

FACT SHEET

2018 Research Symposium

Pavement Life

& STIC Annual Meeting

RESEARCH PROJECT TITLE

Pavement Life

STUDY TIMELINE

1992-Present

VTRANS CONTACTS

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This fact sheet was prepared for the 2018 VTrans Research and Innovation Symposium & STIC Annual Meeting held at the State House in Montpelier, VT, on September 12, 2018 from 8:00 am— 1:00 pm.

Fact sheets can be found for additional projects featured at the 2018 Symposium at

http://vtrans.vermont.gov/planning/research/2018symposium

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

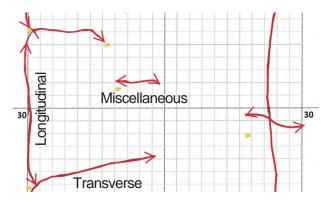
Introduction

Since 1992, Research Section staff have conducted pavement life surveys at projects across the state. There are currently 40 active sites with a variety of different treatment types. The study is designed to help identify treatments that can bring extended service life and detect those with decreased performance. The pavement life program has evolved and adapted to technological advances, harnessing mobile data collection to efficiently gather needed information. New pavement test sites are added by VTrans staff, when new pavement treatments that are of interest to the Agency are implemented.

Methodology

Each pavement life project has 3-7 test sections of either 100 feet or 200 feet. Records are maintained for all test sites and a testing plan is created to visit all sites each summer. Staff visit the sites and draws all cracks onto a field collection sheet. Back in the office, cracks are then categorized into Longitudinal (fatigue), Transverse, Center Line or Miscellaneous. These cracks are digitizable and lengths of each type are tabulated, a process improvement of past techniques of measurement by hand.





Next Steps

Data collection for future pavement life projects will reduce in-field observations and rely on mobile data collection. Cracks will be taken from downward facing imagery and tabulated with the new process. Site visits will be conducted as needed, and typically requisite for the establishment of new test sites.

Potential Impacts and VTrans Benefits

By continuously tracking the pavement deterioration over time, the Research Section is identifying 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 service life (years of use) and minimize installation and maintenance costs.