

Submission to VicRoads by residents

Proposed trial road closure, Station/Princes Streets, North Carlton

Background

Closure of Station Street at Princes Street was identified during extensive community input in 2002/03 on ways to manage traffic on local roads through the North Carlton precinct. A half closure at Station/Princes Streets was incorporated in priority measures set out in plans dated 25 September 2003 drafted by GTA Traffic & Transport Consultants. Several traffic calming measures from these plans - reduction of speed to 40 km/h, and some intersection kerb outstands were implemented. However, most of the 2002/03 North Carlton LATM proposals were not actioned as LATM assessments shifted to other parts of Yarra.

North Carlton was prioritized for LATM assessment for 2014/15, then 2015/16. Postponed due to Melbourne Water upgrading the main Carlton Sewer which saw closure of Station Street at Princes Street between January 2015 and March 2016, the community was advised the North Carlton LATM would be rescheduled to 2017/18. Officer proposals now suggest further postponement to 2018/19.

This delay is a serious concern for North Carlton given the extensive community input in 2002/03, the plans drafted by GTA for Council in September 2003 and the added traffic impacts on North Carlton with development in the inner north and east.

The 14-month temporary closure of Station/Princes Streets as part of the Melbourne Water sewer works saw substantial alleviation in traffic queuing in Station Street with other benefits including reduced traffic on Lee Street adjacent to the Carlton North Primary School. Reopening of Station Street at Princes Street from March 2016, has seen a return to substantial queuing of vehicles seeking to access the Princes Street arterial from Station Street. This has renewed representations on extending the temporary closure of Station Street.

A summary of issues on the proposed closure follows:

- Traffic queuing on Station Street
- Safer angle parking on Station Street
- Vehicles turning into heavy Princes Street traffic lanes
- Ongoing damage to road infrastructure at Station/Princes Streets
- Amenity improvements on Station Street
- Positive impacts of Melbourne Water closure
- Other examples of local road closures at arterials

Traffic Queuing on Station Street

Station Street residents have over at least 15 years, raised the problems of traffic queueing on Station Street as north-south drivers seek access to Princes Street to avoid traffic on Nicholson Street. This queuing on Station Street is shown below:



11/11/2016 – 12 vehicles queuing



21/12/2016 – 10 vehicles queuing

A GTA assessment based on observations in September 2016, downplayed queuing to a maximum of 6 vehicles at any one time. The above photographs show typical morning peak queuing double that, following reopening of the closure post March 2016.

Safer angle parking on Station Street

Station Street has angled parking along its east side. Egress from angled parking by residents during the morning peak is difficult given the queuing of vehicles along the length of Station Street between Lee and Princes Streets. This is problematic for all angle parked cars, but is more problematic for users of disabled car parking spaces outside the Carlton Neighbourhood Learning Centre on Station Street at Princes Street. Closure would remedy this problem of cars seeking to reverse into a queue of vehicles. The learning centre would be a large beneficiary of the closure as the reduced traffic will make parking easier and safer.



2014 pre the closure from January 2015

Vehicles turning into heavy Princes Street traffic lanes

Residents on Station Street emphasise safety concerns over cars queuing on Station Street exiting into oncoming traffic on Princes Street. Such exiting raises several problems:

1. Cars queuing on Station Street seek to exit rapidly to secure a space in incessant oncoming traffic on Princes Street;
2. Impatient drivers on Princes Street, focused on getting through the traffic lights at Nicholson Street are reluctant to give way to vehicles exiting from Station Street east into Nicholson Street;
3. A proportion of vehicles exiting Station Street seek to turn east across 4 lanes of

traffic to access the right turn lane on Princes Street into Nicholson Street south to the CBD;

4. Residents report accidents in this area of Princes Street due to these manouevres. Tow trucks often wait in the area anticipating crashes at Princes/Nicholson Streets.



Truck exiting Station into Princes St, 25 June 2016



Cars exiting Station into Princes St, 4 January 2016



The Station Street resident providing the above 25 June 2016 photo, stated:

“Because there are so many vehicles on Princes st. travelling east, vehicles wanting to turn left at the intersection become impatient and force their way onto the Princes st middle lanes. This is very dangerous for the vehicles already travelling east on Princes street, approaching the Station st intersection.

You can tell by the photo, but the drivers blocked by the truck, were angry and tooting their horns.

I think it is an accident waiting to happen. This sort of incident at the intersection occurs on a daily basis.”

GTA Figure 3.3 reporting a 5-year history to 2015, of injury crashes adjoining the subject site, covered crash data between Rathdowne and Station Streets, but omitted crash data in Princes Street between Station and Nicholson Streets. Given the area of analysis, it is important to consider the impact of left turn vehicles from Station Street into Princes Street and the problems outlined above.

There were 6 reported injury crashes in this section of Princes Street between Station and Nicholson Streets during that 5-year period to 2015. Although a 2016 officer report suggested crashes in this section of Princes Street were unrelated to vehicles exiting from Station Street, the crash stats need proper situational analysis. Apart from injury crashes, residents in Station Street proximate to Princes Street, identify that other crashes involving only vehicle property damage, mostly unreported, are experienced on a regular basis. Residents hear and see these crashes which, while at speeds which may not result in personal injury, cause property damage, noise and other adverse impacts, but are not included in injury crash stats.

It is submitted that the temporary closure of Station Street at Princes Street January 2015 to March 2016, resolved the above problems.

Ongoing damage to road infrastructure at Station/Princes Streets

The impact of traffic seeking to turn quickly out of Station Street into Princes Street is evident in the ongoing damage to kerb outstands at Station/Princes Streets.

The community has worked to achieve water sensitive urban design (WSUD) and amenity improvements in North Carlton with traffic treatments at Station/Princes and Lee/Station Streets. Vehicles turning from Station Street into Princes Street and from Princes Street into Station Street constantly damage the kerb outstands and WSUD garden beds installed at the intersection to manage traffic. This is evident

from the below photos at Station/Princes Streets damage to bluestone edging, asphalt paving and garden beds, which requires regular repair and maintenance.



Closure of Station Street at Princes Street would rectify this constant repair headache which adds to local government maintenance costs and substantially reduces local amenity while the damage is reported, assessed and budgeted for repair, then actioned.

Amenity improvements on Station Street

Residents found that the temporary Melbourne Water road closure at Station/Princes Streets resulted in amenity improvements on Station Street with a safer traffic calmed street. Continued closure is sought to ease the concerns of parents and families on the street and occupants of the residential facility for people with disabilities adjacent to the Carlton Neighbourhood Learning Centre.

The road closure also alleviated the impact of some 30,000+ vehicles per day using Princes Street, forming a barrier to traffic impacts and noise from cars hooting at exiting vehicles. One resident stated that prior to the Melbourne Water closure, she was not supportive of closing Station Street at Princes Street, but having experienced the benefits, was firmly now in support.

Positive Impacts of Melbourne Water Road closure

Overall the impacts of the Melbourne Water temporary road closure between January 2015 and March 2016 were positive. No adverse impacts were reported on the arterial road network and the closure was in general, well received by the local community. Particularly positive impacts were reported in traffic calming the area of Station Street.

A surprising result was that the closure also had a positive impact on reducing vehicle traffic in Lee Street adjoining the Carlton North Primary School.

1. The table below sets out 24-hour two-way traffic flow (VPD – vehicles per day) from traffic data for streets directly affected by the closure of Station/Princes Streets at 3 different periods without and with the closure between January 2015 and March 2016:
 - (a) between August 2009 - November 2013, before the closure in 2015/16;

- (b) February 2016 during the closure, before re-opening in March 2016; and
(c) September 2016, after the road was reopened.

Street	Between	VPD before closure	VPD with closure Feb-16	Increase/Decrease VPD	VPD Sep-16 when open	Increase/Decrease VPD when open
Canning St	Davis St - Lee St	Aug-09 559	750	+191	620	-130
Davis St	Rathdowne St - Canning St	Jul-12 759	792	+33	719	- 73
Lee St	Station St - Canning St	Nov-13 921	935	+14	854	- 81
Lee St*	Canning St - Rathdowne St	Aug-09 432	312	-120	391	+79
Station St	Lee St - Newry St	Aug-09 1,019	904	-115	1,028	+124
Station St**	Lee St - Princes St	Aug-09 747	227	-520	473	+246

* Lee St is one way from Canning to Rathdowne St, thus data is one way, not two way traffic flow

** Preponderance of traffic flow on Station St is north-south from Lee to Princes St with limited south-north traffic from Princes St

2. The closure period saw:

Reduction in vehicles on:

- Station Street - Lee to Princes Streets by 520 VPD;
- Station Street - Lee to Newry Streets by 115 VPD;
- Lee Street - Canning to Rathdowne Streets by 120 VPD.

Total reduction in vehicles during closure = 775 VPD

Increase in vehicles on:

- Canning Street (between Davis and Lee Streets by 191 VPD.
- Some of this increase was however due to vehicles from Davis Street rather than from Station Street, as vehicles on Rathdowne Street turn west into Davis Street, then south into Canning Street to access Princes Street, in order to avoid queuing at the intersection of Rathdowne/Princes Streets.

Not a significant difference in traffic flows on:

- Lee Street - Station to Canning Streets – 14 VPD increase;
- Davis Street - Rathdowne to Canning Streets – 33 VPD increase.

Total increase in vehicles on above 3 streets during closure = 238 VPD

3. Closure of Station/Princes Streets saw substantially reduced traffic on Station Street by 635 VPD between Newry and Princes Street, but also reduced traffic using Lee Street adjacent to the Carlton North Primary School by 120 VPD, thus also benefitting the Primary School. With removal of the closure in March 2016, traffic increased on Lee Street past the Primary School – 79 VPD, but was still lower than the recorded 2009 level. Post removal of the closure, traffic on Canning Street between Davis and Lee Streets declined by 130 VPD and to a lesser extent on Davis and Lee Streets (-73 VPD) between Station and Canning Streets.
4. The closure of Station Street at Princes Street evidenced a higher overall reduction in traffic volumes for Station Street, and for Lee Street adjacent to the Primary School (totaling 775 VPD). The benefits of this reduction greatly exceeded increased traffic flow in Davis and Canning Streets, and in Lee Street between Station and Canning Streets (totaling 238 VPD). Re-opening of Station Street at Princes Street saw an increase in traffic volumes for Station Street, and for Lee Street adjacent to the Primary School (by a total of 449) compared with a reduction

on Davis and Canning Streets, and in Lee Street between Station and Canning Streets (totaling 284 VPD).

Overall positive benefit

The above data showed an overall benefit in terms of traffic volumes. Closure saw a positive 775 VPD reduction in 3 affected streets as against an increase of 238 VPD in 3 other affected streets, that is, a net decrease of 437 VPD. The traffic data relating to the Melbourne Water closure of Station/Princes Streets thus showed an overall net local benefit in terms of local traffic volumes.

Impact on Canning Street Cyclists

The below table sets out cycle data at the Canning/Princes Street intersection from Super Tuesday bike counts in March 2015 and 2016 - northbound and southbound in the morning peak 7-9am.

Intersection	2015 Volume	2016 Volume	% difference
Canning to Princes St	1054	1215	+15%

It has been suggested that the temporary closure of Station Street may be adverse for cyclists on Canning Street between Lee and Princes Streets. However, vehicles from Station Street are only 1 of 5 sources of traffic on this part of Canning Street between Princes and Lee Streets:

1. Cars from Station Street turning R into Lee, L into Canning to turn L into Princes: Only this category of the 4– 5, would be an extra source of traffic volume on Canning Street. But these vehicles do not cross the cycle path on Canning Street.
2. Cars from Rathdowne Street, turning L into Davis Street, then R into Canning cross both northbound and southbound bike paths, to turn L into Princes Street.
3. Cars from Station Street turning L into Canning, then turn R into Davis Street cross both northbound and southbound bike paths, to turn into Rathdowne Street.
4. Cars from Station Street, turning R into Lee Street, also cross both northbound and southbound bike paths on Canning to continue on Lee Street past the School to turn into Rathdowne.
5. Cars from Princes Street turning L into Canning, then R into Lee Street, cross both northbound and southbound bike paths on Canning Street.

Of the 5 categories of vehicles, categories 2 to 5 are unrelated to any road closure at Station/Princes Streets and would continue regardless. Only category 1 would contribute to extra vehicles on Canning Street as a result of a closure of Station Street at Princes Street. Even so, as regards cyclists, vehicles in category 1 turn L into Canning Street parallel to the cycle path adjacent to the Canning central median; the bike path is on the R of any vehicles coming from Station Street via Lee Street. Category 1 vehicles using Canning Street do not cross the cycle path or cut across cyclists. Thus there is no adverse impacts for cyclists from these vehicles from Station Street.

The problematic vehicles for Canning Street cyclists are categories 2-5 above; these, unlike category 1, cross over both directions of the Canning Street bicycle path, with impacts for cyclists. This happens with or without the closure and is thus unrelated to any closure at Station/Princes Streets.

Furthermore, it is suggested that overall traffic on Canning Street may be alleviated to the extent that “Road closed Ahead” signs on Station Street, incidentally, serve to deter vehicle volumes in 3-4 above. This is supported by the decline in traffic volumes along Lee Street adjacent to the Carlton North (Lee Street) primary school during the period of the Station/Princes Street road closure due to Melbourne Water sewer works!

While a majority of residents in the affected section of Canning Street between Lee and Princes Streets did not support continuation of the Station Street closure, it is pointed out that it is safer for vehicles to turn into Princes Street from Canning Street as against turning from Station Street. This is because vehicles can turn L into Princes Street when oncoming vehicles on Princes Street stop at the traffic lights at Canning/Princes Street to wait for cyclists and pedestrians to cross Princes Street at Canning Street. There is also greater visibility from Princes Street of vehicles turning out of Canning as against out of Station Street. Traffic exiting Canning onto Princes also has a wider view of vision because of the median on Canning. There is also no added lane on Princes at Canning so you don't have the danger of traffic veering into new lanes like at the moment at Station.

It is concluded from the analysis that there are no significant impact of the Station Street closure on cyclists using Canning Street. This was recognized by GTA in its 2016 report (Page 29).

Examples of local road closures at arterials

There are many other examples of residential streets being closed at or near arterial roads to improve local road safety and amenity and/or to better support arterial traffic flow. Some such examples include:

- Station Street south at Princes St, Carlton (Melbourne City Council side) - full closure
- Drummond Street south at Princes Street, Carlton - full closure
- Napier Street at Victoria Parade, Fitzroy - half closure
- George Street south of Alexandra Parade, Fitzroy - full closure
- Queens Parade north of Alexandra Parade, Clifton Hill - half closure
- Emma Street south of Alexandra Parade, Collingwood - half closure
- Napier Street, Fitzroy, at Fitzroy Primary School - full mid-block closure near Johnston Street.

Conclusions

Residents of Station Street conclude that there are safety benefits in continuation of the closure of Station Street at Princes Street with no significant adverse outcomes for either local traffic, Canning Street cyclists, or on the arterial road network.

Although some additional traffic queuing is likely on Canning Street at Princes Street, the Melbourne Water temporary closure of Station/Princes Streets between January 2015 and March 2016 saw a positive 775 VPD overall reduction in Station Street between Newry and Princes Streets and in Lee Street adjacent to the Carlton North Primary School. This contrasted with an increase of 238 VPD in 3 other affected streets, that is, a net decrease of 437 VPD. The traffic data relating to the Melbourne Water closure of Station/Princes Streets thus showed an overall net benefit in terms of local traffic

volumes. It is safer for cars to enter Princes at Canning rather than Station because

- no added lane on Princes
- the traffic lights create a break in the traffic
- the greater width of the intersection provides better conflicting traffic visibility.

Further benefits are reduction in the costs of regular repair and maintenance required to the traffic treatments at Station/Princes Streets, damaged by exiting traffic and significant enhancements of the amenity of Station Street residents.

VicRoads and Council are thus urged to support the continuation of the closure.