

# Upgrading and Greening the Rio de Janeiro Urban Rail System (P111996)

LATIN AMERICA AND CARIBBEAN | Brazil | Transport & ICT Global Practice | IBRD/IDA | Specific Investment Loan | FY 2010 | Seq No: 18 | ARCHIVED on 30-Jun-2017 | ISR28424 |

Implementing Agencies: State Government of Rio de Janeiro, Rio de Janeiro State Sercretariat of Transport

## Key Dates

#### **Key Project Dates**

Bank Approval Date:09-Jul-2009 Planned Mid Term Review Date:15-Jun-2015 Original Closing Date:30-Jun-2014 Effectiveness Date:03-Dec-2009 Actual Mid-Term Review Date:15-Jun-2015 Revised Closing Date:30-Jun-2017

## **Project Development Objectives**

Project Development Objective (from Project Appraisal Document) a) Improve the level-of-service provided to the suburban rail transport users in the RJMR in a safe and cost-efficient manner and b) improve the transport management and policy framework in the RJMR.

Has the Project Development Objective been changed since Board Approval of the Project Objective? Yes

Board Approved Revised Project Development Objective (If project is formally restructured) (a) to improve the level of service provided to suburban rail transport users in the RJMR in a safe and cost-efficient manner; (b) to place the suburban rail transport system on a lower carbon growth path; and (c) to improve the transport management and policy framework in the Borrower's territory and in the RJMR.

# Components

# Name Infrastructure and Equipment:(Cost \$206.40 M) Institutional and Policy Development:(Cost \$5.30 M) AF - Infrastructure and Equipment:(Cost \$588.17 M) AF- Institutional and Policy Development:(Cost \$11.83 M)

## **Overall Ratings**

Name	Previous Rating	Current Rating
Progress towards achievement of PDO	Satisfactory	Satisfactory



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Overall Implementation Progress (IP)	Moderately Satisfactory	Moderately Satisfactory
Overall Risk Rating	Moderate	Moderate

#### Implementation Status and Key Decisions

The project is closing in June 30, 2017. The Project is on track for substantially achieving its Development Objective (PDO) but some of the contracts are currently temporarily suspended given the State fiscal situation. The Infrastructure and Equipment component advanced well. The contract for the purchase of 70 trains is ongoing and all the 70 trains have been already delivered and are operating (adding to the 30 previously financed trains). The procurement of additional 6 Electrical Multiple Units (EMUs) of 8 cars each has been concluded. The Institutional and Policy Development Component has shown improvements: i) the non-motorized -railway transport integration study has presented its final results; ii) the urban transport master plan (PDTU) has also been finalized; iii) the State Logistics Master Plan (PELC) has also been finalized; and the iv) the Transport Oriented Development (TOD) pilot project in Queimados was contracted in November 2016 but is on hold until the fiscal situation is resolved.

#### Risks

#### Systematic Operations Risk-rating Tool

Risk Category	Rating at Approval	Previous Rating	Current Rating
Political and Governance		High	<ul> <li>High</li> </ul>
Macroeconomic		Moderate	Moderate
Sector Strategies and Policies		Moderate	Moderate
Technical Design of Project or Program		Moderate	Moderate
Institutional Capacity for Implementation and Sustainability		Moderate	Moderate
Fiduciary		Moderate	Moderate
Environment and Social		Moderate	Moderate
Stakeholders		Moderate	Moderate
Other		Moderate	Moderate
Overall		Moderate	Moderate

#### Results

#### **Project Development Objective Indicators**

► 1. Travel time plus waiting	time between selected pa	airs of stations before and after	r the trains are delivered	d (Minutes, Custom)
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	58.00	0.00	0.00



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Date

30-Sep-2008

15-Jun-2016

15-Jun-2016

30-Jun-2017

Comments

For PDO indicator 1 "Travel time plus waiting time between selected pairs of stations before and after the trains are delivered", please, see sub-indicators below.

#### ▲ 1.a. Japeri Branch (Minutes, Custom Breakdown)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	59.00	58.00	58.00	52.00
Date	30-Sep-2008	30-Dec-2016	30-Dec-2016	30-Jun-2017

#### ▲ 1.b. Santa Cruz Branch (Minutes, Custom Breakdown)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	62.00	55.00	55.00	54.00
Date	30-Dec-2008	30-Dec-2016	30-Dec-2016	30-Jun-2017

#### ▲ 1.c. Saracuruna Branch (Minutes, Custom Breakdown)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	54.00	55.00	55.00	46.00
Date	30-Dec-2008	30-Dec-2016	30-Dec-2016	30-Jun-2017

▲ 1.d. Belford Roxo Branch (Min	utes, Custom Breakdown)			
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	73.00	64.00	64.00	62.00



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Date	30-Dec-2008	30-Dec-2016	30-Dec-2016	30-Jun-2017

#### ▲ 1.e. Deodoro Branch (Minutes, Custom Breakdown)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	46.00	43.00	43.00	40.00
Date	30-Dec-2008	30-Dec-2016	30-Dec-2016	30-Jun-2017

#### ▶ 2. Average passengers per square meter on Supervia Lines at peak hour (Number, Custom)

Value         8.00         6.00         6.00         6.00           Date         30-Dec-2008         30-Dec-2016         30-Dec-2016         30-Jun-2017		Baseline	Actual (Previous)	Actual (Current)	End Target
Date         30-Dec-2008         30-Dec-2016         30-Dec-2016         30-Jun-2017	Value	8.00	6.00	6.00	6.00
	Date	30-Dec-2008	30-Dec-2016	30-Dec-2016	30-Jun-2017

#### ▶ 3. % of passengers per day from households earning less than 4 Minimum Salaries (MS) (Percentage, Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	89.00	89.00	80.00
Date	30-Dec-2008	30-Dec-2016	30-Dec-2016	30-Jun-2017

▶ 4. Number of Supervia stations with bicycle parking facilities (Number, Custom)



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	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	3.00	16.00	16.00	20.00
Date	30-Dec-2008	30-Dec-2016	30-Dec-2016	30-Jun-2017

Implementation Status & Results Report

#### ▶ 5. SuperVia stations with bus-rail fare integration (Number, Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	30.00	82.00	82.00	75.00
Date	31-Dec-2008	31-Dec-2014	31-Dec-2014	30-Jun-2017

#### ▲ 5.a. Japeri Branch (Number, Custom Breakdown)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	12.00	15.00	15.00	15.00
Date	31-Dec-2008	30-Dec-2016	30-Dec-2016	30-Jun-2017

#### ▲ 5.b. Santa Cruz Branch (Number, Custom Breakdown)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	8.00	16.00	16.00	10.00
Date	30-Dec-2008	30-Dec-2016	30-Dec-2016	30-Jun-2017

#### ▲ 5.c. Saracuruna Branch (Number, Custom Breakdown)



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	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	1.00	17.00	17.00	16.00
Date	30-Dec-2008	30-Dec-2016	30-Dec-2016	30-Jun-2017

Implementation Status & Results Report

#### ▲ 5.d. Belford Roxo Branch (Number, Custom Breakdown)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	2.00	15.00	15.00	15.00
Date	31-Dec-2008	30-Dec-2016	30-Dec-2016	30-Jun-2017

#### ⊿ 5.e. Deodoro Branch (Number, Custom Breakdown)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	7.00	19.00	19.00	19.00
Date	31-Dec-2008	30-Dec-2016	30-Dec-2016	30-Jun-2017

#### ▶ 6. Reductions of transport-realted greenhouse gas emissiones in the SuperVia area of influence (Ton CO2) (Number, Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	34,000.00
Date	30-Dec-2008	30-Dec-2016	30-Dec-2016	30-Jun-2017

#### **Overall Comments**

#### **Intermediate Results Indicators**



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► Component 1a. Trains in peak-hour/off peak hour (Text, Custom)					
	Baseline	Actual (Previous)	Actual (Current)	End Target	
Value	8/4	8.6/4	8.6/4	10/6	
Date	30-Dec-2008	30-Dec-2016	30-Dec-2016	30-Jun-2017	

∡ a. Ramal Japeri – linha C	ENTRAL / Nova Iguaçu (Te	xt, Custom Breakdown)		
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	8/4	8.6/4	8.6/4	10/6
Date	30-Dec-2008	30-Dec-2016	30-Dec-2016	30-Jun-2017

⊿ b. Ramal Santa Cruz – linha	a CENTRAL / Bangu (Text	, Custom Breakdown)		
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	8/6	8.6/4	8.6/4	10/6
Date	30-Dec-2008	30-Dec-2016	30-Dec-2016	30-Jun-2017

▲ c. Ramal Saracuruna – linha CENTRAL / Gramacho (Text, Custom Breakdown)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	6/2	6/4	6/4	10/6
Date	30-Dec-2008	30-Dec-2016	30-Dec-2016	30-Jun-2017



⊿ d. Ramal Belford Roxo – linha CENTRAL / B. Roxo (Text, Custom Breakdown)						
	Baseline	Actual (Previous)	Actual (Current)	End Target		
Value	3/1.5	4/2	4/2	10/6		
Date	30-Dec-2008	30-Dec-2016	30-Dec-2016	30-Jun-2017		

⊿ e. Ramal Deodoro – linha CENTRAL / Deodoro (Text, Custom Breakdown)						
	Baseline	Actual (Current)	End Target			
Value	8/0	12/6	12/6	15/10		
Date	30-Dec-2008	30-Dec-2016	30-Dec-2016	30-Jun-2017		

Component 1b. Additional demand generated from project on SuperVia -passengers per day (Number, Custom)						
	Baseline	Actual (Previous)	Actual (Current)	End Target		
Value	0.00	118,536.00	118,536.00	70,211.00		
Date	30-Dec-2008	30-Dec-2016	30-Dec-2016	30-Jun-2017		

► Component 1c. Working ratio supervia (Number, Custom)						
Baseline	Actual (Previous)	Actual (Current)	End Target			
0.75			0.70			
30-Dec-2008	30-Dec-2016	30-Dec-2016	30-Jun-2014			
	Baseline 0.75	BaselineActual (Previous)0.75	BaselineActual (Previous)Actual (Current)0.75			



Component 1d. Cumulative % of train manufacturing completion (Percentage, Custom)						
	Baseline	Actual (Previous)	Actual (Current)	End Target		
Value	0.00	100.00	100.00	100.00		
Date	30-Dec-2008	30-Dec-2016	30-Dec-2016	30-Jun-2017		

Additional trains (82 trains) (Percentage, Custom Breakdown)						
	Baseline	Actual (Previous)	Actual (Current)	End Target		
Value	0.00	85.37	85.37	100.00		
Date	30-Dec-2008	30-Dec-2016	30-Dec-2016	30-Jun-2017		

⊿ Initial trains (30 trains) (Percentage, Custom Breakdown)						
	Baseline	Actual (Previous)	Actual (Current)	End Target		
Value	0.00	100.00	100.00	100.00		
Date	30-Nov-2008	30-Dec-2016	30-Dec-2016	30-Jun-2014		

Component 1e. Cumulative % of completion of rehabilitation/modernization of metric gauge rolling stock (Percentage, Custom)						
	Baseline	Actual (Previous)	Actual (Current)	End Target		
Value	0.00	100.00	100.00	100.00		
Date	30-Dec-2008	15-Jun-2015	15-Jun-2015	30-Jun-2017		



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Component 1f. Cumulative completion of SETRANS building rehabilitation (Percentage, Custom)						
	Baseline	Actual (Previous)	Actual (Current)	End Target		
Value	0.00	0.00	0.00	100.00		
Date	30-Dec-2008	15-Jun-2015	15-Jun-2015	30-Jun-2017		

Component 2a. Update/completion of studies (Original Loan) (Text, Custom)						
	Baseline Actual (Previous) Actual (Current)					
Value	PDTU	100% PDTU	100% PDTU	100% PDTU		
Date	30-Dec-2008	15-Jun-2015	15-Jun-2015	30-Jun-2017		

Component 2.b. Studies (Additional Finance) (% of Completion) (Percentage, Custom)						
	Baseline Actual (Previous) Actual (Current)					
Value	0.00	100.00	33.00	100.00		
Date	30-Dec-2008	30-Dec-2016	30-Dec-2016	30-Jun-2017		

#### Comments

Two out of the six project studies has been completed. The studies completed are PELC and Business plan to increase non-motorized accessibility of the poor to train stations. The following studies were not completed: (i) Climate Change Adaptation Study; (ii) Transit Oriented Development (TOD) Pilot Project in the municipality of Queimados; (iii) Study to design and implement a control center for mass transit operations in the RJMR (CIMU); and (iv) Study to estimate GHG emissions reductions resulting from the Project.

**Overall Comments** 

# Data on Financial Performance

## Disbursements (by loan)



Project	Loan/Credit/TF	Status	Currency	Original	Revised	Cancelled	Disbursed	Undisbursed	Disb	ursed
P111996	IBRD-77190	Effective	USD	211.70	211.70	0.00	203.03	8.67		96%
P111996	IBRD-81170	Effective	USD	600.00	600.00	0.00	359.19	240.81		60%
Key Dates	Key Dates (by loan)									
Project	Loan/Credit/TF	Status	Approval Date	e Signir	ng Date	Effectiveness D	ate Orig	. Closing Date	Rev. Closing Dat	e
P111996	IBRD-77190	Effective	09-Jul-2009	24-Se	p-2009 (	03-Dec-2009	30-J	un-2014	30-Jun-2017	
P111996	IBRD-81170	Effective	26-Jan-2012	05-Se	p-2012 (	05-Oct-2012	30-J	un-2017	30-Jun-2017	

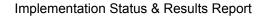
#### **Cumulative Disbursements**



### **Restructuring History**

Level Approved on 25-Jan-2011 , Level Approved on 26-Aug-2011 , Level 2 Approved on 27-Dec-2013 , Level 2 Approved on 23-Jun-2015

## Related Project(s)





P125630-Upgrading and Greening the Rio de Janeiro Urban Rail System Additional Financing