

PROJECT INFORMATION DOCUMENT (PID) CONCEPT STAGE

Report No.: PIDC11971

Project Name	PE - Lima Metro Line 2 Project (P145610)
Region	LATIN AMERICA AND CARIBBEAN
Country	Peru
Sector(s)	Urban Transport (100%)
Theme(s)	Infrastructure services for private sector development (10%), Municipal governance and institution building (10%), City-wide Infrastructure and Service Delivery (80%)
Lending Instrument	Investment Project Financing
Project ID	P145610
Borrower(s)	Ministry of Transport and Communications
Implementing Agency	AATE, OSITRAN
Environmental Category	A-Full Assessment
Date PID Prepared/ Updated	21-Aug-2014
Date PID Approved/ Disclosed	04-Dec-2014
Estimated Date of Appraisal Completion	
Estimated Date of Board Approval	26-Mar-2015
Concept Review Decision	Track II - The review did authorize the preparation to continue

I. Introduction and Context

Country Context

Over the last decade, the Peruvian economy has experienced some of the most rapid growth in Latin America as evident from the annual GDP growth rate of 6.0% in 2012 and 5.8% in 2013. GDP per capita has tripled in the past 10 years, reaching approximately \$6,660 in 2013 current US Dollars. In the same period, the external debt has declined substantially, reaching 29.4% of GNI in 2013, partially reflecting the stronger investment capacity of the Peruvian government. The Government of Peru (GoP) also has an ambitious development agenda to reduce poverty and boost productivity under a solid macroeconomic framework. The agenda includes programs to provide greater accessibility to employment opportunities and basic services, mitigate social conflicts, and improve environmental protections.

However, challenges remain in achieving sustained and inclusive economic growth. In spite of a

steep decline in the headcount poverty rate in the last decade, 23.9% of Peruvians still live below the national poverty line in 2013 and the country continues to display a high GINI coefficient (48.1 in 2010). With Peru's urban population growing at about 1.6 percent annually and a rural population decreasing at about 0.4 percent annually, there is a need to implement mechanisms that enable more inclusive access to socio-economic opportunities and public services in urban areas. This is particularly important in the Lima Metropolitan Region (LMR) which has grown rapidly in the past decade to nearly 9 million inhabitants (29% of the national population) including the municipalities of Lima, Callao and 33 local districts. The LMR includes some of the most prosperous economic and employment centers of the country, including the largest maritime port and largest international airport. While significant progress has been made recently in reducing poverty in the LMR, it still includes large concentrations of urban poor and significant income inequality. Increasing accessibility of the urban poor to jobs and services is a critical element of any plan for shared prosperity.

Sectoral and Institutional Context

In spite of impressive economic growth and increasing public and private investment, Peru still faces a significant lack of transport infrastructure. In urban areas, mass transit is insufficient and existing public transport is largely unregulated and inefficient. The vast majority of urban roads are shared by all transportation vehicles, creating traffic congestion and contributing to lost productive time, increase pollution levels, road accidents and other negative externalities.

The Lima Metropolitan Region is one of the most congested and polluted in Latin America and in need of massive investments in public transportation and sector reforms. It is also growing rapidly and suffering from the effects of unplanned urban development. Major transport corridors in LMR exhibit slower travel speeds and higher road accident rates compared with similar corridors with mass transit systems in other large cities. Around 17 million trips are generated each day in LMR, of which 65% are on the conventional public transport system, 20% in private cars, 11% in taxis, 3% on the Metropolitan Bus Rapid Transit (BRT), and 1% on Tren Electrico. The conventional public transport system (made up of minibuses, vans or combis) and most taxis are generally characterized by unregulated operations and a vicious cycle of oversupply, lack of investment, poor vehicle maintenance, and a lack of reliability, safety or service quality. The Metropolitan BRT (also known as COSAC) is comprised of approximately 300 articulated natural-gas buses and a feeder bus network operated by private concessionaire on a public infrastructure including 26-km of exclusive bus lanes in a North-South alignment. As a result of its higher level-of-service, Metropolitan ridership has grown steadily since its opening in 2010 and is saturated in peak hours at critical segments, prompting the Municipal government of Lima to propose expansion plans. The Tren Electrico is an elevated rail line developed by the National government and in operation since 2010 on a different North-South alignment which has been recently extended to 34 km.

The GoP has envisioned and approved by Supreme Decree in December 2010 (D.S. N°059-2010-MTC) a Metro Network Plan for Greater Lima comprised of Tren Electrico (also known as Metro Line 1) and four new metro lines totaling 168 km. This Plan identified and a subsequent 2012 pre-feasibility study recommended as the first subway project a 35-km underground alignment known as Metro Line 2 from the district of Ate-Vitarte in the extreme east of Metropolitan Lima to the jurisdiction of Callao in the extreme west and including an 8-km northern branch of the future Metro Line 4 towards the international airport. In March 2012, the Ministry of Transport and Communication (MTC) announced as the Government's representative that this priority project would be implemented through a DFBOT (design-finance-build-operate-transfer) concession

contract. The selection process was to be carried out by PROINVERSION, a specialized national agency under the Ministry of Economy and Finance in charge of promoting private investment and with vast experience in developing Public-Private Partnership (PPP) projects in Peru. The Metro Line 2 feasibility studies and preliminary designs were developed by PROINVERSION with the help of a consortium of independent consultants and a transaction advisor. MTC approved this feasibility study (including a reference project and budget) in October 2013 and it was subsequently published with the bidding documents and draft concession contract by PROINVERSION.

The 35-year DFBOT contract for Metro Line 2 was awarded to a private consortium in March 2014. The total value of the contract is US\$ 5.658 billion, of which an estimated 75% is public investment in infrastructure, rolling stock and expropriation. The remaining US\$1.4B is expected to be private investment from the winning concessionaire in the infrastructure and rolling stock. The concessionaire will be compensated through availability payments for completing construction milestones and achieving operational service milestones. The Bank's financing would be used to co-finance the public contribution to the concession contract during the initial years of the concession, which includes at least 6 years of construction.

Once the concession contract was signed in April 2014, OSITRAN assumed responsibility for managing the implementation and operations of the Line 2 PPP contract as the national entity under the Council of Ministers in charge of regulating transport infrastructure in Peru. OSITRAN has sanctioning and dispute resolution capacities and will be supported by an independent supervision consultant, as this is the typical arrangement used in Peru.

The Autoridad Autónoma del Transporte Masivo de Lima y el Callao (AATE), an agency under MTC, was created in 1986 for the purpose of planning, coordinating, implementing and supervising the Tren Electrico. AATE's role is being expanded with the implementation of the Metro Network and has been named by MTC as the implementing agency for the Line 2 project, although its mandate regarding coordination and integration issues beyond the concession contract is not clear. Moreover, many stakeholders have expressed the necessity of creating an autonomous Metropolitan Transport Agency or reactivating the Metropolitan Transport Council to coordinate investments and balance interests between local and national government entities, but no formal arrangement currently exist.

Relationship to CAS

As part of the Country Partnership Strategy for FY12-FY16, the Bank has been supporting the GoP in supplying more accessible social services and delivering more quality public infrastructure. The Government's plan is to maintain sound macroeconomic policies while creating the conditions that generate better economic opportunities, particularly for the most vulnerable. Investments in public transport are well aligned with the Government's plan and the Bank's strategic objectives of: (i) increased access and quality of social services for the poor; (ii) connecting the poor to services and markets; (iii) sustainable growth and productivity; and (iv) improved public sector performance for greater inclusion. Investments in a more efficient and integrated mass transport system, including the Lima Metro Network, would contribute to these goals by: (i) significantly decreasing commuter travel times, lost productive time and operating costs, (ii) provide the poor and vulnerable of LMR with improved access to socio-economic opportunities that can contribute to a better quality of life, and (iii) reducing negative externalities for society compared to the existing road-based urban transport.

II. Proposed Development Objective(s)

Proposed Development Objective(s) (From PCN)

The proposed development objective is to improve the urban mobility of people in the area of influence of the Metro Line 2 and Line 4 Branch and support the integration of the public transport system in the Metropolitan Region of Lima.

Key Results (From PCN)

The proposed outcome indicators are:

- (i) Passengers traveling per day on Metro Line 2.
- (ii) Decrease in travel times for public transport users in area of influence of Metro Line 2
- (iii) Increase in the number of people living within a 60 minute one-way commute of major centers of employment and economic activity along the Metro Line 2 corridor.
- (iv) Number of Metro Line 2 stations physically integrated with other modes.
- (v) Percentage of Metro Line 2 users satisfied with services, differentiated by income level, gender and mobility-impairment.

The PDO and results indicators will be aligned with the operations of other Development Partners currently in discussion with Government.

III. Preliminary Description

Concept Description

The Project includes 35-km of new underground infrastructure and rail operations with 35 stations along 13 districts in the Metropolitan Area of Lima and Callao. Construction will include 27.3-km of tunnel along the Line 2 corridor (East-West corridor connecting the eastern district of Ate-Vitarte with the provincial municipality of El Callao including the central districts of Lima and the Port of Callao), physical connections with existing Tren Electrico and Metropolitano BRT, and a 7.7 km segment of the future Line 4 connecting Line 2 with the international airport and northern districts of the LMR. Government's feasibility studies estimate the potential demand at 660 thousand passengers per day once the entire Project is operational (expected by 2020).

The Bank is discussing with MTC an operation of [at least] US\$300 million with three components:

1. **Metro Implementation.** The majority of the financing would support the initial years of the Government's contributions to the 35-year PPP concession awarded for the 35-km Metro Line 2 including the connecting Line 4 branch. A detailed project schedule including Government's milestone payments are not yet available.
2. **Complementary Works.** Although the concessionaire is required to design and build stations according to international standards of quality and universal accessibility, the final designs are not yet available and the accessibility of stations surroundings may be beyond the scope of the Line 2 concession investments. It is likely that reviews by various stakeholders in national government, local government, civil society, local community and users will identify gaps in pedestrian accessibility and multi-modal integration around future Metro Line 2 stations. Therefore, a minority share of the operation is proposed for ancillary civil works and goods to ensure appropriate physical, fare and operational integration with other modes and local accessibility improvements. These may include elements of an integrated fare collection system, bus and bicycling facilities, plazas, parks, pedestrian facilities including crossings and signage (including for physically-disabled users).

3. Institutional Support. Considering the scale and complexity of the investments and reforms needed to successfully implement Metro Line 2, as well as future projects in the Metro Network Plan, consulting services on the order of 2% of the loan is proposed for the following:

- a. Project implementation support and management oversight consultants for Component 1 and 2.
- b. Studies for future urban transport investments and impact evaluation of Line 2.
- c. Capacity-building for transport planning, regulatory reforms (including vehicle scrappage programs), and institutional coordination at the Metropolitan level.
- d. Site plans for Metro Line 2 pilot stations for complementary works and feasibility studies for potential financial land-based value capture and climate-financing mechanisms.

IV. Safeguard Policies that might apply

Safeguard Policies Triggered by the Project	Yes	No	TBD
Environmental Assessment OP/BP 4.01	x		
Natural Habitats OP/BP 4.04			x
Forests OP/BP 4.36		x	
Pest Management OP 4.09		x	
Physical Cultural Resources OP/BP 4.11	x		
Indigenous Peoples OP/BP 4.10		x	
Involuntary Resettlement OP/BP 4.12	x		
Safety of Dams OP/BP 4.37		x	
Projects on International Waterways OP/BP 7.50		x	
Projects in Disputed Areas OP/BP 7.60		x	

V. Financing (in USD Million)

Total Project Cost:	5000.00	Total Bank Financing:	300.00
Financing Gap:	150.00		
Financing Source			Amount
Borrower			4550.00
International Bank for Reconstruction and Development			300.00
Total			4850.00

VI. Contact point

World Bank

Contact: Georges Bianco Darido
 Title: Sr Transport. Spec.
 Tel: 473-7319
 Email: gdarido@worldbank.org

Borrower/Client/Recipient

Name: Ministry of Transport and Communications

Contact:

Title:

Tel:

Email:

Implementing Agencies

Name: AATE

Contact:

Title:

Tel:

Email:

Name: OSITRAN

Contact:

Title:

Tel:

Email:

VII. For more information contact:

The InfoShop

The World Bank

1818 H Street, NW

Washington, D.C. 20433

Telephone: (202) 458-4500

Fax: (202) 522-1500

Web: <http://www.worldbank.org/infoshop>