

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

Project Number: 48186-005 June 2018

Proposed Loan and Technical Assistance Grant Mongolia: Regional Road Development and Maintenance Project

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Asian Development Bank

#### **CURRENCY EQUIVALENTS**

(as of 4 May 2018)

| Currency unit<br>MNT1.00<br>\$1.00 |               | <ul> <li>togrog (MNT)</li> <li>\$0.0004165</li> <li>MNT2,401.00</li> </ul> |  |  |  |
|------------------------------------|---------------|--|--|--|--|
|                                    | ABBREVIATIONS |  |  |  |  |
| ADB                                | _             | Asian Development Bank   |  |  |  |
| CAREC                              | _             | Central Asia Regional Economic Cooperation                                 |  |  |  |
| GNI                                | _             | gross national income  |  |  |  |
| GRM –                              |               | grievance redress mechanism  |  |  |  |
| km –                               |               | kilometer  |  |  |  |
| MRTD                               | _             | Ministry of Road and Transport Development                                 |  |  |  |
| PAM                                | _             | project administration manual  |  |  |  |
| PIU                                | _             | project implementation unit  |  |  |  |
| PRC                                | _             | People's Republic of China   |  |  |  |
| RAM                                | _             | road asset management  |  |  |  |
| ROW                                | _             | right-of-way   |  |  |  |
| ТА                                 | _             | technical assistance   |  |  |  |

#### NOTE

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

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## **PROJECT AT A GLANCE**

| 1. | Basic Data  |  |                                | Project Number: 48186-005                                    |  |
|----|---|--|--------------------------------|--|--|
|    | Project Name  | Regional Road Development and<br>Maintenance Project   | Department<br>/Division        | EARD/EATC  |  |
|    | Country<br>Borrower   | Mongolia<br>Ministry of Finance  | Executing Agency               | Ministry of Road and<br>Transport Development of<br>Mongolia |  |
|    | Sector  | Subsector(s)   |                                | ADB Financing (\$ million)                                   |  |
| 1  | Transport   | Road transport (non-urban)   |                                | 60.00  |  |
|    |   |  | Total                          | 60.00  |  |
| 3. | Strategic Agenda  | Subcomponents  | Climate Change Info            |  |  |
|    | Inclusive economic growth<br>(IEG)<br>Environmentally sustainable<br>growth (ESG)<br>Regional integration (RCI)                               | Pillar 2: Access to economic<br>opportunities, including jobs, made<br>more inclusive<br>Disaster risk management<br>Natural resources conservation<br>Pillar 1: Cross-border infrastructure | Climate Change impa<br>Project | ct on the Low  |  |
| 4. | Drivers of Change   | Components   | Gender Equity and M            | lainstreaming  |  |
|    | Governance and capacity<br>development (GCD)<br>Knowledge solutions (KNS)   | Organizational development<br>Knowledge sharing activities   | Effective gender main (EGM)    |  |  |
|    | Partnerships (PAR)<br>Private sector development  | Implementation<br>Private Sector<br>Conducive policy and institutional   |                                |  |  |
|    | (PSD)   | environment  |                                |  |  |
| 5. | Poverty and SDG Targeting   |  | Location Impact                |  |  |
|    | Geographic Targeting<br>Household Targeting<br>SDG Targeting<br>SDG Goals   | No<br>No<br>Yes<br>SDG9  | Nation-wide                    | High   |  |
| 6. | Risk Categorization:  | Low  |                                |  |  |
| 7. | Safeguard Categorization  | Environment: B Involuntary Res   | settlement: B Indigen          | ous Peoples: C   |  |
| 8. | Financing   |  |                                |  |  |
|    | Modality and Sources  |  | Amo                            | ount (\$ million)  |  |
|    | ADB   |  |                                | 60.00  |  |
|    |   | ar Loan): Ordinary capital resources   |                                | 60.00  |  |
|    | Cofinancing   |  |                                | 0.00   |  |
|    | None  |  |                                | 0.00   |  |
|    | Counterpart   |  |                                | 0.60   |  |
|    | Government  |  |                                | 0.60   |  |
|    | Total   |  |                                | 60.60  |  |
|    | Note: An attached technical assistance will be financed on a grant basis by the Technical Assistance Special Fund in the amount of \$700,000. |  |                                |  |  |



### I. THE PROPOSAL

1. I submit for your approval the following report and recommendation on a proposed loan to Mongolia for the Regional Road Development and Maintenance Project. The report also describes proposed technical assistance (TA) for the Regional Road Development and Maintenance Project, and if the Board approves the proposed loan, I, acting under the authority delegated to me by the Board, approve the administration of the TA.

2. Mongolia is a large, sparsely populated country that is highly dependent on a narrow economic base. Rapid development of the mining sector brought economic growth but only limited employment, the critical ingredient of inclusive economic growth. To promote inclusive economic growth and regional economic cooperation and trade, the country needs to develop and make safer its regional road network and its trade and logistics infrastructure to boost agriculture, agribusiness, and tourism. The project will rehabilitate and enhance safety of important regional road corridor sections between Ulaanbaatar and Altanbulag. To improve the sustainability of its transport infrastructure, it will also help the government improve the road asset management (RAM) and road safety capacity.

#### II. THE PROJECT

#### A. Rationale

3. **Strategic context.** Since 1991, the Asian Development Bank (ADB) has been a major partner in the improvement of Mongolia's transport network and has assisted in developing two major highway corridors linking Mongolia to the Russian Federation and the People's Republic of China (PRC).<sup>1</sup> This has brought development, jobs, and social services to those regions; and improved the lives of the poor.

4. Mongolia's economy has grown rapidly, with gross domestic product increasing more than 720% from \$1.27 billion in 2001 to \$10.41 billion in 2011. However, gross domestic product growth fell from 17.3% in 2011 to 5.1% in 2017 because of plummeting foreign direct investment, falling commodity prices, and moderating growth in the PRC. Mongolia urgently needs to restore macroeconomic stability in the short term and to develop a more resilient and diversified economy that can deliver rapid, inclusive, and sustainable growth in the long term. This requires infrastructure investments and regional integration to improve connectivity and access to domestic and external markets.<sup>2</sup>

5. Mongolia's poverty rate is high for a lower middle-income economy.<sup>3</sup> Much of the poverty stems from unemployment, the absence of local markets, and lack of higher education in rural areas. The poor condition of roads aggravates persistent poverty conditions, particularly in rural areas. The rural population has limited access to social services and major markets in the region

<sup>&</sup>lt;sup>1</sup> ADB. 1995. Report and Recommendation of the President to the Board of Directors: Proposed Loan and Technical Assistance Grant to Mongolia for the Roads Development Project. Manila; ADB. 1999. Report and Recommendation of the President to the Board of Directors: Proposed Loan and Technical Assistance Grant to Mongolia for the Second Roads Development Project. Manila; ADB. 2010. Report and Recommendation of the President to the Board of Directors: Proposed Supplementary Loan and Grant to Mongolia for the Regional Road Development Project. Manila; and ADB. 2011. Report and Recommendation of the President to the Board of Directors: Proposed Multitranche Financing Facility to Mongolia for the Western Regional Road Corridor Investment Program. Manila.

<sup>&</sup>lt;sup>2</sup> ADB. 2017. Country Partnership Strategy: Mongolia, 2017–2020—Sustaining Inclusive Growth in a Period of Economic Difficulty. Manila.

<sup>&</sup>lt;sup>3</sup> Middle-income economies have per capita gross national income (GNI) of \$1,006–\$12,235 and lower middle-income economies have per capita GNI of \$1,006–\$3,955. Mongolia's poverty rate at \$1.90 threshold was 0.22 in 2014, and the per capita GNI was \$3,590 in 2016.

and *aimags*.<sup>4</sup> Travel is costly and uncomfortable. Without access to markets, local farmers and herders are forced to sell their products at lower prices.

6. Mongolia has a road network of 48,538 kilometers (km), of which only 6,406 km (13.2%) are paved. Investing in road improvement is particularly important at times of economic difficulty as it delivers four benefits: (i) projects create much-needed jobs to support economic recovery; (ii) better roads reduce road user travel costs and facilitate access to markets, schools, and health facilities, making residents more productive; (iii) modest spending on road maintenance prevents costlier rehabilitation; and (iv) road safety improvements reduce the social cost of traffic accidents.

7. **Sector performance**. The construction, maintenance, and rehabilitation of state roads are funded by the state budget, development banks, and international loans and grants. During 2011–2015, MNT1.88 trillion was invested in the upgrade and construction of roads and bridges. These expenditures were regulated by the Mongolian Road Law, 1998 and funded by the State Road Fund.<sup>5</sup> However, insufficient funds were collected as taxes were often reduced or canceled to keep fuel prices under control amid fuel price increases in the Russian Federation, on which Mongolia depends for much of its fuel.

8. While investment in new road construction has grown, it has not been matched by commensurate increases in road maintenance and rehabilitation. The state budget provides separate annual allocations for routine maintenance and rehabilitation, but the government has not funded any major maintenance or rehabilitation projects in 2011–2015, and the amount allocated to the Ministry of Road and Transport Development (MRTD) for routine maintenance has been constrained to only 15% of estimated needs. Consequently, road maintenance has been insufficient, and the condition of the existing road network has deteriorated, making transport costs expensive and Mongolia's exports uncompetitive.

9. **Asset management**. The country urgently needs to improve its RAM. A previously implemented RAM system is no longer used because of limited funding. Timely road maintenance is less costly than allowing roads to deteriorate and need major rehabilitation or reconstruction—saving money in tight fiscal situations. This requires capacity development and institutional strengthening, significant investment in a periodic maintenance and rehabilitation program, and stronger enforcement of vehicle weight restrictions to prevent costly road damage from overloading.

10. To improve accessibility and optimize government spending, ADB has conducted extended dialogue with the government since 2009 through TA to prepare and implement a sector road map and capacity development strategy, including the provision of a RAM system.<sup>6</sup> TA activities helped the government prioritize work for a periodic maintenance and rehabilitation program. Major lessons from this work included the need for predictable funding and systematic asset management practices.

<sup>&</sup>lt;sup>4</sup> Provincial administrative unit in Mongolia.

<sup>&</sup>lt;sup>5</sup> The road fund was established through a 1991 government decree to help stabilize the funding available to the road sector. In 1998, the Road Law distinguished between the state road fund and local road funds. Further information on fund revenue and spending is provided in Sector Assessment (Summary): Transport; and Financial Analysis (accessible from the list of linked documents in Appendix 2).

<sup>&</sup>lt;sup>6</sup> ADB. 2009. *Technical Assistance to Mongolia for Road Database Development Using Geographic Information System*. Manila; and ADB. Mongolia: Preparation of a National Road Sector Capacity Development Roadmap. <u>https://www.adb.org/projects/44303-012/main</u> (the Government of Mongolia approved the road map on 24 August 2011); and ADB. 2011. *Technical Assistance to Mongolia for Road Sector Capacity Development*. Manila (\$2 million financed on a grant basis by the Japan Fund for Poverty Reduction).

11. Partly as an outcome of ADB policy dialogue, the government passed the Mongolian Road Law Amendment, 2017, which ensures that at least 20% of revenues from the vehicle excise tax are allocated to road maintenance. This would add about MNT7 billion to the road fund each year.<sup>7</sup> Significantly higher fines and penalties, including for truck overloading, will also go into the road fund. Unlike in the past, the fund is only for road maintenance and not for new road construction. The amendment is an important policy change that the project will support.

12. **Road safety**. Lack of road maintenance amid rapidly increasing passenger car ownership has an immediate impact on road safety and the social cost of traffic fatalities and injuries. Mongolia has a relatively high road traffic death rate of 21.0 per 100,000 population annually while the global rate is 17.4 and the rate for middle-income economies is 18.4.<sup>8</sup> Under the Central Asia Regional Economic Cooperation (CAREC) program, ADB has supported the development of a road safety strategy that aims to reduce fatalities on CAREC corridors by 50% by 2030, against 2010 levels.<sup>9</sup> ADB also assists the government in developing a national road safety policy and action plan covering three road safety elements: (i) culture and behavior; (ii) engineering, both in design and maintenance, including winter activities such as snow control and deicing; and (iii) education, including traffic safety awareness, driving skills, and traffic rules.<sup>10</sup> The project will help Mongolia implement the action plan by adopting international best practices.

13. Value added by ADB assistance. Previous TA (footnote 6) laid a foundation to support better planning and prioritization of asset management and to improve road maintenance funding as introduced in the Mongolian Road Law Amendment, 2017. The project will help the government implement its maintenance program through enhancement of law implementation procedures and adoption of an improved RAM system. It will also introduce climbing lanes at traffic accident blackspots to avoid fatal head-on collisions. The attached TA will provide government agencies with extensive training on RAM and road safety improvement. The project will provide institutional strengthening to (i) ensure maintenance companies, and (iii) introduce performance-based road maintenance schemes. It will integrate road safety design and new maintenance technologies and will address vehicle overloading.

14. **Link to country partnership and government strategies.** The project is well aligned with Mongolia's national action plan, 2016–2020,<sup>11</sup> as it will take measures to strengthen and raise the quality of road maintenance and gradually increase maintenance funding. It is consistent with ADB's country partnership strategy, 2017–2020 for Mongolia, which indicates improvement of physical connectivity as a priority activity under the second pillar of the strategy (footnote 2). The project will reduce transport and logistics cost on CAREC Corridor 4b, enhancing the competitiveness of Mongolia's non-mining exports.

<sup>&</sup>lt;sup>7</sup> The State Great Hural (Parliament) of Mongolia. <u>http://www.parliament.mn/n/xroy</u>. The law also provides for an increase in vehicle excise tax rates by 5% to 15%, depending on engine size and vehicle age.

<sup>&</sup>lt;sup>8</sup> World Health Organization. 2015. *Global Status Report on Road Safety, 2015*. Geneva.

<sup>&</sup>lt;sup>9</sup> ADB. 2017. Safely Connected: A Regional Road Safety Strategy for CAREC Countries, 2017–2030. Manila.

<sup>&</sup>lt;sup>10</sup> ADB. 2016. *Technical Assistance to Mongolia for the Development of a Road Safety Policy and Action Plan.* Manila. <sup>11</sup> Government of Mongolia. 2016. *Action Program of the Government of Mongolia for 2016–2020*. Ulaanbaatar.

#### B. Impact and Outcome

15. The project is aligned with the following impact: inclusive economic growth promoted by enhanced local, regional, and international connectivity in Mongolia.<sup>12</sup> The project outcome will be efficiency and safety of road transport within the project area and between countries improved.<sup>13</sup>

#### C. Outputs

16. **Output 1: Road asset management capacity improved.** This output will strengthen sustainable road maintenance practices and build capacity for the implementation of maintenance projects prepared and procured during the project. Capacity-building activities will include (i) reestablishing and providing training on the RAM system to improve maintenance planning, implementation, and prioritization;<sup>14</sup> (ii) designing improvements in road funding to ensure the sustainability of maintenance activities, including measures to prevent vehicle overloading; and (iii) supporting pilot performance-based maintenance. This output will be delivered partly through attached TA and partly with output 2.

17. **Output 2: Road condition improved.** This output will preserve and improve important regional road sections that link the PRC and the Russian Federation through Mongolia's capital and comprises part of CAREC Corridor 4b. The project will improve 311 km of existing national highway sections comprising Ulaanbaatar–Darkhan (193 km) and Darkhan–Altanbulag (118 km). Improvement works will include (i) pavement treatment and (ii) widening of carriageways and shoulders within the existing right-of-way (ROW).

18. **Output 3: Road safety improved**. This output will provide capacity development in road safety policies and the implementation of safety features in the road condition improvement works undertaken with output 2. Safety features will include improvements in road markings, barriers, and guide posts. Climbing lanes will be constructed within the ROW at traffic accident blackspots, where overtaking of slow-moving vehicles often causes fatal head-on collisions. Independent road safety audits will be conducted on detailed designs, as well as a post-construction audit.

#### D. Summary Cost Estimates and Financing Plan

19. The project is estimated to cost \$60.6 million (Table 1). Detailed cost estimates by expenditure category and by financier are included in the project administration manual (PAM).<sup>15</sup>

<sup>&</sup>lt;sup>12</sup> This project-related impact statement aligns with the Mongolian national action plan's strategy to develop a road, transportation, and logistical network that sustains economic growth, is consistent with social needs and demands, and provides safe and comfortable services (footnote 11).

<sup>&</sup>lt;sup>13</sup> The design and monitoring framework is in Appendix 1.

<sup>&</sup>lt;sup>14</sup> A team of experts under the attached TA will assess the use of equipment and planning tools provided in 2010 under ADB. 2009. *Technical Assistance to Mongolia for Road Database Development Using Geographic Information System*. Manila.

<sup>&</sup>lt;sup>15</sup> Project Administration Manual (accessible from the list of linked documents in Appendix 2).

## Table 1: Summary Cost Estimates

| tem   | Amount |
|---|--------|
| A. Base Cost <sup>b</sup>                               |        |
| 1. Output 1   | 6.3    |
| 2. Output 2   | 21.4   |
| 3. Output 3   | 22.8   |
| Subtotal (A)  | 50.5   |
| 3. Contingencies <sup>c</sup>                           | 6.3    |
| D. Financial Charges During Implementation <sup>d</sup> | 3.8    |
| Total (A+B+C+D)   | 60.6   |

ADB = Asian Development Bank, OCR = ordinary capital resources, US = United States.

. .

<sup>a</sup> Includes taxes and duties of \$3.77 million to be financed from ADB loan resources. Such amount does not represent an excessive share of the project cost.

<sup>b</sup> In mid-2018 prices as of 15 March 2018.

<sup>c</sup> Physical contingencies computed at 10.0% for civil works; and 5% for field research and development, training, surveys, and studies. Price contingencies computed at average of 42% on foreign exchange costs and 58% on local currency costs; includes provision for potential exchange rate fluctuation under the assumption of a purchasing power parity exchange rate.

<sup>d</sup> Interest during construction for the OCR loan has been computed at the 5-year US dollar fixed swap rate plus an effective contractual spread of 0.50% and maturity premium of 0.20%. Commitment charges for the OCR loan are 0.15% per year to be charged on the undisbursed loan amount.

Source: Asian Development Bank estimates.

20. The government has requested a regular loan of \$60 million from ADB's ordinary capital resources to help finance the project. The loan will have a 25-year term, including a grace period of 8 years; an annual interest rate determined in accordance with ADB's London interbank offered rate (LIBOR)-based lending facility; a commitment charge of 0.15% per year (the interest and other charges during construction to be capitalized in the loan); and such other terms and conditions set forth in the draft loan agreement. Based on the straight-line method, the average maturity is 16.75 years, and the maturity premium payable to ADB is 0.20% per year.

21. The borrower, the Government of Mongolia, will help finance the project and will assume the foreign exchange and interest variation risks of the ADB loan. ADB will finance 99% of the project cost, including the expenditures in relation to works and consulting services. The government will finance \$0.6 million for project implementation. The summary financing plan is in Table 2.

| Source                                    | Amount<br>(\$ million) | Share of Tota |
|---|------------------------|---------------|
| Asian Development Bank                    |                        |               |
| Ordinary capital resources (regular loan) | 60.0                   | 99.0          |
| Government                                | 0.6                    | 1.0           |
| Total                                     | 60.6                   | 100.0         |

Source: Asian Development Bank.

#### E. Implementation Arrangements

22. The executing agency, the MRTD, will form a steering committee to be chaired by the State Secretary of the MRTD, comprising representatives from the MRTD, the Ministry of Finance, the Ministry of Environment and Tourism, and relevant state agencies.<sup>16</sup> Project implementation

<sup>&</sup>lt;sup>16</sup> If the ongoing government restructuring affects ministerial responsibilities for roads and other aspects of the project implementation arrangements, they will be updated accordingly.

unit (PIU) staff will be recruited and established by the MRTD and will report to the executing agency.

23. The project will be implemented from 2019 to 2025. The MRTD started recruiting and appointing PIU staff in May 2018. Draft terms of reference and cost estimates were agreed in the loan fact-finding mission in March 2018 and are included in the PAM. The implementation arrangements are summarized in Table 3 and described in detail in the PAM.

| Table 3: Implementation Arrangements   |   |                        |                       |  |
|--|---|------------------------|-----------------------|--|
| Aspects  | Arrangements  |                        |                       |  |
| Implementation period  | January 2019–December 2025  |                        |                       |  |
| Estimated completion date  | 31 December 2025  |                        |                       |  |
| Estimated loan closing date  | 30 June 2026  |                        |                       |  |
| Management   |   |                        |                       |  |
| (i) Oversight body<br>Project steering committee<br>State Secretary, MRTD (chair)<br>Representatives from the MRTD, the Ministry of Finance, the Ministry of<br>Environment and Tourism, and relevant state agencies (members) |   |                        |                       |  |
| (ii) Executing agency  | MRTD  | MRTD                   |                       |  |
| (iii) Key implementing agencies  | Road Policy Implementation  | on and Coordination De | epartment of the MRTD |  |
| (iv) Implementation unit   | Project implementation un   | it appointed by the MR | TD, 8 staff           |  |
| Procurement (ADB-financed<br>contract packages)  | International competitive bidding   | 2 contracts            | \$44.0 million        |  |
|  | National competitive<br>bidding   | 1 contract             | \$4.0 million         |  |
| Consulting services  | Quality- and cost-based selection (90:10)   | 422 person-month       | ns \$3.5 million      |  |
| Retroactive financing and/or   | Advance contracting is proposed for consulting services and civil works.  |                        |                       |  |
| advance contracting  |   |                        |                       |  |
| Disbursement   | The loan proceeds will be disbursed following ADB's <i>Loan Disbursement Handbook</i> (2017, as amended from time to time) and detailed arrangements agreed between the government and ADB. |                        |                       |  |

| Table 3: Implementation Arrangements |  |
|--------------------------------------|--|
|--------------------------------------|--|

ADB = Asian Development Bank, MRTD = Ministry of Road and Transport Development. Source: Asian Development Bank.

#### III. ATTACHED TECHNICAL ASSISTANCE

24. The proposed TA will assist the MRTD in addressing the incomplete regulatory framework, lack of sustainability of the road asset, and lack of private sector participation by (i) recommending suitable and implementable frameworks for RAM systems, (ii) reviewing and enhancing the law implementation procedures, and (iii) providing start-up support in adopting the improved RAM system and introducing a road board for effectively managing the road assets.<sup>17</sup> The TA will supplement planned assistance under the loan project, which will provide soft and hard measures on road maintenance, rehabilitation, and safety.

25. The TA is estimated to cost \$730,000, of which \$700,000 will be financed on a grant basis by ADB's Technical Assistance Special Fund (TASF 6). The government will provide counterpart support in the form of office accommodation, support facilities, counterpart staff, reports, and other logistical support through in-kind contributions. ADB will engage an international consulting firm and a national individual consultant following the ADB Procurement Policy (2017, as amended from time to time) and its associated project administration instructions and/or staff instructions. It will use the 90:10 quality- and cost-based selection method because of the highly specialized knowledge required for the assignment.

<sup>&</sup>lt;sup>17</sup> Attached Technical Assistance Report (accessible from the list of linked documents in Appendix 2).

#### IV. DUE DILIGENCE

## A. Technical

26. The assessment determined rehabilitation and maintenance needs, including constructing climbing lanes and widening carriageways and shoulders to the Mongolian Class I-G standard to increase road capacity and safety.<sup>18</sup> The project components are expected to improve the conditions of the road from Ulaanbaatar to Altanbulag (the sections with some of the highest traffic), which would bring CAREC Corridor 4b back to adequate technical standards and increase capacity and safety levels at critical sections.

27. As part of the capacity-building activities, the project will review road fund mechanisms and develop suggestions to improve the State Road Fund's management, revenue sources, and fund allocation control. The result should bring the road fund to a level that permits ongoing routine and periodic maintenance. The project will also reestablish and repopulate the RAM system and train a dedicated RAM operations unit. The ongoing use of the RAM system must be supported by adequate funding levels.

28. The lack of routine and periodic maintenance funding constrained the operations of the 20 state-owned and eight private maintenance companies tasked to perform routine maintenance. Domestic construction companies also suffered in 2012–2017 because of limited funding. Foreign contractors won most construction projects during the period because they are more efficient and local contractors have difficulty in meeting qualification criteria. Domestic contractors tend not to participate in joint ventures, which would allow them to be more competitive with foreign firms. While some consolidation could result in increased efficiencies, it is premature in the current fiscal environment.

29. Full introduction of standard performance-based contracts is not appropriate in the current situation because the sector lacks the experience and the capacity to serve longer-term service commitments. However, a form of performance-based contract will be pilot tested in civil works contracts by adding an extended defect liability period of 3 years, with the contractor responsible for the road section for a 5-year period.

#### B. Economic and Financial

30. The project is economically viable, with an estimated economic internal rate of return of 60.7% for all the sections combined. The project's economic benefits include increased road safety and savings in vehicle operating costs and time. The project will also generate unquantifiable benefits related to improved accessibility. A sensitivity analysis of potential cost overruns and benefit reductions demonstrates that the project's economic viability is robust.<sup>19</sup>

31. Given the country's current economic difficulties and possible restriction on government spending, counterpart funding is limited to 1% of the total project cost. The project has no revenue-generating components. It is financially sustainable based on the assessment of the project's fiscal impact on the MRTD's projected budget. While MRTD's financial capacity is very limited, the Mongolian Road Law Amendment, 2017 should result in a gradually increasing and more stable funding source for road maintenance. Improved RAM, including implementing adequate

<sup>&</sup>lt;sup>18</sup> The Mongolian Class I-G standard requires a two-lane carriageway with each lane 3.5-meter wide and an 8.5-meter pavement.

<sup>&</sup>lt;sup>19</sup> Economic Analysis (accessible from the list of documents in Appendix 2).

maintenance funding mechanisms, will be an objective of the project's capacity development outputs.

### C. Governance

32. The financial management assessment concluded that the financial management risk is *moderate* before mitigation measures. Although the MRTD has experience in ADB implementation, the financial management assessment recommended that it should strengthen its financial management capacity by undertaking training on ADB financial management guidelines and disbursement requirements, policies, and procedures. The MRTD will also recruit new financial management staff for the project to mitigate implementation, compliance, and foreign exchange and interest rate risks. Detailed mitigation measures are described in Table 4 and in the PAM.

33. ADB's Anticorruption Policy (1998, as amended to date) was explained to and discussed with the government and the MRTD. The specific policy requirements and supplementary measures are described in the PAM. Relevant sections of ADB's Anticorruption Policy will be included in all procurement documents and contracts.

## D. Poverty, Social, and Gender

34. The national poverty rate fell from 38.7% in 2010 to 27.4% in 2012 and 21.6% in 2014.<sup>20</sup> Lack of higher education and unemployment are key issues in rural areas. Out of 102 households surveyed in the rural areas, 58% spend MNT1 million–MNT3 million per year on education. Since most rural areas do not offer higher education, people from these places continue their education in urban areas, where they rent rooms because of the lack of good transport.

35. Project beneficiaries, comprising about 301,000 residents at target *aimags*, will receive improved, low-cost, and safe transportation. The project will provide better access to markets and basic services such as education and health, reducing annual expenditures and improving the quality of life of residents. The strategic location of the project sites, along the border between Mongolia and the Russian Federation, offers more opportunities for local development in trade and agriculture. The project is classified *effective gender mainstreaming* following the ADB gender categorization. The gender action plan will ensure equal participation and benefits.<sup>21</sup> It requires that women comprise at least 50% of participants to community and household consultation meetings on project construction activities. Training on small businesses and income generation methods along the corridor will be conducted with at least 50% women participation. Prevention measures in the gender action plan will address the likely impact from HIV/AIDS, sexually transmitted infections, and trafficking that women could face during the construction period.

#### E. Safeguards

36. In compliance with ADB's Safeguard Policy Statement (2009), the project's safeguard categories are as follows.

37. **Environment (category B).** The initial environmental examination complies with ADB policies and requirements, including the Safeguard Policy Statement.<sup>22</sup> It identifies potential

<sup>&</sup>lt;sup>20</sup> ADB. Basic Statistics 2017. <u>https://www.adb.org/publications/basic-statistics-2017</u>.

<sup>&</sup>lt;sup>21</sup> Gender Action Plan (accessible from the list of linked documents in Appendix 2).

<sup>&</sup>lt;sup>22</sup> Initial Environmental Examination (accessible from the list of linked documents in Appendix 2).

adverse impacts, mainly during construction, such as dust and air quality during asphalt surfacing, which can be adequately mitigated. Meaningful public consultation was done following the Safeguard Policy Statement. The MRTD is committed to implementing the environmental management plan of the project and the project-specific grievance redress mechanism (GRM). The initial climate risk is *low*. The MRTD will establish a PIU, which will be responsible for carrying out the environmental management plan, environmental monitoring and reporting, and GRM of the project. The PIU will have a full-time environmental officer and qualified loan implementation environmental consultants. The consultants will also provide capacity development training to the MRTD, PIU, and project contractors. The initial environmental examination has been prepared and posted on the ADB website.

38. **Involuntary resettlement (category B).** A due diligence report prepared for outputs 2 and 3 confirmed that the project has no land acquisition or resettlement impacts, as all the related works are limited to the existing ROW. The contractor will mitigate all construction-related impacts. A resettlement framework has been prepared, following the Safeguard Policy Statement and national laws and regulations, to guide the preparation of resettlement plans and to ensure project impacts remain within *category B* or *C*. The resettlement framework was posted on the ADB website on 9 June 2017.<sup>23</sup> The MRTD is committed to implement the resettlement framework and prepare a resettlement plan, when required. The GRM has been agreed with the MRTD and is included in the resettlement framework.

39. **Indigenous peoples (category C).** Due diligence found no ethnic minorities affected by the project. The three project *aimags* do not have any separate ethnic minority as defined by the Safeguard Policy Statement.

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

40. The overall benefits and impacts are expected to outweigh the costs and risks, and the overall risk after mitigation measures is *low*. Significant risks and mitigating measures are summarized in Table 4 and described in detail in the risk assessment and risk management plan.<sup>24</sup> The loan agreement contains assurances on operation and maintenance budget provision.

| Risks   | Mitigation Measures  |
|---|--|
| Government faces political and financial                                  | The MRTD and/or the MOF will provide assurances to increase the  |
| pressures in the adoption of sustainable road maintenance and maintenance | O&M budget provision, as this is a priority project in the road sector.  |
|   |  |
| funding concepts.   | ADB will continue policy dialogue and long-term engagement of all decision makers in policy reform, including discussions on the   |
|   | International Monetary Fund's Extended Fund Facility program.  |
|   | The MRTD will ensure that the counterpart funds are available and  |
|   | included in the state budget. The Government of Mongolia has   |
|   | identified the project as a priority in the road sector, as confirmed by   |
|   | the MOF and the MRTD in a memorandum of understanding with ADB.  |
| Newly recruited PIU staff with limited                                    | The MRTD will appoint suitable staff.  |
| knowledge of ADB procedures and O&M                                       |  |
| requirements may lead to implementation                                   | ADB and consultants will provide institutional development and   |
| delay.  | capacity-building support for O&M-related training on the RAM system<br>and will improve maintenance planning, prioritization, and |
|   | implementation.  |

#### Table 4: Summary of Risks and Mitigating Measures

<sup>&</sup>lt;sup>23</sup> Resettlement Framework (accessible from the list of linked documents in Appendix 2).

<sup>&</sup>lt;sup>24</sup> Risk Assessment and Risk Management Plan (accessible from the list of linked documents in Appendix 2).

| Risks   | Mitigation Measures  |
|---|--|
| The PIU might lack skills in appropriate<br>accounting software and systems for<br>contract management and contractor<br>payments and might continue the practice<br>of not ensuring adequate on- and off-site<br>data storage. | The PIU will use computerized accounting software. It is recommended<br>that the MRTD and the PIU should back up their project data through<br>the National Data Center. |

ADB = Asian Development Bank, MOF = Ministry of Finance, MRTD = Ministry of Road and Transport Development, O&M = operation and maintenance, PIU = project implementation unit, RAM = road asset management. Source: Asian Development Bank.

#### V. ASSURANCES

41. The government and the MRTD 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.

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

#### VI. RECOMMENDATION

43. 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 \$60,000,000 to Mongolia for the Regional Road Development and Maintenance Project, from ADB's ordinary capital resources, in regular terms, with interest to be determined in accordance with ADB's London interbank offered rate (LIBOR)-based lending facility; for a term of 25 years, including a grace period of 8 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

6 June 2018

## **DESIGN AND MONITORING FRAMEWORK**

Impact the Project is Aligned with Inclusive economic growth promoted by enhanced local, regional, and international connectivity in Mongolia (Action Program of the Government of Mongolia for 2016–2020)<sup>a</sup>

|   | Performance Indicators with   | Data Sources and                              |  |
|---|---|---|--|
| Results Chain   | Targets and Baselines   | Reporting Mechanisms                          | Risks  |
| Outcome<br>Efficiency and safety of<br>road transport within<br>the project area and<br>between countries | By 2030<br>a. Average vehicle travel time<br>from Ulaanbaatar to Altanbulag<br>reduced by at least 10%<br>(2016 baseline: 300 minutes)  | a. Project progress and<br>completion reports | Government faces<br>unexpected political and<br>financial barriers in the<br>adoption of sustainable |
| improved  | b. Traffic accidents reduced by<br>15% in 3 project <i>aimags</i> <sup>b</sup><br>(2017 baseline: 75 deaths and<br>191 injured)   | b. National police<br>statistics              | road maintenance and<br>maintenance funding<br>concepts.   |
| Outputs<br>1. RAM capacity<br>improved  | By 2025<br>1a. RAM system established<br>(2017 baseline: no system in<br>place)   | 1a. MRTD annual road maintenance report       | Newly recruited PIU staff<br>with limited knowledge of<br>ADB procedures and<br>O&M requirements may |
|   | 1b. At least 30 staff including at<br>least 50% women who attended<br>training report improved skills on<br>RAM (2017 baseline: 0 and not<br>applicable)                                  | 1b. PIU's quarterly<br>progress reports       | lead to implementation delay.  |
| 2. Road condition<br>improved   | 2a. The 311 km Ulaanbaatar–<br>Altanbulag road section<br>rehabilitated to good condition or<br>international roughness index of 4<br>or below<br>(2017 baseline: 0 km)                   | 2a. PIU's quarterly progress reports          |  |
|   | 2b. 400 people, of which at least<br>50% women, participated in<br>training on small businesses and<br>income generation methods (2017<br>baseline: 0 and not applicable)                 | 2b. PIU's quarterly<br>progress reports       |  |
| 3. Road safety<br>improved  | 3a. Road safety facility including<br>road markings, barriers, and guide<br>posts rehabilitated or installed in<br>311 km Ulaanbaatar–Altanbulag<br>road section (2017 baseline: 0 km)    | 3a. PIU's quarterly<br>progress reports       |  |
|   | 3b. 800 residents (at least 30% women) reported on the improved awareness on road safety and related activities as a result of road safety training (2017 baseline: 0 and not applicable) | 3b. PIU's quarterly progress reports          |  |
|   | 3c. 160 school teachers (at least<br>50% women) trained as trainers<br>on road safety and ready to<br>deliver trainings to school students<br>(2017 baseline: 0 and not<br>applicable)    | 3c. PIU's quarterly<br>progress reports       |  |

#### Key Activities with Milestones

- 1. RAM capacity improved
- 1.1 Define and establish RAM system (Q3 2019)
- 1.2 Conduct training on asset management and maintenance (Q4 2019)
- 1.3 Conduct road condition and traffic surveys (Q2 2019)
- 1.4 Prepare and design road maintenance program (Q3 2020)
- 1.5 Pilot test a performance-based arrangement for road maintenance (Q1 2022)

#### 2. Road condition improved

- 2.1 Start road improvement works (Q2 2020)
- 2.2 Complete road improvement works (Q3 2022)
- 2.3 Implement pilot maintenance works (Q3 2022-Q3 2025)

#### 3. Road safety improved

- 3.1 Conduct safety audit on detailed design (Q3 2019)
- 3.2 Conduct road safety training (Q4 2019–Q4 2020)
- 3.3 Conduct post-construction audit (Q4 2023)

#### **Project Management Activities**

Recruit PIU specialists (Q4 2018) Recruit design and construction supervision consultant (Q3 2019) Award civil works contracts (Q3 2019–Q2 2021)

#### Inputs

ADB:

\$60,000,000 (loan) \$700,000 (technical assistance grant) Government: \$600,000

#### Assumptions for Partner Financing

Not applicable.

ADB = Asian Development Bank, km = kilometer, MRTD = Ministry of Road and Transport Development, O&M = operation and maintenance, PIU = project implementation unit, Q = quarter, RAM = road asset management.

- <sup>a</sup> Government of Mongolia. 2016. Action Program of the Government of Mongolia for 2016–2020. Ulaanbaatar. http://www.mfa.gov.mn/wp-content/uploads/2015/06/2016-2020\_Gov\_AP\_Eng\_Revised.pdf (section 2.121).
- <sup>b</sup> Provincial administrative unit in Mongolia.

Source: Asian Development Bank.

### LIST OF LINKED DOCUMENTS

http://www.adb.org/Documents/RRPs/?id=48186-005-3

- 1. Loan Agreement
- 2. Sector Assessment (Summary): Transport
- 3. Project Administration Manual
- 4. Contribution to the ADB Results Framework
- 5. Development Coordination
- 6. Financial Analysis
- 7. Economic Analysis
- 8. Country Economic Indicators
- 9. Summary Poverty Reduction and Social Strategy
- 10. Risk Assessment and Risk Management Plan
- 11. Attached Technical Assistance Report
- 12. Gender Action Plan
- 13. Initial Environmental Examination
- 14. Resettlement Framework

### **Supplementary Documents**

- 15. Procurement Capacity Assessment
- 16. Procurement Assessment: Mongolian Road Subsector
- 17. Road Asset Maintenance Appraisal
- 18. Financial Management Assessment
- 19. Social Development and Gender Action Plan