

2017 Research Symposium

VTrans Recycled Materials Activities

& STIC Annual Meeting

RESEARCH PROJECT TITLE

Recycled Materials Activities

STUDY TIMELINE

Spring 2016- present

VTRANS CONTACT(S)

Emily Parkany, Research Manager
Mladen Gagulic, Materials Manager

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

Research staff is working with the VTrans Recycled Materials Working Group to foster the application of recycled materials: recycled asphalt shingles (RAS), shredded tires, and recycled glass into VTrans projects.

What was done?

Working Group efforts in 2016-2017 include:

- Working with Vermont Local Roads (VLR) to encourage local governments to use RAS in gravel roads
- Preparing Recycled Materials training materials
- Encourage the use of RAS in shoulders of VTrans roadway projects
- Trying to bring FHWA mobile lab to Vermont to test RAS in HMA mixtures
- Writing the work program for the use of Tire Derived Aggregate (TDA) in underdrains. (Installation expected next year)
- Provided technical assistance to the Chittenden Solid Waste District in their efforts to use Processed Glass Aggregate (PGA) in VTrans projects



RAS Aggregate Surface, Brookfield

What are the next steps?

We continue to develop and look for more uses for Recycled Materials in VTrans projects. We want to overcome reluctance to use different materials especially if the Agency incurs the same costs with the recycled materials and achieves the same or increased benefits. We are trying to uncover applications where Recycled Materials are cheaper, perform better or both. For example, the petroleum in RAS may lead to increased compaction of gravel roads, less dust, and less maintenance.

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

Using Recycled Materials has potentially a great impact on the Agency, especially if applications are found that the use is less expensive or the benefits are greater. Finding new uses for products that may otherwise take up landfill space, and consume virgin resources, should be a benefit to all including VTrans.