July 2016

Introduction
City of Kingston is currently undertaking a traffic study in the Moorabbin area. The study is generally bound by South Road, Rowans Road, Wickham Road and Nepean Highway.

Traffic control measures

Traffic Speeds
Traffic surveys conducted at numerous locations across the study area identified speed issues in the following streets:
- Rowans Road,
- Chapel Road, and
- Perry Street

Solutions to traffic speed issues are largely dependent on the type of street, the level of speed reduction required and the geometric layout of the street. The following section expands on the traffic speed proposals included in the Traffic Management Plan.

Rowans Road
Rowans Road is a Council controlled major road, its primary function is for the movement of traffic. Approximately 1,400 vehicles are exceeding the speed limit of 60km/h every day. Since the movement of traffic is a priority on major roads, speed enforcement by Victoria Police is the
recommended method of reducing vehicle speeds rather than traffic management devices and has been included in the Traffic Management Plan.

**Chapel Road**

Approximately 700 vehicles per day are exceeding the speed limit of 50km/h on Chapel Road. As Chapel Road is a collector road (with a primary function of providing access to properties) the installation of traffic management devices is deemed appropriate. On this basis, it is proposed to install eight (8) speed cushions at 150m spacings along the length of Chapel Road to maximise the speed reduction. As Chapel Road is a bus route, buses will be able to drive over speed cushions without being affected.

**Perry Street**

Perry Road is a local road with approximately 200 vehicles per day exceeding the speed limit of 50km/h. On this basis, it is proposed to install a flat top road hump in Perry Street to reduce vehicle speeds to acceptable levels.

**Intersection Operation**

Numerous intersections around the study area were identified as having operational or safety issues with proposed treatments as follows:

- Install ‘Keep Clear’ linemarking on South Road at Fletcher Street to improve the ability of vehicles along South Road to turn right into Fletcher Street,
- Remove the median linemarking at Linton Street / South Road to improve the ability of vehicles to store in the median when turning right out of Linton Street,
- Remove the guard rail at the intersection of Barilla Road and Chapel Road to remove the road side hazard and improve intersection safety,
- Install ‘No Stopping’ signage to reinforce the statutory ‘No Stopping’ zones on Clay Street at Horsmunden Road, and
- Improve sight distance when turning out of Clay Street onto South Road by installing ‘No Stopping’ signage to the east of Clay Street along South Road.

**Moorabbin Activity Centre**

In 2011, City of Kingston prepared a Structure Plan for the Moorabbin Activity Centre to guide future development. This traffic study reviewed the traffic proposals from the Structure Plan and provided recommendations of their suitability going forward. The review is summarised below:

**One-Way Arrangement – Station Street and Central Avenue**

The Structure Plan from 2011 proposed a northbound one-way arrangement along Station Street and an eastbound one-way arrangement along Central Avenue to reduce vehicle volumes along these streets and improve bus operation. A dedicated bus lane was also proposed on the western side of Station Street.

This arrangement was assessed as part of the traffic study and the following issues were identified:

- Accessibility issues for properties along Station Street and Central Avenue with vehicles having to ‘drive around the block’ when approaching from the north, and
- Redistribution of traffic currently travelling south through the centre will have to divert to the intersection of Nepean Highway and South Road.
Both issues raised above will increase the traffic volumes at the intersection of Nepean Highway and South Road. The left turn movement from South Road into Nepean Highway only accommodates a single turn lane which would likely be put under immense pressure as a result of the additional traffic movements. The potential issues created by the one-way arrangements generally outweigh any benefit that would be received.

On this basis, it is a recommendation of this traffic study that the one-way proposal along Station Street and Central Avenue not be pursued in the future.

**Intersection Realignment – Jasper Road / Taylor Street / South Road**

The Structure Plan also proposed introducing a fourth leg to the signalised intersection of Jasper Road and South Road into the Woolworths Carpark. The intersection of Taylor Street and South Road will be downgraded to a left in / left out arrangement and the median will be closed. Benefits of this arrangement include:

- Improved operation at Jasper Road / South Road including:
  - More efficient signal phasing,
  - Removal of the staggered intersection approach, and
  - Ability to provide a longer right turn lane for south bound movements.
- Improved accessibility into the Woolworths carpark, and
- An overall reduction in the complexity of the road network.

The main issues identified with this proposal relate to the alignment of the southern leg through the Woolworths carpark and connecting to Redholme Street in the east. This could potentially create issues with the queuing at Redholme Street extending back to South Road as well as the difficulties this arrangement may create for vehicles accessing other areas of the carpark. In any case, it is understood that this alignment through the carpark is preliminary and will depend on future development proposals in the surrounding area.

On this basis, the key benefits of the installation of the southern leg will outweigh the potential operational issues and it is recommended to maintain the proposal as a key component of future planning for the Activity Centre.

**Linton Street Reserve**

St Kilda Football Club has recently announced plans to redevelop the existing facilities at the Linton Street Reserve to create a ‘Community Football Hub’. The redevelopment will include the refurbishment of the GG Huggins Stand to incorporate state of the art training and administration facilities which will accommodate the following key uses:

- AFL training facilities,
- VFL games (up to 1,500 spectators),
- Local football competitions (Metro Junior Football League, Southern Football / Netball League and Sandringham Dragons), and
- St Kilda Football Club and local football club administration.

The peak events at the Linton Street Reserve following the development may draw crowds of up to 1,500 spectators. Parking surveys were conducted in the area to determine the existing levels of parking that are occurring during a typical Saturday. An assessment of the future parking demands as a result of the development has resulted in the following proposal to manage competing parking demands between residents and reserve users during peak event times:
‘2P 9am-6pm Saturday and Sunday’ has been proposed on one side of the road across the Linton Street sub-precinct (as shown below) to provide opportunities for resident parking during peak event times.

Please refer to Appendix 2 for a scheme of proposed parking changes.

In addition to the parking issues, the additional traffic generated by the peak events at the reserve may create traffic flow issues in key streets, with parking on both sides limiting traffic flow.

To improve traffic flow on the key streets surrounding the reserve it is proposed to introduce ‘No Stopping 9am-6pm Saturday & Sunday’ along:

- Linton Street (east side) – South Road to Barilla Street,
- Chapel Road (east side) – South Road to Wickham Street, and
- Barilla Road (north side) – Nepean Highway to Chapel Road.

It is possible that some events may occur at Linton Street Reserve that exceed the 1,500 spectator numbers such as finals football or festivals. On this basis, it has been recommended that an Event Traffic Management Plan be developed to review key requirements such as temporary signage, traffic guidance, traffic controllers, etc.

As part of the redevelopment, a review was conducted of the pedestrian connectivity around the reserve. As public transport is primarily located to the west of the reserve around Moorabbin Railway Station the most likely pedestrian route was identified via Horscroft Place and Central Avenue. This pedestrian route contains two uncontrolled crossing points at Healey Street and Linton Street. On this basis, it is recommended to construct pram ramps across Healey Street and a raised zebra crossing across Linton Street to cater for the increased pedestrian demands.
Holmesglen TAFE Redevelopment

In April, 2015 construction began on Holmesglen Private Hospital on the land to the north of Holmesglen Institute with completion due in early 2017. As part of the traffic study, the hospital development was reviewed to assess whether any parking or traffic changes would be necessary in the surrounding streets.

A review of the existing parking identified that there was some level of demand in the surrounding streets that was non-residential. However, much of the area already has parking restrictions on one or both sides. The investigation identified that there were significant parking opportunities in the time based restriction areas (generally suitable for resident vehicles) and the provision of additional time based restrictions was not seen as necessary. However, some streets had high occupancies and no time based restrictions. On this basis, it is proposed to install parking restrictions at the following locations:

- Baker Street (north side) between Fiddes Street and Chapel Road – Time Based (2P Mon-Fri) from Unrestricted Parking, and
- Franklin Street (west side) between Cooma Street and Buchan Street – Time Based (1P (Resident Permit Area)) from Unrestricted Parking.

The proposed parking changes above are intended to provide on-street parking opportunities for residents (who would likely be eligible for permits) at locations where parking may be less available. Please refer to Appendix 2 for a scheme of proposed parking changes.

The Holmesglen TAFE development is not likely to have any significant traffic impacts on the surrounding local network and as such no traffic recommendations have been made.

Increased Enforcement

Several issues have been identified in the study that occur as a result of non-compliance to traffic laws or parking restrictions. A recommendation of this study is for increased enforcement of statutory intersection ‘No Stopping’ zones, parking within bus zones and parking restriction compliance across numerous locations in the study area.

Other Issues

Other issues have been raised as a result of the Moorabbin Traffic Study. Pedestrian accessibility across Rowans Road has been identified as an issue, as there are no formal crossings in the vicinity of GR Bricker Reserve. On this basis, it has been recommended that a separate investigation be undertaken to determine pedestrian volumes and a suitable crossing location if deemed necessary.

Sight distance along the bend on Chapel Road between Barilla Street and Isabella Street was found to be impeded by vehicles parking along the bend. On this basis, it is proposed to install a solid centreline at this location to restrict parking and improve sight lines.
Appendix 1: Proposed Traffic Management Plan

**CORE LATM PROPOSALS**

<table>
<thead>
<tr>
<th>ITEM</th>
<th>LOCATION</th>
<th>DESCRIPTION</th>
</tr>
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<tbody>
<tr>
<td>A</td>
<td>Chapel Road</td>
<td>Install speed cameras in a slight curve along Chapel Road.</td>
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<tr>
<td>B</td>
<td>Princes Street</td>
<td>Install a bus lane ramping facility along Princes Street at one location.</td>
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<tr>
<td>C</td>
<td>South Road at Victoria Street</td>
<td>Increase enforcement of red cones to improve accessibility into and out of two shops.</td>
</tr>
<tr>
<td>D</td>
<td>Lygon Street, Beaufort Street and Chapel Street</td>
<td>Install a bus lane ramping facility along Lygon Street at one location.</td>
</tr>
<tr>
<td>E</td>
<td>South Road / Bellerive Street</td>
<td>Safety issues potentially resolved through access changes.</td>
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<tr>
<td>F</td>
<td>South Road / Burnley Street</td>
<td>Install a Veho Clear marking along South Road for unusual traffic conditions.</td>
</tr>
<tr>
<td>G</td>
<td>Clay Street / Junction Road</td>
<td>Install 'No Stopping' signs along Clay Street to enforce statutory restrictions and improve intersection safety.</td>
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<tr>
<td>H</td>
<td>Aroona Street / Unley Road</td>
<td>Increase enforcement of 'No Stopping' signs to improve intersection safety.</td>
</tr>
<tr>
<td>I</td>
<td>Stirling Road / Glenelg Street</td>
<td>Install guard rail in the improved intersection safety.</td>
</tr>
<tr>
<td>J</td>
<td>Central Avenue / Taylor Street</td>
<td>Increase enforcement of 'No Stopping' signs to improve intersection safety.</td>
</tr>
<tr>
<td>K</td>
<td>South Street / Unley Street</td>
<td>Remove median islands allowing to allow better intersection visibility.</td>
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**PEDESTRIANS**

| M    | Unley Road between Morgan Street and Frankston Street | Pedestrian crossings should be relocated to locations for formal pedestrian crossings. |
| N    | Union Street at Junction Place | Install pedestrian crossing near Union Street to assist pedestrian movements from Moorabbin Shopping Centre to the Ruby on the Bay. |
| O    | Dorrien Street at Central Avenue | Pedestrian crossing near central avenue to assist pedestrian movements across Healy Street at Central Avenue. |

**SIGHT DISTANCE**

| P    | Chapel Road between Porte Road and Mabella Street | Install a central barrier in the central reserve to reduce weaving and improve safety. |

**OTHER ITEMS**

1. **Moorabbin Activity Centre** Traffic flow needs Investigation.
2. **Moorabbin Reserve** Prepare street traffic management plan for larger events.
3. **Hawker Reserve** Request increased enforcement by Victoria Police along Hawker Road.
4. **South Road at Healy highway** Consult with VicRoads on alternative arrangements for light turn bar, gym.
Appendix 2: Proposed Parking Management Plan