

### AGENCY OF TRANSPORTATION

# **VTrans Recycled Materials Working Group** Includes Research, Construction and Materials, Project Delivery and **Agency of Natural Resources Staff**

## Introduction

Motivated by the Architectural Waste Recycling Law (Act 175), the **Recycled Materials Working Group has met to discuss how recycled** materials can be used in our roadway projects.

Materials include:

- Recycled Asphalt Shingles (RAS)
- Crumb Rubber and Shredded Tires
- Processed Glass

## **RAS in Shoulders and Surface (VTrans Projects)**

Project	In Approved FHWA Research Work Program?	Unbound Shoulder Mix	Unbound Surface Course	Stat
VT 64 Northfield Williamstown STP 2959(1)	Yes	Х		Construct 2010
VT 65 Brookfield STP 2960(1)	Yes	Х	Х	
VT 14 Randolph- Williamstown	No	Х		
VT 74 – Shoreham- Cornwall	No	Х		
<b>VT 63</b> Berlin-Barre Town STP 2943(1)	Yes	Х		Constru in 20
<b>VT 36</b> St. Albans FPAV(1)	Yes	Х		
<b>VT 38</b> St. Albans FPAV(2)	Yes	Х		

# **VTrans Recycled Materials Activities**



**Processed RAS** 



cted in

uction



**Gravel / RAS** Surface Mix on **VT 65 in** Brookfield

## **RAS in Town Gravel Roads**

s this year). RAS in Hot Mix Asphalt mixes (FHWA mobile testing this fall), and RAS in gravel roads (Brookfield mising amount of recycled materials an be used in gravel roads—10-20% RAS if mixed properly th good quality gravel for a three inch lif

of using RAS? Previous studies sugges that the asphalt in the RAS leads to easy application, good legislature is motivated by ant to show that the "green" application of using RAS is a win for towns with better performance and reasonable Richmond are happy with their trial mixes placed in 2015

ources for more information (see below for the URL Performance of Recycled Asphalt Applications" (ANR, Chittenden Waste

Gravel Roads Made Smoother, Less Dusty with Addition of Scrap Asphalt Shingles" (MN, 2014)

Roads in Small Town are Paved with Recycled Shingles" (CAD Digest, 2016)

Are you interested in learning more about using RAS in your roads? The VTrans Recycled Materials Working Group is partnering with Vermont Local Roads on getting more nformation to you and learning about your interest in usin AS in your roads. We plan to attend Road Foreman meeting Addison Chittenden and Franklin Counties this fall (large) cause these areas are close to the processed RAS stored a /hitcomb Construction in Colchester). And we plan vorkshop and installation demo in a to-be-named town i late May 2018. We're also looking for towns that want to us AS this fall. There will potentially be a RAS/gravel mix at the Whitcomb facility in Colchester that may be available at a ery competitive price in order to get 2-4 towns t lemonstrate this year. Please use this Survey Monkey link to tell us of your interests (and if you have concerns about using

lease share any questions or concerns about using RAS in



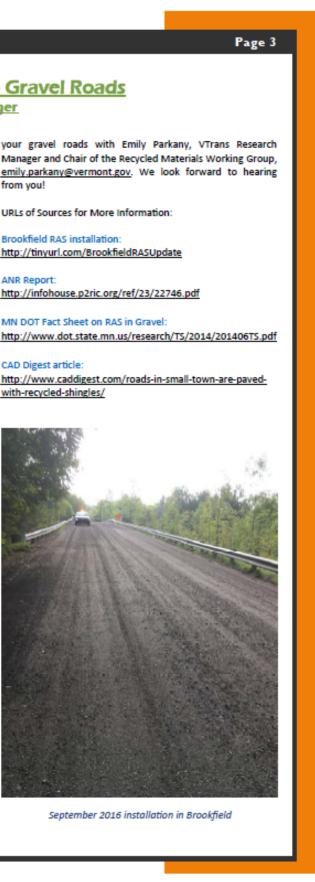
## **VLR Newsletter**

## **Next Steps**

In addition to working on RAS in Town Gravel Roads, the Recycled Materials Working Group will be

- Working with FHWA's Mobile Asphalt states' efforts with RAS in HMA





The VTrans Recycled Materials Working **Group is working with Vermont Local Roads to** encourage towns to use RAS in the surface course of town gravel roads. Efforts include:

- Field trip to Myers RAS processing facility and storage at Whitcomb in Colchester
- Newsletter article describing the benefits of RAS in Gravel Roads (including less dust and less grading)
- **Recruitment of three towns (Richmond,** Essex, and Panton) to install a pilot of 4 inches of 20% RAS Surface Mix purchased from Whitcomb in October 2017
- Fall presentations at Road Foremen meetings in Chittenden and Addison Counties
- Workshop training materials including an expected workshop and demo in May

• Monitoring the use of shredded tires in underdrains (two projects constructed in 2018; work plan approved 2017)

Laboratory to test Vermont RAS in HMA mixes. Van visit in 2017 is featuring other



**FHWA Mobile Lab** 



