RISK ASSESSMENT AND RISK MANAGEMENT PLAN

R	lisk Description	Rating	Mitigation Measures	Responsibility
Te	Technical			
1.	Behavioral change regarding road safety may extend beyond the project timeline	M	The project will carry out a broad range of activities to address institutional and management gaps, including the preparation of a national road safety policy, strategy and action plan, and the strengthening of the road safety council. The project will also conduct a survey to assess the behavior of road users towards road safety, prepare road safety awareness campaign materials, and carry out awareness campaigns to contribute to behavioral change.	DOR, Project Directorate
2.	High turnover of project management staff may lower the priority given to road safety	M	The government and the Asian Development Bank have agreed on a specific loan category allocation to ensure that the recommendations identified during road safety audits of the East–West Highway are effectively implemented by the Department of Roads.	DOR, Project Directorate
3.	Inadequate maintenance may affect road utilization in the long term	Н	The pavement of the project road has been designed for 20-year durability. Civil works contracts include 1-year of defect liability and 5-year of performance-based maintenance under the responsibility of the contractors. The project will also strengthen the road asset management and maintenance capacity of the Department of Roads, and will monitor the periodic maintenance backlog to mitigate financial sustainability risks.	DOR, Project Directorate, Contractors
4.	Extreme weather events that exceed climate change projections	M	To address climate change impacts, road embankment heights in flood-prone areas will be increased, side drains and new culverts will be provided, and bridges and gabion retaining walls will be constructed.	DOR, Project Directorate
5.	Project readiness may delay implementation in initial phases	L	To minimize implementation delays, (i) detailed design and procurement were prepared under ongoing projects, and (ii) advance actions started in May 2018 for the recruitment of consultants and August 2018 for the procurement of civil works, with the objective of awarding contracts shortly after loan effectiveness. Preconstruction activities, such as relocating utilities and obtaining forest and environment clearances, are ongoing.	DOR, Project Directorate
6.	Road safety is not improved	L	A road safety audit will be carried out for the project road during the design phase. The project road will be upgraded from a 2-lane undivided standard to a 4-lane standard with a separate median, and service lanes in urban areas, which will significantly mitigate the risk of accidents particularly for motorcycles, bicycles, and pedestrians. Civil works improvement packages will further improve road safety on the entire East–West Highway corridor.	DOR, Project Directorate

R	isk Description	Rating	Mitigation Measures	Responsibility				
Ec	Economic and Financial							
7.	Transport demand is lower than forecast	L	The Terai region experiences frequent political changes or unrest, such as during the fuel blockade in 2015 and the nationwide strikes of 2016, which in turn affected the cost of transport and reduced travel opportunities. While the risk of prolonged economic downturn remains low, it cannot be mitigated by the project. The 2017 elections that followed the promulgation of the 2015 Constitution are expected to bring a period of stability to Nepal.	DOR, Project Directorate				
Go	overnance							
8.	Procurement: Lack of oversight and guidance on up- to-date technical guidelines and manuals on procurement	M	The Public Procurement Monitoring Office, as the national procurement oversight agency under the Office of the Prime Minister and Council of Ministers, is mandated to (i) make recommendations to the government on reform in procurement policy or laws, (ii) issue technical guidelines and manuals on procurement, (iii) prepare standard bidding documents, and (iv) conduct a regular training program for stakeholders. The DOR staff will be trained on procurement procedures and ADB guidelines and standard bidding documents through the Nepal Resident Mission's orientation and the Capacity Development Resource Center established at the Nepal Administrative Staff College through ADB's technical assistance for the Strengthening Public Management Program. ^a The design consultant will support the initial major procurement actions, and the supervision consultant will advise on the procurement and bid evaluation process during the implementation period. ADB will increase the overall procurement oversight.	DOR, Project Directorate				
9.	Procurement and anticorruption: collusion and intimidation	M	MOPIT and DOR will increase their efforts to control collusion and intimidation. ADB will closely monitor the procurement process to uphold due diligence.	DOR, Project Directorate				
10.	Procurement and anticorruption: Inadequate record keeping and disclosure of information for audit of procurement processes	M	MOPIT and DOR will disclose information concerning the project and business opportunities associated with the project on their websites. ADB will ensure that a document archive system is established through the project, and a full-time financial expert will be engaged to support the Project Directorate (ADB) to prepare and manage documents for financial management purposes.	DOR, Project Directorate				

Risk Description	Rating	Mitigation Measures	Responsibility
11. Anticorruption: Insufficient awareness and deterrence during procurement and implementation	M	The National Vigilance Center was established in August 2002 to create awareness of corruption and activities related to preventing it. DOR will appoint certified auditors acceptable to the National Vigilance Center to technically audit the project and assess how well the design criteria are met within the allocated timeframe and budget. Technical audits will be conducted at (i) the procurement stage, focusing on procurement of works in relation to transparency and the requirements of funding agencies; and (ii) the implementation stage, focusing on accomplishment or construction in relation to the schedule and budget. The timeline will be determined during the ADB project inception mission. ADB will monitor DOR's enforcement of the mandatory requirement to submit a formal declaration of any potential conflict of interest by those involved in procurement.	DOR, Project Directorate
12. Inability of the government to provide counterpart funds on time, including insufficient maintenance financing	L	The project agreements include assurances that project counterpart funds will be made available on time during the project implementation. The project will introduce 5-year performance-based maintenance to ensure committed budget allocations for the project road after completion of construction.	DOR, Project Directorate
13. Changes in DOR management and frequent turnover of staff	L	To minimize negative impacts, DOR staff are trained in contract management and quality assurance.	DOR, Project Directorate
14. Unstable political environment	M	General risks associated with the internal security situation and political instability in certain parts of the country can hinder construction activities. During project preparation, difficulties were experienced because of protest movements and border closures in southern Nepal. The overall design included an increased focus on people's participation in decision making to build community support.	DOR, Project Directorate
Poverty, social, and	d gender		
15. Lack of acceptance of the project by local authorities, local communities, and affected people	L	Extensive consultations were held with project stakeholders and potentially affected people during project preparation regarding safeguards and physical connectivity issues. The outcomes of these consultations have been reflected in the project resettlement plan, initial environmental examination, engineering designs, and contract documentation.	DOR, Project Directorate

Risk Description	Rating	Mitigation Measures	Responsibility
Safeguards			_
16. Safeguard non- compliance	L	Prior to construction, a due diligence mission will be fielded to (i) confirm that rights-of-way to be handed over to contractors are free of encumbrances and ready for handover; and (ii) inform project authorities and those affected by remedial actions, if any.	DOR, Project Directorate

M = moderate; L = low.

ADB = Asian Development Bank; DOR = Department of Roads; MOPIT = Ministry of Physical Infrastructure and Transport.

Source: Asian Development Bank.

^a ADB. 2012. Report and Recommendation of the President to the Board of Directors: Proposed Policy-Based Grant, Administration of Grant, and Technical Assistance Grant to Nepal for Strengthening Public Management Program. Manila. The Capacity Development Resource Center was established to provide training to government staff, particularly regarding procurement, gender, and safeguards.