

Pavement Preservation Treatment Selection Guide

Non-Subdivision Routes with < 2000 AADT

Alligator Cracking	Crack Size	Good	Better	Best
Light	1/8" or less	Single Seal	Double Seal	Double Seal
Moderate	1/4", spalling	Triple Seal	Mat + Double Seal	Skin Patch + Double Seal
Severe ¹	>1/2", loose pieces	Mat + Double Seal	Mill Patch + Double Seal	Full Depth Patch + Double Seal
Transverse Cracking	Crack Size	Good	Better	Best
Light	<1/4"	Microsurfacing	Double Seal	Cape Seal
Moderate	1/4" < x < 1/2", spalling	Crack Seal + Double Seal	Triple Seal	Mat + Double Seal
Severe	>1/2", 1-5' apart, bulging	Crack Seal + Double Seal	Routed Crack Seal + Double Seal	Routed Crack Seal + HMA Overlay
Rutting ²	Rut Depth	Good	Better	Best
Light	1/4" < x < 1/2"	Double Seal	Double Seal	Microsurfacing
Moderate	1/2" < x < 1"	Skin Patch + Double Seal	Double Microsurfacing	Rut Fill Microsurfacing
Severe	>1"	Skin Patch + Microsurfacing	Skin Patch + Double Seal	Rut Fill Microsurfacing
Raveling	Severity	Good	Better	Best
Light	Very Little	Fog Seal	Microsurfacing	Double Seal
Moderate	Some	Microsurfacing	Double Seal	Triple Seal
Severe	Problematic	Double Seal	Skin Patch + Double Seal	Cape Seal
Oxidation	Severity	Good	Better	Best
Severe	Oxidation present	Fog Seal	Microsurfacing	Double Seal + Fog Seal
Bleeding	% Bleeding	Good	Better	Best
Light	10% < x < 25%	Single Seal	Double Seal	Microsurfacing
Moderate	26% < x < 50%	Single Seal	Double Seal	Microsurfacing
Severe	x > 50%	Single Seal	Double Seal	Microsurfacing
Ride Quality	Speed Limit	Good	Better	Best
Light	Maintain	Patching	Patching + Double Seal	Double Microsurfacing
Moderate	Slight difficulty	Patching	Leveling + Double Seal	Leveling + HMA
Severe	Speed reduction	HMA	Leveling + Double Seal	Leveling + HMA
Patching	% Patching	Good	Better	Best
Light	6% < x < 15%	Single Seal	Microsurfacing	Double Seal
Moderate	16% < x < 30%	Single Seal	Microsurfacing	Double Seal
Severe	x > 30%	Single Seal	Microsurfacing	Double Seal

¹ If >30% of a road needs full depth patching, FDR should be considered for economic purposes.

² If rutting is caused by subgrade issues, PP Treatments are not ideal. Subgrade must be dug out and replaced.

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Routes with > 2000 AADT

Alligator Cracking	Crack Size	Good	Better	Best
Light	1/8" or less	Microsurfacing	Double Microsurfacing	Cape Seal
Moderate	1/4", spalling	Cape Seal	Skin Patch + Microsurfacing	Mill Patch + Microsurfacing
Severe ¹	>1/2", loose pieces	Mill Patch + Microsurfacing	Full Depth Patch + Microsurfacing	Full Depth Patch + HMA Overlay
Transverse Cracking	Crack Size	Good	Better	Best
Light	<1/4"	Crack Seal	Crack Seal + Microsurfacing	Cape Seal
Moderate	1/4" < x < 1/2", spalling	Crack Seal + Microsurfacing	Cape Seal	Chip Seal Interlayer + HMA Overlay
Severe	>1/2", 1-5' apart, bulging	Fiber Interlayer + HMA Overlay	Routed Crack Seal + HMA Overlay	Mastic Seal + HMA Overlay
Rutting ²	Rut Depth	Good	Better	Best
Light	1/4" < x < 1/2"	Double Seal	Microsurfacing	Double Microsurfacing
Moderate	1/2" < x < 1"	Skin Patch + Microsurfacing	Double Microsurfacing	Rut Fill Microsurfacing
Severe	>1"	Skin Patch + Microsurfacing	Skin Patch + Double Microsurfacing	Rut Fill Microsurfacing
Raveling	Severity	Good	Better	Best
Light	Very Little	Double Seal + Fog Seal	Thin Lift Overlay	Microsurfacing
Moderate	Some	Double Seal + Fog Seal	Microsurfacing	Double Microsurfacing
Severe	Problematic	Double Seal + Fog Seal	Double Microsurfacing	Skin Patch + Microsurfacing
Oxidation	Severity	Good	Better	Best
Severe	Oxidation present	Fog Seal	Thin Lift Overlay	Microsurfacing
Bleeding	% Bleeding	Good	Better	Best
Light	10% < x < 25%	Double Seal + Fog Seal	Thin Lift Overlay	Microsurfacing
Moderate	26% < x < 50%	Double Seal + Fog Seal	Thin Lift Overlay	Microsurfacing
Severe	x > 50%	Double Seal + Fog Seal	Thin Lift Overlay	Microsurfacing
Ride Quality	Speed Limit	Good	Better	Best
Light	Maintain	Patching	Patching + Microsurfacing	Double Microsurfacing
Moderate	Slight difficulty	Patching + Microsurfacing	Leveling + Microsurfacing	Leveling + HMA
Severe	Speed reduction	Leveling + Microsurfacing	HMA	Leveling + HMA
Patching	% Patching	Good	Better	Best
Light	6% < x < 15%	Thin Lift Overlay	Microsurfacing	Double Microsurfacing
Moderate	16% < x < 30%	Thin Lift Overlay	Microsurfacing	Double Microsurfacing
Severe	x > 30%	Thin Lift Overlay	Microsurfacing	Double Microsurfacing

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Subdivision/Residential Routes

Alligator Cracking	Crack Size	Good	Better	Best
Light	1/8" or less	Microsurfacing	Thin Lift Overlay	Double Seal + Fog Seal
Moderate	1/4", spalling	Crack Seal + Thin Lift Overlay	Triple Seal + Fog Seal	Cape Seal
Severe ¹	>1/2", loose pieces	Cape Seal	Full Depth Patch + Thin Lift Overlay	Full Depth Patch + Microsurfacing
Transverse Cracking	Crack Size	Good	Better	Best
Light	<1/4"	Microsurfacing	Double Seal + Fog Seal	Cape Seal
Moderate	1/4" < x < 1/2", spalling	Crack Seal + Double Seal + Fog Seal	Cape Seal	Triple Seal + Fog Seal
Severe	>1/2", 1-5' apart, bulging	Mat and Double Seal + Fog Seal	Routed Crack Seal + Thin Lift Overlay	Routed Crack Seal + Microsurfacing
Rutting ²	Rut Depth	Good	Better	Best
Light	1/4" < x < 1/2"	Double Seal + Fog Seal	Microsurfacing	Double Microsurfacing
Moderate	1/2" < x < 1"	Skin Patch + Double Seal + Fog Seal	Skin Patch + Microsurfacing	Double Microsurfacing
Severe	>1"	Skin Patch + Double Seal + Fog Seal	Skin Patch + Microsurfacing	Rut Fill Microsurfacing
Raveling	Severity	Good	Better	Best
Light	Very Little	Fog Seal	Thin Lift Overlay	Double Seal + Fog Seal
Moderate	Some	Thin Lift Overlay	Double Seal + Fog Seal	Microsurfacing
Severe	Problematic	Double Seal + Fog Seal	Skin Patch + Microsurfacing	Cape Seal
Oxidation	Severity	Good	Better	Best
Severe	Oxidation present	Fog Seal	Microsurfacing	Double Seal + Fog Seal
Bleeding	% Bleeding	Good	Better	Best
Light	10% < x < 25%	Double Seal + Fog Seal	Microsurfacing	Microsurfacing
Moderate	26% < x < 50%	Double Seal + Fog Seal	Microsurfacing	Microsurfacing
Severe	x > 50%	Double Seal + Fog Seal	Microsurfacing	Microsurfacing
Ride Quality	Speed Limit	Good	Better	Best
Light	Maintain	Patching	Patching + Double Seal + Fog Seal	Double Microsurfacing
Moderate	Slight difficulty	Patching	Leveling + Double Seal + Fog Seal	Leveling + Microsurfacing
Severe	Speed reduction	HMA	Leveling + Double Seal + Fog Seal	Leveling + Thin Lift Overlay
Patching	% Patching	Good	Better	Best
Light	6% < x < 15%	Fog Seal	Microsurfacing	Double Seal + Fog Seal
Moderate	16% < x < 30%	Fog Seal	Microsurfacing	Double Seal + Fog Seal
Severe	x > 30%	Fog Seal	Microsurfacing	Double Seal + Fog Seal

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