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Project Background

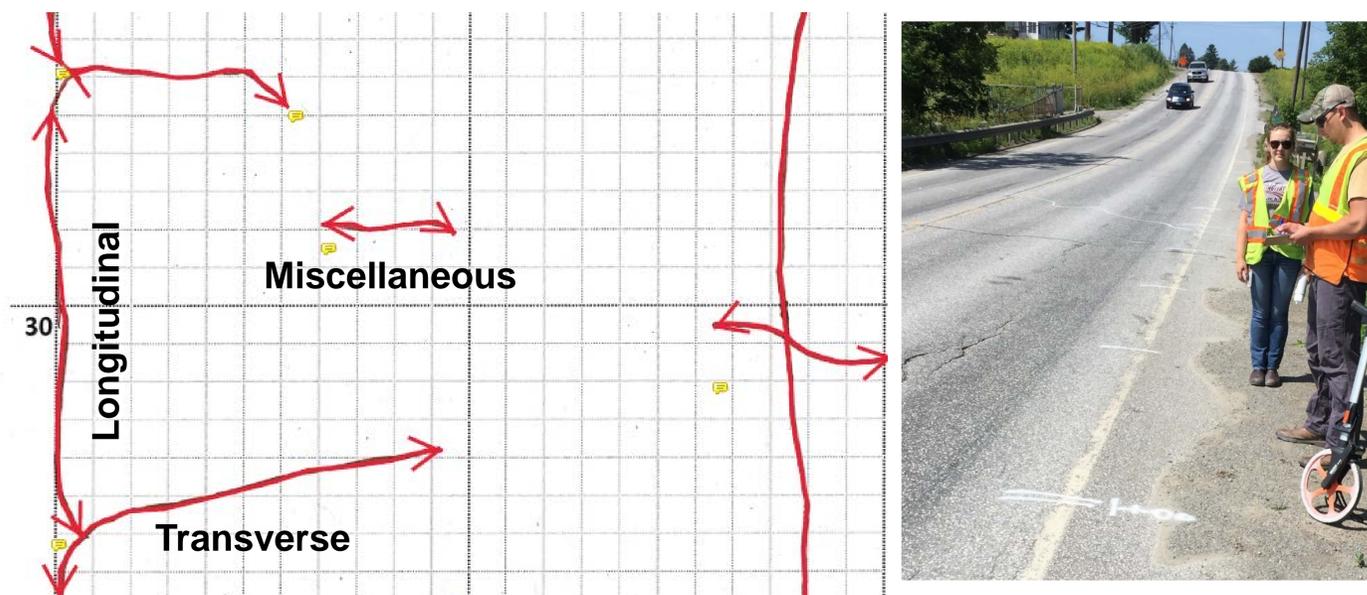
In 1992, the VT AOT began its Pavement Life Project as many new paving treatments were being developed, with the goal of analyzing which treatments had the best performance with regards to cracking and rutting prior to being repaved. Before the start of the Project, very few pavement treatments were utilized in Vermont. As of today, 20 different types of pavement treatments have been used and tested in our state's climate.

In 2018, the VTrans Research division was able to observe cracking data for 33 individual projects throughout Vermont along with establishing preconstruction data for two new projects.

Data Collection and Analysis

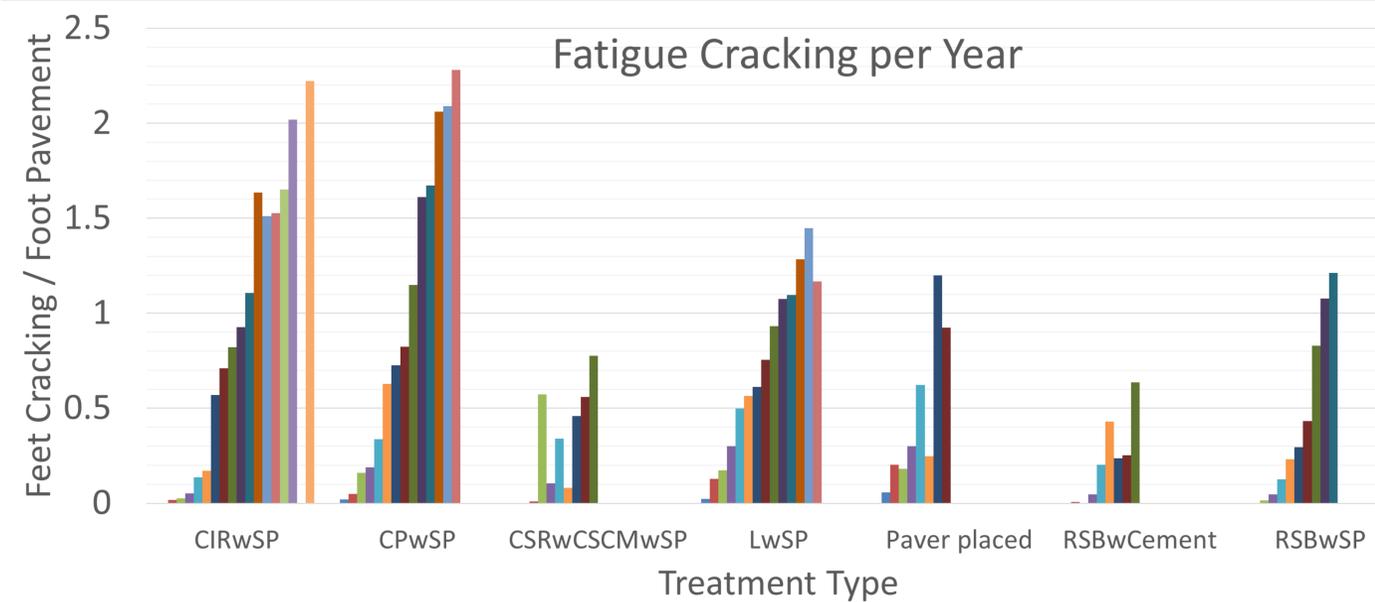
Prior to 2018, both cracking and rutting data were collected by hand. This year with the availability of more accurate automated systems for collecting rutting data, only cracking data was done by hand.

Starting in 2018, cracks were drawn onto field sheets, and then cracks were measured electronically. Each section of cracking was analyzed based on four different types of cracking: Longitudinal (Fatigue), Transversal, Center Line and Miscellaneous. From these cracks, total cracking was calculated and included all but Center Line cracking.



Analysis and Comparison

Data for each project including current and canceled projects were compiled into one spreadsheet in order to analyze each pavement type over time. Since each project began in different years, the analysis was based on individual years. Each project has approximately 3-7 test locations of 100 or 200 foot long sections with at least one type of pavement treatment per project. Data was compiled by the average linear feet of cracking per project and pavement type therefore allowing a uniform comparison.



Moving Forward

In the years to come, VTrans will continue the Pavement Life project with additional projects and pavement types. The project will include the following objectives:

- Consistent collection of data, year to year
- Detailed analysis of sites at end of 'pavement life'
- Report on historical performance of pavement life test sections, based on compilation and analysis of individual treatment types.
- Collect and report on supplement data to find correlations between distress and possible causes of pavement distress.