



<b>1. Project Data:</b>		<b>Date Posted :</b> 08/15/2002	
<b>PROJ ID:</b> P006547		<b>Appraisal</b>	<b>Actual</b>
<b>Project Name:</b> Metro Transp. Rio	<b>Project Costs (US\$M)</b>	272	311.4
<b>Country:</b> Brazil	<b>Loan/Credit (US\$M)</b>	128.5	128.5
<b>Sector(s):</b> Board: TR - General transportation sector (95%), Central government administration (5%)	<b>Cofinancing (US\$M)</b>	0	0
<b>L/C Number:</b> L3633			
	<b>Board Approval (FY)</b>		93
<b>Partners involved :</b>	<b>Closing Date</b>	12/31/1997	12/31/2000

<b>Prepared by :</b>	<b>Reviewed by :</b>	<b>Group Manager :</b>	<b>Group:</b>
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**2. Project Objectives and Components**

**a. Objectives**

The objectives of the project as stated in the SAR were to:

- (a) support the Federal Government in its efforts to transfer the CBTU-RJ (Brazilian Urban Train Company - Rio de Janeiro) system to the State in order to enhance its management and operations;
- (b) strengthen institutional, organizational, and financial policy reforms to assure CBTU-RJ's long term financial sustainability (including cost-efficiency gains, improved multimodal integration, expanded capacity, and substantial reduction in subsidies); and
- (c) contribute to poverty alleviation and environmental improvement (improved access to work, decreased travel time to work, reduced congestion and pollutant emissions, and reduced accidents and fatalities through the provision of safer and more comfortable rail transport) in the Rio de Janeiro Metropolitan Region.

**b. Components**

1. The investment component (97 % of the total project cost) included civil works and goods for rehabilitation of stations, track, track machinery, workshops, rolling stock, power supply, telecommunications, fencing of the right of way and construction of transfer points, within stations, required to integrate CBTU with other modes.
2. The institutional development component (3 % of the total project cost) consisted of action programs for:
  - organizational, financial and institutional reforms for improved cost recovery;
  - multi-modal and tariff integration between CBTU-RJ, feeder bus systems and non-motorized vehicles, introduce long run variable cost based fare structures and to improve targeting of subsidies;
  - an investment program to consolidate the rehabilitation and decentralization in RJ;
  - improving the operating efficiency of the Metro Company (METRO) and the State Bus Company (CTC), and for each of the remaining operating subdivisions;
  - increasing private sector participation in CBTU-RJ's operations; and
  - technical and management training to staff of CBTU and other transport agencies.

**c. Comments on Project Cost, Financing and Dates**

The actual total project cost at closing was US\$311.4 million compared to the appraisal estimate of US\$272 million. This was mainly due to the introduction of Real and the sudden appreciation of contracts that had been signed in local currency and delays in implementation caused by delays in counterpart funding. The Federative Republic of Brazil funded the cost overruns completely. The project closed on December 31, 2000, three years behind schedule. The project experienced a lag of one year between loan approval and effectiveness. There were delays in setting up of a special account in a commercial Bank. Also, untimely provision of counterpart funding added to the overall delays in project closing.

**3. Achievement of Relevant Objectives:**

1. The objective of decentralization of CBTU-RJ (Rio de Janeiro) system to the State of Rio de Janeiro was achieved. CBTU-RJ was transferred to the State of Rio de Janeiro in 1994 and a new operating company Companhia de Trens Urbanos ( FLUMITRENS) was created which was subsequently concessioned to Comcessionaria de Transportes Ferroviarios) SUPERVIA in 1998 under a concession program supported by Rio de Janeiro State Reform-Privatization Project.
2. The objective to strengthen the institutional, organizational, and financial policy reforms was partially achieved.
  - The project provided initial support for the concessioning of the FLUMITRENS, Rio Metro and the ferryboat, as well as the dissolution of the state-owned bus operator. In addition, the project supported the creation of the regional coordination body, Metropolitan Agency for Urban Transport of Rio de Janeiro (AMTU-RJ) to coordinate urban transport planning and operations among municipalities and between municipalities and the state. However, the institutional framework within which urban transport is provided in Rio de Janeiro remains weak and fragmented, mainly because of the lack of coordination between the mayor and governor's offices. Also, commitment by the governor and the Mayor of Rio is lacking, especially for integrating the buses with rail.
  - Most of the operational and financial targets were not met at project closure mainly because of the delays in the delivery of the rehabilitated trains. Expected ridership has not yet materialized but based on similar projects in Sao Paulo will grow now that the trains have been delivered. Average daily ridership in 2001 was 330,000 passengers, substantially lower than the revised SAR target of 900,000. Fleet availability in 2000 was 75%, but still below 80% as projected in SAR. The peak-hour headways is between 10 and 29 minutes compared to SAR targets of 5 to 15 minutes.
3. The objective of contributing to poverty alleviation was partially achieved. The objective of improving safety was achieved.
  - The impact of the project on the poor was less than expected during the project, as the majority of users preferred other modes because of lack of reliability of the system during the delays in the rehabilitation of trains.
  - Safety has improved in the Rio commuter rail system, especially after SUPERVIA took over operations. The number of people hanging on the outside of the train, has dropped from 8,760 a year before concessioning to 511 in 2000. Today there are practically none. No vendors are allowed in the trains and this has contributed to more safety, cleanliness and less theft.

#### 4. Significant Outcomes/Impacts:

1. The project supported the federal governments decentralization program by developing the necessary legal and regulatory framework.
2. The project was instrumental in creating the political consensus for introducing private sector participation and the subsequent concessioning of the system through the various studies financed under the project.
3. The project financed rehabilitation of 19 stations, construction of 13 overpasses, rehabilitation and maintenance on 25.4 kilometers of infrastructure, and construction of 8 kilometers of track on the Gramacho-Saracuruna extension. The project also rehabilitated and modernized 55 trains and 9 locomotives.

#### 5. Significant Shortcomings (including non-compliance with safeguard policies):

- The project was completed three years behind schedule and with significant cost overruns albeit due to the introduction of the Plano Real and delays in the provision of counterpart funds.
- Substantial delays in the delivery of rehabilitated trains because of contractor performance and delays in counterpart funding. This adversely affected system ridership which declined every year from 1984 until 1998, when concessionaire took over. Thereafter, ridership has increased but is substantially below the SAR target.
- The institutional framework for urban transport remains weak and fragmented, and adverse to the organized development of the urban transport system and comprehensive planning. This is mainly because of the lack of a continuing coordination between the mayor and governor's office.
- The regulatory capacity is still very weak and lacks effective monitoring and enforcement capacity as well as an effective dispute resolution system.

6. Ratings:	ICR	OED Review	Reason for Disagreement /Comments
Outcome:	Satisfactory	Moderately Satisfactory	The outcome of the project is rated moderately satisfactory as most of the operational and financial targets have not

			been met. Expected ridership has not yet materialized. Average daily ridership in 2001 was one-third the revised SAR target of 900,000. Fleet availability and peak-hour headways, which at project closure were below SAR targets are now in line with those targets. Also, the impact of the project on poor so far has been less than expected.
<b>Institutional Dev .:</b>	Substantial	Substantial	
<b>Sustainability :</b>	Likely	Non-evaluable	The sustainability of project benefits is non-evaluable as some institutional and financial issues threaten the continued stream of project benefits. These include weak financial framework of the commuter rail system, lack of progress in modal integration and sluggish ridership, inadequate institutional capacity to monitor and enforce the SUPERVIA concession contract, and ongoing contractual disputes between SUPERVIA and the state government. Progress in resolving the contractual difficulties and modal integration can improve sustainability. These matters are, however, reportedly being addressed.
<b>Bank Performance :</b>	Satisfactory	Satisfactory	
<b>Borrower Perf .:</b>	Satisfactory	Satisfactory	
<b>Quality of ICR :</b>		Satisfactory	

**NOTE:** ICR rating values flagged with '\*' don't comply with OP/BP 13.55, but are listed for completeness.

### 7. Lessons of Broad Applicability:

The ICR identified the following lessons:

- In cases where decentralization has a limited impact on performance and service delivery, it should be followed by concessioning as improved managerial and financial performance can be achieved through a concession contract.
- Modal integration requires political commitment and resistance to the lobbying efforts of the bus unions.
- Rehabilitation of trains may be less expensive, however, it involved significant delays which varied from 12 to 2 months. The project experience shows that neither the local firms nor the international firms were able to deliver rehabilitate trains on time. The time indicated by contractors for train rehabilitation is generally optimistic and should be carefully evaluated.

OED carried out the Project Performance Assessment simultaneously with the preparation of the ICR. It identified following valuable lessons related to concessions and their regulation:

- Strong regulatory institutions are essential for the success of rail concessions. Contracts, which cover long time periods, will inevitably require interpretation and effective dispute resolution system —something that can only be done within the context of strong regulatory capacity.
- Transferring inherently unprofitable operations to the private sector is best addressed by the use of negative concessions. Where commuter rail systems are inherently unprofitable (especially at social tariffs), shifting those losses from the public to the private sector will not make the losses disappear, nor can the private sector be expected to carry such losses indefinitely. For private concessioning to succeed when farebox revenues do not cover costs, a negative concession, whereby the government pays the concessionaire to cover losses, must be used.
- Negative concessions are highly vulnerable to discretionary government behaviors as under the contract, the government pays a private concessionaire to provide service for the duration or part of the contract period based

on the fulfillment of specific output/outcome targets. Negative concessions, therefore, need to be combined with various types of partial risk guarantees so that the risks of government default can be controlled.

**8. Assessment Recommended?**  Yes  No

**Why?** OED already carried out a field assessment of this project in August 2001 to provide input to the CAE (Country Assistance Evaluation) for Brazil and for the OED study on Private Sector Development and Reform in the Transport Sector.

**9. Comments on Quality of ICR:**

The quality of the ICR is Satisfactory.