

# RFI-Rejuvenators and Surface Sealing Products to Extend Asphalt Pavement Life

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## Responses to Questions

1. What are the performance criteria? The RFI indicates that the outcome is ultimately a performance based specification. What are the performance criteria that you will be evaluating?

*The performance criteria will be developed from the research study.*

2. What is the AADT and existing surface of the subject test location and is this surface the anticipated type of surface that will be selected for primary treatment?

*The selected routes have AADT of 3,500 or below. The existing surface for the mainline application is a BP1. The existing surfaces for the longitudinal joint locations are a Surface Level course and a SP095CLP. The vendor is to identify if there are any traffic count or speed limitations, as well as any surface types that the product is limited to.*

3. What laboratory tests will be performed on the products submitted?

*The laboratory tests that are performed on any new product for sealing/rejuvenating may include, but are not limited to:*

- *Weight per gallon*
- *Sieve test - AASHTO T59*
- *Viscosity at 25 °C - AASHTO T59*
- *Residue by evaporation - AASHTO T59*
- *Residue by distillation - AASHTO T59*
- *Penetration - AASHTO T49*
- *Particle charge - AASHTO T59*
- *Acidaffin - ASTM D2006*
- *Separation of asphalt into four fractions - ASTM D4124*

4. With respect to the roadway tests indicated in the RFI, what are the acceptable performance criteria? More specifically what is the definition of 'maintain adequate friction'?

*We are going to measure the before and after friction performance and*

*make a determination on acceptable levels. The criteria for removal will be based upon vehicle performance traveling through this area and any changes which may have occurred due to a reduction in measured friction.*

5. Will the residual product amounts be measured to capture wear resistance? If so, how will this be measured and what will be acceptable wear resistance?

*The finished surface sealant treatment shall be evaluated by MoDOT staff based on the PASER manual. It will be used to rate the condition of the pavement surface and observe any raveling, polishing or flushing. A final surface with insufficient coverage or delamination shall be considered unacceptable material.*

6. The second category of product is noted to be 'asphalt based' or other alternative product. What types of products are acceptable for the first category (applied to the entire road)?

*The vendors can submit what they believe to be acceptable to apply to the entire roadway. During the course of the research study, it will be determined whether it is acceptable or not.*

7. Will you be accepting products that require a 'fly coat' application?

*Yes, we will be accepting products that require a 'fly coat' application.*

8. If you are going to evaluate products that require a 'fly coat', will the skid resistance measurements be captured before or after the fly coat is applied?

*Skid resistance measurements will be captured after the 'fly coat' is applied, as it will be considered part of the treatment.*

9. Will cost be a consideration?

*The cost consideration will have an impact on future use as it will be compared to our typical preventative maintenance application (i.e. slurry seal, chip seal).*

*During the research process, It is intended that the evaluator will document the product application cost per square yard which should include the cost for material delivered plus labor.*

10. Is the research limited to a certain number of products that can be evaluated? If so, how will you decide what products are selected?

*The intent is to evaluate every vendor who wants to apply their product*

*for consideration on MoDOT roadways. All products will be used, provided they pass our lab testing for new products.*

11. Regarding the bold type language on the submission of products regardless of MoDOT's previous use, does that mean you want products submitted for evaluation that are already support[ed] by MoDOT Standards or Special Provisions? For example, the Sand Seal that is being used on Call H08 in the May letting. Will that product need to be submitted for evaluation?

*The sand seal will not need to be submitted for evaluation, as it is actually a "scrub seal" and is considered standard and meets friction criteria. The research study is looking for new and improved ways to provide MoDOT with different options.*

12. Is it the intent of this research to develop a performance based specification that will complement existing standards and special provisions or to replace them?

*The performance based specification intentions to complement or replace existing specifications, standards or provisions cannot be determined prior to the research evaluation.*

13. Will a supplier be expected to secure an applicator to get the products applied in the field or is this research an effort to identify products that MoDOT will be able to self-apply? Please include Traffic Control expectations.

*Per the RFI, if the vendor does not do physical application, at a minimum, they should be on-site to give guidance for proper installation. The research evaluation will document how the vendor applies the product, ease of application, how it can be purchased and if it can be applied by internal staff. The researcher will also identify if there is a particular process required for product installation. MoDOT will provide Traffic Control for the application of the products in this evaluation study.*

14. What quantity of product or what area of road will you want treated for evaluation?

*The quantity of product and area of roadway cannot be determined at the time of this response. The number of products for each application category is undetermined; however, there are 30 miles of longitudinal joints to treat and 12 miles of mainline treatment. Each product will have no less than 1,500 linear feet of application area depending on the category.*

15. Will there be any compensation offered for products chosen for field application and evaluation?

*Per the RFI, the products will be purchased for application with the intent that the vendor will perform the application. The amount of each product purchased is dependent on the number of submissions that pass the initial lab review.*

16. What will the timeline be for getting products, product data and 3<sup>rd</sup> party test results submitted?

*We would like to **emphasize** that vendors respond expeditiously regarding needed documentation and product submission. Because vendors have indicated interest but not yet submitted product forms, we have added deadlines.*

- *Indicate your interest by May 3<sup>rd</sup>, 2017 (no change)*
- *Complete the [product form](#) for each product you plan to submit (no change; added externally available link)*
- *Submit the product form along with the required certification, product literature and material safety data sheet (MSDS) via email to [MoDOTResearchRFP@modot.mo.gov](mailto:MoDOTResearchRFP@modot.mo.gov) by **May 8<sup>th</sup>, 2017** (new deadline)*
- *Submit the product sample with a copy of the completed form to MoDOT Construction & Materials Division (no change)*
- *Submit the product's independent (or third party) test data via email to [MoDOTResearchRFP@modot.mo.gov](mailto:MoDOTResearchRFP@modot.mo.gov) no later than **June 5<sup>th</sup>, 2017** (new deadline)*