

## Treatment Toolbox

Our goal: “Right Treatment, Right Road, Right Time.”

Arapahoe County Public Works utilizes a combination of **Rehabilitation** treatments as well as less assertive **Preservation** procedures designed to extend the service life of asphalt pavements while they are still in good condition. This economical approach to efficient maintenance helps to “keep the good roads good”.

The pavement maintenance treatments used to accomplish our goals make up our Treatment Toolbox and are listed below in the preservation and rehabilitation categories.

- | Preservation  | Rehabilitation  |
|---|---|
| <ul style="list-style-type: none"><li>• <u>Patching</u></li><li>• <u>Crack Seal</u></li><li>• <u>Fog Seal</u></li><li>• <u>Slurry Seal</u></li><li>• <u>Chip Seal</u></li></ul> | <ul style="list-style-type: none"><li>• <u>Overlay</u></li><li>• <u>Reconstruct</u></li></ul> |

## Preservation

### Patching



Patching of weak or failed areas extends pavement service life by preventing water infiltration into pavements which leads to accelerated deterioration.

### Crack Seal



Crack sealing is a “first line of defense” pavement preservation treatment. Crack sealing prevents intrusion of water and incompressible materials into cracks to prevent accelerated deterioration of the asphalt.

## Preservation (continued)

### Fog Seal



Pavement rejuvenators are applied to aged pavements to restore surface flexibility and to impede block cracking. Aging begins at construction with most deterioration occurring within the first two to four years of service life. This results in the top half-inch or so of the pavement surface becoming more brittle than the underlying material. The result can be top-down weathering, raveling and premature cracking. Rejuvenators are formulated to penetrate into the pavement surface and enhance the properties of the asphalt binder thereby combating environmental aging, hardening and cracking.

### Slurry Seal



Slurry Seal is a preservation treatment applied to streets in relatively good condition to seal pavements against the harmful affects of water intrusion and environmental weathering.

Slurry seal is a relatively thin surface coat with a fine aggregate wearing surface that protects streets like a stucco finish protects a house. The finished treatment results in a new black appearance which provides several years of extended service life.

## Preservation (continued)

### Chip Seal



Chip Seal is a preservation treatment that is applied to streets in relatively good condition to seal pavements against the harmful effects of environmental weathering.

Chip seal provides a flexible, long-lasting seal along with a durable aggregate wearing surface to seal and protect streets. The finished treatment results in a new black appearance which provides years of extended service life

# Rehabilitation

## Overlay



Asphalt overlay is a rehabilitation treatment consisting of mill profiling adjacent to the curb and gutter or as needed, followed by placement of a new asphalt layer.

Asphalt paving projects are generally completed between May and October.

## Reconstruction



Pavement Reconstruction becomes necessary when a roadway reaches the end of its service life.

Reconstruction needs vary based on the roadway use and material used. When the blacktop surface is severely distressed and showing significant cracking, the asphalt pavement has reached the end of its service life.