I. Introduction and Context

Country Context

Gujarat, located in the west of India is the seventh largest (6 percent of total) state by area and tenth largest (5 percent of total) by population. An industrially advanced and high growth state, Gujarat contributes to about 10 percent of India GDP and is considered as a leader in pursuing economic reforms. The state GDP grew at 10.2 percent per annum during the plan period 2002-2007, at a pace much higher than the national average. The state accounts for 39 percent of total industrial output, 67 percent of petrochemical production and 20 percent of exports of India. The state has been quite effectively pursuing economic reforms across many sectors, including, but not limited to, fiscal reforms, power reforms, education reforms and private sector participation in infrastructure. The private sector influences, both implicit and explicit, have played crucial roles in shaping the reforms in various sectors. Many policies on port and privatization especially, were shaped and energized by private sector needs, capacity and initiatives. Gujarat has been a pioneer in complementing these reforms through better governance initiatives. It has been harnessing information and communication technologies to offer more efficient and transparent citizen based services notable among these are the complete computerization of land records and SWAGAT, the grievance handling system developed for the state. Gujarat also ranks first in the country to have made E-Governance functional in all its municipalities and municipal Corporations.

Sectoral and Institutional Context

The state prepared a State-specific road development master plan (Gujarat Road Development Plan, 1981-2001), part of which was funded with World Bank assistance. In 1996, to better define and update the objectives of the Road Development Plan, GOG issued a cabinet-endorsed “State Road Policy” which declared the following objectives: (a) provide connectivity to all villages by all-weather roads; (b) provide an adequate and efficient road system encompassing all transportation needs to ensure smooth and uninterrupted flow for intra and inter-State goods and passenger traffic; (c) upgrade technology by introducing superior and quicker construction and maintenance methods; (d) induct more scientific principles in resource allocation for maintenance and new construction programs; and (e) set high standards of road safety and travel comfort. To help achieve the above objectives, GOG also significantly increased the allocations for the road sector during the ninth State Plan (1997-2001) and onwards.

Gujarat has one of the most extensive and traffic intensive road networks in the country. The road (plan roads only) density in the state stands at around 38 km per 100 sq km and 146 km per 100,000 persons. These figures are broadly comparable to 43 km and 126 km for India. However, it needs to be realized that approximately 92 percent of Gujarat roads are paved which is significantly more than the country’s average (58 percent) and other advanced states, e.g., Andhra Pradesh (68 percent), Karnataka (61 percent) and Punjab (81 percent). During the last 15 years, the State road network expanded in length from around 50,000 km to about 74,000 km and the paved part increased from about 66 percent to 92 percent of the total length. The development, however, of the network in the relatively lagging eastern tribal region and arid Kutch region in the west needs to be assigned higher priority from strategic and regional growth balance perspectives.

Gujarat has been pioneer in using PPP approach in development of its primary road network. Till date it has successfully implemented 16 road and bridge projects, valued at about Rs. 21 billion, through the PPP route. In parallel with the first Bank-funded Gujarat State Highways Project (GSHP), the GOG took early action to set up the Gujarat Infrastructure Development Board (GIDB) to streamline clearance of infrastructure projects implemented under PPP, as well as the Gujarat State Roads Development Corporation (GSRDC) and various special-purpose toll road development and management bodies, separate from the previous R&B centered approach to roads development. The state, however, needs to re-balance its highway PPP strategy to include...
mechanisms such as the availability based payment (annuity mode) and other innovation in this field to take maximum advantage of the state robust structural framework, conducive business environment and long successful track record in implementing PPP projects, resulting in expeditious development of its main road networks.

Gujarat increased its maintenance funding two-fold during 1998 to 2008. Comparative statistics on annual road maintenance expenditure in select states during 2001-2005 showed that Gujarat paid more attention to maintenance than any other states in India. In 2005, it spent US$884 per km, which was over 15 percent more than the second highest maintenance spending state. In order to accelerate road development and improve asset management, the GOG needs to develop a more diversified and innovative financing and contracting strategy, beyond relying on (a) government budget allocations and international sovereign borrowing and (b) traditional item rate and O & M contracts. To this effect, GOG has undertaken study to develop a long term road sector financing strategy for development and management of its core state highway network which is in its final stages of completion. The recommendations of this study have been found to be fully consistent with the current scarcity of multilateral financing agency resources and the imperative of leveraging such limited resources with market borrowing and smart co-financing. Their effective implementation may require the GOG to initiate some institutional adjustments and to develop new capacities in the sector.

Relationship to CAS

The World Bank Country Strategy for India (FY09-12) puts emphasis on providing knowledge and lending solutions that match the needs of a middle income country/state. The objectives envisioned in the proposed project to modernize highway financing and institutions, improve asset management performance, better integrate various modes of transport and improve the road safety management framework would help Gujarat to realize its socio-economic and development goals and contribute to the CAS objective of supporting progress of middle income states through innovation and demonstration.

II. Proposed Development Objective(s)

The project development objective is to improve the efficiency and safety of the core state highway network and strengthen institutional effectiveness towards improved service delivery and financing strategies.

In order to achieve the objective, the proposed project will comprise the following components (a) Highway Improvement Component, (b) Sector Policy and Institutional Development Component, and (c) Road Safety Improvement.

Key Results

Key results are likely to include:

(a) Improved quality of transport services through reduction in vehicle operating cost and travel time related cost in the core road network;
(b) Improved condition of the road assets through improved share of good roads in the core road network and improved asset management practices;
(c) Improved safety management capabilities through improved institutional, financing and coordination arrangements and reduction in road crash fatalities on the demonstration safety corridor(s); and
(d) Improved road sector financing capabilities evident through improved participation of private sector in development and management of road sector and evolution of more efficient contracting methodologies.

III. Preliminary Description

Concept Description
Component 1: Highway Improvement Component

About 1072 Km road upgradation and 505 km road rehabilitation works are proposed to be included under this component. The project selection was carried out following an economic prioritization model with an objective to facilitate fulfillment of the state’s overarching goal of maintaining a level of service B (Volume / capacity ratio < 0.5) and average satisfactory (i.e. IRI <4.0) condition of the highway network as stated in the Gujarat Infrastructure Vision 2020. The selection process is also fully coherent with the state medium term objective of improving the accessibility of the relatively backward tribal areas in eastern Gujarat as well as accelerating the development of the secondary transport network in the high growth potential Delhi - Mumbai Industrial Corridor. The selected project sections constitute 21 corridors of average 75 km length and 40 percent of the corridors are interlinked. This corridor approach would provide opportunity for streamlined project administration, introduction of safety and environmental enhancement demonstration measures and application of a blended financing (PPP and public financing) model. The works will be undertaken through a mix of traditional item rate, EPC, performance based and PPP contracts. The appropriate mix of contracting will be developed on the final recommendations of the financing options study and keeping in view the objective of leveraging the Bank financing to the maximum possible within sound fiduciary practice.

Component 2: Sector Policy and Institutional Development Component

Under this component the Roads & Buildings Department (R&BD) has undertaken an externally-facilitated Institutional Strengthening and Governance & Accountability (planning) study to identify important next-stage medium-to-longer term interventions to further enhance sector performance and capabilities of R&BD. With the benefit of the study outcomes, this component would assist the GOG and the R&BD in developing and implementing a next-stage 5-6 years program of policy enhancements, capacity development and governance, structural and institutional strengthening measures for the road sector in the state. In connection with the proposed measures for roads financing reform, the program may include attention to the fiduciary and governance frameworks and capacity of the GOG agencies that are expected to carry the main responsibilities in PPP innovations leveraging Bank loan funds and other non-Budget revenues. The proposed major activities to be under this component are as follows:

- Comprehensive GRMS-based Asset Management & Development;
- Program Management (covering Project Development & Mgmt, Activity Monitoring & Evaluation, Performance Reporting);
- Quality Management in R&BD works (framework, policies, resources);
- IT-ICT Systems, Databases & Assets (integration and enhancement);
- Human Resources (HR) Management & Development;
- Road Network Planning & Multi-modal / Inter-modal Transport Planning;
- Roads Financing Strategy & Roads Revenue Leveraging;
- Capacity development in the state-level Construction Industry;
- Fostering Centre(s) of Excellence in Construction, Quality &/or Asset Management; and
- Industry Capacity Development and Industry Liaison / Outreach (state-level)
- Public Information and Communication Strategy

Component 3: Road Safety Improvement Component

A road safety component is included under the proposed project which would support the development of a Safe Corridor demonstration intervention that could provide a useful start for developing a comprehensive state-wide road safety strategy. A road safety management capacity assessment, funded by GRSF, is currently underway to inform the design of this component, which is likely to comprise the development, implementation and monitoring of a variety of interventions on selected corridor(s), as follows:

- Improving the institutional arrangements and capacity for road safety interventions and management, including the establishment of a GOG lead agency for road safety and improving inter-agency coordination;
- Establishing a sustainable road safety financing mechanism;
- Improving safety of road infrastructure;
- Improving enforcement of compliance with safety rules;
- Improving vehicle safety on the selected road corridor(s), and
- Improving appropriate aspects of the emergency medical system e.g. emergency response, first responder training.

IV. Safeguard Policies that might apply

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VI. Contact point

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