

North east truck curfew background

Before and after traffic surveys

VicRoads arranged for traffic surveys to be undertaken, respectively in August 2015 and March 2016, on a number of roads in the north east of Melbourne. These surveys were crucial in giving us a better understanding of traffic flow and volumes within the area, especially after the truck curfew implementation.

It should be noted that the "before" counts were undertaken prior to the opening of the Melbourne Market in Epping.

Fluctuations in traffic volumes throughout the year are common and have been evident in the survey data.

When comparing before and after data, we detected the following trends:

- There was an overall increase in total traffic volumes (light and heavy vehicles) in the March 2016 data when compared with August 2015 data.
- The total number of trucks during curfew hours on Rosanna Road significantly reduced from 271 to 89 over the eight-hour curfew period;
- The number of trucks on all roads which have the trial curfew in place dropped during curfew hours, with the exception of Greensborough Highway and Waiora Road;
- Waiora Road saw a total increase of 30 trucks over the eight hour curfew period, even though a curfew is in place;
- A significantly higher number of trucks were recorded on Greensborough Highway. Trucks volumes were noted to have gone from 278 to 363 over the eight-hour curfew period; A breakdown of the data, suggests that while both medium and large truck volumes have reduced from 135 to 90 within the curfew period, there was a significant increase in small trucks. To understand where these trucks are coming from VicRoads plans to undertake a 24 hour traffic survey along Greensborough Highway using cameras. This should help us identify how trucks are using Greensborough Highway.
- As expected, many truck drivers diverted to other arterial roads such as Bell Street, Lower Heidelberg Road, Plenty Road, High Street and Albert Street. The highest increase amongst these roads was Lower Heidelberg Road, which saw a total truck volume increase over the eight hour curfew period from 98 to 215;

Noise Assessment

VicRoads commissioned a kerbside noise assessment on Rosanna Road between the 8th till the 16th of March 2016, with noise measurements undertaken between 8-10pm and 6-8am. The following conclusions were determined:

- The difference in noise between smaller trucks and larger trucks was minimal
- The average kerbside noise of trucks was in the range of 74 – 78 decibels (dB). This does not include noise generated by engine brakes.

During this assessment, there were only two incidents where trucks used engine brakes, which resulted in 91 and 92dB respectively. We suspect the reason for this is directly correlated to the small sample size and the already existing signage advising truck drivers to refrain from using their engine brakes.

Unfortunately, the limited data is considered inconclusive in determining the effects of truck engine brakes. Whilst trucks operate normally in the 70-80dB range, it is assumed

that the majority of complaints with regards to amenity and truck noise at night relates to the use of engine brakes, which range in the area of 91 and 92dB.

Road Safety Assessment

VicRoads commissioned an independent road safety assessment for Rosanna Road, as there were many concerns raised during the initial consultation regarding Road Safety at all times. The following are issues that have been identified:

General:

- power poles are within close proximity to the roads in some locations and are considered a safety concern. In certain circumstances this is further exacerbated by the slight angle of the road and/or pole angle.
- the power poles also impede line of sight at certain intersections
- safety barriers located within the northern section of Rosanna Road are not considered suitable for end-on impact.
- street lighting along Rosanna Road has been identified as a possible contributor to night time crashes. A street lighting assessment would need to be undertaken to confirm if a deficiency exists. Narrow lanes have potential to cause side swipe crashes, particularly if there are two trucks side by side.
- kerbside bus stops are present along Rosanna Road and are not always highly visible to drivers.
- a high percentage of crashes have taken place at unsignalised intersections, particularly when a right-hand turn is being executed.
- pedestrian safety issues along Rosanna Road between Banksia Street and Darebin Street.
- narrow lane widths between Station Road to Lower Plenty Road, which increase the potential for side swipe type crashes.
- alignment and visibility issues at the intersection of Rosanna Road and Lower Plenty Road are assumed to be a contributing factor in crash history at this particular intersection.

Community Feedback

Feedback from the local community has been generally related to traffic congestion along Rosanna Road throughout the day, with the predominant concern relating to the volume of trucks sharing a very narrow road space with other smaller more vulnerable vehicles. Furthermore, there have been safety concerns related with trucks crashing with existing barriers near the Lower Plenty Road intersection and with power poles along Rosanna Road.

Suggested Improvements

A) Enforcement and Origin Destination Survey

VicRoads has been undertaking enforcement activities along Rosanna Road and Greensborough Highway, with 87 infringements issued by VicRoads officers from start of curfew to the end of April 2016. Based on the trends identified above, the following actions are proposed for May and June 2016:

1. **Increase enforcement** on Waiora Road and Greensborough Highway

2. **Undertake an origin destination survey** for Rosanna Road, Greensborough Highway, Waterdale Road and Waiora Road. This will enable VicRoads to identify whether the trucks using these roads are on legitimate, local trips. Cameras will be set up at a number of points to capture images of all trucks; these enable the movements of these trucks to be identified.

B) Road Safety Improvements

VicRoads has developed a proposal along Rosanna Road Rosanna Road between Lower Plenty Road in Rosanna and Yarra Street in Heidelberg, which seeks to address the recorded crashes and inheritably some of the recommendations made by the Road Safety Assessment. It is noted for the 5-year period ending in June 2015, there was 75 recorded crashes resulting in 15 serious and 60 other casualty type crashes. The following treatments are suggested as part of this proposal:

- Rosanna Road/Yarra Street: Construction of central splitter islands and left turn pavement arrows on the western and eastern approaches to restrict through and right turning exit vehicles;
- Rosanna Road/Burgundy Street/Jika Street: Implementation of part-time fully controlled right turns (off-peak) on the northern and southern approaches;
- Rosanna Road/Darebin Street: Upgrade of the intersection with LED lanterns and fully controlled right turns on the northern and southern approaches;
- Rosanna Road/Banyule Road: Upgrade of the intersection with LED lanterns; and
- Rosanna Road/Lower Plenty Road: Modify intersection alignment.

This proposal will be submitted for funding consideration in a future road program.

Furthermore, VicRoads will investigate the suitability of the recommendations made by the Road Safety Assessment that were not incorporated into the above mentioned road safety proposal. Following these investigations, future proposals could be developed to address those issues.