



1. Project Data:		Date Posted : 09/16/2003	
PROJ ID: P006661		Appraisal	Actual
Project Name: CI Third Rd Sctr	Project Costs (US\$M)	2,075.3	4,589.1
Country: Chile	Loan/Credit (US\$M)	120	118.9
Sector(s): Board: TR - Roads and highways (100%)	Cofinancing (US\$M)	0	0
L/C Number: L3833			
	Board Approval (FY)		95
Partners involved :	Closing Date	06/30/1999	12/31/2002
Prepared by :	Reviewed by :	Group Manager :	Group:
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2. Project Objectives and Components			
a. Objectives			
The objectives of the project were to:			
(a) consolidate the road maintenance and pavement management program financed under the First and Second Road Sector Projects;			
(b) support the governments privatization efforts in the road sector through (i) the use of "global" maintenance contracts, and (ii) promotion of Build, Operate, Transfer (BOT) schemes for private sector financing of road and road related investments;			
(c) improve road traffic safety on the national network; and			
(d) strengthen Ministry of Public Works (MOP) environmental impact assessment and monitoring capacity in the roads sector.			
b. Components			
As a Road Sector Project, this project comprised all Ministry of Public Works (MOP's) road sector expenditures for the period 1995-1998, arranged in three major categories:			
<ul style="list-style-type: none"> ● Investment (US\$1,833.4 million or 40% of total actual project cost), includes road widening, upgrading, construction of bypasses, overlays and road safety infrastructure, and consulting services for engineering and supervision and preparation of Built Operate and Transfer (BOT) schemes. ● Maintenance (US\$ 2,399 million or 52% of total actual project cost) includes periodic and routine maintenance, equipment acquisition, special maintenance operations (tunnels, weighing and toll systems, bridges, riverbank defenses, and road signs), consulting services and training. ● Administration (US\$356.7 million or 8% of total actual project cost). 			
c. Comments on Project Cost, Financing and Dates			
US\$ 118.8 million of the Bank Loan was disbursed and US\$ 1.1 million was cancelled. The decision to reduce foreign borrowings during the early years of the project implementation resulted in slower disbursement profile as the government decided not to request reimbursement from loan proceeds for activities implemented during the first year of the project. The actual project costs were US\$ 4,589 million, more than double the appraisal estimate of US\$ 2,075 million. According to the ICR, this was largely due to the expansion in the government's roads program.			
3. Achievement of Relevant Objectives:			
The project substantially achieved all of its objectives.			
(a) The project assisted in the consolidation of the road maintenance and pavement management program by updating and completing the calibration of all sub-models of the Highway Design and Maintenance Standards Model III (HDM III) for flexible pavements and of the Chilean Comprehensive Management of Pavement Maintenance model (GIMP) for rigid pavement. The Pavement Management Department has developed: (a) Proposal of Maintenance Actions and Status of the Paved Roads Network, (b) Technical and Economic Evaluation of the			

National Roads Network, and (c) Scoping and Characteristics of the National Roads Network.

(b) Increased private sector participation in highway construction, maintenance and operation. 100% of new construction is by contract. The “global” maintenance contracts are being used for 40% of the road maintenance activities. About 418 global contracts were executed, far exceeding the appraisal target of 131 contracts. The program contributed significantly to the establishment and strengthening of 30 mid-size local road maintenance contractors. To support BOT schemes, the project provided Technical Assistance for quality control of feasibility studies, basic engineering, and the review of the regulatory framework. By the end of the project 21 road concession projects were awarded, compared to three at the beginning of the project.

(c) The project improved road traffic safety on the national network by constructing vehicular and pedestrian overpasses, improving road signs and road markings, and providing lightning equipment. Bike paths (about 56% of the appraisal estimate) were constructed. Close coordination between the National Commission on Traffic Safety, the National Police and Highway Directorate (DV) was fostered. Road fatality index (deaths per 100,000 persons) declined from 12.7 persons in 1992 to 10 persons in 2002. Also, the number of interurban accidents decreased from 7,083 in 1996 to 4,972 in 2002.

(d) The environmental evaluation guidelines and methodologies have been enhanced by (a) the development of Roads Manual 9 dedicated to environmental impact evaluation, (b) Environmental Impact Assessment (EIA) studies for environmental monitoring of civil works, and (c) collaboration with the special environmental unit for BOT projects. Also, the data from the Environment Data Bank has been integrated into the Roads Directorate

4. Significant Outcomes/Impacts:

1. Substantial improvement in the condition of the paved and unpaved road network. The condition of the paved road network in good condition improved from 52% in 1995 to 61% in 2001, and in fair condition from 30% to 34%, and those in poor condition decreased from 18% to 5%.
2. Significant decrease in vehicle overloading. The percentage of overloaded vehicles has declined from 18% (of the total vehicles at the weighing stations) in 1993 to 1.9% in 2002.
3. Introduction of internationally approved method by Highway Directorate (DV) to evaluate the efficiency of training courses.

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

- The implementation of the roads concession program was slower than originally envisioned at the appraisal. This was partly due to the delays in preparation, increase in costs, changes in regulatory framework and delays in tendering process. By 1998, only 13 of the 21 road concession projects were awarded.
- During the first three years of the project, the supervision reporting quality was inadequate because of its narrow focus on the civil works and maintenance program and the delays in the disbursement schedule. But it improved during the period 1998-2000.

6. Ratings:	ICR	OED Review	Reason for Disagreement /Comments
Outcome:	Satisfactory	Satisfactory	
Institutional Dev .:	Substantial	Substantial	
Sustainability:	Likely	Likely	
Bank Performance:	Satisfactory	Satisfactory	
Borrower Perf .:	Satisfactory	Satisfactory	
Quality of ICR:		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:

- Global maintenance contracts are effective in maintaining non-concessioned road network. The project experience has shown significant savings of administrative expenses as compared to Specific Contracts. However, few deficiencies have been detected in the administrative conditions which need to carefully looked into such as the requirement to award to lowest-price bidder, which creates problems in enforcing the contract, specifically in times of crisis.
- If very few companies are interested in participating in International Public Bids due to low amount set for the threshold, this would indicate that it may be convenient to increase such threshold for future projects.

8. Assessment Recommended? ● Yes ○ No

Why? To verify the project ratings and to draw lessons from the implementation of the privatization and institutional strengthening components.

9. Comments on Quality of ICR:

Although the ICR has been rated satisfactory, however, it contains some weaknesses. More lessons could have been drawn from the rich project experience. Also, the ICR does not adequately explain the doubling of the total project cost from US\$ 2,075 million at appraisal to US\$ 4,589 million at completion. It mentions that the governments roads program was expanded. However, it does not provide data on unit costs. Also, while the ICR reports considerable data on performance indicators in Annex 1, they are not easy to interpret as it is unclear as to what period in time they are referring to.