



Validation Report

Reference Number: PVR-489
Project Number: 42399-013
Loan/Grant Numbers: 2533 and 0153
December 2016

Kyrgyz Republic: CAREC Transport Corridor 1 (Bishkek–Torugart Road) Project 2

Independent Evaluation Department
Asian Development Bank

ABBREVIATIONS

ADB	– Asian Development Bank
CDS	– Country Development Strategy
CAREC	– Central Asia Regional Economic Cooperation
DMF	– design and monitoring framework
EIRR	– economic internal rate of return
IED	– Independent Evaluation Department
IEE	– initial environmental examination
IPIG	– Investment Projects Implementation Group
km	– kilometer
JCSS	– Joint Country Support Strategy
MOTC	– Ministry of Transport and Communications
PCR	– project completion report
PPMS	– project performance management system
PRC	– People's Republic Of China
RRP	– report and recommendation of the President
RSDS	– Road Sector Development Strategy for 2007–2010
SERF	– shadow exchange rate factor

NOTE

In this report, "\$" refers to US dollars.

Key Words

adb, asian development bank, carec, kyrgyz republic, lessons, maintenance, performance evaluation, road sector, safeguards, transport, transport systems, validation

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PROJECT BASIC DATA

Project Number	42399-013	PCR Circulation Date	Sep 2015	
Loan and Grant Numbers	2533 and 0153	PCR Validation Date	Dec 2016	
Project Name	CAREC Transport Corridor 1 (Bishkek–Torugart Road) Project 2			
Sector and subsector	Transport	Road transport (nonurban)		
Theme and subtheme	Regional cooperation	Cross-border infrastructure		
Safeguard categories	Environment		B	
	Involuntary Resettlement		C	
	Indigenous Peoples		C	
Country	Kyrgyz Republic		Approved (\$ million)	Actual (\$ million)
ADB Financing (\$ million)	ADF: 28.00 (Loan 2533) 22.00 (Grant 0153)	Total Project Costs	62.50	61.13
	OCR: 0.00	Project Loan Loan 2533 (SDR equivalent, million)	28.00 (18.49)	27.81 (18.10)
		Project Grant Grant 0153	22.00	21.99
		Borrower	12.50	11.33
		Beneficiaries	0.00	0.00
		Others	0.00	0.00
Cofinancier		Total Cofinancing	0.00	0.00
Approval Date	14 Jul 2009	Effectiveness Date	6 Oct 2009	30 Oct 2009
Signing Date	5 Aug 2009	Closing Date	30 Jun 2014	1 Mar 2015
Project Officers	P. N. Seneviratne S. Mitra S. Lim	Location	From	To
		ADB headquarters	Jul 2009	Jan 2011
		ADB headquarters	Feb 2011	Feb 2012
		ADB headquarters	Feb 2012	Mar 2015
IED Review Director	B. Nguyen, Officer-in-Charge, IED2			
Team members	F. Ahmed , Lead Evaluation Specialist, IED1 E. Kwon, Principal Evaluation Specialist, IED 2 B. Prakash, Consultant D. Lucius, Consultant			

ADB = Asian Development Bank; ADF = Asian Development Fund; IED2 = Independent Evaluation Department, Division 2, OCR = ordinary capital resources; PCR = project completion report; SDR = special drawing right.

I. PROJECT DESCRIPTION

A. Rationale

1. The level of regional trade transiting through the Kyrgyz Republic has increased significantly over the last decade. As a consequence, the increased traffic and higher axle loads, combined with insufficient maintenance funding, led to the rapid deterioration of the road

network. The government's Road Sector Development Strategy (RSDS) for 2007–2010 called for increased road maintenance and improvements in eight priority road corridors.

2. The Kyrgyz section of the Central Asia Regional Economic Cooperation (CAREC) Corridor 1—the 539 kilometers (km) Bishkek–Torugart road—was one of the RSDS's priority road corridors. It forms an important international and/or regional road in the CAREC corridor, and links the western part of the People's Republic of China (PRC) to Kazakhstan and the Russian Federation via the Kyrgyz Republic.¹ However, at the time of appraisal, the road was in poor condition and in need of rehabilitation. Improving the corridor was expected to increase speed and reliability of passenger and freight flows, and contribute to regional trade.

3. Together with the Asian Development Bank (ADB), development partners were upgrading the Bishkek–Torugart road corridor in five sections.² Along with the customs inspection facility anticipated at assessment, the corridor improvements were designed to improve traffic, increase access to markets, and provide economic and social benefits to the communities of the Kyrgyz Republic (PCR, paras. 4–7).³

B. Expected Impacts, Outcomes, and Outputs

4. The project's expected impacts at appraisal were increased regional trade and reduced poverty in the project area. Its expected outcomes were higher accessibility and mobility of approximately 2.3 million beneficiaries in the project area.

5. The project was expected to deliver physical and nonphysical outputs. The physical output included improved pavement, bridges, and level of service in 75 km of the Bishkek–Torugart road. In addition, improved pavement on 6 km of road to At-Bashy village was added during project implementation (PCR, para. 6), as requested by the Ministry of Transport and Communications (MOTC), to utilize unused funds. The nonphysical outputs were professional development in the Kyrgyz Republic's Transport Sector Master Plan, such as internships for five university students, and certification for professionals.

C. Provision of Inputs

6. The loan was approved on 14 July 2009 and became effective on 30 October 2009. The original closing date was 30 June 2014. The project was extended to allow for the completion of the additional civil works (PCR, para. 6). Construction was completed on 21 November 2014 and the project closed on 1 March 2015 (PCR, para. 22).

7. At appraisal, the total project cost was estimated at \$62.5 million, including \$10 million in contingencies (\$6 million to account for physical uncertainty, \$4 million for price increase). ADB was to provide \$50 million from its special funds (\$28 million ADF loan and \$22 million grant) and the government was to provide counterpart financing of \$12.5 million. Upon completion, the actual total project cost was \$61.13 million, of which the ADB's contribution was \$49.8 million,

¹ ADB. 2009. *Report and Recommendation of the President to the Board of Directors: Proposed Loan and Asian Development Fund Grant CAREC Transport Corridor 1 (Bishkek–Torugart Road) Project 2 (Kyrgyz Republic)*. Manila

² The first section (Bishkek to km 272) was financed by the Export-Import Bank of China and completed in 2014. The second section (km 72 to km 365) is financed by the Islamic Development Bank, scheduled for completion in 2017.

³ ADB. 2015. *Completion Report: CAREC Transport Corridor 1 (Bishkek–Torugart Road) Project 2 (Kyrgyz Republic) (Loan 2533 and Grant 0153)*. Manila.

and the government's share was \$11.3 million. The reasons for cost changes included (i) the replacement of the customs inspection facility with the 6 km local road to At-Bashy, (ii) underspending on the human resources development component, and (iii) changes in costs due to small changes in design.

8. Consultant inputs included construction supervision for the physical outputs and capacity building for the nonphysical outputs. The estimated costs of these services at appraisal were \$3.3 million, of which \$2.7 million was for the physical component and \$0.6 million was for the nonphysical component. Upon completion, the project had disbursed \$2.2 million for consulting services. Despite lower expenditures, the project completion report (PCR) reported a greater level of effort than budgeted in the report and recommendation of the President (RRP)—from an estimate of 32 months of international and 374 months of national consulting work at appraisal to 47 months international and 420 months national upon completion (PCR, Appendix 2, Table A2.1).

9. The project was classified as Category B under the ADB environmental categorization. The RRP included an initial environmental examination (IEE), concluding that no significant adverse impacts would arise as long as project implementation followed its mitigation recommendation. An IEE was prepared by the government, and the PCR indicated that the IEE was carried out, and all the prescribed management and mitigation measures were implemented. All works occurred on the existing right-of-way or on state-owned land. There were no indigenous peoples impacted by the project and the project's resettlement classification was Category C.

D. Implementation Arrangements

10. MOTC was the project's executing agency. The Investment Projects Implementation Group (IPIG), an office within MOTC, served as the project implementation unit, and was responsible for managing the procurement of goods, works, and services, and the administering of contracts, and project arrangements. A United States-based consulting firm served as the supervision consultant to IPIG, and a Chinese company performed the civil works. The Kyrgyz State University of Construction and Architecture provided training to university students under the nonphysical component of capacity development. ADB headquarters and the Kyrgyz Republic Resident Mission staff assisted MOTC and the IPIG in project implementation.

11. The financing agreement contained 20 covenants.⁴ The covenants included measures to address risks anticipated during assessment, namely, implementation delays, maintenance shortfalls, and counterpart funding). The covenants also addressed other matters, such as illegal trafficking, transparency, safeguards, equal opportunity, and labor. Of the 20 covenants, the PCR stated that 19 were complied with and only one was partly complied with. Counterpart funds were not provided in a timely manner, which delayed payment to contractors. In addition to counterpart funding, the covenant on funds for operation and maintenance needs to be monitored in the future. Although current maintenance requirements are minimal and the project road is in good condition, the PCR noted that, historically, the Kyrgyz Republic has not allocated sufficient funds to cover maintenance needs (PCR, para. 28).

⁴ ADB. 2009. *Financing Agreement (CAREC Transport Corridor [Bishkek–Torugart Road] Project 2)*, 5 August 2009. Manila. Article IV and Schedule 5.

II. EVALUATION OF PERFORMANCE AND RATINGS

A. Relevance of Design and Formulation

12. The PCR rated the project *relevant*, citing the CAREC Transport Corridor 1 as a priority road in the government's Country Development Strategy (CDS) for 2007–2010 and RSDS, and for its role in improving transport infrastructure and poverty reduction.⁵ The project was also aligned with the ADB country operations business plan and the Joint Country Support Strategy (JCSS), 2007–2010. The CDS, the RSDS, and the JCSS coincided with the larger CAREC initiative involving Central Asian and neighboring countries, ADB, and other development partners seeking to improve connectivity and trade facilitation.⁶ The CAREC initiative includes six international corridors traversing the Central Asian countries and Mongolia, with links to larger Asian and European markets, including the PRC and the Russian Federation. Four of the six corridors transit through the Kyrgyz Republic, including the 539 km Bishkek–Torugart road.⁷

13. The rehabilitation of 75 km of road under the project, therefore, was relevant to Kyrgyz national and road sector plans. The project represented two segments on the larger Bishkek–Torugart road, a priority alignment under the nation's CDS and RSDS, and the CAREC initiative. The Kyrgyz Republic required donor funding to rehabilitate priority roads. The RRP indicated that unless the road network is improved, it will not be able to service the demand for transport brought about by growing regional trade (RRP, para. 5).

14. Initial project design included innovative solutions in the form of performance-based maintenance contracts, an internship program, and training and/or certification of transport professionals. However, none of these were implemented satisfactorily. No performance-based maintenance contracts were awarded before 2014. Instead, the contracts were included as part of the later Bishkek–Osh Project 3, currently under implementation.⁸ The internship program was a 3-week course, with no prolonged summer exposure to the MOTC's workflow, as stated in the RRP. The staff received training, but not in transport engineering or project management, as envisioned (RRP, para. 18), and none received certificates.

15. Changes were made in the project's scope during implementation that altered the outputs stated in the project's design and monitoring framework (DMF) and changed the implementation arrangements. Toward the end, the unutilized project funds were used in 2013 to rehabilitate 6 km At-Bashy road with ADB's approval. The rehabilitation of the At-Bashy road is consistent with the national plan. Citing two statements in the CDS on minimizing transport costs and accessibility to regional and local markets, the PCR noted that the inclusion of the At-Bashy road strengthened the project's relevance, although these were not included under the project at appraisal.

⁵ RSDS specified the following eight medium-term initiatives to improve access to regional and local markets: (i) rehabilitation and adequate maintenance, (ii) transport independence, (iii) improvement of the road financing system, (iv) involvement of the private sector in road construction and maintenance, (v) involvement of local communities in the maintenance of local roads, (vi) institutional reforms, (vii) improvement of road safety, and (viii) use of modern technologies in road management and monitoring.

⁶ CAREC. 2005. Joint Ministerial Statement. Fourth Ministerial Conference on Central Asia Regional Economic Cooperation. Bishkek. 5–6 November.

⁷ ADB. 2009. *CAREC Transport and Trade Facilitation*. Manila. pp. 7 and 14.

⁸ ADB. 2013. *Report and Recommendation of the President to the Board of Directors: Proposed Loan and Grant, Kyrgyz Republic: Central Asia Regional Economic Corridor 3 (Bishkek–Osh Road) Improvement Project, Phase 4*. Manila.

16. The PCR was forthcoming in noting the weaknesses in road construction and the decision to drop the inspection facility from under the project and locate it elsewhere (PCR, paras. 8–10). The selection of a location for the inspection facility required the cooperation of the State Customs Service, which later announced that they would upgrade facilities near the PRC border using alternative funding. Delays in funding the facility under the project raises some questions on the host-country's engagement and, hence, the project's relevance. Notwithstanding, this validation assesses the project *relevant*.

B. Effectiveness in Achieving Project Outcomes and Outputs

17. The outcome indicators in the RRP's DMF were (i) a reduction in travel time from Naryn to Torugart from 5 hours to at most 4 hours, by 2015; (ii) an increase in average daily traffic originating from Naryn Oblast (province), from 700 to 1,000 vehicles by 2015; (iii) a reduction in the average time to pass through the inspection facility, from 30 minutes per vehicle in 2009 to 15 minutes in 2013; (iv) increased performance-based maintenance contract value to at least \$100,000 by 2013; and (v) 2.3 million people enjoy improved accessibility. The DMF was later modified to express the traffic growth in terms of a 50% increase over the baseline. This is slightly a more demanding standard than the 700 to 1,000 vehicle target (PCR, para. 47).

18. The PCR rated the project *effective* for achieving three of the five target outcomes—travel times, traffic volumes, and general accessibility of 2.5 million people. It noted that the project did not meet the objectives of greater throughput at the inspection facility as this was never built, and the lack of contract awards for the performance-based maintenance (PCR, paras. 45–48).

19. The project delivered the following road civil works outputs: 75 km of roads built to category III standards and an additional 6 km feeder road to At-Bashy, both with an international roughness index of 2 (better than the target of 3). The PCR claimed the project to be effective in achieving outcomes, emphasizing travel time improvements and traffic increases, and of 2.3 million people gaining greater accessibility. However, two outcomes were not achieved. Civil works on the inspection facility were never undertaken due to prolonged negotiations and the government's ultimate decision to locate the complex at a different location with funding from another donor, hence, no time savings were achieved in that place. Furthermore, no performance-based maintenance contracts were registered before 2014.

20. The nonphysical outputs were designed to provide training and develop human resources, as recommended by the transport sector master plan—an industry–university program to improve the transport project management skills of Kyrgyz engineering graduates, including summer internships for students. The indicators associated with the nonphysical component specified at least five internships for university graduates and 10 persons certified as transport professionals. The PCR indicated that the eight students participated in 12 days of lectures, fieldwork, and laboratory sessions covering project planning, engineering design, construction, and supervision. The PCR also acknowledged that no transport professionals were certified (PCR, para. 14). The internship program also did not expose students to months of workflow processes inside MOTC as part of the standard “summer internship” recommended (RRP, para. 18), and this program has been discontinued (PCR, para. 53).

21. While the largest component (75 km road rehabilitation) was completed, it was constructed with a serious fault of frost heave cracks, which had implications for additional construction and enhanced annual maintenance. The initial remedy was the immediate

treatment of the cracks with bitumen, and improved drainage. The expected recurrent damage each winter will require annual monitoring and treatment of the affected segments with bitumen. The PCR indicated that frost heave cracks arose due to technical design that did not account adequately for specific site factors. Country design standards were applied, despite the project alignment's high elevation, presence of frozen soil, and temperature variations.

22. Different outcome and output targets were met in part—the project reduced travel times, and increased traffic, and 2.3 million people now enjoy improved accessibility. However, the average time at the inspection facility did not improve, and the project did not introduce performance-based maintenance contracts. As to outputs, pavement roughness indexes improved, but the inspection facility was not built, the internship program was not as extensive as envisioned, and professional certification did not occur. It must be noted that both the inspection facility and the internship program were identified in the RRP (paras. 17–18) as special features of the project. Also, the project was not able to advance the performance-based contracts associated with it. Given that the outcomes on travel times and road traffic deserve greater weight, this validation assesses the project *effective* in delivering outcomes and outputs.

C. Efficiency of Resource Use in Achieving Outcomes and Outputs

23. The PCR assessed the project *efficient* since the 12.9% recalculated economic internal rate of return (EIRR) exceeded the opportunity cost of capital, even after assuming lower traffic growth estimates than those given in the RRP. The PCR's sensitivity analysis indicated that a 9.8% shortfall in the vehicle operating cost savings would reduce the EIRR to the opportunity cost of capital; however, it did not conduct a sensitivity analysis on maintenance costs or residual values. The derivation of the shadow exchange rate (SERF) factor of 1.029 follows the ERD Technical Note 11.⁹ The PCR's reevaluation, however, did not provide sufficient explanation on the key assumptions.

24. On process efficiency, the project suffered delays in start-up and closure, but there were no cost overruns. The cost of the investment plan was \$62.5 million, including \$10.0 million for contingencies. The project's actual investment cost upon completion was \$61.1 million (97.8% of estimated total costs). The project consumed most of the contingency to provide drainage improvements after cracks emerged in the pavement during cold weather and to accommodate price increases. The actual cost included the additional 6 km road rehabilitation of a feeder road, using \$3.1 million from funds not spent on constructing the inspection facility, and from contingencies (PCR, Appendix 10).

25. The loan and grant were signed in August 2009 and became effective 2 months later. The delay in mobilizing the supervision consultant limited progress until June 2011. Construction moved apace after that, completing the bulk of civil works on the principal 75 km roads by around the middle of 2013, although the corrective actions to the frost heave cracks were not completed until the third quarter of 2014. The executing agency requested the use of the surplus funds to rehabilitate 6 km of a feeder road to At-Bashy town, which ADB approved in May 2013. This subproject eventually required a closing extension from June 2014 to November

⁹ ADB. 2004. *Shadow Exchange Rates for Economic Analysis: Toward Improving Practice at the Asian Development Bank. ERD Technical Notes Series No. 11*. Manila. A more thorough application of the ERD methodology to consider VAT and sales taxes that apply to imports, and to a lesser extent, exports, if the revenue collection data were available, may have produced a higher SERF factor. Drawing on tax rates, and making assumptions about the share of different products exported, a draft recalculation suggests the SERF is equal to 1.1.

2014 to partly address the environmental cleanup of borrow pits. Financial closure occurred on 1 March 2015. The implementation was delayed for 15 months. The completion of the 75 km principal road subproject took 18 months. Civil works on At-Bashy road were completed 4 months after the original schedule. The account was closed 9 months behind the original schedule, 5 months after the extension. The project, however, did not have any cost overruns. Despite these implementation process issues, since the estimated EIRR is above 12%, this validation assesses the project *efficient*.

D. Preliminary Assessment of Sustainability

26. The PCR rated the project *less than likely sustainable* due to the uncertainty of adequate maintenance funding. The PCR also pointed to the discontinued training of university students. The PCR's assessment on project sustainability did not raise the issue on the lack of progress in creating performance-based contracts or the lack of certification of transport professionals. Although the project expects economic benefits from enhanced tourism and from increased trade in agriculture and mineral resources in the medium to long term (RRP, para. 39), the project does not envisage generating revenues, so neither financial internal rate of returns nor financial analyses appear in either the RRP or the PCR.

27. The government's national road maintenance budget allocations are less than half the required amount, may decrease in dollar terms over time, and may suffer from a volatile and unpredictable national budget allocation process.¹⁰ The Road Fund created in 1998 made little progress in establishing an independent cost-recovery mechanism.¹¹ Since there is a need to continue maintenance funding over the long term, it is encouraging to learn that recent budget allocations for the Bishkek–Naryn–Torugart corridor appear sufficient, and MOTC has established a project corridor maintenance unit.

28. Although some training was provided, the effort was less than envisaged at appraisal. As the PCR noted, it has not been continued (PCR, para. 53). More appropriate capacity building is needed for the road sectors' sustainability. Given this, despite the recent initiatives to increase maintenance funding for the project's larger corridor, this validation assesses the project *less than likely sustainable*.

E. Impact

29. The impact indicators found in the DMF were (i) an increase in freight movement through Torugart between the PRC and the Kyrgyz Republic, from 300,000 tons in 2008 to 400,000 tons by 2015; and (ii) a decline in the level of extreme poverty in the project impact area, from 25% in 2007 to 20% by 2015 (RRP, Appendix 1).

30. The PCR rated the project impact *significant* citing the achievement of DMF targets. The project performance management system (PPMS) provided DMF measures. The project did not involve land acquisition or resettlement and there were no substantial environmental impacts. Freight movement in 2012 already exceeded the 2015 target, suggesting a low bar setting under the DMF. The PCR mission surveyed individuals in At-Bashy town, and the responses were positive in terms of construction impacts, safety, and incomes and livelihoods.

¹⁰ ADB. 2013. *Country Partnership Strategy: Kyrgyz Republic, 2013–2017*. Manila.

¹¹ ADB. 2010. *Project Evaluation Report: Road Rehabilitation Project, Second Road Rehabilitation Project, and Third Road Rehabilitation Project in Kyrgyz Republic*. Manila. See also the RRP, Appendix 2, para.9.

31. Unanticipated impacts occurred, but most (dust, poor work camp conditions, erosion, insufficient warning signs, removal of plant, reinstatement of borrow pits, and civil works blocking access to homes) were swiftly mitigated, due in part to ADB interventions to enforce safeguards and to provide training to IPIG environmental staff. Overall, these do not alter the larger impacts. Later, it was learned that a cattle was trapped and found dying in drainage works undertaken to repair frost heave cracks. The adequacy of resolving this unanticipated impact is not known).

32. This validation has questions on the poverty indicators used in the PCR's DMF. The cited poverty impacts in the PCR use measures (extreme poverty in the Naryn Oblast reduced from 12.8% in 2007 to 4.9% in 2013) that did not correspond to the poverty indicators used in the RRP's DMF (extreme poverty at the project impact area to be reduced from 25% to 20% during 2007–2013). On balance, this validation concurs with the PCR rating and assesses the project impact *satisfactory*.¹²

III. OTHER PERFORMANCE ASSESSMENTS

A. Performance of the Borrower and Executing Agency

33. The PCR rated the performance of the borrower and the executing agency *satisfactory*. The PCR stated that the project complied with 19 of the 20 covenants specified in the project agreements, and partly complied with the remaining covenant related to counterpart funding (PCR, paras. 27–28). Counterpart funding for contractor payments experienced slippage, but the government addressed this issue before project completion. However, the executing agency and IPIG did not adequately deliver on some actions to support the project, such as (i) communications with the Customs Service; and (ii) compliance with some covenants without delays and pressure from ADB, including the temporary deactivation of the grievance redress mechanism under public consultation, environmental safeguards, performance monitoring, and counterpart funding. Underperformance on the nonphysical component and its subsequent discontinuation were noted, such as internships that were shorter than anticipated, and lack of certification for the ministry professionals. These were shortcomings that are, perhaps, symptomatic of the lack of appreciation for capacity building needs. Notwithstanding these shortfalls and delays in counterpart funding, monitoring, and repeated ADB intervention to enforce safeguards, this validation assesses the borrower and the executing agency performance *satisfactory*.

B. Performance of the Asian Development Bank

34. The PCR rated the performance of ADB *satisfactory* based on assistance provided in implementation and safeguards. ADB was decisive in using notifications to halt the project to enforce compliance with covenants, instituting the grievance redress mechanism, demanding the submission of environmental management reports and the PPMS, mobilizing counterpart funds, and perhaps the most important, issuing a warning to stop the project unless corrective actions were taken to address environmental damage. It also applied pressure on the US-based consulting firm to mobilize the supervisory consultant. ADB also provided training on safeguards. Although these actions were, in many cases, reactive and could have been more effective if taken earlier, the results were effective and satisfactory.

¹² Beginning May 2016, IED adopts the ratings terminology of the April 2016 Guidelines for the Evaluation of Public Sector Operations on development impacts. In this terminology, a *less than satisfactory* rating coincides with the *moderate* rating that was used before

35. ADB may share some responsibility with regard to the frost heave cracking. It is surprising that the problem was not foreseen, as ADB has been involved in the Central Asian region now for about 2 decades and has financed the construction of a number of roads in the region, including in the Kyrgyz Republic. It should have been able to anticipate the problem and factor it in the project design. Moreover, the construction company should also have been familiar with the impact of climate on roads in cold regions. In any case, once the frost heave cracks emerged, ADB was able to mobilize an international expert in the field who identified the problem and recommended corrective measures. Overall, this validation rates the performance of ADB *satisfactory*.

IV. OVERALL ASSESSMENT, LESSONS, AND RECOMMENDATIONS

A. Overall Assessment and Ratings

36. The PCR rated the overall performance of the project *successful* based on the project's relevance, effectiveness, and efficiency. This validation also rates the project *successful*. It rated the project *effective* considering the achievement of the main outcome indicators—increased traffic and reduced travel times. It agreed with the PCR's rating on project efficiency based on the EIRR calculations although these were based on optimistic assumptions. Although the PCR's impressive measure of poverty reduction in the Naryn Oblast does not match those cited for the RRP's impact area, the swift enforcement of safeguards, and demands for actions to conform to covenants, indicate that on balance, the project's impact was *satisfactory*.

Overall Ratings

Criteria	PCR	IED Review	Reason for Disagreement and/or Comments
Relevance	Relevant	Relevant	
Effectiveness in achieving outcome	Effective	Effective	
Efficiency in achieving outcome and outputs	Efficient	Efficient	
Preliminary assessment of sustainability	Less than likely sustainable	Less than likely sustainable	
Overall assessment	Successful	Successful	
Impact	Significant	Satisfactory	
Borrower and executing agency	Satisfactory	Satisfactory	
Performance of ADB	Satisfactory	Satisfactory	
Quality of PCR		Satisfactory	Refer to para. 40

ADB = Asian Development Bank, IED = Independent Evaluation Department, PCR = project completion report.

Note: This report uses the ratings terminology of the April 2016 Guidelines for the Evaluation of Public Sector Operations.

Source: ADB Independent Evaluation Department.

B. Lessons

37. The PCR provided eight lessons specific to various implementation shortcomings. This validation provides one general observation on the project management capacity requirements. MOTC and IPIG were effective in delivering the purely physical side of the project—the 75 km road civil works being completed within budget and the project's closing date being extended to rehabilitate an additional 6 km village road using unutilized funds. However, the executing

agency was not fully appreciative of the broader project design, including the nonphysical outputs and the importance of environmental safeguards, consultation, and monitoring. Greater project management capacity is, therefore, necessary.

C. Recommendations for Follow-Up

38. The PCR offered four recommendations: (i) revise road design standards, (ii) conduct the project performance evaluation report in 2018, (iii) undertake strategic planning to increase resources and capacity to support road maintenance, and (iv) implement a continued internship program in future years. This validation concurs with these recommendations, with modification on item (iv) to include a full summer internship program that provides students on-the-job exposure to project management work flow. In addition, a more extensive training for existing staff in safeguards and other aspects of project management can also be considered.

V. OTHER CONSIDERATIONS AND FOLLOW-UP

A. Monitoring and Evaluation Design, Implementation, and Utilization

39. The monitoring and evaluation framework is less than satisfactory. It is not clear if the executing agency produced anything more than annual reports. The DMF had a number of shortcomings. The freight target was set very low (traffic exceeded the target before the road was complete). The people with increased accessibility only measured population growth in four oblasts, not the project road outcomes. The DMF appearing in the PCR substituted a poverty indicator based on consumption, rather than on income, as indicated in the RRP. The PPMS measured travel time between points located beyond the project alignment, and this left open the question of travel times between Naryn and Torugart. It also measured poverty in At-Bashy Rayon (i.e., At-Bashy district), not the entire project impact area.

B. Comments on Project Completion Report Quality

40. The PCR is concise and has extensive supporting appendices. It is consistent with the PCR guidelines, with the exception of the lessons learned, which focused on specific project events rather than on major issues. The social survey methodology was reasonable. The evidence is adequate to support the majority of the ratings. The PCR should have provided the rationale for the figures assumed for maintenance costs and the residual value assumed in the calculation of EIRR. Overall, this validation rates the PCR quality *satisfactory*.

C. Data Sources for Validation

41. Data sources supporting this validation include the RRP; PCR; grant and/or loan review missions reports and aide memoire; safeguard review mission reports; project administration memoranda; financing agreement and project performance monitoring reports; the JCSS of ADB; the Kyrgyz Country Development Strategy, 2007–2010; and CAREC transport strategy papers.

D. Recommendation for Independent Evaluation Department Follow-Up

42. There is no need for further follow-up by the Independent Evaluation Department, although there are a few gaps in the existing information. A study providing some illumination of

the economic analysis would be useful. A study of capacity gaps in maintenance management and safeguards, and possible improvements, may also be useful.