



<b>1. Project Data:</b>		<b>Date Posted :</b> 05/13/2002	
<b>PROJ ID:</b> P006180		<b>Appraisal</b>	<b>Actual</b>
<b>Project Name:</b> Rd Maint	<b>Project Costs (US\$M)</b>	240.0	272.9
<b>Country:</b> Bolivia	<b>Loan/Credit (US\$M)</b>	80.0	81.6
<b>Sector(s):</b> Board: TR - Roads and highways (87%), Central government administration (13%)	<b>Cofinancing (US\$M)</b>	0.0	0.0
<b>L/C Number:</b> C2395			
	<b>Board Approval (FY)</b>		92
<b>Partners involved :</b>	<b>Closing Date</b>	06/30/1998	06/30/2001
<b>Prepared by :</b>	<b>Reviewed by :</b>	<b>Group Manager :</b>	<b>Group:</b>
Hernan Levy	Jorge Garcia-Garcia	Alain A. Barbu	OEDST
<b>2. Project Objectives and Components</b>			
<b>a. Objectives</b>			
(a) Improve road conditions in order to reduce vehicle operating costs, improve access to markets, and encourage trade development			
(b) Improve the road maintenance budget process			
(c) Improve road maintenance management, planning and operations			
(d) Improve investment planning for roads			
(e) Assure SNC's adequate maintenance funding			
(f) Strengthen the domestic construction industry by having private contractors participate in road maintenance works; and			
(g) Transfer maintenance technology and organization to the local governments in the framework of the proposed decentralization			
<b>b. Components</b>			
(a) periodic maintenance by contract of 781 km of the paved road network and 765 km of the gravel network			
(b) periodic and routine maintenance program by force account			
(c) maintenance and rehabilitation on 77 bridges			
(d) work compound and warehouse construction			
(e) rehabilitation of maintenance equipment and complementary equipment purchases			
(f) road safety program			
(g) institutional strengthening and technical assistance			
Changes in project design during implementation resulted in the project further focusing on road maintenance and rehabilitation [components (a), (b) and (c)] and on institutional strengthening, as actual share of these components was 98 percent of project cost, compared with 94 percent at appraisal.			
<b>c. Comments on Project Cost, Financing and Dates</b>			
Total project cost, estimated at \$240 million at appraisal, rose to \$272.85 million by project completion. Schedule 1 of Credit Agreement was periodically revised to reallocate the proceeds of the loan as requested by the Borrower . The closing date was extended twice . The three year delay in the closing date was due to drastic changes in government policies including decentralization and recentralization of road management, civil disturbances that significantly hampered execution of civil works, and harsh climatic conditions, notably the recurrence of the El Nino phenomenon, bringing heavy rainfalls and floods			
<b>3. Achievement of Relevant Objectives:</b>			
The factors that delayed project execution also influenced the achievement of objectives . The most significant factor was the decentralization process, implemented well beyond what was expected at appraisal . In 1995, a government decree transferred the management of the entire road network from the National Roads Agency (SNC) to newly created local governments (the Prefecturas) in Bolivia's nine regions. This process resulted in the spreading of			

human, physical (equipment) and financial resources too thin, severely reducing the country's capacity for managing the road network. While the project objectives were not revised, the decentralization process and related policy changes caused a shift in the relative importance given to the various objectives. As a result, some components were reduced or even eliminated (procurement services), while others were expanded. In particular, resources for institutional strengthening were almost tripled (relative to appraisal) as the project attempted to help redress the deteriorating institutional framework.

The project's key physical targets were largely met, although 3 years later than originally foreseen. Road rehabilitation was 99 percent achieved for paved roads (775 km actual compared to 781 km target) and 73 percent for gravel roads (557 km versus 765 km at appraisal). In addition, under a pilot of maintenance by contract 440 km of roads received major maintenance. Including the pilot, the project surpassed the number of kilometers to be rehabilitated/maintained by 15%. Rehabilitation of bridges reached 84 percent of the target (65 bridges actual compared to 77 at appraisal). Maintenance by force account, following the decentralization process, was substituted by contracted work; overall, maintenance with counterpart resources was 28 percent larger than the appraisal forecast, but spread out over a longer period of time than anticipated. Other physical components (acquisition of equipment for axle load control and traffic counting, road safety barriers and road signalling) were executed to about 75 percent of the original appraisal resources. The maintenance equipment component and the work compound and warehouse component were implemented minimally and were phased out following the 1995 decentralization process. The economic rate of return was a high 36 percent (39 percent at appraisal).

#### 4. Significant Outcomes/Impacts:

- Implemented under radically shifting political and economic policies, and civil unrest, the project managed to achieve most of its physical (civil works) targets.
- build up of experience of the private construction industry in road works, through project -financed contracts (29 for rehabilitation, 7 for maintenance and 13 for bridge rehabilitation).
- strategic planning workshops led to the renewal of the National Road Agency, and the selection of this agency as one of the first three (together with Customs and Tax Administration) to be included under the ongoing Institutional Reform Project.

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

- the expectation that after decentralization 100 percent of the paved network and 70 percent of gravel network would be in good to fair condition was not realized. Instead, the two networks deteriorated during the decentralization period due to inadequate allocation and use of maintenance resources. Upon recentralization, there has been a turn around in the condition of the roads, but not enough to achieve the expected level of improvement.
- long delay in project implementation
- progress made initially for the establishment of maintenance and equipment management systems in Servicio Nacional de Caminos's (SNC) district offices was negated by the decentralization process
- the project had little impact in improving the administration and management of maintenance in SNC and in ensuring reliable funding for SNC

6. Ratings:	ICR	OED Review	Reason for Disagreement /Comments
<b>Outcome:</b>	Satisfactory	Moderately Satisfactory	On account of the non-achievement of the road condition target and the low efficacy of institutional development objectives [N.B.: this rating is not available under the ICR rating scale]
<b>Institutional Dev.:</b>	Modest	Modest	
<b>Sustainability:</b>	Likely	Non-evaluable	Current conditions and stability of the highway sector's institutional set up and finance do not allow to judge resilience, especially to potential shortfalls in maintenance funding. [N.B.: this rating is not available under the ICR rating scale]
<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 most significant lesson of this project is the dangers of a decentralization done to extreme, where the whole road network of the country was transferred to 9 regional governments (the 'Prefecturas'). The Bolivian experience showed that such a drastic decentralization cannot be successful because limited resources (human, financial,

technical) are spread too thin and the responsible local institutions are not prepared . At the same time, the local political interests often conflict with national interests leading under the decentralized organization to favoring local roads to the neglect of the national road network . The cost of decentralizing and later recentralizing represents a significant waste of resources . For a decentralization of road management to be successful, it must be carefully tuned to local capacities and resources and adequate incentives mechanisms must be designed so that the local government carries out maintenance effectively .

**8. Assessment Recommended?** ☒ Yes ☐ No

**Why?** To learn from decentralization and recentralization process, and to pass a better -founded judgment of outcome and other ratings that is advisable in view of the decentralization /recentralization swing .

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

The ICR is satisfactory. It presents a detailed description and analysis of the circumstances under which the project was executed, and how they affected implementation and outcome . In some sections the ICR could have been shorter, as it presents more information than that needed to evaluate the project .