# A. STUDY BACKGROUND

### A.1 STUDY INTENT

## A.1.1 The Background

- 1. Roads and Buildings Department (R&BD), Government of Gujarat have been implementing several road projects over the years with the state, centre and multi-lateral funding. In addition, the state has implemented road projects through private sector participation<sup>1</sup>. Recognising the need to attract increased investments in road development the R&BD, GoG have set up the Gujarat State Road Development Corporation Limited (GSRDC)<sup>2</sup>.
- 2. R&BD has identified important roads as core road network extending over 9,000 km. It also defined the major corridors<sup>3</sup> of movement which are designated to act as catalyst for achieving the targeted economic development of the state. The state also formulated a private sector policy in the road development and identified corridors for posing under the PPP/PSP. In this context the GSRDC has identified three high density corridors namely Rajkot Jamnagar Vadinar Road, Ahmedabad Viramgam Halvad Maliya and Halol Godhra Shamalaji for capacity augmentation by converting them from existing two-lane to four-lane divided carriageway roadway.
- 3. GSRDC has conducted pre-feasibility studies/preliminary studies for developing these corridors on commercial format during the years 2000 to 2003. It is important to note that these projects could not be implemented till date due to major funding needs, apart from other reasons. However, in the some of these corridors<sup>4</sup> were improved (or improvement works under way).
- 4. GoG,R&BD has excellent track record of implementing projects in several forms. GoG desires to seek assistance from GoI under the viability gap funding for these selected road projects, which could not implemented before, to meet growing travel demand on the road system of Gujarat.

### A.1.2 The Purpose and Corridors

5. In this context, the GSRDC is keen to restructure and revalidate these projects on the concept of BOT. This work need to take into account the improvement work carried out under the World Bank aided GSHP. Towards this GSRDC have retained M/s LEA Associates South Asia

<sup>&</sup>lt;sup>4</sup> The R&BD, GoG has improved some of them with the loan assistance from the World Bank under Gujarat State Highway Project.



<sup>&</sup>lt;sup>1</sup> Vadodara – Halol and Ahmedabad – Mehasana are two such major road projects implemented under PPP by R&BD.

<sup>&</sup>lt;sup>2</sup> GSRDC is an undertaking of Government of Gujarat. It is mandated to develop Road infrastructure projects in the State of Gujarat under PPP/PSP.

<sup>&</sup>lt;sup>3</sup> Major These Road Corridors defined are known as Vikas Path and Pragathi Path

Private Limited (LASA) as consultants for providing consultancy services for revalidation study and overall appraisal of the projects.

6. The corridors mandated to LASA as part of this study are:

a)	Rajkot – Jamnagar – Vadinar Road	126 km;
b)	Halol – Godhra Road	38 km;
c)	Godhra – Shamalaji Road	130 km;
d)	Ahmedabad – Viramgam Road	30 km; and
e)	Viramgam – Maliya Road	130 km

#### A.1.3 The Domain

- 7. **Objectives:** The objective of revalidation study is to explore the possibilities of developments of aforesaid road corridors from existing two-lane to four-lane divided carriageway and evolve an implementation strategy for development of corridors on commercial format with option of Viability Gap Funding. For this purpose the Consultant is to utilize the available study reports, revalidate them by carrying out traffic surveys and carry out in depth revalidation studies for the project corridors.
- 8. **Scope of Services:** The scope of services of this study include the following:
  - a) Revalidate the strip maps of the alignment as appended with the reports of earlier studies, indicating ROW required for four laning, identify the Government land that may be used in the project and assess the land acquisition requirements;
  - b) Carrying out 7 day traffic volume counts and 1-day OD surveys for projecting the future traffic demands in order to explore feasibility for four laning of the roadway. The consultant is required to assess Tollable traffic and trip length and suggest location of toll plaza.
  - c) Carrying quick feasibility studies, preparation of preliminary designs and assessment of preliminary cost for converting the existing two-existing two-lane to four-lane carriageway of the proposed corridor.
  - d) Rapid Environmental Impact Assessment.
  - e) Establishment of financial and commercial viability of the project to enable its functioning as an independent commercial viable entity to he be implemented on BOT concept.
  - f) Detailed financial projections, involving estimation of the overall project cost for selection of appropriate financial mix and evaluation of alternative financial project structure.
  - g) Evaluation and recommendation regarding preferred implementation structure based on the Project economics and identification of potential partners.
  - h) Risk management.
  - Preliminary designs of pavement and bridges compatible with ongoing GSHP respective corridor.



## A.2 APPROACH

# A.2.1 The Process

- 9. The process approach included:
  - Review of earlier efforts and findings;
  - Revalidation study analysis and findings; and
  - Comparative assessment of viability gap.
- 10. The following have been broad steps under which the study has been undertaken:
  - Appreciation of revalidation study corridors and their current scenario;
  - Review of the efforts made and findings therein, as per the documents made available;
  - Conduct of surveys and studies on all corridors;
  - Analysis of data collected led to assessment of traffic forecast, establishment the need of capacity augmentation (four laning) and assessment of improvement cost;
  - Undertaking the financial analysis and assessment its viability on commercial format;
    and
  - Comparative appreciation of funding needs including the viability gap funding needs from centre by project corridor.

### A.2.2 The Structure

- 11. This report is the Draft Final Report. It's intent is to present interim findings.
- 12. The report is structured accordingly. Apart from this section, the report is structured to have distinct sections, with one section fully addressing a specific corridor. It may be noted that the last section presents the comparative findings across the project corridors.



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