

MICRO SURFACING

Pavement Preservation Process

Micro Surfacing is a surface treatment designed to extend the life of asphalt pavements in good condition by providing additional skid resistance, preventing moisture intrusion, preventing further oxidation and raveling and restoring a uniform black appearance. Micro Surfacing can also be used for rut repairs and is the most economical choice when leveling is needed. Micro Surfacing has quick construction times to minimize disruption to the traveling public.



THE PROCESS

Micro Surfacing can be applied by a continuous or truck mounted paver. It is a carefully designed mixture of all the materials and is applied in a homogenous mat which adheres firmly to the surface. Traffic can be returned to the roadway fairly quickly, typically within one hour.

BENEFITS

- Reduces life cycle costs of roadways by 25-45% compared to traditional resurfacing
- Reduces energy use and greenhouse gasses by more than 45% compared to traditional HMA placement
- Traffic can be returned to the roadway within one hour
- Adds at least six to eight years when applied at optimum time for pavement preservation

ISSUES ADDRESSED WITH MICRO-SURFACING

- Friction loss
- Raveling
- Rutting
- Uneven surface profile

MATERIALS USED

- **Aggregate:** Crushed stone such as granite, limestone or slag can be used. Gradation of the stone is required
- **Asphalt Emulsion:** A cationic polymer modified emulsion is needed
- **Mineral Filler:** Mineral fillers such as Portland cement, hydrated lime, limestone dust and fly ash are typically used. The mineral fillers are used to adjust mixture breaking and curing times
- **Water:** Potable water is best and must have the correct pH balance to work with the mix design
- **Additives:** Additives may be used to accelerate or slow the break/set times of the micro surfacing