

**PROJECT INFORMATION DOCUMENT (PID)
APPRAISAL STAGE**

Report No.: AB4839

Project Name	Allahabad Bypass Project
Region	SOUTH ASIA
Sector	Roads and highways (93%); Other social services (7%)
Project ID	P073776
Borrower(s)	GOVERNMENT OF INDIA
Implementing Agency	National Highways Authority of India NHAI, Plot No. G5&G6 Sector 10, Dwarka, New Delhi India Contact Person: H. C. Arora, Chief General Manager (World Bank Projects) Tel: 91 11 508-0355; 91-11-508-0988; Fax: 91 11 508-0360 nhai@vsnl.com
Environment Category	<input checked="" type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> FI <input type="checkbox"/> TBD (to be determined)
Date PID Revised	June 5, 2009
Date of Appraisal Authorization	April 21, 2003
Date of Board Approval	October 14, 2003

1. Country and Sector Background

Main Sector Issues: (a) Serious road capacity constraint on the core national highway network. The national highway network has a total length of about 63,000 km¹, which accounts for about 1.7 percent of the total road network of 3.3 million km but carries over 40 percent of the road traffic. Over 95 percent of the national highway network are two-lane roads or less, and 25 percent are in poor surface condition. Steady economic growth during the last 10 years has increased traffic on the national highways by 10 percent per annum. As a result, the trunk national highways are increasingly congested. (b) Poor management of road infrastructure services. The level of service is further worsened by the mixed traffic of fast and slow vehicles, mixed use of right-of-ways passing through urban areas, encroachment, and state border checkpoints (for commodity permit inspection and tax collection) that often hold up trucks for many hours. Even four laning in large sections of Golden quadrilateral has not resulted in any significant change in traffic mix in absence of adequate access control and provision for movement of local traffic.

Poor driving conditions in mixed traffic is a major contributing factor to road traffic accidents in national highways, especially through the densely populated urban areas. The death rate per 10,000 vehicles in India is around 10 times the levels seen in the European Union, and 38 percent of the road accidents in India occur on national highways. (c) Limited private sector participation in road financing. Improving the level of service on the national highway corridors requires both capacity augmentation and traffic efficiency/safety enhancement. The financial requirements for increasing the trunk highway capacity through 4-laning, 6-laning, and expressway construction are expected to be substantial, and it will be

¹ Over the implementation period of the project, the national highway network expanded from 57,700 km to 63,000 km.

difficult for the public sector to meet the requirement. However, private sector participation in road financing is very limited. Few projects are financially viable for stand-alone BOT (Build, Operate, and Transfer) schemes, and most projects would require Public-Private Partnership (PPP) to become viable. Various modalities of PPP are currently under development in limited cases, and these need to be tested and extended to cover more projects. (d) Weak institutional capacity to address highway project related social and environmental issues. National highway development in India is also heavily constrained by the weak institutional capacity to address project-related environment and social issues. While relevant laws and government procedures are in place, the technical capabilities of road agencies are inadequate.

Coordination is weak between the central and state administrative jurisdictions. The mechanism for consultation with project-affected people, stakeholders, and NGOs is developing, but remain inadequate.

Government strategy. The Government of India (GOI) recognizes that the poor performance of the national highway system has been a major drag on economic growth and is determined to upgrade the system through its National Highway Development Program (NHDP). Covering a network of 13,000 km, the program includes the 4-laning of a 6,000 km Golden Quadrilateral (linking Delhi, Calcutta, Chennai and Mumbai), the North-South and East-West corridors, and the trunk roads to key ports. It also includes the planning and construction of expressways where feasible. The total cost for the program is estimated to be US\$15 billion over eight years, and funding sources include government grants, fuel levies, tolls, bonds, private investments, and loans from international development banks. A dedicated Central Road Fund, with revenues from a cess (tax) of Rs. 1 per liter on petrol and diesel was established by GOI in 1999, and a substantial portion (about Rs. 2,000 crores or equivalent of US\$416 million a year) of the Fund is earmarked for national highway development, maintenance, and operation. GOI also has amended the National Highway Act and developed policy guidelines to permit private financing of highways under BOT schemes or PPP arrangements. Institutional reform to improve the effectiveness of public road agencies to deliver road infrastructure services is also an integral part of the government strategy. The Ministry of Road Transport & Highways (MORTH) has long been responsible for national highways. In the past, with close oversight, MORTH delegated considerable responsibilities to the national highway branches in the state Public Works Departments. In 1998, GOI entrusted the National Highways Authority of India (NHAI), a new implementing agency established under the NHAI Act, to take charge of the implementation of NHDP, including projects financed by ADB, the Japanese Bank for International Cooperation and the World Bank. The Act requires NHAI to discharge its functions on business principles as far as possible. The agency has maintained a lean organization by outsourcing most of its activities to the private sector. Through the institutional development actions supported under the Bank and ADB projects, NHAI has taken significant steps to develop and strengthen its institutional capacity for the development, maintenance, and operation of the national highway system in response to the needs of road users and other stakeholders. NHAI is also a designated implementing agency for the preparatory work and monitoring the implementation of private investment projects on the national highway network. The agency has taken responsibility for the maintenance and operation of the entire Golden Quadrilateral and achieved this through suitable maintenance contracts with the private sector, partly through the implementation of the Corridor Management Units under the World Bank financed Third National Highway Project (TNHP) and Grand Trunk Road Improvement Project (GTRIP).

2. Objectives

The Bank adopts a programmatic approach to support GOI's NHDP through a series of loans. The Allahabad Bypass Project (ABP) is the third in the series, following the TNHP and GTRIP, which were approved by the Board in June 2000 and June 2001, respectively. All three projects finance the upgrading

of National Highway 2 (NH-2) between Delhi and Calcutta (with the ABP taking up the last remaining section), and support national highway institutional strengthening actions under an institutional development framework agreed with the client. Thus the development objectives of ABP are consistent with those of TNHP and GTRIP: (a) to reduce transport constraints on national economic activity; and (b) to improve institutional capabilities to manage road programs, assets, and services on a more commercial basis.

3. Rationale for Bank Involvement

The most important contribution of the Bank in this sector is the knowledge of effective institutions, policies, financing and implementation mechanisms in other parts of the world, and experience with economic, social, and environmental analyses of projects. This project focuses on the strengths and weaknesses of current practices in the sector in India, and has mobilized technical expertise in examining and testing new approaches. Many of the procedures which have been put in place during the preparation of TNHP and GTRIP are now being adopted by NHAI for all of its project preparation activities, including procurement, engineering, environment, land acquisition, resettlement, construction supervision and dispute resolution practices. The Bank has been supporting NHAI's institutional development, and facilitating the exchange of information between the central government, states and the private sector. Continued involvement of the Bank has facilitated institutional reforms in sound business management, accountability and responsiveness to external stakeholders, improved road asset management and traffic efficiency and safety, and better planning, policy and regulations.

4. Description

The Project, as originally envisaged, had three components, namely (a) Bypass Construction, (b) Corridor Management and (iii) Institutional Strengthening. The bypass construction, the largest component, envisaged construction of 82 km long partially access controlled 4-lane divided carriageway facility including a 1 km bridge over the River Ganges. The corridor management component, entailing rolling out of performance based maintenance contracts and establishing of automatic traffic management system at 3 locations in the Golden Quadrilateral. The institutional strengthening component included undertaking user satisfaction surveys and integrating the survey findings in NHAI's operational strategy and business plan to help NHAI to sharpen its focus on user responsiveness.

As the project was implemented, a few changes impacting several planned activities took place. For example, both the planned installation of automatic traffic management units and roll out of performance based O & M contracts (major activities under the corridor management component), were dropped following a strategic decision made in 2006 by the Government of India to build six lanes in the entire road system of the Golden Quadrilateral, using a public private partnership (PPP) approach. Given that the PPP approach effectively incorporated these activities, it was found these activities were no longer relevant to the project. In the meantime, the bypass construction component began to experience marginal time and cost overruns, thus opening up a possibility that funds originally set aside for the corridor management component could be moved to this component. Thus, taking both changes into account, GoI requested the project be restructured in order to drop the corridor management component and to reallocate related loan funds to the bypass construction component. This was done in June 2009.

Other developments that positively affected plans for the corridor management component were factored into the restructuring process. These were related to two activities already undertaken in the two preceding Bank-supported projects of the overall program, the Road Information System (RIS), and the formulation of a Corridor Management (CM) Strategy.

Although not affecting restructuring, it should be noted that another positive outcome of the Bank-supported program was the successful use of a number of PPP road concessions by NHAI utilizing its own resources. This was facilitated by various studies and activities supported by projects under the program, and assessments of these conclude they had an impact on the development and evolution of new policies and practices in the sector.

5. Financing

Source:	(\$m.)
Borrower	80.2
International Bank for Reconstruction and Development	240
Total	320.2 ²

6. Implementation

Similar to the arrangement under TNHP and GTRIP, the project is prepared and implemented by NHAI with extensive outsourcing to the private sector and close coordination with the relevant state, Uttar Pradesh. Within NHAI, implementation of the highway upgrading component is under the direct responsibility of a Chief General Manager, supported by an on-site Project Management Unit (PMU). A high-level State Project Coordinating Committee in Uttar Pradesh has been functional in facilitating land acquisition, resettlement, utility shifting, forestry and other issues which may require coordination between NHAI and the state. Responsibility for land acquisition and resettlement and financing of all project-related costs remained with NHAI. Accounting and internal control arrangements: NHAI has decentralized accounting arrangements. Its on site project management teams prepare monthly trial balances which are sent to the headquarters. The bypass construction works are supervised by independent professional construction supervision consultants. The contractor's bills are checked by the consultants in addition to ensuring quality control. Bills are also checked by NHAI technical and accounts staff before making payments to contractors. NHAI has a team of finance professionals who will coordinate the consolidation and submission of reimbursement claims for the project. NHAI has been implementing a Financial Management System (FMS) action plan originally developed under TNHP. A computerized integrated financial management system has been developed and rolled out to cover all NHAI activities. The internal audit function has been re-established and continues to be strengthened.

7. Sustainability

Benefits of the project are likely to be sustained over time as the traffic volumes increase. The facility will be operated as a tolled facility to be managed by a long term O & M contract through a private concessionaire which is expected to enhance the sustainability of the investments. Nevertheless, a key factor will be NHAI's overall institutional capacity to maintain and efficiently operate the newly created road assets. The project will enhance this capacity through institutional strengthening, promotion of private sector involvement, and assured funding mechanisms. Key issues for sustainability remain as, (a) establishing an overall strategy for national highway spending; and (c) ensuring adequate funding for maintenance.

² The estimate presented in the original PID was preliminary and subsequently firmed up to the current figure during Project Appraisal.

8. Lessons Learned from Past Operations in the Country/Sector

ABP is the third Bank project to support NHDP and its implementing agency, NHAI. The two preceding projects TNHP and GTRIP have now been concluded with moderately satisfactory ratings. Some initial lessons learned from the two preceding projects were reflected and integrated in the design of ABP. Although good progress in the civil works components of TNHP and GTRIP was made, the institutional strengthening components advanced slowly. Thus the appraisal timetable for ABP was closely linked to the implementation progress of TNHP and GTRIP. Weaknesses were identified in the areas of financial management and environmental and social safeguard capacity during the preparation and implementation of the first two projects, and those were addressed in ABP by strengthening the financial, social and environmental management framework. The land acquisition and the implementation of environmental management plan and resettlement action plan of TNHP and GTRIP was closely monitored, and much stronger processes for environmental assessment, stakeholder consultation, land acquisition and resettlement, and government clearances were adopted for ABP.

Program of Targeted Intervention (PTI) N

Environment Aspects (including any public consultation)

The bypass passes through mostly rural and some semi-urban areas. The terrain across the entire project area is quite homogenous, undulating, fertile alluvial irrigated agricultural land. The alignment traverses about 104 villages, one major (Ganga) and two minor river crossings, about 30 stream and 30 canal crossings. By freeing large volumes of motor vehicle traffic from the build-up area of Allahabad City, the bypass will substantially contribute to the reduction of motor vehicle pollution that would otherwise affect the city's high density population. The bypass will also cause significant environmental issues mainly along the alignment, including alternation of land use, tree loss, induced ribbon development, motor vehicle emissions and noise, traffic accident risks, alternation of natural drainage pattern. The bypass construction has also caused large volume of earthwork, use of material from quarries and borrow areas, and other construction related impacts (such as large volumes of material excavation, use of potable water, setting up of stone crushers, hot-mix plants and concrete batch plants, round-the-clock laying of concrete, and spills of oil, fuel, lubricants and bitumen). The environmental issues have been assessed in detail and avoidance/mitigation measures developed through the Environmental Assessment (EA) process. Identification of all stakeholders were carried out, covering urban (Allahabad), semi-urban and rural people (some of whom who lost land or properties); communities potentially impacted by increased traffic and safety concerns; hospitals, schools, libraries, and businesses; road users including road user associations; government officials from the line departments; local government agencies including village level 'panchayats'; NGOs and community based organizations working in the region; and experts including forestry, wildlife and environmental professionals. It should be noted that the project was developed through a participatory process. Stakeholder consultations were carried out as part of the EA and Social Assessment screening process and were continued throughout the project cycle. The consultations were conducted through various means, including door-to-door personal interviews, village meetings, focus group discussions, and consultations with experts and NGOs working in the area. Public consultations were held on the scope, methodology and expected outputs of the EA and the Environmental Management Plans (EMPs). An analysis of potential impacts and avoidance/mitigation alternatives were carried out, and the adequate mitigation measures developed for the EMPs. Subsequently, public consultations on the draft EMPs were carried out to develop enhancement plans and refine mitigation measures and the findings of the consultations will be incorporated to the extent possible in the bypass designs.

9. Contact point

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Note: This is information on an evolving project. Certain components may not be necessarily included in the final project.

This version of PID was processed by the InfoShop during the week ending June 15, 2009.