

**From:** [Michael Shea](#)  
**To:** [Joe Korzilius](#)  
**Cc:** [Jason Blomberg](#); [Brian Reagan](#)  
**Subject:** RE: Preventive Maintenance Team Long Term Research Project; Maintaining Poor Pavements  
**Date:** Tuesday, September 25, 2018 6:50:00 AM  
**Attachments:** [image001.png](#)  
[image002.jpg](#)  
[image003.jpg](#)  
[image004.jpg](#)  
[image005.png](#)  
[Long Term Research Development.docx](#)

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Joe please find the questionnaire from Missouri DOT on the reference topic.

Let me know if you have any questions.

Thanks

Mike Shea

Missouri DOT

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**From:** Joe Korzilius [<mailto:JKorzilius@srfconsulting.com>]

**Sent:** Thursday, September 06, 2018 10:25 AM

**To:** Jason Blomberg; Mark Gawedzinski (IL); [Ned.grady@dot.wi.gov](mailto:Ned.grady@dot.wi.gov); Robert Green (MI); Pete Kemp (Wisc); Elliot Keyes (MN); [leo.mahserelli@dot.ca.gov](mailto:leo.mahserelli@dot.ca.gov); Doug Mason (CalTrans); Michael Shea

**Cc:** Jerry Geib (MN.) (Chair); Worel, Benjamin (DOT); Renae Kuehl; Cody Brand (MnDOT D8) ; Andrew Hanz (Mathy); Ed Johnson (MN) ; [jim.bittmann@state.mn.us](mailto:jim.bittmann@state.mn.us); [timothy.lee.andersen@state.mn.us](mailto:timothy.lee.andersen@state.mn.us); [timo.saarenketo@roadscanners.com](mailto:timo.saarenketo@roadscanners.com); Dan Wegman (Braun Interotec); [kevin.kliethermes@dot.gov](mailto:kevin.kliethermes@dot.gov); Renae Kuehl

**Subject:** RE: Preventive Maintenance Team Long Term Research Project; Maintaining Poor Pavements  
NRRRA Team Participating States,

Today the NRRRA Tap for Preventive Maintenance discussed the ongoing Long Term Research Project; Maintaining Poor Pavements

We are waiting to hear back from states responses to the questions below.

The TAP discussed today putting a delivery date on this request for responses, therefore please complete and return responses by October 1<sup>st</sup>, 2018.

This will allow the Long Term Research Project; Maintaining Poor Pavements, to continue.

Questions below in original email from May.

Joe

Joseph Korzilius, PE (MN, WI)  
Senior Associate

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**From:** Joe Korzilius

**Sent:** Friday, May 25, 2018 8:39 AM

**To:** 'Jason.Blomberg@modot.mo.gov' <[Jason.Blomberg@modot.mo.gov](mailto:Jason.Blomberg@modot.mo.gov)>; Mark Gawedzinski (IL) <[Mark.Gawedzinski@illinois.gov](mailto:Mark.Gawedzinski@illinois.gov)>; 'Ned.grady@dot.wi.gov' <[Ned.grady@dot.wi.gov](mailto:Ned.grady@dot.wi.gov)>; Robert Green (MI) <[GreenR6@michigan.gov](mailto:GreenR6@michigan.gov)>; Pete Kemp (Wisc) <[Peter.kemp@dot.wi.gov](mailto:Peter.kemp@dot.wi.gov)>; Elliot Keyes (MN) <[elliott.keyes@state.mn.us](mailto:elliott.keyes@state.mn.us)>; 'leo.mahserelli@dot.ca.gov' <[leo.mahserelli@dot.ca.gov](mailto:leo.mahserelli@dot.ca.gov)>; Doug Mason (CalTrans) <[douglas.mason@dot.ca.gov](mailto:douglas.mason@dot.ca.gov)>; Mike Shea (Missouri) <[mike.shea@modot.mo.gov](mailto:mike.shea@modot.mo.gov)>

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**Subject:** Preventive Maintenance Team

Long Term Research Development

Maintaining Poor Pavements

As presented at yesterday's pavement workshop below are questions related to Task 2; Gathering data for this long term research study.

If we can get a response from each State by June 29, 2018 it will help to keep this study moving along on schedule.

If you can not identify a response for all questions please respond with what you can obtain.

A draft literature review, Task 1, has been posted to the project website.

Please contact me with any comments or questions.

1. Name of State agency:
2. Does your State perform network roughness measurements ?
3. What measurement does your State use to collect roughness measurements (inches per mile) ?
4. How does your State perform and collect pavement distress data (patching, longitudinal or transverse cracking, rutting, etc. ...) ?
5. What are the pavement distress measures your State uses for reporting ?
6. How does your pavement management system define a "Poor Pavement" ?

If you do not have a pavement management system what defines a pavement in poor condition for your State ?

7. Please provide a listing of pavement segments in poor condition that received a "Thin" surface treatment.
8. What is the approximate traffic volume in AADT ?
9. What thin surface treatment(s) was applied.
10. What were the reported pavement performance measures prior to application of a thin surface treatment ?
11. IRI (or other used by your State)

- a. Before application of thin surface treatment.

At the bottom of this email are a listing of treatments, if the treatment applied does not fit please describe.

- b. Are there any before and after photographs?
- c. After application of thin surface treatment
- d. After year one and successive years where data is available

12. SR (or other used by your State)

- a. Before application of thin surface treatment.
- b. Are there any before and after photographs?
- c. After application of thin surface treatment
- d. After year one and successive years where data is available

13. Cost of surface treatment

- a. Total Project Cost
  - i. Material
  - ii. Installation
- b. Area covered
- c. Cost per lane mile

14. When was next rehabilitation performed ?

15. What is the basic pavement structure of the roadway segment ?

Not required but if you have the following information:

16. Please describe the most significant distress(s) being addressed.

17. Please describe the methodology or decision making process followed to select the rehabilitation application.

- Applied treatments may be combined but should be limited to those that are considered "Thin" = less than a 2" depth.

A description of general treatments being considered in the study are on the attached definitions sheet and include:

- Thin Overlay (with or without milling)
- Thinlay (with or without milling):
- Hot in-place recycling (HIR)
- Open Graded Friction Courses (OGFC), also known as Plant Mix Seal Courses
- Texas Under Seal
- Ultra Thin Bonded Wearing Course / Paver Placed Surface Seal / Nova Chip:
- Microsurfacing
- Slurry Seal
- Chip Seal
- Fiberbat Chip Seal

- Scrub Seal
- Cape Seal
- Fog Seal:
- Rejuvenating Fog Seal:
- Bio Fog Seal:
- Otta Seal
- Scratch Course
- Mastic Surface or crack Treatment

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Senior Associate

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