



Long Term Pavement Preservation Strategy with the City of Medford

RePlay offers Medford, Oregon long lasting pavement with low maintenance costs

"I wish we had put RePlay in our budget years ago because there's nothing like it – RePlay gives us an advantage that no other sealant can. BioSpan's products have been a wonderful addition to our preservation program."

Tad Blanton

Chief Construction Inspector,
Engineering Division of Public Works
at City of Medford, Oregon

Executive Summary

The City of Medford, Oregon considers pavement preservation a central part of its Public Works department. In 2006, they began to understand the significant long term cost savings presented by BioSpan's premier product: RePlay Agricultural Oil Seal and Preservation Agent. Medford started applying RePlay on streets and trails, then after successful testing and monitoring of pavement over a two-year period they now continue to spray RePlay and other BioSpan pavement solutions upon the entire city's asphalt infrastructures.

Challenges

Tad Blanton, Chief Construction Inspector in the Engineering Division of Public Works at Medford with a career spanning three decades, was looking for a fog sealing solution that would extend the life of the roads paid for by the city's rate payers.

Before looking at a pavement preservation strategy, Medford was spending more than it wanted to on repaving – an inconvenient and time consuming approach. Traditional pavement preservation didn't offer long lasting roads, so Medford was reliant on contractors to complete pavement preservation work.

Blanton remarked that conventional fog sealing takes a “full size distributor, three to four hours of downtime, and masking off the area of contact plus the gutter. You just hope that traffic doesn't track through it because nobody likes that black toxic goo [petroleum] on their cars or driveways. Cleanup after conventional fog sealing is a pain and the whole process takes specialized equipment.”

“More infrastructure agencies should consider RePlay. It keeps your good roads good and it's a more efficient use of taxpayer money. Spending a dollar per square yard now means you avoid spending \$20 per square yard in a few years.”

How BioSpan Helped

Blanton was first introduced to BioSpan in 2004 at a paving conference, where engineers discussed our biobased sealcoat, RePlay, which preserves the current state of asphalt surfaces for at least five years.

After an initial trial Blanton said, “RePlay was easy to put down and to clean up.”

Compared to traditional preservation methods, Medford could get their cost per square foot down significantly with RePlay.

“From a pavement management standpoint, RePlay requires a leap of faith because you have to understand what it's capable of doing. It darkens asphalt very little and smells like citrus, and you have to wait five or six years to see the treated versus untreated difference,” notes Blanton. Known for being more than a top coat, RePlay penetrates the asphalt matrix and restores the binder up to 1 ¼” below the surface, adding nine polymers to the mix.

Applying RePlay was also a simple process. “We loved that we didn't have to buy hundreds of thousands of dollars of specialized equipment. The BioSpan Spray System is easy to use and we aren't dedicating a piece of equipment for this work, which would otherwise require a large expenditure of rate payers' dollars.”

Results and Future Plans

Medford had such success they now use RePlay on all city roads on an ongoing basis. Blanton says their plan is to continue a six-year spray cycle. They are not reliant on contractors for fog seal application, and existing city equipment is used to apply RePlay annually.

For new patching jobs, the city also uses BioSpan's BioTak-4600 for pre-tack and AR-3600 to clean up. “These solutions are so easy to use compared to others and we're pleased that they're also safer for our residents,” says Blanton. Learn more about the City of Medford, Oregon at www.ci.medford.or.us.