

Pavement Maintenance

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All pavements require maintenance. Expansion and contraction are year round stresses that continuously cause damage. Cracks, holes, depressions and other types of visual distress are the evidence and end result of the pavement wear process which begins when construction ends.

The early detection and repair of minor defects is the most important work done by the owner or manager of a paved area. Cracks and other surface breaks, which in their first stage are almost unnoticeable, typically develop into serious defects if not repaired promptly. For this reason, frequent inspections of the pavement should be made by qualified inspectors. Areas where ditches are dug through pavement for water lines and other utilities are especially vulnerable and often require additional maintenance. Upon detection of these warning signs, a detailed investigation should be made to determine what type of repair is necessary. Pavement repairs should be made as quickly as possible, especially when the defect makes driving hazardous.



Regular inspections and proper maintenance can help pavement utilize its full life.

Weather plays an important factor in pavement maintenance. For example, crack filling is more likely to be successful during periods of cool, dry weather. Pothole patches adhere best when the pavement is warm and dry. Sealcoating, patching and other surface treatments require warm and dry weather for best results. When hot or warm mixtures are placed on cold pavements, they may cool so fast that adequate compaction is difficult. This cooling effect can be more pronounced if the mixture is placed in thin layers. In addition, asphalt and asphalt mixtures usually do not bond well to damp surfaces. Repairs can be made during cold or damp weather, however they require much greater care.

In all cases of pavement distress, it is best to initially determine the cause or causes of the problem. Then repairs can be made, which will not only correct the damage, but will also prevent or delay the defect from happening again. Time and money spent for such repairs are well spent because the same repairs will not have to be made over and over again.

Maintenance work requires proper oversight, skilled workers and good workmanship. Unless all three are employed, it is likely that some repair work will be poorly done and may have to be repeated. Since most pavement repairs involve the use of asphalt, a thorough knowledge of this material is essential for maintenance personnel.

The most common type of preventive maintenance performed is the seal coating or slurry sealing. By definition, a sealcoat is a thin asphalt surface treatment used to waterproof and improve the texture of an asphalt-wearing surface. Depending on the purpose, sealcoats may or may not be covered with aggregate. A slurry seal is a mixture of fine aggregate and mineral filler that is used primarily for roadways with a high degree of stress.

In order to utilize the full life of pavement, be sure to make seasonal inspections of the roads and parking lots on your property. By examining the roadways on a consistent basis, you will be able to take note of cracks and pot holes and have them corrected before they become larger and more problematic. The less pavement is maintained, the more it will cost in future repairs.