

Travel Time Sign Pre and Post installation Assessment Point Cook Road, Seabrook



Contents

1	Background	3
2	Assessment Considerations	3
3	Assessment Findings	4
4	Summary	5

1 Background

In October 2020, DoT installed VMS travel time signs on Point Cook Road, Seabrook.

The VMS signs use Bluetooth technology to gauge relative travel times between two points and help drivers make informed decisions about their route and travel times.

The purpose of this assessment is to consider the impact to vehicle volumes along Point Cook Road and Dunnings Road pre and post installation of the VMS Travel Time Signs.

2 Assessment Considerations

The assessment was undertaken using vehicle detector loop counts from the traffic signals at:

- Point Cook Road and Dunnings Road (Site 5236);
- Point Cook Road, Nr Catherine Rd, South (POS) (Site 5298); and
- Palmers Road and Dunnings Road (Site 3776).

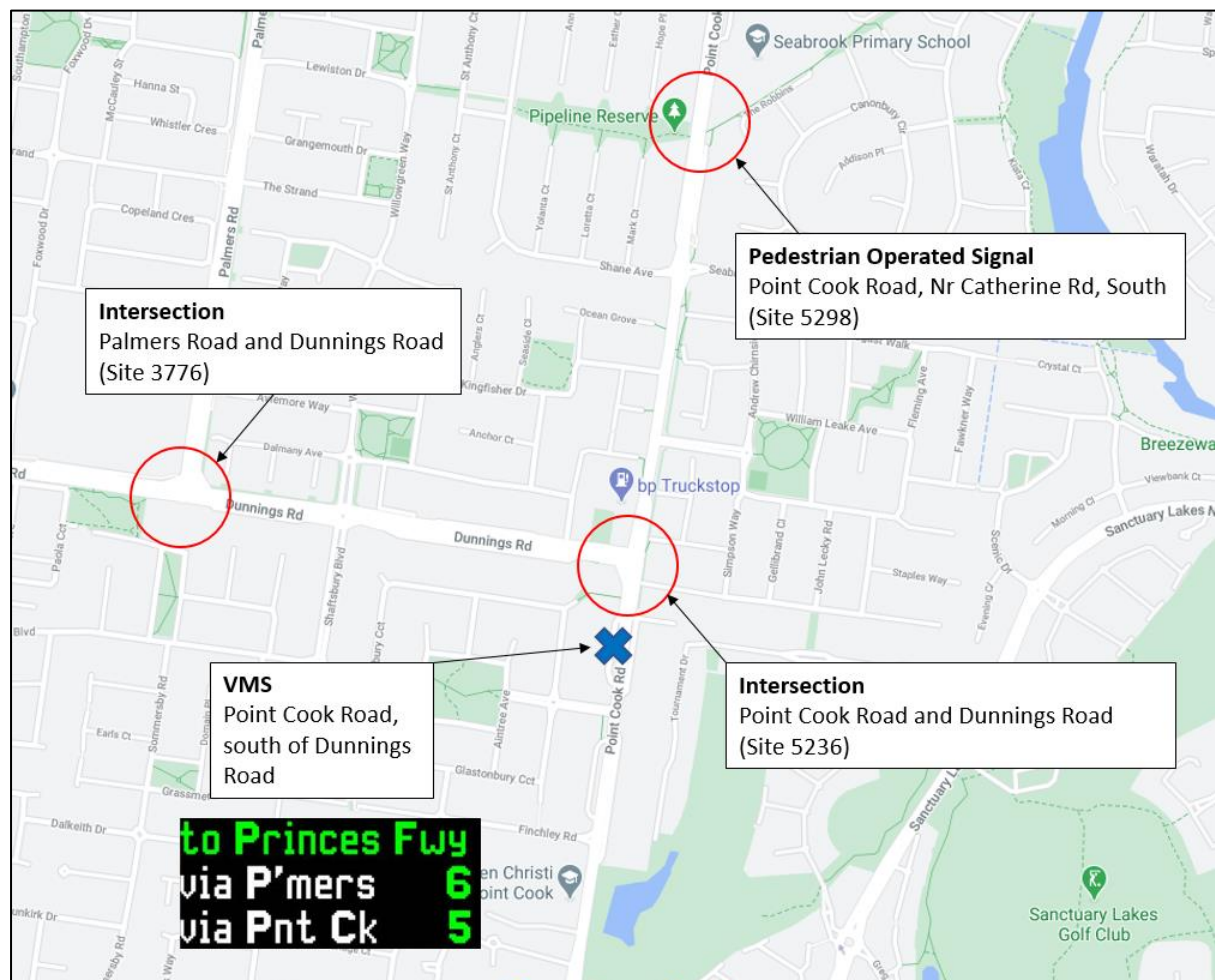


Figure 1: Traffic signal vehicle detector and VMS sign locations

The assessment considered AM peak traffic volumes (6AM – 10AM), as this is the critical time for north bound movements along Point Cook Road and gives the best indication of the vehicle volumes when the road is operating at its highest capacity.

The assessment considered (4) dates for comparison. With 2 pre-installation and 2 post-installation.

These were;

- March 2020;
- October 2020;
- February 2021; and
- March 2021.

All volumes were taken during the school term and on a Friday to give an accurate cross-comparison.

Noting that a reduction in vehicle volumes is seen during October 2020 as a result from the Covid19 lockdowns.

The assessment considered the northbound traffic volumes along Point Cook Road (north of Dunnings) & Dunnings Road (westbound) as a percentage of the total south approach volumes at the intersection of Point Cook Road and Dunnings Road. Furthermore, it considered the volume of left and through movements at the intersection of Point Cook Road and Dunnings Road as a percentage of the total south approach volumes.

3 Assessment Findings

The assessment shows that there has been an increase in vehicles turning left vs heading straight at the intersection of Point Cook Road and Dunnings Road. (Through: 70%, Left: 30%) In March 2020 vs (Through: 62%, Left: 38%) in March 2021.

Furthermore, there has been an increase in traffic volumes along Dunnings Road and a decrease in traffic volumes along Point Cook Road, as a percentage of the traffic volumes on Point Cook Road (south of Dunnings Road)

- Dunnings Road: (March 2020: 54%, March 2021: 67%)
- Point Cook Road: (March 2020: 82%, March 2021: 77%)

The below diagram gives a complete breakdown of the various volumes over the dates considered.

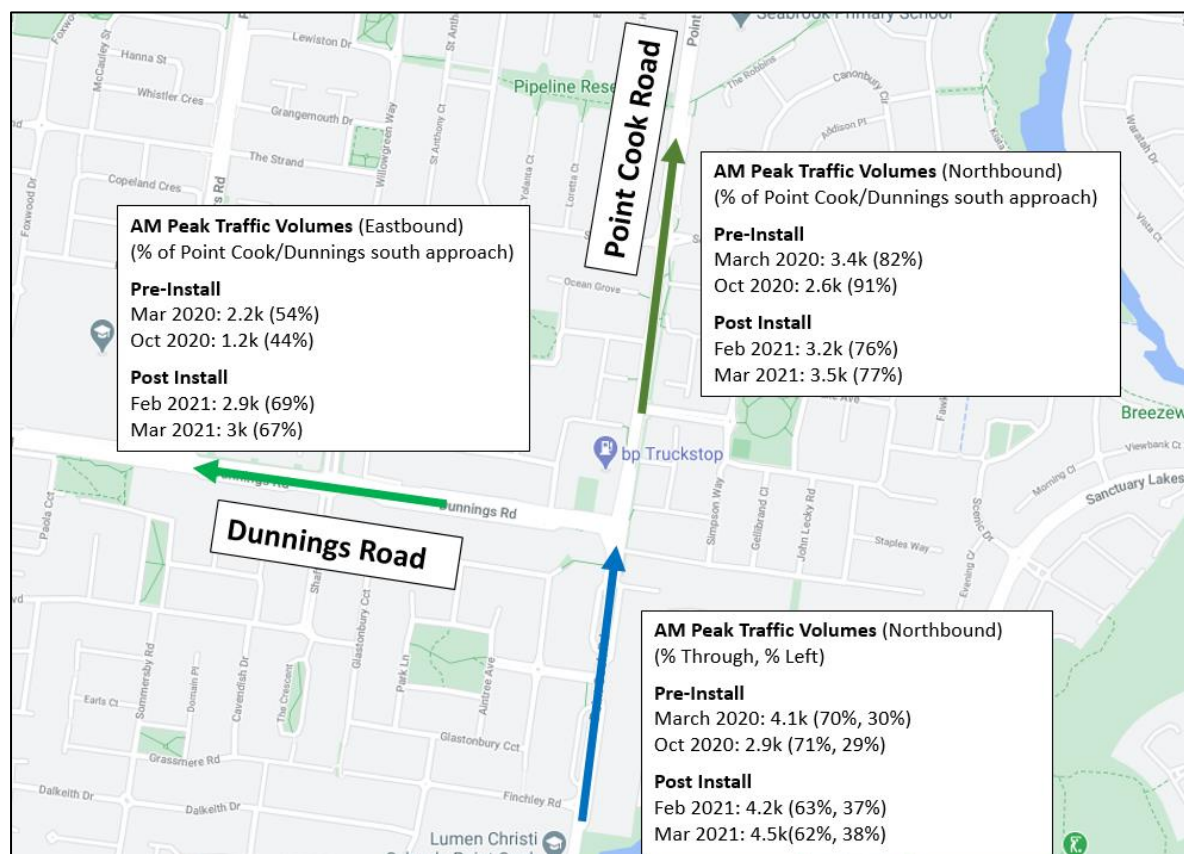


Figure 2: Assessment findings

4 Summary

It should be noted that the overall increase in traffic volumes approaching the Point Cook Road and Dunnings Road intersection from the south (March 2020: 4.1k, March 2021: 4.5k) has resulted in an increase in traffic volumes on both Dunnings Road and Point Cook Road (north of Dunnings Road).

However, from this assessment it is shown that a redistribution of that traffic has resulted, with Dunnings Road carrying a larger percentage of that traffic. As such, the 10% increase in traffic on Point Cook Road (south of Dunnings Road), has only resulted in a 3% increase in traffic on Point Cook Road (north of Dunnings Road). While traffic on Dunnings Road (westbound), has increased by 36%.

This can likely be attributed to the duplication of Dunnings Road as well as travel time indicators encouraging more vehicles to use Dunnings Road and Palmers Road to access the freeway.

DoT will continue to work with key stakeholders such as Hobsons Bay and Wyndam City Council to investigate transport improvements and explore funding opportunities for the Point Cook area.