

The Statistics

How the closing of the slip lane has impacted local traffic.

Background

In Australia 30% of our public space is dedicated to roads and carparks¹. As our cities grow to accommodate more people, we need to think creatively to reimagine what this public space could be, so it can benefit a larger proportion of the community. Repurposing our public roads into pedestrian spaces, encourage people of all ages to socialise and activate, and truly invest in our streets as public assets.

This is a key objective in the Junction Urban Master Plan (JUMP) – Council’s blueprint for improving the public environment for the Preston Junction Precinct. The Master Plan recommends that by removing slip lane, there is an opportunity to create a small urban public space for the community.

This idea was tested over a four month period from Late November 2015 – late April 2016, where the Oakover Road slip lane was closed temporarily and a ‘Pop-up Park’ installed in the reclaimed space.

The Study Area

The study area focuses on the intersection of High Street and Oakover Road, Preston.

These roads are classified as local and major roads under the jurisdiction of Darebin City Council. Darebin City Council is the Road Management Authority of this location.

High Street is aligned north-south and generally comprises one traffic lane in each direction, with on-road bike lanes and parallel on-street parking provisions. A 40km/h speed limit applies to High Street within the study area from 8am to midnight. Recent traffic calming measures were implemented on High Street, including a central median and landscaping to improve the amenity of the precinct for pedestrians, cyclists and motorists. These works were a high priority project in the Junction Urban Master Plan.

High Street carries in the order of 12,000 vehicles per day, which is consistent with sections, further south (Thornbury) as well as other roads which operate under similar conditions (Arthurton Road, Northcote).

Oakover Road extends 1.7km, in an east-west direction from High Street to A H Capp Reserve. It generally comprises of a single traffic lane, and on-road bike marking (from High Street to St Georges Road). Oakover Road (between High Street to Railway Place/South Morang train line) falls within the JUMP focus area, and is home to some large strategic redevelopment sites, including Australia Post and motor mechanics. Through the realisation of JUMP and future redevelopment of these sites, it is envisaged that Oakover Road will look very different to how we see it today.

Oakover Road does carry high volumes of traffic when we compare it to other local roads. Traffic surveys undertaken in 2015 indicate an average weekday volume of 5,400 vehicles per day. It is generally expected that local roads carry no more than 2,000vpd. However, it must be noted that volumes are higher than would be expected given the Australia Post Centre is a major traffic generator. This will change as Australia Post has reduced its operational capacity at the Preston site.

¹ Codesign Tactile urbanism (2010).

Impact on local traffic network

By installing a 'pop-up park' at this location we were able to test the idea of a temporary park in the space and understand the implications of closing the slip lane.

Traffic counts were undertaken in 2015 (before the installation of the 'pop-up park', in 2016 (during the 'pop-up' park) and in 2017 (after the completion of the High Street traffic calming works).

The study area included the intersection of High Street and Oakover Road as indicated in figure 1.

The traffic counts recorded the number of standard vehicles (cars), large vehicles (vehicles greater than 5.5m), cyclists, pedestrians and traffic speeds.

The traffic counts took place from 6am – 8pm on the following days:

- 28 & 30 July 2015
- 22 & 24 March 2016
- 20 & 22 June 2017



Figure 1. Study Survey Area

THE FINDINGS

Traffic analysis of this data reviews counts of the entire intersection (all movements of this intersection), unless stated in the subsection. It also calculates the average number of movements during AM (8am-9am) and PM (5pm-6pm) peak periods, over the two days.

When comparing the traffic data we found that:

Standard Cars

- Overall traffic volumes remained fairly constant between 2015, 2016 and 2017 during peak hours, indicating that traffic did not avoid this intersection in favour of other local roads.

	2015 (average)	2016 (average)	2017 (average)
AM peak	1282	1270	1262
PM peak	1361	1374	1374

- The number of northbound vehicles turning left into Oakover Road from High Street has also remained consistent - indicating that vehicles are not avoiding this intersection in favor of other local roads.

	2015 (average)	2016 (average)	2017 (average)
AM	117	108	108
PM	108	118	117

Traffic Speeds

- During the installation of the pop-up park, traffic speeds were recorded to be very low on High Street with average speeds in the region of 15-20km/h and 85%tile speeds in the region of 20-25km/h. These speeds are for northbound and southbound vehicles on High Street only and the very low speeds are likely due to left-turning and right-turning vehicles slowing through vehicles near the subject site.
- The 2017 traffic counts were undertaken after the completion of the traffic calming works. The results indicate that vehicles are complying with the 40km speed limit on High Street.
- No accidents have been reported at the intersection since the slip lane was removed.

Heavy Vehicles (Trucks)

- The number of heavy vehicles using this intersection has fluctuated over the past 2 years. This could be attributed to the number of construction sites in the precinct. During the 2016 survey, the 'Nine high' development on the corner of Miller Street/High Street and the site opposite the pop-up park site were under construction.

	2015 (average)	2016 (average)	2017 (average)
AM peak	57	88	65
PM peak	47	62	61

- In 2016, the northbound - left turn ban for large vehicles was imposed. Over the past 15 months, there has been a significant reduction in the number of large vehicles violating this road regulation.

	2015 (average)	2016 (average)	2017 (average)
AM peak	n/a	14	3
PM peak		17	4

- It should be noted that, 'heavy vehicle' was classified as any vehicle larger than 5.5m and includes transit vans (possibly access the Australian Post site), whereas the left-turn restriction, prohibited vehicles larger than 7.5m long from turning left at the T-intersection.

Cyclists

- The number of bicycles recorded showed an increase over the last 2 years.

	2015(average)	2016(average)	2017 (average)
AM peak	15	28	22
PM peak	24	31	25

Pedestrians

- Peak time for pedestrians was recorded during the lunchtime period (generally 11am-2pm), where the numbers of pedestrians crossing using this intersection has increased.

	2015 (average)	2016 (average)	2017 (average)
AM peak	33	32	51
PM peak	41	42	49

Conclusion:

In reviewing this data:

- Pedestrian numbers have increased over the past 2 years. The recent traffic calming works, which include the central median and landscaping works, is heralding change in the precinct.
- Cyclist's numbers have increased. When comparing the 2015 and 2017 data (recorded during the winter period), the number of cyclists in the AM period increased from 15 to 22.
- Traffic speeds on average are 30-40km/hr.
- The recent counts indicate that the north-bound, left turn truck ban is being adhered to.
- Traffic volumes at this intersection have remained consistent over the 2 year period, indicating that commuters are not avoiding this intersection in favour of other local roads.

In summary, the temporary closure of the slip lane, coupled with the recent traffic calming works is starting to realise JUMP's vision of creating a slower and safer High Street environment - without impacting the local traffic network.

Any permanent closure of the Oakover slip lane will reinforce the pedestrian focussed environment, by creating shorter and safer crossings and a small urban community space this location.