



Calcutta Transport Infrastructure Development Project

Contributing to reducing traffic congestion and a better environment by improving and grade-separating intersections in this large city

[External evaluator]

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Rating

Effectiveness, Impact	a	Overall rating B
Relevance	a	
Efficiency	c	
Sustainability	a	

Project Objectives

To improve road surfaces for smoother traffic by building ten major intersections in the central part of the city, and thereby contribute to economic development, better public transport services, and a more favorable urban environment.

Outline of the Loan Agreement

- Loan amount / disbursed amount: 10,679 million yen / 10,531 million yen
- Loan agreement: February 1997
- Terms and conditions: 2.1% interest rate; 30-year repayment period (including a 10-year grace period); general untied
- Final disbursement date: December 2005
- Executing agency: Transport Department, State Government of West Bengal
- Website URL: <http://www.wbgov.com>



Additional work area

Changes in traffic volume at peak times (No. of cars/hour)*

Intersection	Direction	Before the project	At the time of ex-post evaluation Feb. 2008	Percentage increase
AJC BOSE	West→East	400	1,840	360
	East→West	274	2,054	650
GARIAHAT	North→South	950	2,314	144
	South→North	1,090	2,872	163
PARK	South→North	1,976	4,437	125
	North→South	1,746	3,226	85
LOCK GATE	South→North	475	930	96
	North→South	234	1,046	347

* The peak times are defined as 09:00 - 11:00 and 16:00 - 18:00.
Source: Transport Department, State Government of West Bengal

Effects of Project Implementation (Effectiveness, Impact)

This project has resulted in gradual increases in traffic volume in the city of Kolkata, formally known as Calcutta, judging from the fact that the traffic volume at most of the grade-separated intersections constructed under this project increased more than 100% (see the table below). The project has also made some contribution to smoother traffic flows in the city. It is evident from the fact that the average traveling speed along seven routes in the city increased from 12.9 km/h in 1992 to 19.6 km/h at the time of the ex-post evaluation, and from the beneficiary survey showing that 77% of the road users who responded noted reduced traffic congestion and a shorter commuting time, and that some 73% reported better driving comfort. Finally, the project has made some contribution to a better urban environment as well. Such air pollutants as SO₂ and NO₂ as well as noise levels have been on the decline, although levels of suspended particle matter (SPM) and noise have yet to meet national standards. This project has largely achieved its objectives and its effectiveness is high.

Relevance

This project has been highly relevant with India's national policies and development needs at the times of both appraisal and ex-post evaluation. Kolkata has far much lower ratio of roads than that of other major cities, making road traffic more concentrated in the city center. The need to increase the road capacity, especially by grade-separating or otherwise improving intersections, was well recognized in the city in the project planning phase. At the time of the ex-post evaluation, more emphasis was placed on how to cope both with the increased transport demand as a result of recent economic growth and with health hazards associated with air and noise pollution.

Efficiency

The project period was much longer than planned and the project costs slightly exceeded the plan (182% and 104% of planned respectively); therefore the evaluation for efficiency is low. The major causes of the delay were associated with land acquisition and the need for relocating underground installations such as water mains. The additional cost was chiefly due to the relative increase in the value of the domestic currency and by additional work to make up for the cancelled work for grade-separated intersections.

Sustainability

No major problems have been observed in the capacity of the executing agency nor its operation and maintenance (O&M) system; therefore sustainability of this project is high. The Hooghly River Bridge Commissioners (HRBC), which is responsible for the O&M of the project, provides its staff with regular training. It also received adequate budget allocations for the project O&M.

Conclusion, Lessons Learned, Recommendations

In light of the above, this project is evaluated to be satisfactory. There remains a considerable need to construct the planned but cancelled intersections with grade separation. It is advisable to study technical alternatives soon, including the construction of bridge piers with a smaller cross section that will not require the relocation of underground installations. A major lesson learned is the importance of establishing a system that ensures smooth coordination with the residents and organizations concerned to provide prompt solutions to problems associated with land acquisition and the relocation of underground installations.