

PROJECT INFORMATION DOCUMENT (PID) APPRAISAL STAGE

Report No.: PIDA16472

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	26-Mar-2015
Date PID Approved/Disclosed	31-Mar-2015
Estimated Date of Appraisal Completion	23-Feb-2015
Estimated Date of Board Approval	16-Jul-2015
Appraisal Review Decision (from Decision Note)	

I. Project Context

Country Context

Peru has seen a period of broad-based and rapid economic growth as evident from the annual GDP growth rate of 6.0% in 2012 and 5.8% in 2013. Sound macroeconomic management during these growth years created the fiscal space needed for countercyclical policies to soften the impact of the global economic crisis. Medium-term and long-term macroeconomic projections are promising, with GDP growth estimates of over 5 percent growth in the 2013-2018 period with most growth attributable to private investment and private consumption. Peru is also making significant progress in addressing national infrastructure gaps, as reflected by their position of 7th out of 23 Latin American and Caribbean countries and 61st overall (out of 148) in a 2013 infrastructure ranking.

Economic growth in Latin America as a whole has slowed in the past year due to a combination of external and domestic factors. On the external side, the weakening of key commodity prices has created a general sense of leaner times and caused the private sector to curb its spending. Domestic policy uncertainties have further depressed confidence in several countries. In Peru economic activity slowed in the final months of 2014 and the trade balance registered a record annual deficit

in December. Decreasing demand and falling prices for Peru's commodity exports will weigh on exports going forward. Slow growth in the manufacturing and construction sectors, as well as subdued private consumption, are also affecting negatively the economy. The government is hoping to boost growth with a series of large public-private infrastructure projects.

Poverty has fallen sharply throughout the country in recent years and there is progress towards shared prosperity. The national poverty rate in Peru fell from 55.6 percent to 25.8 percent between 2005 and 2013, while extreme poverty was reduced from 15.8 percent to 4.7 percent. Poverty in rural areas has fallen dramatically in the period 2005-2013 from 83.4 percent to 48.0 percent and in urban centers from 48.2 percent to 16.1 percent thanks mainly to formal job creation, higher incomes, the expansion of social safety nets and labor market strategies for poor and vulnerable groups. Income equality in Peru has also improved, with the Gini Coefficient falling from 0.50 to 0.45 between 2007 and 2012. Similarly, the Lima Metropolitan Region (LMR) has made strides towards shared prosperity in the 2004-2012 period as evidenced by the higher mean income growth of the bottom 40 percent (5.4 percent) as compared to overall income growth (4.0 percent). The number of people situated below the poverty line in the LMR decreased from 25.1 percent in 2007 to 12.8 percent in 2013, and extreme poverty has become very rare in the LMR.

Sectoral and institutional Context

However, as urbanization continues in Peru, its major cities face important development challenges and constraints to achieving sustained and inclusive growth. With Peru's urban population growing at about 1.6 percent annually and the rural population decreasing at 0.4 percent annually, there is a need to implement mechanisms that enable more inclusive access to socio-economic opportunities and public services in the growing urban areas. This is particularly important in the LMR, comprised of the adjacent jurisdictions of the Metropolitan Municipality of Lima and the Constitutional Province of Callao, having grown rapidly in the past decade to over 9 million inhabitants (29 percent of Peru's population). While significant progress has been made recently in reducing poverty, the LMR still contains large concentrations of low-income groups and significant socio-economic disparities. In the LMR, there are 1.3 million people considered poor and an additional 1.7 million considered vulnerable. In response, the Government of Peru (GoP) has an ambitious urban development agenda to further reduce poverty and boost productivity, including infrastructure investment aimed at providing greater access to employment opportunities, basic services, and improved environmental protection.

Spatial development patterns and inadequate transport services are hampering the productivity of Peru's urban agglomerations, particularly constraining the poor. In the LMR, the combination of a dispersed pattern of urbanization and the lack of high-quality public transport services on an integrated network is reinforcing social-spatial inequalities (mismatches) by limiting access to urban centers where a majority of formal jobs, education, health and other services are available. Low-income households live predominantly in the urban periphery with poor quality access to these centers and, consequently, have to make a considerable effort in terms of travel time or travel expenses to reach these destinations or do not make the trip at all.

Current urban mobility trends in LMR are not sustainable in part because the public transport network is very limited or of poor quality. The LMR is growing rapidly and its major transport corridors generally exhibit slower travel speeds and higher traffic accident rates relative to peers. Part of the problem is a very limited mass transit network – the Metropolitano Bus Rapid Transit

(BRT) and Tren Eléctrico (as known as Line 1 of the Metro system) carry about a million trips a day but that accounts for only 5 percent of the 22.3 million daily trips (including trips in private modes and by foot). Most public transport in the LMR serving about 50 percent of all trips are on the conventional system of largely unregulated, low-capacity vehicles that compete for customers on the street. There are approximately 31,000 buses, minibuses, vans and combis operating in Lima and Callao (most of them 15 to 20 years of age) on more than 560 routes that lack public transport facilities such as bus lanes, terminals or proper stops. These vehicles share the road with an increasing number of private cars, taxis and mototaxis that now account for 23 percent of total trips; seen as a much superior alternative by those who have a choice. As a result, the vast majority of urban roads have high levels of traffic congestion and low travel speeds; and traffic is a significant source of lost productive time, pollution, as well as fatalities and economic loss related to road accidents.

Strengthening the mass transit network and related policies are essential to allow the LMR to realize its economic potential in a socially inclusive manner. Investments in mass transit at the metropolitan level need to be complemented by institutional reforms and policies that involve multiple jurisdictions and entities at the national and local levels. The performance of the two existing mass transit lines illustrates the potential to alleviate constraints in the LMR. Travel time savings on these trunk lines combined with integrated feeder services, regulation of competing modes, accessible stations, and affordable fares have led to high and growing patronage. The Municipality of Lima implemented a 26-km exclusive busway in a north-south alignment and operating approximately 300 articulated natural-gas buses and an extensive feeder bus network (the Metropolitan BRT) with financing from the World Bank. Since its opening in 2010 and as a result of its higher level-of-service compared to conventional modes, Metropolitan ridership has grown steadily and is currently reaching nearly 700,000 passengers per day. This demand exceeds its capacity in peak hours and has prompted the Municipality of Lima to propose expansion plans. Metro Line 1, a 34-km elevated rail transit line developed by GoP on a different north-south alignment from the BRT, started limited operations in 2010 and was recently extended into the San Juan de Lurigancho district. The ridership on Line 1 is also growing steadily, currently averaging above 300,000 daily passengers, and operating up to available capacity in peak periods. This growing demand for mass transit services supports the case for more public transport investments in the LMR, particularly on an east-west alignment where currently no high-capacity services exist.

In December 2010, with the aim of expanding mass transit provision, the GoP approved a Metro Network Plan for Greater Lima and Callao by Supreme Decree (D.S. N°059-2010-MTC). This Plan includes Metro Line 1 and five new Metro lines totaling 168 km. Following the results of a pre-feasibility study, the GoP approved a new subway line consisting of the full 27.3-km of Line 2 and a 7.7-km segment of Line 4 as the top urban transport priority. The selected alignment for Line 2 runs from the district of Ate-Vitarte in the extreme east of the LMR to the maritime port of Callao in the extreme west and the selected Line 4 segment consists of the northern branch that links Line 2 to the international airport and beyond in the Province of Callao (known collectively as the Metro Line 2 Project or the Project). Metro Line 2 will intersect Metro Line 1, Metropolitan BRT, and future Metro Lines 3 and 6, with an opportunity to ensure physical, operational and tariff integration in a multimodal transit system.

In March 2012, the Ministry of Transport and Communication (MTC), as the Government's representative for the project, announced that it would be implemented through a design-finance-build-operate-maintain-transfer (DFBOT) concession contract. The selection process was carried

out by Proinversion, a specialized national agency under the Ministry of Economy and Finance (MEF) in charge of promoting private investment and with vast experience in developing Public-Private Partnership (PPP) projects in Peru. The Project feasibility study and preliminary designs were developed by Proinversion with the support of a consortium of financial and technical consultants.

10. In October 2013, MTC approved the Metro Line 2 Feasibility Study, including a preliminary design and a maximum budget for government contribution. The preliminary design and budget were published by Proinversion with the bidding documents and a draft concession contract. After the prequalification of three international consortia, one proposal was received but the process was deemed competitive by Proinversion since the other prequalified firms sustained an interest until just before the proposal deadline and the winning bid was under the maximum budget. The GoP awarded the 35-year concession contract in March 2014 to a private consortium and the concession contract was signed by MTC in April 2014. Once signed, OSITRAN (Organismo Supervisor de Inversiones en Transporte) assumed the responsibility for overseeing the execution of the contract as the national entity under the Council of Ministers in charge of regulating transport PPP infrastructure in Peru. The Autoridad Autónoma del Sistema Eléctrico de Transporte Masivo de Lima y el Callao (AATE), an agency under the MTC created in 1986 for the purpose of planning, coordinating, implementing and supervising the Tren Eléctrico (Metro Line 1), also has an important role in the Line 2 Project as the technical implementing agency of the owner (MTC) and leading the effort on expropriation, resettlement and resolution of interferences with utilities or other obstacles to implementation.

The Metro Line 2 Project is part of a Metropolitan Transport Strategy to be developed by the GoP and to include complementary investments and institutional reforms for the LMR. With the implementation of Metro Line 2, the MTC is seeking a more coordinated approach to the currently fragmented institutional framework for urban mobility in the LMR. Specifically, AATE's role is being expanded to ensure the integration of Line 2 with the future mass transit network in coordination with relevant agencies and stakeholders in the LMR, while MTC is studying the creation of a Metropolitan Transport Authority and financing mechanisms. This effort is being coordinated with municipal governments and is supported by technical assistance activities of the World Bank and other partners.

II. Proposed Development Objectives

The PDO is to improve the accessibility to jobs and services in the area of influence of Metro Line 2 and the Gambetta branch of Line 4 and enhance the integration of the mass transit system of the Lima-Callao Metropolitan Region.

III. Project Description

Component Name

Component 1: Metro Line 2 Implementation through Concession Agreement

Comments (optional)

35 Km of new urban rail infrastructure to include (i) the construction of 35 stations with, at a minimum, physical integration to the existing Metro Line 1 and Metropolitano BRT, (ii) construction of approximately 27.3 Km of tunnel along the Line 2 corridor with one rail yard, (iii) construction of approximately 7.7 Km segment of the future Line 4 branch with one rail yard, and (iv) the provision and installation of the necessary rolling stock, electrical, control,

telecommunications, and fare systems for operation of the Metro Line 2. The Project will be entirely underground with approximately 32 shafts for ventilation and emergencies, one additional emergency shaft, two rail yards, and electromechanical, structural and rail facilities.

IV. Financing (*in USD Million*)

Total Project Cost:	5836.00	Total Bank Financing:	300.00
Financing Gap:	0.00		
For Loans/Credits/Others			Amount
Borrower			2285.00
International Bank for Reconstruction and Development			300.00
Andean Development Corporation			150.00
Inter-American Development Bank			300.00
Foreign Private Commercial Sources (unidentified)			2801.00
Total			5836.00

V. Implementation

VI. Safeguard Policies (including public consultation)

Safeguard Policies Triggered by the Project	Yes	No
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

Comments (optional)

VII. Contact point

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