

PAVEMENT MAINTENANCE & REHABILITATION

- The current AASHTO definition of highway maintenance is: A programme to preserve, repair and restore a system of roadway with its element to its designated or accepted configuration. System elements include travel way surfaces, shoulders, roadsides, drainage facilities, bridges, tunnels, signs, markings, lighting fixtures, etc. Included in the programme are such traffic services as lighting and signal operations, snow and ice removal, and operation of roadside rest areas.
- Rehabilitation encompasses overlays, recycling, reconstruction and their combinations.
- Pavement distress

Distress is defined as an indication of unfavourable pavement performance or signs of impending failure, or any unsatisfactory performance of pavement short of failure.

- § Distress types in flexible pavements- Cracking, Distortion, Disintegration, Skid hazard
- § Distress types in rigid pavements- Joints and cracks, Distortion, etc.

PAVEMENT CONDITION EVALUATION AND SURVEY

- Pavement condition evaluation-Evaluation of pavement condition can be described as a process of measuring the functional and structural condition of the pavement followed by verifying whether the condition is above or below predefined minimum acceptance levels and warning levels.
- Functional condition of a pavement expresses its ability to serve the user, and its major indicators include roughness, skid resistance, riding comfort, aesthetics and other safety considerations.
- Structural condition addresses whether or not the pavement can support future traffic loadings over the desired design period without structural improvement.
- Several systems for evaluating the condition of pavements have been developed and used by various highway agencies.
- **Pavement condition surveys-** Every highway agency is supposed to collect pavement condition data from time to time to make rational maintenance and rehabilitation decisions.
- Pavement condition survey results, together with serviceability, drainage and structural evaluation surveys should provide the engineer with necessary information to develop sound maintenance or rehabilitation decisions.
- Pavement maintenance management systems-a number of procedures have been developed for pavement maintenance management. The essence of these procedures is to provide a consistent, reasonably objective and systematic approach for establishing priorities, scheduling and budgeting roadway maintenance and rehabilitation requirements.