

2017 Research Symposium

& STIC Annual Meeting

Pavement Life

RESEARCH PROJECT/TITLE

Pavement Life

STUDY TIMELINE

1992-Present

VTRANS CONTACT(S)

Emily Parkany, Research Manager

Jonathan Razinger, Research Engineer

Formerly:

Jason Tremblay, Risk Engineer

Wendy Ducey, Construction

MORE INFORMATION

Pavement Life Summary Reports and are found here:

<http://vtrans.vermont.gov/planning/research/pavementlife>

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This fact sheet was prepared for the 2017 VTrans Research Symposium & STIC Annual Meeting held **on September 28, 2017** at National Life in Montpelier, VT. 8:00 am– 12:00 pm.

Fact sheets can be found for additional projects featured at the 2017 Symposium at

<http://vtrans.vermont.gov/planning/research/2017symposium>

Additional information about the **VTrans Research Program** can be found at

<http://vtrans.vermont.gov/planning/research>

Additional information about the **VTrans STIC Program** can be found at

<http://vtrans.vermont.gov/boards-councils/stic>

Introduction or What was the Problem?

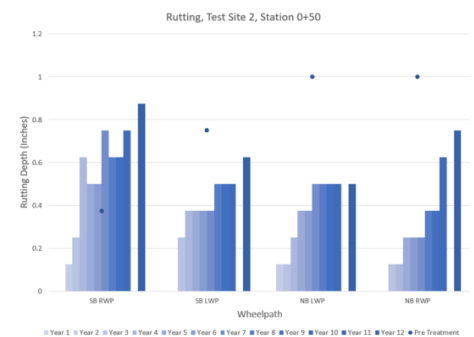
Since 1992, Research Section staff have visited pavement projects across the state. There are currently 42 active sites with a variety of different pavement treatments. The interest is to be able to identify which treatments last as long as expected and which treatments do not perform as expected. The pavement life program has evolved and become re-purposed for gathering more localized data and developing a more intimate portrayal of pavement quality. VTrans staff suggest adding sites to the pavement life program with new pavement treatments that are of interest to the Agency.

Methodology or What was done?

Each pavement field site has several 100 foot or 200 foot sections. Our team visits the sites and draws the longitudinal, transverse, reflective, fatigue, and miscellaneous cracks within each section on top of sheets that show the previous years' cracks. They also take left and right wheel path rut measurements for both travel lanes every 50 feet within the sections. The team is writing up summary reports for the 21 locations that are closing this year (new surface is expected in the next year).



Collecting rutting data



Rutting data plot

Conclusion or What are the next steps?

Next year, Research staff will need to again visit the 42 current sites and any others identified by VTrans staff. After putting together summary reports for the locations receiving new surfaces, we hope to aggregate reports from locations that use the same treatments so that we can learn how the treatment worked in different locations and throughout the State.

What are potential impacts? What is the benefit to VTrans?

By visiting all of these sites across the state each year and tracking pavement deterioration over time, the Research Section is identifying for the Pavement Design team in the Project Delivery Bureau and the Pavement Management folks in the Asset Management and Programming Bureau which surface treatments are performing better or worse than expected. This helps the Agency make decisions on which treatments to use on our roadways that maximize pavement life (years of use) and minimize installation and maintenance costs.