

**Highway Leadership Team
System Preservation Strategy Work Plan
December 8, 2010**

- Strategy: Reevaluate budget split between interstate and non-interstate systems

The issue we have is the interstate is projected to fall in condition rating to similar levels as our other highways and there is a desire to keep the interstate at a higher condition rating. We can accomplish this through other strategies as moving more money out of non-interstate preservation program is problematic. For 2012-2015, we will stay with the present allocation strategy which is 50% interstate – 50% non-interstate. We will monitor over time and adjust if needed.

Action

Monitor Budget Split

Delivery Date

On-Going

- Strategy: Add statewide highways under 5000 ADT and \leq 3 million ESALS to the low volume program.

We will modify the low volume preservation program to include statewide, regional, and district level highways with $\text{AADT} \leq 5,000$ and truck ESAL's ≤ 3 Million. This would add approximately 25% more lane miles to our low volume program (See attached map). To help offset this we would take the existing high volume chip seal (HVR) program in the maintenance limitation (\$7 million per year) and distribute \$4 million per year to the low volume program, and \$3 million per year to the maintenance pavement patching program.

As a result the pavement preservation projects in the STIP would not be targeted to those sections falling within the low volume program. The thought is we continue, as we do today, to focus our STIP pavement overlay preservation dollars primarily toward our higher volume and higher speed highways. However, because this expansion of low volume includes significant stretches of poor to very poor pavement on the freight system that are too much to fix with low volume funding the STIP preservation eligibility criteria will allow for an exception process to allow for STIP preservation projects on low volume routes that are high priority for repair. The exception process would essentially allow these sections to be considered as they are today. This would be on a case by case basis and would require Statewide Pavement Committee approval.

We would create a new federally funded chip seal program in the STIP for high volume highways (i.e. highways above the low volume ADT and ESAL thresholds). A program which treats the priority chip seals at an 8 year cycle requires \$5 million per year. This program would be developed to 1R standards. Pavement's unit will work with the Regions to program specific projects for the first two years of the STIP and the remaining two years would show up as buckets in the STIP to be allocated in the next STIP update. This allows us to have the best available pavement information before selecting specific projects. The funding for the new STIP high volume chip seal program would come off the top of the non-interstate preservation allocation or from additional redistribution dollars that may become available.

Under the current state funded HVR chip seal program, the Regions generally contract these out to the private sector, but have the options of using state or local government forces to do the work. The proposed new federally funded chip seal program will have to be contracted out. In the event that a Region wants to do a chip seal on a high volume road with in-house forces, they may federalize a low volume chip seal project in exchange for doing the high volume project with their own forces. This will require working with the STIP program coordinators to accomplish this.

<u>Action</u>	<u>Delivery Date</u>
<i>Modify the low volume preservation program to include statewide, regional, and district level highways with AADT \leq 5,000 and truck ESAL's \leq 3 Million</i>	<i>12-2010</i>
<i>Redistribute the existing \$7 million / year (High volume chip seal account) in the maintenance limitation to the low volume program (\$4 million) and the pavement patching program (\$3 million).</i>	<i>7-1-2011</i>
<i>Target STIP Pavement Preservation overlay program to non-low volume pavement program with a focus on high speed / high volume highways. Exception process put in place to deviate that requires Statewide Pavement Committee approval.</i>	<i>FFY 2014</i>
<i>Create a new STIP federally funded high volume highway chip seal program to be funded at \$5 million / year. Amend into the 10-13 STIP for years 2012 and 2013. Include out years in future STIP updates.</i>	<i>10-01-2011</i>

- Strategy: Look at doing substantially more low cost 1R treatments on the system in an effort to preserve the fair or better pavements we currently have.

We will increase the target amount of 1R projects we do on the system (interstate and non-interstate) to 70% for both systems. We will negotiate with FHWA on what needs to be done to the size of the safety buckets to offset this.

Give priority to high speed and high volume corridors when selecting STIP pavement overlay projects. High Speed facilities pose the greatest safety risk to the traveling public when poor pavements are prevalent (see attached speed and volume map).

<u>Action</u>	<u>Delivery Date</u>
<i>Target 70% 1R pavement preservation projects</i>	<i>FFY 2014</i>
<i>Work with FHWA to adjust the size of the safety buckets to account for more 1R paving.</i>	<i>FFY 2012</i>

- Strategy: Look at doing more partial pavement restorations with our IM program (i.e. more of a patchwork approach).

We will scope our IM projects so that we are only rehabilitating the pavement that needs it. So there would be more projects where we might only do one lane, or do both lanes and no shoulders, etc.

Will do test sections in the Major Interstate Maintenance (MIM) program with 1R type treatments to evaluate their performance on deteriorated or rutted pavement. We will also evaluate thin (1.5" or less) paving as a way to correct functional surface distress and extend surfacing life in areas where we can pave during the day when temperatures remain warmer.

<u>Action</u>	<u>Delivery Date</u>
<i>Do more partial typical section paving within IM Program (i.e. one lane only or both lanes and no shoulders, etc.)</i>	<i>FFY 2012</i>

<i>Allow inclusion of test sections within MIM program</i>	<i>FFY 2011</i>
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- Strategy: Pursue a multi-lift pavement 2R program with FHWA.

We will work with FHWA and develop a 2R standard for multi-lift pavements on state facilities.

<u>Action</u>	<u>Delivery Date</u>
<i>Work with 1R Committee to develop 2R standards for multi-lift pavements</i>	<i>July 1, 2011</i>

- Strategy: Focus pavement program dollars on pavements only. This is provided for in the 1R programs and seeking exceptions where it makes sense on 3-R projects will be required as well. (Note: We will need the same philosophy in the bridge program).

Agency direction to focus pavement dollars on pavements will come in the form of an operational directive from HLT. This will make it clear that other non-pavement items (that aren't required by standards) will not be funded out of the pavement program and may not be funded at all consistent with the agency's practical design initiative.. In addition, all pavement preservation target in the STIP will go towards the pavement preservation program.

<u>Action</u>	<u>Delivery Date</u>
<i>Develop Operational Directive from HLT that directs the agency to focus pavement dollars on pavements.</i>	<i>7-1-2011</i>

- Strategy: Leverage other programs where possible to do additional pavement preservation on the system. (Same applies to bridge program)

Agency direction to leverage other non-pavement programs to benefit Oregon's pavements will come in the form of an operational directive from HLT.

<u>Action</u>	<u>Delivery Date</u>
<i>Develop Operational Directive from HLT that directs the agency to focus pavement dollars on pavements.</i>	<i>7-1-2011</i>

- Strategy: Implement jurisdictional exchanges on local interest highways when agreement can be reached with local jurisdictions.

<u>Action</u>	<u>Delivery Date</u>
<i>Regions evaluate list of candidate jurisdictional Exchanges and move forward with those where we can get agreement with the local jurisdiction.</i>	<i>3-1-2011</i>

- Strategy: Other strategies as determined by a lifecycle cost analysis.

Absent any additional funding we would implement the new strategy in the STIP starting in 2014 during the 2012-2015 STIP update. The new STIP federal high volume chip seal program would be funded out of the non-interstate preservation allocation. New calculations for 1R and 3R program amounts will be provided by pavement services unit so the 2012-2015 STIP can be adjusted accordingly in between the draft and final programs of the 2012-2015 STIP.

Use any additional redistribution money coming to pavements to fund the new federal chip seal program (starting in 2012) and to fund additional 1R projects (starting in 2012).

We currently have \$15 million available as a result of redistribution / ARRA funding made available for the Tower Road – Stanfield IM project on I-84 in Umatilla County. It is proposed these funds and any other funds that become available go towards this strategy.

Implement the revised low volume preservation program in the maintenance limitation starting in the 2011-2013 biennium.

See attached pavement performance charts for the current and proposed strategies.

<u>Action</u>	<u>Delivery Date</u>
<i>Recalculate pavement preservation splits for 2012-2015 STIP update for years 2014 and 2015. Work with Regions to incorporate changes into draft 2012-2015 STIP.</i>	<i>3/1/2011</i>
<i>Work with Regions and Statewide Pavement Committee to incorporate new 1R targets during STIP 2012-2015 update for years 2014 and 2015.</i>	<i>10/1/2011</i>
<i>Identify an additional \$20 million of 1R projects on the interstate system.</i>	<i>7/1/2011</i>

- Strategy: Set direction for use of pavement preservation dollars for durable lines and Jurisdictional Exchanges.

Durable line costs on preservation projects
Jurisdictional Exchange costs to the preservation program

<u>Action</u>	<u>Delivery Date</u>
<i>Work with Statewide Pavement Committee to develop durable line and jurisdictional exchange policy for the</i>	<i>3/1/2011</i>

use of STIP Pavement Preservation funds.