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Council Meeting
AGENDA NO. 8/18

Meeting Date: **Tuesday 24 July 2018**
Location: **Council Chambers, Level 1A, 1 Pope Street, Ryde**
Time: **7.00pm**

Council Meetings will be recorded on audio tape for minute-taking purposes as authorised by the Local Government Act 1993. Council Meetings will also be webcast.

NOTICE OF BUSINESS

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LATE ITEM

LATE ITEM

10 EASTWOOD TRAFFIC AND PARKING STUDY - Progress Update

Report prepared by: Senior Traffic and Development Engineer
File No.: GRP/09/3/15 - BP18/324

REPORT SUMMARY

Council at its meeting of 24 October 2017 resolved:

> *That Council conduct a comprehensive Traffic and Parking Study of the Eastwood area and its surrounds that takes into consideration (but is not limited to) the following:*
>
> - *Future Land Use*
> - *Traffic Flow (Vehicular & Pedestrian)*
> - *On-street and Off-street parking needs*
>
> *and that appropriate funds be allocated.*

This report advises Council on the current status of the study, in particular the investigations that have been undertaken to understand the key issues facing the Town Centre.

Council has engaged the services of a specialist traffic consultancy (Cardno) to undertake an analysis and make recommendations pertaining to the Eastwood study area. An extensive data collection exercise was undertaken around both sides of the Eastwood Town Centre for the purposes of determining the prevailing traffic and parking conditions and to then develop an appropriate plan of action. The study area has been expanded to include the 800m walking catchment of the Eastwood Railway. In terms of study area this is considered reasonable for the purposes of understanding parking pressure and general movement patterns in and around a Town Centre. A map outlining the study area is displayed in Figure 1.

The study will include modelling and impact assessment associated with the potential increase in traffic as a direct result of parking supply growth. The study incorporates three (3) key components; Traffic Modelling, Parking Modelling, and Parking Strategy.

Traffic modelling determines the extent to which the growth of traffic demand to and through Eastwood can be accommodated by the network. Based on benchmark guidelines, this framework uses parking capacity restraint (a ‘parking cap’) alongside pricing and alternative transport provision to limit the impact of demand growth on the Centre.

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A parking analysis model was utilised to incorporate real world data, effects of development scale, mode choice, shared parking and internal trip capture. This model was calibrated to the observed parking utilisation, and it will be used as the

basis for future operation under the identified growth scenario, based on land use (commercial and residential), and commuter (park and ride) parking demands.

The intention of this study is to provide recommendations to address parking supply requirements in the short, medium and long term to meet the needs of the growing population. A Parking Strategy will include consideration for on-street and off-street public parking and the need for and impact of commuter parking. Recommendations with respect to paid parking and parking restrictions, funding mechanisms and the potential impact of future technological change on parking infrastructure requirements will also be provided as part of this study.

The study is continuing on both the western and eastern sides of Eastwood in order to complete the information gathering exercise and analysis in order to complete the study overall.

A final draft report from the consultant for the overall study area is expected to be completed by the end of Quarter 1 of the 2018/19 financial year. The study is expected to provide short, medium and long-term actions with associated indicative costings, and a further report of the findings will be provided for Council's consideration in late 2018.

RECOMMENDATION:

That Council notes the information contained within the progress update report.

ATTACHMENTS
There are no attachments for this report.

Report Prepared By:

Kelly Yoon
Senior Traffic and Development Engineer

Report Approved By:

Harry Muker
Manager - Traffic, Transport and Development

Joe So
Acting Director - City Works

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Background

Council at its meeting of 24 October 2017, under Mayoral Minute (MM10/17), resolved:

> *That Council conduct a comprehensive Traffic and Parking Study of the Eastwood area and its surrounds that takes into consideration (but is not limited to) the following:*
>
> - *Future Land Use*
> - *Traffic Flow (Vehicular & Pedestrian)*
> - *On-street and Off-street parking needs*
>
> *and that appropriate funds be allocated.*

In accordance with the above resolution, Council is currently undertaking a detailed study investigation to understand existing traffic and parking conditions within and surrounding the Eastwood Town Centre and to develop improvement strategies over a 10 to 20 year development horizon. This report provides an update on the progress of the study.

Further, Council has engaged the services of a traffic consultancy (Cardno) to deliver a comprehensive traffic and parking study. To ensure this outcome is achieved, the study incorporates three (3) key components, namely; Traffic Modelling, Parking Modelling and Parking Strategy.

Traffic Modelling

Traffic modelling determines the extent to which the growth of traffic demand to and through Eastwood can be accommodated by the network. Based on benchmark guidelines, this framework uses parking capacity restraint (a 'parking cap') alongside pricing and alternative transport provision to limit the impact of demand growth on the Centre.

Traffic modelling was used to identify the existing traffic behaviour and critical intersections that may require upgrade. Feasible, practical mitigation measures will be proposed and assessed for the upgraded network. The point at which these upgraded intersections reach capacity defines the extent of traffic growth that can be sustained. This capacity limit will be interrogated through the analysis and actionable tasks developed to identify transport requirements to support future development.

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Parking Modelling

The study will provide robust parking demand forecasting for dense, mixed-use commercial centre developments. A parking analysis model was utilised to incorporate real world data, effects of development scale, mode choice, shared parking and internal trip capture. This model was calibrated to the observed parking utilisation, and it will be used as the basis for future operation under the identified growth scenario, based on land use and commuter (park and ride) parking demands.

Parking Strategy

The intention of this study is to provide recommendations to address parking supply requirements in the short, medium and long term to meet the needs of the growing population. The parking cap determined through the above analysis technique defines only the number of bays that can be sustained in the Study Area. As part of this project, a best-practice parking management regime will be considered in allocating parking to the representative user groups based on a needs hierarchy, to be determined in collaboration with the Council.

The Parking Strategy will include consideration for on-street and off-street public parking, the need for and impact of commuter parking. Advice will be provided with respect to paid parking and parking restrictions, funding mechanisms and the potential impact of future technological change on parking infrastructure requirements.

Methodology

A number of key steps are required to prepare a study that is accurate and informative, these include:

1. Defining the Study Area;
2. Data Collection;
3. Key Findings to Date (often referred to as an Existing Conditions Assessment Report).

A summary of each of these 3 areas are provided below:

Study Area

Cardno (“consultancy”) has undertaken an extensive data collection exercise around the Eastwood Town Centre for the purposes of determining the prevailing traffic and parking conditions and to then develop an appropriate plan of action. The study area has been expanded to include the 800m walking catchment of the Eastwood Railway Station as shown below. In terms of study area this is considered reasonable for the purposes of understanding parking pressure and general movement patterns in and around a Town Centre. A map outlining the study area is illustrated on the following page.

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Figure 1: Study Area (higher resolution map will be available at the Council meeting)

Data Collection

To obtain an understanding of prevailing traffic and parking conditions, an extensive data collection exercise consisting of the following surveys has been undertaken around the Eastwood Town Centre:

- Classified Intersection Counts (25 locations)
- Queue Length Surveys (10 locations)
- Travel Time Surveys (5 routes)
- Parking Inventory (800m walking catchment to the Eastwood Railway Station)
- Parking Occupancy Surveys (Eastwood Town Centre)

The surveys were conducted on 24 March 2018 (Saturday) and 27 March 2018 (Tuesday) to undertake traffic and parking assessments for a weekday (AM), weekday (PM) and weekend peak period conditions ("weekday" nominally between 7:30am to 9:30am and 3:00pm to 6:00pm; "weekend" nominally between 11:00am to 1:00pm).

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Discussion

Key Findings to Date ("current" trends)

An existing condition assessment report was prepared by the traffic consultant following the review of data collected through onsite surveys and general observation. The following key themes emerged are summarised, as follows:

- *Parking Shortfall:*
    i. The total amount of off-street public parking provided within the Town Centre is approximately 1,129 spaces, of which 943 spaces (84 percent) is located within western side and 186 spaces (16 percent) is located within eastern side of the centre utilising the rail corridor as the boundary between both hemispheres.
    ii. There is strong evidence of vehicle recirculation for the purposes of trying to find a public parking space (either on-street or off-street).
    iii. The shortage of public parking is evident on the eastern side of the railway station as "parking" overspill into surrounding residential streets is observed and there is a tendency for shoppers to look for parking facilities on the western side of the railway station where the probability of finding a parking space is greater.

- *Intersection Performance:*
    i. Based on survey data, it is evident that most intersections within the western part of the town centre, operates satisfactorily with the exception of Shaftesbury Road / Terry Road (near capacity); and First Avenue and West Parade (over capacity).
    ii. Based on survey data, it is evident that most intersections within the eastern part of the town centre, operates satisfactorily with the exception of First Avenue / East Parade; and Blaxland Road / Balaclava (at capacity); and Blaxland Road / Ethel Street and Blaxland Road / First Avenue (over capacity).

- *Uncontrolled Pedestrian Crossings:*
    i. Uncontrolled pedestrian crossings in particular on the western side of the town centre, have the capacity to hold up vehicle traffic for a considerable length of time, especially during peak commuter periods (AM and PM), for West Parade. Generally for shoppers it is The Avenue.

Based on the results above, there is a strong parking demand in the Town Centre, which if sufficed would aid in the reduction of recirculating vehicles. The area which appears to have the "greater" public parking deficiency is the eastern side of the town centre and this is primarily due to the parking inequity that exists in relation to off-street public parking.

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On this basis, the study area was subsequently divided into two parts; Western and Eastern Town Centres with the latter being investigated as part of the first stage of the study with the western side to follow.

A key finding from the Eastern Town Centre parking analysis has identified a shortfall of some 250 car spaces exists on the weekday and 100 spaces on the weekend for shopper car parking. A viable site to maximise the car parking numbers would be Council's site at Rowe Street East.

Commuter car parking was not considered in the east, following previous rigorous analysis by Transport for New South Wales that deemed "possible" commuter parking sites (including Council's Rowe Street East Car Park) as being, unsuitable.

Council's traffic consultant is currently preparing "future" traffic management scenario's, for the purposes of enhancing accessibility to and from the State Road network and further, how best to manage the complex pedestrian/vehicle interaction that occurs at "uncontrolled" pedestrian crossings, as practicable across the whole study area.

Consultation

A Technical Committee is established for this study, which consists of:
- Council
- Roads and Maritime Services
- Transport for NSW
- Cardno (external consultant).

for the purposes of being a technical sounding board on traffic and parking issues.

Council's Urban Strategy Department was consulted regarding future land use options of Eastwood Town Centre.

In addition, Bitzios Consulting is engaged by Council to undertake an independent review of traffic modelling, which is industry practice when managing modelling studies of this size and complexity.

Next Steps

The study is continuing and the western side is also being undertaken in order to complete the information gathering exercise and analysis in order to complete the study overall.

A final draft report from the consultant for the overall study area is expected to be completed by September 2018. The study is expected to provide short, medium and long-term actions with associated indicative costings, and a report of the findings will be provided for Council's consideration in late 2018.