

Traffic Volume Collection & Analysis During COVID-19

PROJECT TITLE

Traffic Volume Collection & Analysis During COVID-19

STUDY TIMELINE

April 2020 – July 2020

INVESTIGATORS

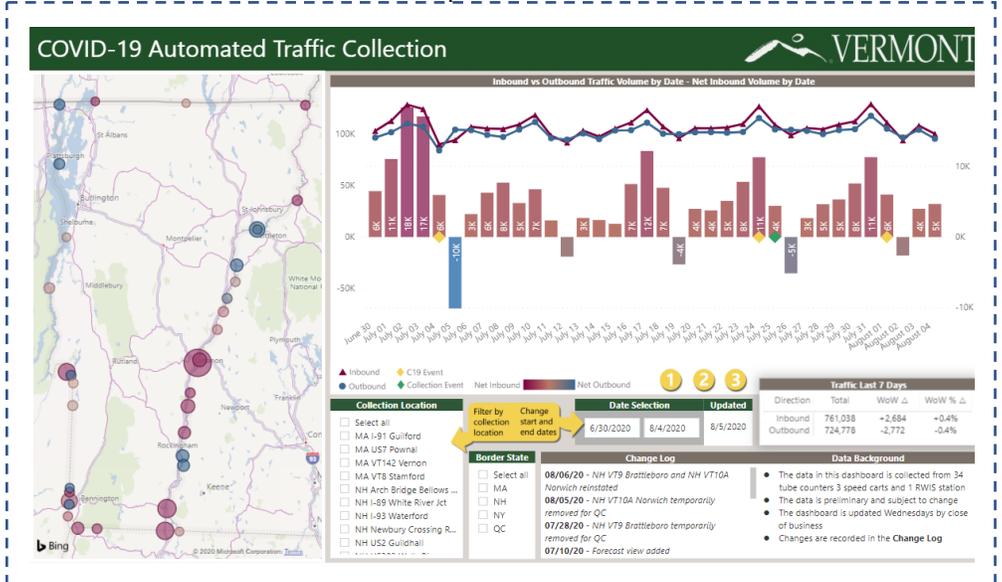
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Problem Statement

In an effort to track changing traffic patterns during the COVID-19 pandemic, VTrans has been using automated collection methods to capture and report on traffic volume data at border crossing locations since April 14th, 2020. The use of tube counters, sensor carts and RWIS stations has allowed for a multi-faceted approach to obtaining inbound and outbound traffic volumes at 38 high-priority border locations. This paper will outline the different approaches used to collect, transform and communicate this unique dataset.



Methodology

Due to their flexibility and low upfront cost, tube counters were quickly deployed at 33 border crossing locations. Sensor carts were then installed at an additional 4 high volume locations, and 1 pre-existing RWIS was identified as being suitable for capturing cross-border traffic data. Data from the tube counters is collected by staff in the field, while data from the sensor carts and RWIS is accessed remotely. The data is cleaned and validated using a number of methods before being brought into the reporting dashboard.

Next Steps

In order to continue to collect and report this data into the foreseeable future, the tube counters will gradually be replaced by more durable and remote access enabled sensor carts and semi-permanent sensors mounted on utility poles, improving the speed and efficiency of the data collection and processing cycle.

Potential Impacts and VTrans Benefits

The data collected and reported through these processes has proven to be valuable to many stakeholders, including state and local officials, departments within VTrans, as well as other state agencies, researchers, and the public. Outside of the context of COVID-19, the data could be used for analyzing trends in traffic volume, vehicle class distributions and speeds on a granular level.

More information about the VTrans Research Program, including additional Fact Sheets, can be found at: <http://vtrans.vermont.gov/planning/research>