

Extending Pavement Life Using Preventive Maintenance Techniques

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RMWPPP State Report

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Study Objective

Determine the effectiveness of various pavement maintenance treatments in extending pavement life.

Test Site Summary Information

- **65 Test Sites**
 - **27 Olympic Region**
 - **28 Eastern Region**
 - **3 South Central Region**
 - **3 Southwest Region**
 - **3 North Central Region**
 - **1 Northwest Region**
- **16 treated in 2012**
- **15 treated in 2013**
- **10 treated in 2014**
- **24 treated in 2015**

Test Site Summary Information (cont'd)

48 Sites are HMA pavements

17 Sites are BST pavements

Integrated Pavement Preservation Plan Classification

- **38 - Strategic (PSC 60-100)**
- **12 - Emerging (PSC 40-59)**
- **13 - Reactive (PSC < 40)**
- **2 - Ramps with no rating**

Treatment	Total
Dig Outs Only	21
Crack Sealing Only	6
Dig Outs and Crack Sealing	7
Blade Patch	8
Dig Outs and Chip Seal	5
Dig Outs and Double Chip Seal	1
Chip Seal	4
Crack Sealing and Chip Seal	2
Wheel Path Chip Seal	5
Control (no treatment)	4
Thin Overlay	1
WP Chip Seal and Blade Patch	1
Total	65



Dig Out



Crack Sealing



Wheel Path Chip Seal

Observations (stand alone treatments)

- **No matter what treatment is applied it will extend pavement life at least three years**
- **Only exception is blade patching, treatment lasts two years or less**
- **Crack Sealing - effective in holding the pavement together and preventing water infiltration, however, it is impossible to seal all the cracks in an alligatored pavement.**
- **Chip Sealing - effective, however, existing wide cracks will quickly reflect through the chip seal.**
- **Crack sealing and chip sealing – very effective because the larger cracks do not reflect through, however, costs are higher.**

Success Story - SR 395, SR 17 to Muse Rd SB



WSDOT Instructional Letter

Bituminous Pavement Asset Management

A. Programming

In accordance with the current [Integrated Approach to Pavement Preservation](#), **all Capital Preservation Projects will include at least one touch of Pavement Preservation Plan before the Capital Project may be programmed.** Current Capital Projects that have completed at least one Strategic Preservation activity will hold their current delivery dates. All other projects will be considered to be **moved out two years** in the programming cycle and the roadway segments enrolled in the Strategic Preservation plan for priority as determined by the Policy Committee. The cash flow generated from these moves will be used to fund the additions to the Strategic Preservation plan as well as augment the monies uses by Maintenance for emerging pavement issues.

