



<b>1. Project Data:</b>		<b>Date Posted :</b> 10/28/2002	
<b>PROJ ID:</b> P008329		<b>Appraisal</b>	<b>Actual</b>
<b>Project Name:</b> Highway Sector	<b>Project Costs (US\$M)</b>	567.81	1,598.46
<b>Country:</b> Croatia	<b>Loan/Credit (US\$M)</b>	80.00	79.90
<b>Sector(s):</b> Board: TR - Roads and highways (91%), Central government administration (9%)	<b>Cofinancing (US\$M)</b>	47.50	40.87
<b>L/C Number:</b> L3869			
	<b>Board Approval (FY)</b>		95
<b>Partners involved :</b> EBRD	<b>Closing Date</b>	12/31/2000	06/30/2001

<b>Prepared by:</b>	<b>Reviewed by:</b>	<b>Group Manager :</b>	<b>Group:</b>
Adam L. Understein	George T. K. Pitman	Alain A. Barbu	OEDST

**2. Project Objectives and Components**

**a. Objectives**

The main objective of the project was to support and speed up the modernization and transformation of the transport sector with special emphasis on the main road network and Croatian Road Authority (HC). This was to be achieved through seven sub-objectives:

- (a) Assist the Government of Croatia (GOC) in its investment program for the roads sector with the objective of reducing the deterioration of the network and completing the construction of a few well justified sections
- (b) Support the development of modern management tools in HC
- (c) Improve the road safety situation
- (d) Decrease road vehicle emissions
- (e) Maintain the present level of road user charges
- (f) Support the restructuring of Croatian Railways (HZ) leading to reduced budget transfers
- (g) Contribute to the elaboration of a master plan and associated investment for the port of Rijeka .

**b. Components**

(i) **A three-year time slice (1995-97) of Croatia's HC road expenditure program** . Components of this program were tentative at appraisal but included repair of war damage, highway rehabilitation, resurfacing, and routine maintenance (totaling 49% of project cost at appraisal); completion of projects that accommodated changes in transport demand provided they produced an economic rate of return greater than 12 percent (trunk highway construction, 24% of project cost at appraisal); the financing of highway equipment for construction and maintenance; and the elimination of black spots.

(ii) **Technical assistance and studies for** : restructuring HZ, road safety study, implementation of pavement and bridge management systems, and Rijeka port study .

(iii) **Training for HC technical personnel** in modernizing road maintenance techniques, including pavement and bridge management systems.

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

EBRD cofinanced the project through parallel funding (\$47.5 million equivalent) but operated individually and followed its own procurement practices, and US\$ 11.7 million from the 1994 IBRD Emergency Reconstruction Loan (3760-HR) also supported project objectives . Government disbursed US\$ 1,486 million against the agreed amount of US\$428.61 million, and planned retroactive financing was not needed . The Bank loan of \$80 million equivalent was fully disbursed with the exception of about \$47,000 that was cancelled, and the project closed on June 30, 2001, six months later than the original closing date (because of slow implementation of the pavement and bridge management systems).

**3. Achievement of Relevant Objectives:**

Some of the project's main objectives were achieved but the agreed highway sector policy was not followed (Section 5).

- (a) The project only partly achieved its main objective of speeding up the modernization and transformation of the (mainly highways) transport sector. Funds spent on road maintenance and rehabilitation were on target .

- (b) The project only partially achieved its objective to support the development of modern management in HC . Modern management tools were introduced and technical capacity to manage roads was significantly improved but are not being fully employed .
- (c) Road safety marginally improved following implementation of a number of recommendations in the road safety study: fatalities decreased by 10% from 1996 to 2000 but are still high compared with Western Europe .
- (d) Government reports that road vehicle emissions decreased by 10%. Many of the recommendations of the vehicle emission study - introduction of unleaded gasoline, reduction of leaded levels to 0.4% by weight, and enforcement of more strict technical requirements for vehicles - were introduced and are assisting government to align regulations with EU directives .
- (e) The level of road user charges exceeded appraisal agreements . Road revenues jumped from \$192 million to \$922 million a year between 1994 to 2000 .
- (f) The project successfully completed the Croatian Railways restructuring study, and its recommendations have been adopted and are being implemented, with the Bank supporting this initiative through the ongoing Railway Modernization and Restructuring Project .
- (g) The study on Rijeka port (financed by France) is being used to help prepare the proposed Rijeka Port and Highway Project .

#### **4. Significant Outcomes/Impacts:**

1. After the government abandoned the original sector strategy, thereby breaching project covenants, the Bank resorted to substantial dialogue and sector work rather than cancellation . This led eventually at the end of the project to renewed agreement (with a new government) on highway sector strategy and restructuring in 2001 of the sector .
2. Physical works financed by the Bank had high rates of economic return (weighted average was 45%), as is typical for rehabilitation expenditure .
3. The government transferred about 5,000 km of lesser roads (which HC had difficulty maintaining) to local government responsibility, with funding allocated from central sources .
4. Croatia made progress with the development of its domestic contracting industry for road works . Domestic construction companies won most of the contracts, and 14 commercialized road maintenance companies were created in 1998 from former HC maintenance departments and are in the process of being privatized .

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

- The maintenance backlog was not reduced as far as can be told (data is inconclusive) . At appraisal, the maintenance problem was considered so serious, and of such magnitude, that there were concerns that the road network would continue to deteriorate despite achieving project targets . Although management improvements were a project objective, tracking road conditions was not effective such that the overall condition of the national road network, compared with its poor state at appraisal, is unknown .
- Although the level of road user charges exceeded appraisal agreements, most of these funds were not allocated to transport expenditures at a time when maintenance and reconstruction needed more funding if the backlog was to be reduced . Only 27% was spent on roads in 2000 compared with 67% in 1994, and of the 27%, two-thirds was allocated for the construction of new motorways contrary to the project strategy .
- Sector priorities were abandoned . Despite government's agreement at appraisal to allocate only US\$ 152 million for new and improved roads, expenditure on new motorways (1995-2000) was US\$1.02 billion on a new 10-15 year program to construct 1,530 km of high level toll roads and motorways (on the existing base of 593 km) at a total cost of US\$6.5 billion . Since equity funds from government were not available, Croatia was forced to take expensive short-term loans to finance turnkey contracts with foreign firms . As a result, unit prices for motorway construction were about 140% of prices in Western Europe . The Ministry of Works did not carry out feasibility studies or the agreed economic screening tests for these works . The high cost of new construction diverted funds from essential O&M of existing roads and weakened the administration of the roads sector . A new government, elected in 2000, recognized that the motorway program was not sustainable and is currently working with the Bank to mitigate the problems created .
- Decisions on the motorway program were taken at a high level without involving HC, without economic justification, and with little information made public . Contracts were negotiated in a non-transparent way, at a high price, and were influenced by political considerations . Modern road management tools were not put to full use . Furthermore, the motorway program violated the loan covenant that major road works (more than \$5 million) be demonstrated to have a satisfactory ERR exceeding 12% .
- While the management of HC was improved, the available modern management tools (for road and bridge maintenance programming) were not used, although the ICR expects this to change in favor of using the new system .
- These contracting problems in HC may have undermined the efficiency and competitiveness of the expanded domestic contracting industry .
- Low salaries for employees of HC resulted in the loss of skilled manpower, but this problem may have not been amenable to a project-specific solution .

6. Ratings:	ICR	OED Review	Reason for Disagreement /Comments
<b>Outcome:</b>	Satisfactory	Moderately Unsatisfactory	See section 5.
<b>Institutional Dev .:</b>	Modest	Modest	
<b>Sustainability:</b>	Likely	Likely	Primarily due to a change of government and new sector policies from 2001.
<b>Bank Performance:</b>	Highly Satisfactory	Satisfactory	When government abandoned the agreed sector strategy the Bank could, and perhaps should, have cancelled, but chose to continue to work towards improved policies which eventually was achieved following a change of government.
<b>Borrower Perf .:</b>	Satisfactory	Unsatisfactory	Government quickly abandoned the agreed sector strategy and breached efficiency covenants. Most new works were uneconomic and contracting was non-transparent, indicating a continuing drain on the economy. The new government is addressing these problems, but too late to affect the outcome for the completed project.
<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:

1. High borrower ownership of an agreed sector policy should be a prerequisite of lending, and when critical sector policies are ignored the Bank should cancel.
2. Tying project objectives into conditions for membership of the EU is an effective way of providing incentives for institutional reform.

#### 8. Assessment Recommended? Yes No

**Why?** Mainly to clarify disagreements with the region concerning Outcome and Bank /Borrower performance ratings, and to fill major information gaps in the ICR (e.g. the status of the locally managed roads).

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

The quality of the ICR is satisfactory overall, although a more thorough explanation of economic analysis calculation, and more extensive borrower's and cofinancier's comments, could have been provided. Also, a discussion describing the decentralization of the road network should have been included, particularly since 43% of the state road network was transferred to local governments. In addition, a distinction should have been made between private sector contractors and commercialized road maintenance companies when describing progress with developing the domestic road contracting industry. This latter limitation also existed in the appraisal document. The ICR could have been more explicit on the environmental and social impacts of the construction program.