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# Project Information Document (PID)

Appraisal Stage | Date Prepared/Updated: 27-Mar-2026 | Report No: PIDIA01588

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**BASIC INFORMATION**

**A. Basic Project Data**

Project Beneficiary(ies)	Region	Operation ID	Operation Name
Iraq	MID EAST,NORTH AFRICA,AFG,PAK	P510293	Iraq Transport Economic Corridors (ITREC)
Financing Instrument	Estimated Appraisal Date	Estimated Approval Date	Practice Area (Lead)
Investment Project Financing (IPF)	06-Apr-2026	21-May-2026	Transport
Borrower(s)	Implementing Agency		
Republic of Iraq	Ministry of Construction, Housing, Municipalities, and Public Works, Roads and Bridges Directorate		

Proposed Development Objective(s)

The Project Development Objective (PDO) is to enhance the connectivity, resilience, safety, and institutional sustainability of Iraq’s priority road transport infrastructure and create jobs in transport and related sectors.

**Components**

- Resilient and Safe Road Infrastructure
- Support for sector reforms
- Implementation and project management support
- Contingent Emergency Response Component (CERC)

**PROJECT FINANCING DATA (US\$, Millions)**

**Maximizing Finance for Development**

Is this an MFD-Enabling Project (MFD-EP)?	Yes
Is this project Private Capital Enabling (PCE)?	Yes

**SUMMARY**

<b>Total Operation Cost</b>	<b>941.00</b>
<b>Total Financing</b>	<b>941.00</b>
<b>of which IBRD/IDA</b>	<b>900.00</b>

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<b>Financing Gap</b>	<b>0.00</b>
<b>DETAILS</b>	
<b>World Bank Group Financing</b>	
International Bank for Reconstruction and Development (IBRD)	900.00
<b>Non-World Bank Group Financing</b>	
Commercial Financing	41.00
Unguaranteed Commercial Financing	41.00

Environmental And Social Risk Classification

High

Decision

The review did authorize the team to appraise and negotiate

Other Decision (as needed)

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**B. Introduction and Context**

Country Context

1. **Emerging from three decades of fragility and conflict, Iraq is transitioning from reconstruction to development.** Since the conclusion of major military operations related to the ISIS conflict in 2017 and notwithstanding other remaining fragilities, the country has experienced a period of relative stability and is progressing on its path to sustainable development. Government efforts have primarily focused on a largescale investment program in key infrastructure aiming to improve public service delivery and to lay the foundations for transitioning to a more diversified economy. Reaping the full benefits of these investments depends on the implementation of a more comprehensive package of policy reforms to address longstanding structural economic challenges and improve economic efficiency and transparency.

2. **As Iraq transitions from reconstruction to development, it continues to face significant economic and social challenges that constrain private sector recovery, diversification, and job growth.** Iraq’s economy is among the least complex in the world,<sup>1</sup> with heavy reliance on the oil sector, which leads to economic volatility and undermines implementation of needed policy reforms to address structural economic challenges. Oil revenues accounted for 53% of

<sup>1</sup> Iraq ranks 182<sup>nd</sup> globally on economic complexity which reflects a country’s resilience to shocks during crises and its capacity to attract foreign investment. Harvard Growth Lab. (2023). The Atlas of Economic Complexity. Retrieved from <https://atlas.hks.harvard.edu/data-downloads>.



real GDP, 95% of exports, and 91% of government revenues in 2024, in line with the last decade averages. This heavy reliance on the oil sector led to a 1.5% gross domestic product (GDP) contraction in 2024 due to Organization of the Petroleum Exporting Countries (OPEC)+ production quota agreement. Fiscal conditions significantly deteriorated in 2025 due to declining oil export revenues and following the previous years' sharp rise in recurrent spending, prompting a significant cut to planned public investment spending. This procyclical fiscal policy also translated to the accumulation of arrears and liquidity shortages due to lack of fiscal buffers with negative spillovers for non-oil sector activity. The dependence on oil also exposes the economy to other exogenous shocks such as the disruption to oil exports during conflicts in the Middle East that further compound fiscal risks. The unemployment rate in Iraq is around 15.5%, much higher than the regional average (10.9%).<sup>2</sup> The agriculture sector is the largest employer in the country, generating 20% of all jobs in 2019. Yet over 16% of Iraqis are undernourished, much higher than regional peers<sup>3</sup>. Reliance on food imports leaves the country vulnerable to commodity supply and price shocks. Iraq also ranks low on connectivity and access to services with just 0.07 healthcare facilities and 1.3 hospital beds per 1,000 people, which is far below World Health Organization (WHO) recommendations and regional peers. These gaps in agriculture and healthcare are more severe outside major cities due to lack of transport infrastructure, fueling social and economic divides.

**3. Iraq's location in the Middle East positions it at the intersection of regional and international economic corridors.** Sharing borders with Türkiye, Iran, Kuwait, Saudi Arabia, Jordan, and Syria, Iraq serves as a geographical nexus for trade and connectivity. The estimated US\$17 billion Iraq Development Roads (IDR) is an ambitious plan by the Government of Iraq (GoI) to leverage Iraq's strategic geographic location through a series of long-term road, railway and complementary investments. The vision for the 1,200-kilometer IDR is to connect Al Faw port and Basra in southern Iraq to Faysh Khabur on the Iraq–Türkiye border, with broader linkages extending connectivity to Europe and beyond.<sup>4</sup> The phased implementation of IDR through 2050 has the potential to significantly increase trade and diversification, strengthening the foundation for private sector growth and job creation in Iraq. The successful achievement of these goals crucially depends on the complementary implementation of deeper policy reforms to improve macroeconomic stability, foster more efficient government spending, and promote a transparent and conducive business environment.

#### Sectoral and Institutional Context

**4. Roads are the backbone of the Iraq's transport system and key to broader connectivity and job creation, but the Iraqi network is currently underdeveloped compared to peer countries.**<sup>5</sup> Iraq ranks 115th out of 139 countries in the World Bank's 2023 Logistics Performance Index, and it reportedly takes 24 hours for a truck to travel 580 km between Baghdad and Umm Qasr port. Road transport accounts for over 90% of transportation activity in Iraq. While approximately 85% of Iraq's road network is paved, almost 65% is reported to be in moderate to poor condition. Poor connectivity isolates key agricultural governorates that collectively produce nearly half of Iraq's wheat. In Baghdad, Nineveh, and Kirkuk, 35–45% of surveyed firms identified poor transport access as a major or very severe obstacle. Despite these challenges, the road sector is additionally a significant source of employment, with large-scale construction and rehabilitation projects generating tens of thousands of jobs annually and further widescale impacts.<sup>6</sup> Indeed, recent studies estimated that a 10% increase in Iraq's stock of road infrastructure increased employment by about 1.6%<sup>7</sup>.

**5. The transport sector offers important employment opportunities for women in Iraq, which has one of the world's lowest female labor force participation rates: only 11 percent of women are economically active, versus 72**

<sup>2</sup> Central Statistical Organization. (2022). Iraq Labor Force Survey 2021.

<sup>3</sup> Concern Worldwide & Welthungerhilfe, Global Hunger Index (2024), <https://www.globalhungerindex.org/>

<sup>4</sup> [https://mecouncil.org/wp-content/uploads/2024/10/ME-Council\\_Issue-Brief\\_Iraqs-Development-Road-Project-A-Path-to-Prosperty-or-Instability\\_\\_WEB.pdf](https://mecouncil.org/wp-content/uploads/2024/10/ME-Council_Issue-Brief_Iraqs-Development-Road-Project-A-Path-to-Prosperty-or-Instability__WEB.pdf)

<sup>5</sup> Iraq has an average road density of 0.008km/km<sup>2</sup>, well below the average of neighboring countries (0.15km/km<sup>2</sup>) per Global Roads Inventory Project (GRIP).

<sup>6</sup> Iraq Infrastructure Sector Assessment Program (InfraSAP) for Connectivity and Economic Diversification, World Bank (2022)

<sup>7</sup> Estache, Antonio, Elena Ianchovichina, Robert Bacon, and Ilhem Salamon. 2013. *Infrastructure and Employment Creation in the Middle East and North Africa*. Washington, DC: World Bank.



**percent of men.**<sup>8</sup> Women make up less than 1 percent of total employment in transportation and storage.<sup>9</sup> Women are nearly absent in the private road construction sector due to barriers such as childcare responsibilities, social norms, mobility constraints, and inadequate sanitation facilities in field settings<sup>10</sup>. The public sector shows more favorable statistics for women’s participation in the transport and construction sectors: women comprise 29 percent of the Roads and Bridges Directorate’s (RBD) workforce, including 34 percent of engineers, and women lead three of RBD’s eight departments.<sup>11</sup> While transport-specific education statistics are unavailable, women represented 35 percent of undergraduate students in the Engineering Roads and Bridges program at the University of Technology and 33 percent of graduates in the Roads and Transport program at the Polytechnic University in Iraq in 2024–2025, highlighting a promising talent pipeline for transport sector employers. On-the-job training and targeted capacity building for women have been identified by consulted private-sector road construction companies as critically needed interventions. These measures, including industry-recognized certifications, are seen as essential for attracting and retaining women in skilled roles, and for supporting progression into managerial positions.

**6. A severe and escalating road safety crisis in Iraq, driven by rapid motorization and inadequate system-wide safety measures, further strains the sector.** The number of registered vehicles more than doubled from about 2.2 million in 2005 to 4.7 million in 2020, with traffic volumes rising at an estimated 11.5 percent per year between 2003 and 2013, far above population growth. This surge has contributed to a high fatality burden: official data recorded 5,563 deaths in 2021, while WHO estimates reach 9,344, equivalent to a fatality rate of 22 per 100,000 population compared with a global average of roughly 15.<sup>12</sup> The economic cost is equally significant, with road crashes in 2021 resulting in an estimated US\$9.5 billion in human capital losses.

**7. The vulnerability of Iraq’s transport infrastructure to climate change poses further threats to economic activity and integration.** Aging transport infrastructure with outdated drainage capabilities and creeping urbanization along existing roads north of Baghdad has made this critical northern corridor susceptible to increasingly common climate risks. A recent example includes the unseasonable rainfall from 16 November 2025 which resulted in widespread damage. Such events have multi-sectoral impacts across the Iraqi economy. If road infrastructure becomes less reliable, then the consequences could be widespread. For example, the country’s<sup>13</sup> and access to<sup>14</sup> both rely crucially on the domestic road network. These gaps in agriculture and healthcare are more severe outside major cities due to a lack of transport infrastructure, fueling social and economic divides. Failure to promote climate resilience in road infrastructure risks furthering these divisions.

**8. Financial instability and underinvestment in the road sector are limiting maintenance and rehabilitation in the sector.** Capital and recurrent road expenditures under RBD<sup>15</sup> rely on annual national budget allocations, leaving funding highly exposed to Iraq’s fiscal conditions and political cycles. During the 2010s, RBD faced volatile budget transfers, with sharp cuts during fiscal downturns. Annual road maintenance needs are estimated at US\$300 million in federal Iraq and US\$200 million in the Kurdistan Regional Government (KRG), while opportunities to finance these expenses through tolls and other revenues are currently being considered. Although RBD collects road-related fees<sup>16</sup>, these revenues are transferred to the central treasury rather than retained, constraining planning capacity and contributing to chronic

<sup>8</sup> Labor force participation, aged 15 and above. 2024. World Bank Data Portal

<sup>9</sup> International Labor Organization (ILO). 2021. aged 15 and above. Labor Force Survey

<sup>10</sup> The statement is based on HR statistics shared by seven local private road sector companies.

<sup>11</sup> Data obtained from RBD. January 2026

<sup>12</sup> Most fatalities occur among 4-wheel vehicle occupants (65 percent), followed by 2/3-wheeler users (28 percent), and nearly 60 percent of victims are under 35. Vulnerable road users, especially pedestrians and motorcyclists in urban areas, represent a substantial share of those killed.

<sup>13</sup> Concern Worldwide & Welthungerhilfe, Global Hunger Index (2024), <https://www.globalhungerindex.org/>

<sup>14</sup> Iraq has 0.07 healthcare facilities and 1.3 hospital beds per 1,000 people, which is far below World Health Organization (WHO) recommendations.

<sup>15</sup> The Road and Bridges Directorate is the state agency under Iraq’s Ministry of Construction, Housing and Public Works responsible for the country’s road infrastructure outside of the capital.

<sup>16</sup> Such as vehicle overweight fines and vehicle registration levies earmarked for maintenance



underinvestment and growing maintenance backlogs.

9. **Greater private sector participation offers an opportunity to fill gaps in the country's infrastructure.** Recent successful examples of private sector engagement in Iraq's transport sector include the Baghdad International Airport Public Private Partnership (PPP), a 25-year US\$764 million contract awarded in late 2025 to expand the airport's capacity, in which the International Finance Corporation (IFC) acted as transaction adviser<sup>17</sup>. In the road sector, private capital mobilization (PCM) faces several hurdles, including lack of practical experience, the absence of a tolling authority, security risks along corridors, and the lack of a dedicated legal and institutional framework for the development of PPPs in the road sector. Addressing these challenges is key to infrastructure development.

10. **The proposed Iraq Transport Economic Corridors (ITREC) Project identifies priority road segments that will serve to immediately improve the operations and climate resilience of the national road network and provide a foundation for subsequent investments.** Among more than 1,200 km of roadways identified in the IDR plan, two axes are highlighted: a north-south corridor connecting Baghdad to the Turkish border requiring greenfield construction (Expressway 2 or E2), and improved operations; and improved road conditions and climate resilience along an east-west corridor, Expressway 1 (E1) connecting Baghdad to Iraq's neighbors of Syria and Jordan. The junction of these two corridors near Baghdad is strategically significant, as it consolidates flows from both directions, strengthens domestic connectivity, and enables stronger links with neighboring countries, thereby enhancing regional integration and expanding the economic reach of Iraq's north-south transport axis. In parallel, targeted upgrades within the KRG will enhance redundancy and improve access to major industrial and economic zones, manufacturing and energy clusters, and key agricultural areas. In its first phase (SOP1), ITREC will finance civil works on E1, E2 and selected KRG segments to improve the operations of these corridors. Sector reforms and learnings from SOP1 will then inform future phases of the ITREC SOP that will mobilize private capital to extend these works towards a broader portion of the IDR plan.

11. **The ITREC SOP builds on two decades of World Bank engagement in the transport sector.** Since 2006, the World Bank has supported investments totaling US\$1.2 billion to finance four transport sector projects<sup>18</sup>. This has included the rehabilitation or reconstruction of 700 km of road, 218 km of railway and 72 bridges, reflecting efforts to improve inter-provincial connectivity and build capacity in the sector.<sup>19</sup> These projects have impacted more than 2.5 million beneficiaries, generated 3 million person-day jobs, and resulted in up to 41% reduction in travel time for some projects<sup>20</sup>. More recently, the World Bank is engaged in complementary investments to support the IDR Stage 1 initiative. In June 2025, the World Bank's Board of Directors approved the US\$930 million Iraq Railway Extension and Modernization (IREM) project, which will upgrade railway infrastructure and services between Umm Qasr Port in southern Iraq and Mosul in the north. The project aims to reduce travel time, increase freight volumes, and modernize the railway sector.<sup>21</sup> The ITREC project is also supported by the donor-funded Iraq Reform, Recovery and Reconstruction Fund (IRRF) for complementary and upstream activities, including capacity building, training, and knowledge transfers.<sup>22</sup>

<sup>17</sup> While the Baghdad Airport PPP is a positive precedent for Iraq and signals government's commitment to such innovations, it is important to note that airports rely on largely hard-currency revenue streams and a single controlled site, whereas road PPPs must depend on local currency tolls and face increased risk from the willingness and ability to pay tolls.

<sup>18</sup> Successfully implemented projects include the Emergency Road Project (ERP), the Transport Corridor Project (TCP), and most recently the Emergency Operation for Development Project (EODP).

<sup>19</sup> Impact Evaluation of the Iraq Transport Corridors, The World Bank, 2018

<sup>20</sup> World Bank team's own calculation of impacts across projects.

<sup>21</sup> The complementarity of rail and road investments, together with supplemental institutional reforms, will promote connectivity, multimodality and the resilience of the transport system. First, multi-modality in the transport system is a strategic necessity. Second, the IREM railway will strengthen north-south freight movement and port connectivity, but will specialize in a narrower range of long-distance and high-volume commodities. Iraq will therefore continue to rely on road transport—especially for perishable, high value, and time-sensitive goods and services. Additionally, complementary institutional reforms will ensure physical infrastructure assets facilitate long-term economic growth. Institutional reforms are essential to ensure that assets remain well-maintained beyond the project implementation period, preserving the long-term benefits that quality infrastructure delivers. Given the sector's persistent financing gaps, reforms that mobilize private capital are critical.

<sup>22</sup> The World Bank has already provided training and consulting services for capacity building for over 120 professionals in RBD, General Directorate for Roads and Bridges (GDRB) and Iraqi Republic Railways (IRR) in procurement, the design and operationalization of PBCs and PPPs, and environmental and social safeguards.



12. **The rehabilitation of a key segments of Expressway 1 (86 km), the enhancement of priority roads in KRG (72km), and the greenfield construction of Expressway 2 (100km in Phase 1) will enhance the resilience and the development of national economic corridors.** Expressway 1 (E1) constitutes part of a critical east–west axis within Iraq, and the selected segment (R9B) complements prior rehabilitation financed by World Bank investments<sup>23</sup>. Including E1 in ITREC aims to build on that project’s demonstrated results, reduced travel times, enhanced climate resilience and network redundancy, and improved road safety, thereby generating additional economic benefits and employment opportunities around Baghdad and strengthening connectivity with Iraq’s neighbors, Syria and Jordan, while improving integration with the broader national road network generally. The strategic placement of the Sulaymaniyah–Chamchamal–Kirkuk Road and the Girsheen–Suhaila Road in KRG enhances access to major industrial and economic zones, manufacturing and energy clusters around Sulaymaniyah, Chamchamal, and Kirkuk, as well as Duhok’s industrial and agricultural areas, reducing transport costs and improving freight reliability and resilience. Together, these investments in select key segments of the transport network help deliver a resilient, integrated, and job-generating economic corridor that benefits all jurisdictions.

13. **The 504 km Expressway 2 (E2) between Baghdad and the Turkish border will be developed in phases with the support of the ITREC Series of Projects (SOP) to improve connectivity, improve climate resilience, and enable job creation and economic diversification in key sectors including tourism, agriculture, health, and manufacturing.** The northern corridor covered by E2 is increasingly exposed to climate hazards, including extreme heat and flash flooding, which threaten road durability and service reliability. Disruptions along this corridor can therefore have cascading impacts on regional connectivity, food supply chains, and economic activity. E2 will cut travel times to major markets by up to 40 percent improving health access for residents near E2 and lowering logistics costs for agro-industries. SOP1 focuses on a 100 km segment between Baghdad and Samarra, where religious tourism attracts nearly 5 million visitors annually, poor road access is a major constraint. The expressway will reduce travel time to the nearest airport by 30 percent and access time to tourist destinations. More than 20,000 direct and indirect jobs are expected to be created from this SOP, with larger long-term employment effects emerging as lower transport costs expand markets for farms, small manufacturers, and service providers. Faster access to airports, border crossings, and new industrial zones enlarges the job markets for nearly eighteen million people in underserved governorates, enabling firms to hire from a deeper talent pool and allowing workers to reach better-paying opportunities. This improves the conditions for industrial growth in northern governorates that currently host very few of Iraq’s formal firms.

### C. Proposed Development Objective(s)

Development Objective(s) (From PAD)

The Project Development Objective (PDO) is to enhance the connectivity, resilience, safety, and institutional sustainability of Iraq’s priority road transport infrastructure and create jobs in transport and related sectors.

#### Key Results

The Project Development Objective (PDO) will be measured using a combination of the following indicators and intermediate results indicators.

- PDO indicator 1 - Creating Jobs: Number of more and better jobs created through the project [unit: number] [scorecard indicator]
- PDO indicator 2 - Enhanced Connectivity: Travel times from Baghdad to Samarra for Freight and Passengers [unit: hours]

<sup>23</sup> Specifically, the 86 km R9B section directly adjoins the previously rehabilitated 62 km R9A segment delivered under the Iraq Transport Corridors Project (P131550).



- PDO indicator 3 - Enhanced Resilience: Number of people benefiting from climate resilient infrastructure [scorecard indicator]
- PDO indicator 4 - Enhanced Road Safety: Number of fatal crashes per billion vehicle-kilometers traveled per year on E2 greenfield corridor [unit: Number]
- PDO indicator 5 - Enhanced Institutional Sustainability: Mechanism for sustainable funding established (Yes/No)

#### D. Project Description

##### 14. Component 1: Safe and Resilient Road Infrastructure (estimated US\$835.15 million IBRD; US\$41 million PCM).

This component will finance the following activities related to the implementation of new or existing roads using good practices in safe systems and climate resilient standards for Iraq.

- **Subcomponent 1.1. Implementation of initial phase of Expressway 2 between Baghdad and Samarra:** This subcomponent will finance the design, construction, operations and maintenance of: (i) the initial 100 km greenfield segment from Baghdad to Samarra of the E2 corridor (out of the 504 km from Baghdad to the Turkish border), and (ii) approximately 10 km of greenfield feeder roads connecting rural areas within the vicinity of Samarra. Operation and maintenance will be delivered through a Performance-Based Contract (PBC) using good practices and standards for resilience, safety, and sustainability.<sup>24</sup> This subcomponent will reduce distances and travel times between Baghdad and Iraq's northern governorates and will displace traffic from other longer routes shifting a portion of non-essential traffic out of Baghdad and other villages and towns' core inner city transport networks acting to alleviate urban traffic congestion.
- **Subcomponent 1.2. Rehabilitation and maintenance of the R9B segment of Expressway 1:** This subcomponent will finance the rehabilitation and maintenance of the existing 86 km E1-R9B<sup>25</sup> segment, a key road corridor in Iraq, using a PBC including climate performance and recovery indicators to ensure resilience standards are maintained throughout the operation's lifecycle. The safety performance of the corridor under the PBC will be addressed by linking contractor payments to measurable performance outcomes during the operation and maintenance phases, incentivizing performance through safe engineering practices, including multi-stage safety audits, and enhanced work zone safety protocols.
- **Subcomponent 1.3. Rehabilitation and maintenance of priority road corridors in KRG using safe and resilient standards:** This subcomponent comprises rehabilitation and maintenance of two existing road segments totaling approximately 77 km, including the Sulaymaniyah–Chamchamal–Kirkuk Road (about 50 km, linking to

<sup>24</sup> The PBC contract will incorporate localized climate resilient interventions including pavement material and equipment designed to withstand high heat stress, road geometric and drainage design to manage rainfall inundation events. Importantly, the contract will integrate climate-related performance indicators, linking contractor payments to the achievement of resilience outcomes, and thus create strong incentives for contractors to proactively maintain assets and implement climate-resilient solutions. This approach significantly enhances resilience by shifting from reactive maintenance to continuous, performance-driven management of climate risks, ensuring that road infrastructure remains functional under increasing climate stress. The new road corridor will include roadside services areas incorporating electric charging stations to support transition to electric vehicles, contributing to greenhouse gas mitigation by facilitating the transition to low-emission transport and reducing reliance on fossil fuels. The contract will also include overhead digital gantries and climate hazard communication and management plans in coordination with emergency services, improving real-time risk communication, enabling faster emergency response particularly to rural areas connected by feeder roads, and reducing disruptions and safety risks during climate-related events, and tolling systems. Toll collection can strengthen resilience by generating a predictable source of funding for road maintenance, climate adaptation measures, and post-disaster recovery, thereby improving the sustainability and reliability of transport infrastructure under increasing climate risks. The design and engineering will undergo a multi-stage road safety audit process, with specific attention to work zone safety protocols, speed management strategies, and mitigation of roadside crash hazards through compliant barrier systems and safe access provisions. This subcomponent also includes the design and rollout of Fiber Optics (FO) infrastructure along the Baghdad-Samarra corridor by adopting a "dig once" approach as appropriate and support Intelligent Transport Systems while utilizing surplus FO capacity for national and metropolitan telecom wholesale services.

<sup>25</sup> This segment (R9B) begins at the end of R9A, approx. at Station 40+000km (i.e., within the vicinity of Baghdad) and extends westward towards the Jordanian border. R9B is a divided highway consisting of six-lanes (each 3.75 meters wide), separated by a wide median (10 meters). Both directions of the highway feature standing/emergency lanes (2.5 meters wide) at the edge of pavement.



E2) and the Girsheen–Suhaila Road rehabilitation (22km) as well as Girsheen Interchange and maintenance as PBCs incorporating climate performance and recovery indicators, as well as safe and resilient standards.

- **Subcomponent 1.4. Piloting of road safety features:** This component will implement a multi-sectoral road safety corridor demonstration pilot on E1-R9B to include traffic enforcement measures focusing on speed management and other behavioral risk factors, as well as coordination with emergency healthcare services and civil society. This includes financing goods and services, such as equipment, speed cameras, traffic enforcement equipment, patrol vehicles, and evaluation study.

15. **Component 2. Institutional Strengthening and Preparation of Future Interventions (estimated US\$ 19.6 million).**

This component will support institutional strengthening and transport sector reforms to enable the preparation, modernization and financing of Iraq’s future national road network. This component will finance goods, consulting services and non-consulting services to include the following activities:

- **Subcomponent 2.1. Capacity building for road sector PPPs:** Activities will support RBD in: (i) preparing and structuring future road PPPs including the greenfield extension of E2 from Samarra to the Turkish border (approx. 404 km) as a bankable PPP transaction, (ii) developing a national tolling strategy, (iii) developing performance monitoring systems for PBCs including safety and resilience, and (iv) designing sustainable payment mechanisms for road implementation and maintenance from Payment Accounts to a future Road Fund.
- **Subcomponent 2.2. Road safety program:** Activities will include: (i) the preparation and assessment of a national-level Road Safety Mass Action Program (RS-MAP) targeting at least 1,000 km of high-risk and high-volume roads with readily implementable interventions identified through network-level survey and crash data collection, and (ii) technical advisory and capacity-building support to all stakeholder agencies for improving road safety management functions, governance mechanisms, and crash data management systems.
- **Subcomponent 2.3. Strengthening Environmental, Social and Health and Safety (ESHS):** Activities will support RBD to: (i) improve ESHS risk management, grievance redress monitoring, reporting, and management, and (ii) build capacity in maintaining grievance databases, continuous stakeholder engagement, livelihood restoration, compensation, biodiversity and Occupational Health and Safety (OHS) management activities.
- **Subcomponent 2.4. Design and engineering of future road interventions:** Activities will include: (i) design and engineering of the greenfield E2 extension from Samarra to the Turkish border (approx. 404 km), (ii) field surveys, functional or conceptual plans, preliminary and detailed designs for additional road rehabilitation, maintenance, and improvements consistent with the objectives of ITREC, (iii) the development of Environment and Social Management Plans, Emergency Action Plans, and Traffic and Road Safety Management Plans, (iv) additional engineering designs for road improvements selected under the RS-MAP, and (v) improvements to the Road Asset Management System and other support systems to include road safety, climate resilience and sustainability objectives.
- **Subcomponent 2.5. Sector reform studies:** Activities will include plans and studies to: (i) maximize socio-economic benefits of road investments through job creation in agricultural, industrial, tourism and other relevant sectors, (ii) promote integrated logistics and multi-modal transport services that improve emissions and system reliability, (iii) ensure system-wide climate resilience for the transport sector, and (iv) support other reforms identified in the World Bank’s Infrastructure Sector Assessment Program (InfraSAP) for Connectivity and Economic Diversification in Iraq.

16. **Component 3: Implementation and Project Management Support (estimated US\$43.5 million):** This component is estimated based on common practices for the management and supervision of road projects and the total value of the works to be implemented.

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- **Subcomponent 3.1. Project Management Consultancy (PMC) for Implementation.** A PMC will support RBD in the management and implementation of the ITREC program according to international good practices.
- **Subcomponent 3.2. Engineering review and construction supervision for Component 1.** Professional consultants will support RBD in engineering reviews and construction supervision of all works under Component 1 of the project, including on-site material testing and workmanship supervision to ensure Contractors meets road standards and climate resilience design specifications.

17. **Component 4: Contingent Emergency Response Component - CERC (US\$0):** Provision of immediate response to an Eligible Crisis or Emergency, as needed.

18. **The total IBRD financing for SOP1 is US\$900 million as detailed in the estimated costs per component below.** Gol counterpart resources will supplement funding for land acquisition, changes in cost estimates, and ensure adequate resourcing of the Payment Account to meet government payment obligations for O&M under the project.

Legal Operational Policies	Triggered?
Projects on International Waterways OP 7.50	No
Projects in Disputed Area OP 7.60	No

Summary of Screening of Environmental and Social Risks and Impacts

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19. The rehabilitation and construction of the Express way 2 project in Iraq involve several environmental and social risks and impacts. These can be categorized according to the activities throughout the project lifecycle as follows: Planning and Design: - Improper selection of new routes, and construction activities may result in destruction or fragmentation of important habitats, loss of biodiversity, massive economic and/or physical displacements. - Poor design may miss including engineering and control measures to avoid, reduce or mitigate negative environmental, social and community health and safety risks and impacts. Construction phase: - Air Quality and dust Emissions: Dust generation due to earthwork and movement, and emissions from construction machinery. - Noise Pollution and Vibration: Noise and vibrations from construction machinery and equipment can affect worker health and nearby communities' health and safety. - Land and Soil Contamination: Accidental spills, leaks from construction equipment, and improper management of liquid waste can contaminate soils and subsoil. - Water bodies: Improper disposal of domestic sewage and construction waste can contaminate surface and subsurface water bodies. Pollution of rivers can negatively affect aquatic ecosystems. Loss of biodiversity, destroying habitats and increased soil erosion: Removal of trees and green cover for construction purposes can lead to habitat loss or fragmentation and may increase soil erosion and landslides especially in mountainous areas. Cultural Heritage: Construction activities can negatively impact sites of cultural significance, especially due to increase in dust emissions, high vibration levels and closure of access to sites of important tangible or intangible cultural heritage values. - Socio-Economic Environment: The influx of workers can impact local communities, including potential child labor issues and public health disturbances. Ensuring proper working conditions and community engagement can mitigate these impacts. - Traffic and Accessibility: Construction activities can lead to road blockages and traffic congestion, road safety risks (especially on R9B) causing inconvenience to road users. - Occupational Health and Safety (OHS): Construction activities pose significant risks to workers' health and safety. Waste Management: Generation of construction and hazardous waste requires proper disposal methods to prevent environmental contamination. Cultural Heritage: The new



road is planned to reach Samarra where the World Heritage Site of the historical Samarra city exists. While this may represent a significant cultural risk, it was evident - using IBAT - that the new road construction will not have negative impacts on the Samarra cultural heritage sites. Further assessment of tangible and intangible cultural heritage will be conducted. Operation Phase: - Air emissions, noise and vibrations, health and safety. Solid, liquid, hazardous and non-hazardous wastes: Improper management of these wastes which can be generated from maintenance activities may result in contamination of soils and water bodies. Road safety risks during operation of the roads will require special measures to control traffic and enforce road safety measures. All risks above have been fully investigated as part of the environmental and social due diligence, Project ESIA prepared by the Borrower, and will be further addressed in the site-specific instruments to be prepared during project implementation.

## E. Implementation

### Institutional and Implementation Arrangements

20. **Iraq's road sector is overseen by the Roads and Bridges Directorate (RBD) under the Ministry of Construction, Housing, Municipalities and Public Works (MoCHMPW).** The sector operates within national public works legislation, notably the Public Roads Law (Law No. 35 of 2002) and Law No. 22 of 1997 governing corporate and procurement activities. The Ministry of Transport (MoT) sets up transport strategies and policies, and parallel institutional arrangements exist in the KRG, coordinated with MoCHMPW. The Ministry of Finance (MoF) is the borrower, while MoCHMPW—through the RBD—will implement activities. Strategic oversight will be provided by a high-level steering committee chaired by MoCHMPW, including MoF, MoT, the Ministry of Planning (MoP), and KRG representatives to ensure national alignment and cross-regional coordination. Implementation will be led by a dedicated PMT within RBD, covering procurement, financial management, monitoring and evaluation, and technical oversight.

21. **RBD will implement the project through a dedicated PMT, responsible for procurement and financial management, monitoring and evaluation (M&E), and technical oversight of project activities.** As a critical risk mitigation measure, the PMT will be reinforced with additional staffing, resources, and technical experts to ensure timely and effective implementation. The PMT will also oversee compliance with Environmental and Social Standards (ESS), including land acquisition, resettlement, and community health and safety in accordance with the principles of equal employment opportunity and merit-based selection, ensuring that qualified women and men have equitable access to roles and advancement based on competence, experience, and performance. To ensure coherent implementation across jurisdictions, the PMT will include representatives from KRG technical, environmental and social, procurement, and fiduciary disciplines. A Ministerial Order dated February 09, 2026, issued by the Minister of Construction and Housing, has been signed to formalize the involvement of the KRG in the project. The Order establishes the agreed implementation arrangements between the Federal Government and the KRG, confirming their joint commitment to the project and the way forward. In line with this agreement, the Ministerial Order stipulates that three KRG staff members will be seconded to and embedded within the PMT in Baghdad, and that a single implementing entity will be responsible for project implementation on behalf of both governments.

22. **To strengthen institutional capacity, the PMT will be supported by a Project Management Consultant (PMC), recruited internationally under Component 3.** The PMC will provide hands-on support to RBD in managing large-scale capital expenditure programs, including contract packaging, procurement planning, and risk management. Within this mandate, the PMC will: (i) Develop and maintain the integrated project schedule, including critical path tracking and mitigation of delays, (ii) Oversee design reviews and approvals, ensuring compliance with standards, ROW constraints, and stakeholder requirements, (iii) Coordinate environmental and social safeguards, ensuring timely permits, mitigation actions, and compliance reporting, (iv) Prepare decision-ready reports, highlighting risks, bottlenecks, and recommended corrective actions, (v) Validate contractor cost claims and variations, ensuring accuracy, justification, and alignment with contract provisions, (vi) Monitor and enforce health, safety, and traffic-management measures across all work zones, (vii)



Manage commissioning, handover, and defect-liability processes, ensuring all documentation, tests, and rectifications are completed.

23. **To ensure timely fulfillment of PBC payment obligations, the Government will establish a dedicated Payment Account.** The Payment Account will secure government obligations under the PBCs, ensuring liquidity over a defined period and ring-fencing of funds as appropriate.<sup>26</sup> The Payment Account will initially be used solely to make payments under PBC contracts. It will be advanced by the GoI for a defined number of months of expected PBC payments and maintain the minimum balance throughout implementation. The World Bank reimburses the Account within a defined period whenever the balance falls below the threshold and during the project life. Payment verification, reporting, and monitoring protocols will be set up.

24. **The RBD will prepare a Project Operations Manual (POM) as a condition of effectiveness under the Loan Agreement.** The POM will define internal procedures for project implementation, including roles and responsibilities of the RBD, PMC, Engineering Supervision Consultant, and other stakeholders. It will also outline fiduciary processes, procurement protocols, environmental and social requirements, monitoring and evaluation frameworks, and reporting mechanisms. The POM will serve as a key instrument to ensure transparency, accountability, and consistency in project execution. Procurement will include applicable thresholds, and will explain in detail the operational procedures regarding how RBD will reduce delays in finalizing the procurement processes, handling contract management issues, and effective complaints management to handle procurement complaints. The POM should include timelines (service standards for decision-making at each stage and level and the mechanism for reporting exceptions at the highest level in government).

25. **For the sub-component in the KRG region, oversight of this subcomponent will also be handled by the RBD, working in close coordination with KRG’s Ministry of Construction and Housing.** The PMT will manage fiduciary and technical aspects of the KRG rehabilitation works, supported by Engineering Supervision Consultants providing technical oversight, quality assurance, and capacity support, particularly in areas such as contract management, environmental and social standards, and road safety. These arrangements will ensure consistency with national standards and alignment with ITREC’s broader objectives of connectivity, resilience, and safety.

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<sup>26</sup> Among the good practice features of Payment Account are transparency, operational autonomy, and safeguards to ensure predictability and reliability of payments. This financial architecture is essential given the off-taker risk in Iraq, to build trust with private contractors, support contract enforcement, and lay the foundation for a future in which Iraq’s road network is sustainably financed and maintained.



**Implementing Agencies**

**Ministry of Construction, Housing, Municipalities, and Public Works, Roads and Bridges Directorate**

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