkmenistan in the south. It also connects the Central Asia Regional Economic Cooperation (CAREC) Corridor 1b at Aktobe and Corridor 6a at Makat, providing further access to the People's Republic of China (PRC) and Southeast Asia.

[4] World Bank. 2012. *Project Appraisal Document, East West Roads Project*. Washington, DC.

[5] S. Straub and A. Terada-Hagiwara. 2010. Infrastructure and Growth in Developing Asia. *ADB Economics Working Paper Series.* No. 231. Manila: ADB.

[6] The project costs about $6.5 billion and is mainly cofinanced by ADB, the European Bank for Reconstruction and Development, the Islamic Development Bank, the Japan International Cooperation Agency, and the World Bank.

[7] For instance, in 2012, the total volume of goods in transit through Kazakhstan was 17.8 million tons by road and rail, income from which totaled more than $1 billion. Nevertheless, revenues are still low, affecting cost recovery and reinvestment capabilities.

much potential to link the East Asia countries with Europe by road and rail, and through inland shipping along the Caspian Sea.

5. With oil prices tumbling since 2014 and lower external demand slowing the economy, Kazakhstan responded with a new economic anti-crisis program. The President, in his address to the nation on 11 November 2014, announced Kazakhstan's Infrastructure Development State Program (IDSP)—*Nurly Zhol*—for 2015–2019. To enable a favorable environment for business-driven regional economic integration, among others, the IDSP prioritizes domestic transport links of strategic importance and regional impact, and connects the national capital, Astana, with other "urban agglomerations" and/or "second-tier cities" in the eastern, western, and southern parts of the country.[8] Accordingly, the government, aided by development partners, is accelerating the development of the Center South (Astana–Almaty), Center East (Astana–Ust'–Kamenogorsk), and Center West (Astana–Aktau) corridors. The program will be implemented from 2016 to 2020. The overall IDSP is expected to generate a significant number of new jobs and incomes through public investments.

6. The existing Aktobe–Makat road is a two-lane national road originally designed to categories III and IV standard, and connects the CAREC corridors 1b and 6a, as well as the capitals and administrative centers of the oil- and mineral-rich provinces of Aktobe and Atyrau, where approximately 1.7 million people live. Most of the existing road pavement is either non-existent or damaged to the extent that ordinary passenger cars cannot move faster than 30 km/hour. As a result, many vehicles divert off the road and travel on parallel dirt paths. This largely deters both passenger and freight operation from using the road. Many passengers traveling between Aktobe and Atyrau have to use infrequent railway services instead, and much goods traffic is diverted to the northern Aktobe–Oral–Atyrau route, but the detour takes more time needed with an additional distance of 360 km. Poor road connectivity has also become a key social issue contributing to the growing income disparity between rural and urban areas.

7. The project will reconstruct and upgrade about 299 km of a deteriorated section of the Aktobe–Makat road. In parallel, the Islamic Development Bank (IDB) will reconstruct and upgrade additional 153 km section along the same road. The project will help establish efficient transport links by reducing transport time and costs. It will (i) improve in-country transport services, particularly linking Astana and Aktobe with the major oil city of Atyrau and the country's only international port of Aktau; (ii) facilitate regional trade and link the growing markets of the East Asia countries with Caspian Sea countries further to Europe; and (iii) open new trade and business opportunities and support poverty reduction by raising the living standard of the local population.

8. Since 2006, the road sector in Kazakhstan has made strides in institutional and capacity development supported by assistances from development partners, mainly the Asian Development Bank (ADB), the European Bank for Reconstruction and Development, and the World Bank. These assistances have been focusing on (i) separating planning and management from implementation of road works; (ii) development of a road asset management system; (iii) introduction of results-based planning and monitoring, and modern transport information technologies; (iv) institutionalizing road safety audits; (v) enforcing traffic overload control; and (vi) expanding toll road operations. These interventions have been largely effective

[8] The Kazakhstan Program for Regional Development—a mechanism for predictive spatial development of Kazakhstan up to 2020—focuses on developing the centers of economic growth ("urban agglomerations" of Almaty and Astana and 14 "second-tier cities") to improve the country's economic potential and the living conditions in regional Kazakhstan. An identified challenge for the program is the development of critical engineering infrastructure, including that required for connectivity within and between the regions, i.e., transport systems.

as a result of close and effective coordination and collaboration among the development partners and good government ownership. As the government embarks on the next stage of road network upgrades, efficient utilization of road assets and further reducing transport cost become crucial. The project will support government to improve communication throughout the strategic road network by strengthening the transport information system. This system will provide timely road condition and traffic information to road administrators and road users, so as to leading safer, better, and more efficient movements of goods and people.

9. The State Program for the Development and Integration of Transport Infrastructure to 2020 (Transport Strategy 2020) was adopted by the government on 13 January 2014. It aims to form a modern transport system in Kazakhstan that (i) increases the flow of freight through the country by properly integrating and linking land, sea, and air transport systems; (ii) provides connectivity between regional cities and towns; and (iii) allows the development of infrastructure centers within regions. The project also forms a key part of the Center West Corridor, a high government priority featured in the IDSP. The project is consistent with ADB's country partnership strategy for Kazakhstan, 2012–2016,[9] and fully in line with ADB's Midterm Review of Strategy 2020.[10] It supports the CAREC Transport and Trade Facilitation Strategy 2020.[11] The project is included in ADB's country operations business plan for Kazakhstan, 2016–2018 (footnote 2).

10. ADB's assistance in Kazakhstan's transport sector has been overall successful. The performance of ADB's ongoing portfolio of projects is satisfactory. Its disbursement and contract award ratios are above ADB-wide averages. The preparation of the project has taken into consideration of ADB and other development partner's experience and lessons learned in the sector: (i) provide quality consulting services for project coordination and construction supervision; (ii) streamline the role of various road sector agencies,[12] and strengthen their project implementation and monitoring capacities; and (iii) develop synergy with other development partners.

B. Impact and Outcome

11. The impact will be aligned with government's Transport Strategy 2020 aiming to form a modernized transport system with increased freight transit, improved network connectivity, and creation of infrastructure centers. The outcome will be improved network operational performance, increased transit potential, and improved social and economic development of the western region of Kazakhstan in particular.

C. Outputs

12. The project outputs will be: (i) reconstruction of approximately 299 km of highway between Aktobe and Makat, and (ii) improvements to transport system operations with better provision of road traffic safety and logistics effectiveness.

13. **Road upgrade.** Taking into account traffic demands and estimated road works cost, the 299 km project road (between Km 156 and Km 500) is proposed to remain two lanes as now,

[9] ADB. 2012. *Country Partnership Strategy: Kazakhstan, 2012–2016*. Manila.
[10] ADB. 2014. *Midterm Review of Strategy 2020: Meeting the Challenges of a Transforming Asia and Pacific*. Manila.
[11] ADB. 2014. *CAREC Transport and Trade Facilitation Strategy 2020*. Manila.
[12] Sector Assessment (Summary): Transport (Road Transport [Nonurban]), and Kazakhstan Road Sector Reform (accessible from the list of linked documents in Appendix 2).

with their standard to be upgraded from categories III and IV to category II.[13] The 153 km of adjoining section to Aktobe (between Km 0 and Km 156), being financed by IDB, will include an expansion to four lanes at some highly trafficked urban locations. The project will include road safety measures such as road signs, lane markings, lighting, rest areas, bus stops, and sidewalks, and conduct a gender-sensitive road-safety-awareness campaign. To achieve better sustainability, maintenance equipment will also be procured under the project. The equipment will allow quick responses to traffic disruptions caused by natural disasters.

14. **Improvements to transport system operations.** This component is a logical follow-up on the scoping study[14] of the intelligent transport system completed in 2012 and supported by ADB. It aims to establish a single platform for monitoring and coordinating transport infrastructure usage and develop implementation plans for selected subsystems (e.g., road condition and weather reporting, freight vehicle tracking, and traffic safety monitoring). The component includes the development of pertinent regulatory frameworks and technical documentation, and delivery of workshops and certified training activities.

D. Investment and Financing Plans

15. The project is estimated to cost $283.0 million (Table 1).

Table 1: Project Investment Plan
($ million)

Item		Amount[a]
A.	**Base Cost**[b]	
	1. Aktobe–Makat road upgrade (Km 156–Km 500)	250.4
	2. Improvement of transport system operations	4.7
	Subtotal (A)	**255.1**
B.	**Contingencies**[c]	**18.1**
C.	**Financing Charges during Implementation**[d]	**9.8**
	Total (A+B+C)	**283.0**

[a] Value-added taxes of $22.2 million will be financed (in cash contribution) from the government resources. Other project-related expenditures, such as social tax, transport tax, and environment pollution fee, and other taxes associated with minor expenses will be financed by the Asian Development Bank (ADB). These will not represent an excessive share of the project investment plan, are material and relevant to the success of the project, and consistent with eligibility parameters set out in ADB's country partnership strategy for Kazakhstan, 2012–2016.

[b] In June 2016 prices.

[c] Physical contingencies computed at 5% for civil works, equipment and consulting services. Price contingencies computed at 1.4%–1.5% on foreign exchange costs and 4.6%–12.6% on local currency costs; includes provision for potential exchange rate fluctuation under the assumption of a purchasing power parity exchange rate.

[d] Includes interest and commitment charges. Interest during construction for the ADB loan has been computed at the 5-year forward London interbank offered rate (LIBOR) plus a spread of 0.5%. Commitment charges for an ADB loan are 0.15% per year to be charged on the undisbursed loan amount.

Sources: Ministry of Investments and Development and Asian Development Bank estimates.

[13] In accordance with Kazakhstan's technical standard SNIP RK 3.03-09-2006, category II roads require a carriageway of two 3.75-meter lanes, category III roads two 3.5-meter lanes, and category IV roads two 3.0-meter lanes. The design speed for category II roads is 120 km/hour in flat terrain (100 km/hour in rolling terrain), 100 km/hour in flat terrain (80 km/hour in rolling terrain) for category III roads, and 80 km/hour in flat terrain (60 km/hour in rolling terrain) for category IV roads.

[14] The consulting service was financed under tranche 1 of the multitranche financing facility for ADB. 2008. *Report and Recommendation of the President to the Board of Directors: Proposed Multitranche Financing Facility to the Republic of Kazakhstan for the CAREC Transport Corridor I (Zhambyl Oblast Section) [Western Europe–Western People's Republic of China International Transit Corridor] Investment Program*. Manila.

16. The government has requested a loan of $240.3 million from ADB's ordinary capital resources to help finance the project. The loan will have a 23.5-year term, including a grace period of 5.5 years, repayment by straight-line method, 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, and such other terms and conditions set forth in the draft loan agreement.[15] Based on this, the average loan maturity is 14.75 years and the maturity premium payable to ADB is 0.10% per annum.

17. The financing plan is in Table 2. IDB will provide a collaborative cofinancing loan of $273 million for the reconstruction and upgrade of the Aktobe–Makat road between Km 0 and Km 156. ADB does not provide any administration services for the IDB-financed section, and each financing partner follows its own policies and procedures, including on procurement and safeguards. However, both parties have agreed, through a minutes of meeting signed on 20 November 2015, respective responsibilities in terms of coordination, exchange of information, and overall implementation of the respective portions of the Aktobe–Makat road.

Table 2: Financing Plan

Source	**Amount** ($ million)	**Share of Total** (%)
Asian Development Bank		
Ordinary capital resources	240.3	84.9
Government of Kazakhstan	42.7	15.1
Total	**283.0**	**100.0**

Sources: Ministry of Investments and Development and Asian Development Bank estimates.

E. Implementation Arrangements

18. The Ministry of Investments and Development (MID) will be the executing agency. The Committee of Roads (COR) under MID will be the implementing agency with direct responsibility for overall project implementation. COR has implemented eight ADB-assisted road projects since 2008. Its project delivery performance has been satisfactory, and its staff has adequate technical skills and understanding of ADB procedures to manage the project. COR will engage, using government counterpart funds, JSC Kazavtozhol as the project management consultant (PMC) firm, which will comprise qualified international and national consultants acceptable to ADB, and also coordinate the implementation of the IDB-financed Aktobe–Makat road section. Consultants for the construction supervision and the transport information system to be financed under the ADB loan will be recruited in accordance with ADB's Guidelines on the Use of Consultants (2013, as amended from time to time). Consultants will assist COR with procurement and contract execution, safeguard monitoring, institutional capacity development, interagency coordination, and other project implementation functions. Procurement of civil works and equipment financed under the ADB loan will follow international competitive bidding procedures pursuant to ADB's Procurement Guidelines (2015, as amended from time to time) and ADB's prior review.

19. Advance actions in line with ADB's procurement and consulting guidelines were taken to expedite preconstruction works and avoid initial implementation delays. The implementation arrangements are summarized in Table 3 and described in detail in the project administration manual (PAM).[16]

[15] The financing charges during implementation will not be capitalized in the loan and will be paid separately by the government. The ADB loan may finance local transportation and insurance costs, if needed.
[16] Project Administration Manual (accessible from the list of linked documents in Appendix 2).

Table 3: Implementation Arrangements

Aspects	Arrangements		
Implementation period	September 2016–June 2021		
Estimated completion date	30 June 2021		
Loan closing date	31 December 2021		
Management			
(i) Executing agency	Ministry of Investments and Development		
(ii) Implementation unit	Committee of Roads		
Procurement	ICB	Up to seven contracts (civil works)	$223.0 million
	ICB	One contract (equipment)	$2.8 million
Consulting services	QCBS (90:10)	Two contracts for construction supervision (81 person-months international and 957 person-months national)	$9.3 million
	QCBS (90:10)	One contract for transport information system development	$4.4 million
Advance contracting	Civil works and consulting services		
Disbursement	The loan proceeds will be disbursed in accordance with ADB's *Loan Disbursement Handbook* (2015, as amended from time to time) and detailed arrangements agreed upon between the government and ADB.		

ADB = Asian Development Bank, ICB = international competitive bidding, QCBS = quality- and cost-based selection.
Source: Asian Development Bank.

III. DUE DILIGENCE

A. Technical

20. Road improvement activities will follow the existing alignment to minimize the works and the social and environmental impacts. The road will be designed to boost safety by eliminating hazardous curves and improving the road geometry. Road markings, traffic signs, traffic signal controls at junctions, and road furniture necessary to improve road safety will be installed on the project road. Rest areas along the road will also be constructed. Material investigations will be carried out at potential borrow pits in the vicinity of the project road, using to the extent possible locally available coarse and fine aggregates for subbase, base, and wearing course. The sustainability and efficiency of road maintenance operations along the project road will be enhanced by using modern road maintenance equipment that will be procured for local road maintenance departments, and by maximizing the use of local construction materials. Project design elements, such as heightened embankments, additional culvert system and modified asphalt concrete mixtures, will help mitigate expected climate risks including snow loading during winter and high ambient temperature during summer.

21. Road operations and traffic management require reliable and accurate data on all aspects of the network. Kazakhstan's current system in this regard is deficient. Advance-warning information systems necessary to handle axle load monitoring and controls are not in place. In addition, road weather information, highway advisory radio and electronic signs, and traffic records are still sporadic. Such information is essential for, among others, winter road maintenance—to ensure that road restrictions are minimized and costs are kept low. Rectifying these problems requires modern information technology. The transport information system for nonurban transport in Kazakhstan is at an early stage of development—a pilot application was introduced in 2013 on the 211 km Astana–Shchuchinsk toll road, which features closed-circuit television, variable message signs, and a road weather information system. Feedback from road users and transport operators has been positive, and areas for improvement were identified. Expanding the transport information system to the remaining road network will bring the benefits

of greater road safety, better logistics effectiveness, enhanced mobility and convenience, and positive impacts on the environment.

B. Economic and Financial

22. The economic evaluation was undertaken in accordance with ADB's Guidelines for the Economic Analysis of Projects.[17] The main beneficiaries of the project are (i) users of the existing substandard road between Makat and Aktobe; (ii) those traveling between Atyrau and Aktobe, who are currently routed via Uralsk but will use the more direct route via Makat after project opening; and (iii) additional road users, which the upgraded road network will be able to accommodate. The project's main benefits are lower vehicle operating costs and reductions in travel time. The project has an economic internal rate of return of 18.8%, and a net present value of $126.3 million at a 12% discount rate, and therefore is economically viable.

23. The project is not generating net revenue because no immediate plan exists to toll the project road upon its completion. Nationwide, the annual repair and maintenance budget has increased significantly since 2012. The legacy maintenance backlog was gradually cleared thanks to the annual maintenance carried out and the expansion of the reconstruction and/or rehabilitation program since 2007. To mobilize more resources for maintenance, the government has started levying tolls on selected main road corridors. The government has committed to allocating sufficient budget for operation and maintenance of the project road after completion, which is covenanted in the loan agreement. Kazakhstan's public and publicly guaranteed external debt is projected to rise slightly, from the equivalent of 10.3% of gross domestic product at the end of 2015 to 10.6% at the end of 2017, which is still low by international standards. It is unlikely that this project will have a significant impact on public and publicly guaranteed external debt. It should be noted, however, that Kazakhstan is suffering a period of fiscal insecurity due to volatile exchange rates and significantly reduced oil revenues, which are having an effect on government budgets. Given current financial and economic uncertainty, the expansion of tolls to selected national roads will be implemented in a gradual manner. The plan is to increase the current length of tolled roads from 211 km in 2015 to 6,911 km in 2022.

C. Governance

24. The capacity of MID and COR for financial management and procurement, and for implementing the project, was assessed and found to be adequate. MID, through COR, maintains separate project records and accounts adequate to identify the works, goods, and services financed from the loan proceeds, financing resources received, expenditures incurred for the project, and use of local funds, including adequate internal controls and financial reporting arrangements. All bidding documents for the civil works contract will include provisions specifying ADB's right to audit all project records and accounts, as well as those of all contractors, suppliers, and other service providers as they relate to the project. Key measures to ensure proper governance are (i) independent external auditing of contracts, project accounts, and financial statements;[18] (ii) transparent decision processes for all procurement matters; and (iii) verification of contractors' payment claims by the supervision consultant and oversight by the project implementation agency.

[17] ADB. 1997. *Guidelines for the Economic Analysis of Projects*. Manila.

[18] The government finances all independent financial auditing required by international financial institutions through a centralized budget.

25. ADB's Anticorruption Policy (1998, as amended to date) was explained to and discussed with the government and MID. The specific policy requirements and supplementary measures are described in the PAM (footnote 16).

D. Poverty and Social

26. The project is a general intervention. It does not specifically address poverty reduction through standard direct actions at the level of households, or involve specific services that deal with the geographical determinants of poverty. Nonetheless, the project will have a positive impact on poverty alleviation in the local communities along the project road. Reduction in travel times and costs will accrue to travelers. During construction, the project is expected to produce positive impacts on local employment. The key gender issues in the area are high unemployment for women in an area dominated by mining work, and restricted mobility due to poor road conditions. Gender-sensitive road safety features will be included in designated parts of the project route, including lighting, roadside rest areas with separate toilets for men and women, bus stops, and sidewalks. Advertisements for project-related jobs will include a sentence to the effect that women are encouraged to apply.

27. Civil works contracts will be designed for the contractors to (i) comply with Kazakhstan's applicable labor laws and related international core labor standards (i.e., the abolition of child labor, the elimination of discrimination in respect of employment and occupation, the elimination of all forms of forced or compulsory labor, and the freedom of association and the effective recognition of the right to collective bargaining); (ii) provide safe work conditions and separate sanitation facilities for male and female workers; (iii) provide equal wage to male and female workers for work of equal value; (iv) provide employment opportunities for women; and (v) carry out HIV/AIDS, illicit drug, and human trafficking prevention programs in workers' campsites.

E. Safeguards

28. **Environment.** The project is classified B for environment. An initial environmental examination was prepared and disclosed on ADB's website on 4 November 2015, in accordance with ADB's Safeguard Policy Statement (2009). The project's public consultations were conducted from April to September 2015. The initial environmental examination and its consultation process established that there are no significant environmental issues that cannot be either totally prevented or adequately mitigated to levels of insignificance. It is expected that the project will have site-specific, temporary environmental impacts during the construction phase, such as air and water pollution, noise, and soil erosion; cause traffic disruptions, and have occupational health and safety impacts. Adequate mitigation measures are included in, and will be implemented through, an environmental management plan (EMP). The EMP, including its mitigation and monitoring programs, will be included in the bidding documents for civil works. The overall responsibility for the implementation of the EMP will rest with the contractor. Construction supervision consultants will engage environment specialists to monitor the implementation of the EMP by contractors during construction. The construction supervision consultant will conduct a training workshop on environmental management for the PMC at the preconstruction stage. The PMC will appoint environmental safeguard specialists to ensure that the project is in compliance with the environmental loan covenants, including semiannual environmental monitoring reporting, and the implementation of a grievance redress mechanism.

29. **Involuntary resettlement.** The project is classified B for involuntary resettlement impacts. Because only a limited number of agricultural plots are located along the project road, the impacts will not be significant. All of the 17 land plots affected, totaling 557.09 hectares (ha), are owned by the state. Out of these, 11 plots (with an estimated area of 152.04 ha) are leased

by legal entities, i.e., 13.80 ha provided for short-term lease (up to 5 years) and 138.24 ha provided for long-term lease (5 to 49 years). The total number of affected persons is estimated to be 11 (all legal entities—10 peasant farms and 1 limited liability company). All 11 leased plots will be partially affected and do not have structures on the part of the land to be taken for the project purposes (the area of the land to be taken varies from 0.04% to 1.65% of the overall area of the respective plot). These plots are used as natural pastures and not for residential or commercial purposes.

30. A land acquisition and resettlement plan (LARP) was prepared to mitigate and manage all associated losses in accordance with ADB's Safeguard Policy Statement (2009) and the relevant national legislation. The LARP was disclosed on ADB's website on 4 November 2015. Complete details of entitlements for loss of assets and land are provided in the entitlement matrix of the LARP. Additional provisions for displaced persons belonging to vulnerable groups are also included. Proper consultation with the displaced persons on land acquisition and compensation, and with the general public through ADB's website, was undertaken during LARP preparation. If, during detailed design and implementation, any modification or additional land requirement or involuntary resettlement impacts are identified, the LARP should be modified in accordance with the applicable laws referred to in the LARP, and prior approval of ADB obtained before any further implementation.

31. All displaced people will be paid compensation in accordance with the provisions in the LARP. The land to be handed over to the contractor should be rid of encumbrances before construction starts. An efficient grievance redress mechanism is in place in accordance with the LARP to assist affected persons in resolving any grievances and complaints in a timely manner. The overall responsibility of LARP finalization and implementation rests with MID and COR. The construction supervision consultant will engage a resettlement specialist to monitor LARP implementation. The PMC will appoint a social safeguard specialist to coordinate land acquisition and resettlement tasks and to monitor LARP implementation. COR will submit semiannual monitoring reports to ADB for review and disclosure.

32. **Indigenous peoples.** The project road is located in the settled areas of Aktobe and Atyrau provinces, which have no indigenous peoples as defined under ADB's Safeguard Policy Statement. Therefore, no indigenous communities will be affected by the project. Accordingly, the project is classified C under ADB's Safeguard Policy Statement, and no planning documents related to indigenous peoples are required.

F. Risks and Mitigating Measures

33. Major risks and mitigating measures are summarized in Table 4 and described in detail in the risk assessment and risk management plan.[19] The project procurement classification is category B. Overall, the risks are deemed manageable by adopting mitigating measures, and the integrated benefits and impacts are expected to outweigh the costs of mitigation.

Table 4: Summary of Risks and Mitigating Measures

Risks	Mitigating Measures
Cumbersome procedures for external loan approval and ratification cause project implementation delay.	Make extra effort to monitor government loan approval and ratification processes and collaborate closely with the government agencies.

[19] Risk Assessment and Risk Management Plan (accessible from the list of linked documents in Appendix 2).

Risks	Mitigating Measures
Cost overrun because prices of labor, commodities, and raw materials rise more than budgeted as a result of high volatile exchange rates or project design changes midcourse, e.g., to fund additional activities to accommodate local content.	Project cost estimates are based on detailed design and the most recent unit prices of similar civil works. Contingencies are budgeted in the project investment to account for any unforeseen factors. The government assured to cover any further cost overrun with counterpart funding, which is covenanted in the loan agreement.
Lack of sufficient funds to sustain project road maintenance	The government has committed to allocating sufficient budget for operation and maintenance of the project road after completion, which is covenanted in the loan agreement. The government requested to procure maintenance equipment of about $3 million under the project to enable quick responses to traffic disruptions caused by natural disasters. The government has requested assistance from the Asian Development Bank to initiate a system of performance-based road maintenance contracts, which aims to improve the prioritization and funding of road maintenance and improve overall network service standard. The government has planned to impose more road tolls on selected main road corridors, an increase from the 211 km tolled roads in 2015 to 6,911 km in 2022, to finance road operation and maintenance.

Source: Asian Development Bank.

IV. ASSURANCES

34. The government and MID have assured ADB that implementation of the project shall conform to all applicable ADB policies, including those concerning anticorruption measures, safeguards, gender, procurement, consulting services, and disbursement as described in detail in the PAM and loan documents.

35. The government and MID have agreed with ADB on certain covenants for the project, which are set forth in the loan agreement.

V. RECOMMENDATION

36. I am satisfied that the proposed loan would comply with the Articles of Agreement of the Asian Development Bank (ADB) and recommend that the Board approve the loan of $240,300,000 to the Republic of Kazakhstan for the CAREC Corridors 1 and 6 Connector Road (Aktobe–Makat) Reconstruction Project, from ADB's ordinary capital resources, with interest to be determined in accordance with ADB's London interbank offered rate (LIBOR)-based lending facility; for a term of 23.5 years, including a grace period of 5.5 years; and such other terms and conditions as are substantially in accordance with those set forth in the draft loan agreement presented to the Board.

Takehiko Nakao
President

4 August 2016

DESIGN AND MONITORING FRAMEWORK

Impact the Project is Aligned with: A modernized transport system with increased freight transit, improved network connectivity, and creation of infrastructure centers (Transport Strategy 2020)[a]			
Results Chain	**Performance Indicators with Targets and Baselines**	**Data Sources and Reporting Mechanisms**	**Risks**
Outcome Improved network operational performance, increased transit potential, and improved social and economic development of the western region of Kazakhstan in particular	By 2021 a. Average daily vehicle-km for the Aktobe–Makat–Atyrau road increased to 1,600,000 (2015 baseline: estimated 800,000 vehicle-km) b. Average travel time from Aktobe to Atyrau reduced to 7.0 hours, from 14.5 hours in 2015 c. Casualty crash rate per 100 million vehicle-km traveled reduced by 10 percent of the existing national road casualty crash rate (2015 baseline: estimated 18.6)	a–c. Ministry of Investments and Development reports on annual traffic statistics and project performance monitoring system	Lack of sufficient funds to sustain project road maintenance
Outputs 1. 299 km highway between Aktobe and Makat reconstructed to category II standard and operational 2. Improved transport system operation with better provision of road traffic safety and logistics effectiveness	By 2020 1a. 299 km road section constructed to 100km/hour to 120 km/hour design standard 1b. Road maintenance equipment procured and operational 2a. Transport information system strategy, architecture, and required regulatory frameworks developed and accepted by the executing agency 2b. Implementation plan for the establishment of a national transport information system approved by government agencies concerned 2c. All targeted road agency staff trained on features of transport information	1a–1b. Consultant's progress reports, and project completion report from executing agency 2a–2c. Consultant's progress reports, and project completion report from executing agency	Cost overrun because prices of labor, commodities, and raw materials rise more than budgeted as a result of high volatile exchange rates or project design changes midcourse, e.g., to fund additional activities to accommodate local content. Cumbersome procedures for external loan approval and ratification cause project implementation delay.

Results Chain	Performance Indicators with Targets and Baselines	Data Sources and Reporting Mechanisms	Risks
	system		

Key Activities with Milestones

1. 299 km highway between Aktobe and Makat reconstructed to category II standard and operational
1.1 Mobilize construction supervision consultant by 31 May 2017.
1.2 Award civil works contract by 30 June 2017.
1.3 Complete civil works by 30 June 2020.
1.4 Ensure that road maintenance equipment is fully operational by 30 June 2020.

2. Improved transport system operation with better provision of road traffic safety and logistics effectiveness
2.1 Mobilize transport information system consultant by 30 June 2017.
2.2 Government to accept consultant's reports and transport information system implementation plan by 30 November 2019.
2.3 Complete training of all road agency staff concerned by 31 March 2020.

Inputs

Asian Development Bank: $240.3 million (ordinary capital resources)
Government of Kazakhstan: $42.7 million

Assumptions for Partner Financing

Islamic Development Bank will finance the upgrade of 153 km Aktobe–Makat section (Km 0–Km 156) in the amount of $273 million under collaborative cofinancing with the Asian Development Bank project.

km = kilometer.
[a] Government of Kazakhstan, Ministry of Transport and Communications. 2014. *The State Program for the Development and Integration of Transport Infrastructure to 2020*. Astana.
Source: Asian Development Bank.

LIST OF LINKED DOCUMENTS

http://www.adb.org/Documents/RRPs/?id=48424-002-3

1. Loan Agreement
2. Sector Assessment (Summary): Transport (Road Transport [Nonurban])
3. Project Administration Manual
4. Contribution to the ADB Results Framework
5. Development Coordination
6. Economic and Financial Analysis
7. Country Economic Indicators
8. Summary Poverty Reduction and Social Strategy
9. Initial Environmental Examination
10. Resettlement Plan
11. Risk Assessment and Risk Management Plan

Supplementary Documents

12. Kazakhstan Road Sector Stakeholders
13. Project Climate Risk Assessment and Management Report