

2018 Research Symposium

Experimental Features

& STIC Annual Meeting

RESEARCH PROJECT TITLE

Experimental Features

STUDY TIMELINE

Ongoing

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

The Experimental Features project covers a broad range of tests conducted by the Vermont Agency of Transportation. These installations of new experimental designs function as a full-scale demonstration and trial of the innovative technology, allowing for ongoing testing and observation of the performance in Vermont.



Methodology

Each project in the Experimental Feature program is tested regularly and monitored for change or deterioration. An important aspect of the study is to determine if the new feature will provide a better investment, cost savings, or performance improvement over the existing practice for the state.

Conclusions

Composite Arch Bridge—deflections to the bridge are stable, the materials are performing well and show no signs of early deterioration. Overall the Composite Arch Bridge is a successful demonstration.



Pavement Markings – tape markings on US-302 have shown mixed results for durability under the high traffic in their locations. Traffic and winter maintenance abrasion has decreased retroreflectivity. Bike path markings are performing well, except in the highest stress areas.

Randolph Park and Ride Pervious Asphalt—new pervious asphalt was well constructed and finished. Average infiltration rates at installation and again at two months are 383 in/hr and 319 in/hr, respectively.

Potential Impacts and VTrans Benefits

Experimental Features projects help prove the value of new techniques and materials in Vermont's transportation infrastructure. These real-world tests help show the potential for adoption into regular use, and advance the practice at VTrans.

