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Mr. Gupta is an experienced highway engineering professional with over eighteen years' experience in the Highway Infrastructure Development domain and experienced in Strategic Planning & Engineering Design, Implementation of Projects, Co-Ordination, Analysis, Global Operations (Externally Aided Projects), Public – Private Partnership (PPP) Projects, Environmental Management Programs and Environmental Impact Assessment.

**PRESENTATION TITLE: Road Maintenance Strategy in India**

**ABSTRACT:** Roads are dominant mode of transportation in India carrying almost 90% of country's passenger traffic and 65% freight. India's road network of 4.69 million km is second largest in the World, with density of 0.66 km per sq km of land, which is similar to that of United States (0.65) and much greater than China (0.16) or Brazil (0.20). During the last two decades, India is registering traffic growth rate of 9% (CAGR), which is highest in the world. The expectation of road user for better quality of roads is increasing day by day.

To preserve the road assets, India has developed a system which comprises of routine maintenance, periodic maintenance, rehabilitation including repairs damages due to natural calamities viz. floods, cyclones, etc. and special repairs. In addition the pavement management system and bridge management system have also been adopted by some of the road owning organizations in the country. These efforts are not only government funded but also funded by the private sector, wherein the strategy is to create road infrastructure and maintain it for longer period by adopting PPP model (toll based), transferring the responsibility of maintenance to concessionaire. The results are conspicuous and large stretches of road are being maintained by concessionaire for a maximum period of 30 years. One more strategy being followed in India is the concept of Operate, Maintain and Transfer (OMT) which supplements the public financed roads constructed by the government / other road owning agencies.

The extent of work involved in the maintenance is enormous. It is estimated that India would require approximately an annual funding of \$1.3 billion to maintain its highways network. This is about three times the amount that is currently being spent. Therefore, the opportunities available for introducing the best and the cost effective techniques / technology are immense. The concept of recycling the existing pavement and reusing municipal waste, industrial / mining waste is also being developed for conservation of natural material.

Road maintenance is an essential component of the road asset management. Learning from the past and adopting global best practices, India aiming for a road maintenance strategy that minimizes investment, maximizes cost efficiency, reduces losses for users and is energy efficient.