

2019 Research  
ShowcaseVTrans Unmanned Aircraft Systems -  
Transportation Agency Applications& STIC Annual  
Meeting

## PROJECT TITLE

VTrans Unmanned Aircraft  
Systems – Transportation Agency  
Applications

## STUDY TIMELINE

January 2018 – Ongoing

## INVESTIGATORS

Dan Delabruere  
Rail and Aviation Bureau

## VTRANS CONTACTS

Evan Robinson, UAS Program  
Manager  
Dave Tillberg, GIS/UAS Imagery  
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This fact sheet was prepared for  
the 2019 VTrans Research  
Showcase & STIC Annual Meeting  
held at the Dill Building in Berlin,  
VT, on September 11, 2019 from  
8:30 am– 1:00 pm.

Fact sheets can be found for  
additional projects featured at the  
2019 Symposium at

[http://vtrans.vermont.gov/planning/  
research/2019showcase](http://vtrans.vermont.gov/planning/research/2019showcase)

Additional information about the  
VTrans Research Program can be  
found at

[http://vtrans.vermont.gov/planning/  
research](http://vtrans.vermont.gov/planning/research)

Additional information about the  
VTrans STIC Program can be  
found at

[http://vtrans.vermont.gov/boards-  
councils/stic](http://vtrans.vermont.gov/boards-councils/stic)

## Introduction

VTrans UAS is in the process of defining its capability to provide support for; **emergency response, infrastructure inspection, construction site monitoring, remote aerial imagery** for VTrans as well providing UAS support for other Vermont State Agencies. In the near future, the VTrans UAS program will have internal steady state operation capacity as well as be augmented by aerial equipment currently provided by outside contractors



## Action Taken

VTrans UAS has conducted over 350 flights since January of 2018. VTrans UAS has provided UAS support for many different sections of VTrans, as well as the VT Agency of Natural Resources, and VT Buildings and General Services.

**Highlights include:** Providing updated imagery to first responders that displays new traffic patterns for a bridge refurbishment project in Colchester; Mapping the Cotton Brook landslide for geological analysis for the Agency of Natural Resources; Exploration of capability to augment the VTrans Rail Bridge Inspection team's efficiency.

With support from FHWA and the STIC innovation grant, VTrans UAS has identified 4 additional UAS platforms to add to the fleet. Imagery processing software, computer, and supporting equipment has also been identified and are actively being procured.

## Next Steps

VTrans UAS will continue to define and improve its capability as a functioning UAS team. VTrans UAS is taking any opportunity to fly UAS missions for VTrans and other state agencies in efforts to implement an innovative, safe, and efficient technology into every-day industrial applications.

## Potential Impacts and VTrans Benefits

VTrans UAS will be able to provide a fresh perspective to many transportation applications. Utilizing the rapidly growing technology, VTrans UAS will be able to provide a safe and efficient means to collect important data that may be used to better facilitate the safe movement of people and goods.

