

# **STRATEGIES FOR BRIDGE REPAIRS, REHABILITATION, RETROFITTING**

By

Prof. Mahehs Tandon, Managing Director,  
Tandon Consultants Pvt. Ltd.

## **ABSTRACT**

Bridges form the most important element of infrastructure. Their longevity depends on regular inspection and inspection and prompt attention to repairs, rehabilitation and retrofitting.

The strategy for bridge repairs and rehabilitation depends on the type of deficiency in the structure. Some of the main issues which must be addressed can be summarized as follows:

1. Design Defects
2. Construction Defects
3. Determination of Materials with time
4. Upgradation for Loading Requirements
5. Earthquake Damage
6. Terrorist Action
7. Bearings, Expansion Joints, Articulations
8. FRP- the wonder material

In this presentation it is proposed to give an exposure to case studies where the above mentioned strategies have been utilized.

The basic requirements of repairs, rehabilitation and retrofitting are:

- Should be economically feasible
- Should be technically viable
- Should be Surmount.
- Should be functional constraints

Finally, it must be said that "Prevention is better than cure". A proactive approach can deliver appropriate concepts that ensures that repairs, rehabilitation and retrofitting are either minimized or can be implemented in a safe, sound and economical manner if and when the need arises.