

Project Fact Sheet		
Project Name: Gujarat State Highways Project: Road Maintenance Component – Planning & Priorisation Study		Country: INDIA
Project Location Within Country: Gujarat		Professional Staff Provided by LEA:
		# Staff: 2 # Man-months: 2.5
Name of Client: Roads & Buildings Department, Government of Gujarat		
Start Date (mo/yr) September 1997	Completion Date (mo/yr): November 1997	Total Contract Value (USD): \$22,850.00
Name of Associated Firm(s), if any: Lea Associates South Asia Pvt. (LASA)		Man-months of Professional Staff Provided by Associated Firm(s): 17.5
Senior Staff Involved and Functions Performed:		
Dr. Ronald Allan – Sr. Transport Economist	M.V. Rajagopal – PMS Specialist	
Mike Riley – Sr. Highway Maintenance Specialist	Hari Kumar – Highway Engineer	
Vikas Sharma – PMS Specialist	Pawan Saluja – Asst. Highway Engineer	
	Abhilash Singh – Computer Programmer	
Detailed Narrative Description of Project:		
<p>During a World Bank mission in the Fall of 1997, it was decided to include a maintenance program in the bank-funded project. A figure of US \$56 million, spread over three years, was tentatively earmarked for this purpose and the PCC was required to prioritise a maintenance program for this amount. A total length of nearly 2,000-km was identified for study. The objective of the study was to determine indicative treatments and costs and prioritise the roads within a constrained budget.</p>		
Description of Services Provided by LEA:		
<p>The prioritisation included road inventory, pavement and shoulder condition, road roughness, deflection surveys, database preparation, making homogeneous sections, aggregating data for homogeneous sections, preparation of treatment criteria, preliminary costs and data input, calculation of economic benefits in terms of net present value and implementation of the work program.</p> <p>The study prioritised the various treatments using economic principles and dTIMS proprietary software, which allows multiple strategies (different treatments and/or different years) to be analysed for each homogeneous road section. For each section, 20-years costs and benefits were estimated. A network level optimisation was then applied to find the best strategy for each section under a given set of budget constraints.</p>		