

**ANNEXURE "C"**  
**Accessibility Review of Draft Amended Masterplan**  
**(Sinclair Knight Mertz – June 2010)**



## **Accessibility Review of the Draft Amended Hurstville City Centre Masterplan**

- Final
- v03
- 21 June 2010





Hurstville City Council

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## Executive Summary

SKM were commissioned by Hurstville City Council (HCC) in March 2010 to complete a strategic accessibility review of the Draft Amended Masterplan for the Hurstville City Centre area.

This Masterplan proposes that the Hurstville City Centre be developed into a major commercial centre with supporting retail and residential development. The Amended Hurstville City Centre Masterplan will result in a fourfold increase in commercial floor space, a threefold increase in retail and a marginal increase of 8% in the residential floor space. The corresponding trip generation rates show that this would result in a 300% increase in commercial and retail trips into the City Centre. It should be noted that this is a conservative estimate as it does not include the development opportunities of Council's Civic Precinct and nor the redevelopment of Westfields Precinct, or full opportunities for increased residential development within the precinct, all of which would result in increased trip generation.

SKM have previously developed 2009 Paramics models to assess the current level of service of operation of the road network in the Hurstville City Centre. These Paramics models were used to assess the impact of the proposed full development on the current road network, with no background growth incorporated. Typically such growth would be in the order of 2-3% per annum over a 20 year period and can be significant proportion of overall traffic.

Thus the traffic impacts presented in the remainder of the report are very conservative. The results from this analysis indicate that to accommodate this level of growth in the Hurstville City Centre area a significant infrastructure investment would be required which would include an additional lane each direction on Forest Road, Queens Road, Park Road and The Avenue as well as localised intersection widening and a range of traffic management measures such as partial or full removal of medians, full or partial removal of parking/loading, narrowing of footpaths and removal of landscaping, traffic signal optimisation, etc. However there is limited scope to expand the current road network and it is not considered a desirable policy to provide additional road capacity in an already congested network. A significant mode shift to more sustainable modes (public transport, walking and cycling) is required to accommodate the quantum of development detailed in the Amended Hurstville City Centre Masterplan.

Therefore public transport mode shift requirements were assessed. To avoid major road infrastructure upgrades, an additional 3,000 trips per hour are required to switch modes from private vehicle to public transport, walking or cycling. Assuming a 3 hour peak period, this is equivalent to shifting 9,000 additional trips onto public transport. This would result in a 60% mode split for public transport, which is considered to be extremely optimistic and unrealistic to achieve.



In conclusion the level of development as a result of the Amended Hurstville City Centre Masterplan would result in extreme congestion in the road network and would require significant road infrastructure and a significant mode shift to more sustainable modes, which would also require a significant investment in the public transport, cycle and pedestrian networks.

A further sensitivity analysis on accessibility shows that 66% of the Masterplan development could be accommodated with localised infrastructure improvements to the road network and by improving public transport service provision and the cycle/pedestrian network, achieving a 40% public transport/sustainable modes and 60% car mode split<sup>1</sup>. This option would require shifting 1,200 trips per hour to public transport, walk or cycle.

It is therefore recommended that that a 60% to 66% Masterplan development be considered by HCC and this development could be implemented in the following stages:

- 1) Short Term (2010 to 2015);
  - Establish a consultation programme with all stakeholders;
  - Develop a detailed transport and mobility access plan for the Hurstville City Centre which incorporates:
    - The promotion of reduced parking rate and parking management strategies recommended by the Hurstville City Centre Parking Rate Review;
    - Improving the existing cycle and pedestrian amenity within the City Centre area;
    - Providing good cycle facilities within the City Centre;
    - Promoting public transport as an alternative mode; and
    - Behaviour Change programs to encourage a switch to more sustainable modes.
  - Discuss with RailCorp opportunities to increase rail service provision at Carlton and Allawah stations during the peak hour; and
  - Discuss with NSW Transport and Infrastructure (and STA) opportunities to increase bus frequency along existing routes and introduce new routes along the Kogarah, Rockdale and Hurstville bus corridor.
  
- 2) Medium to Long Term (2015 to 2030);
  - Staged implementation of the proposed 66% development in the Amended Masterplan;
  - Develop an integrated transport strategy to assist and guide the future planning of the Hurstville City Centre;

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<sup>1</sup> Centres (including Chatswood, St Leonards and Parramatta) with strong public transport connectivity (i.e. high frequency rail services, extensive bus network and high-quality interchange facilities) and limited long-term parking availability have an overall private vehicle mode split of between 56 percent and 63 percent, and public transport mode split of between 36 percent to 44 percent.



- Review the previous parking strategy;
- Introduce new bus connections and rail connections to the study area in conjunction with the NSW State Government; and
- Introduce new cycle and pedestrian spine connecting Hurstville City Centre with surrounding suburbs.

This 66% of the Amended Masterplan development is based on achieving a mode share of 40% to public transport and sustainable modes. If this mode shift is not achieved the scale and intensity of the proposed development would need to be reduced further. This mode shift cannot be accommodated by the current public transport network and investment is required at both a local and strategic level to accommodate this growth in patronage.



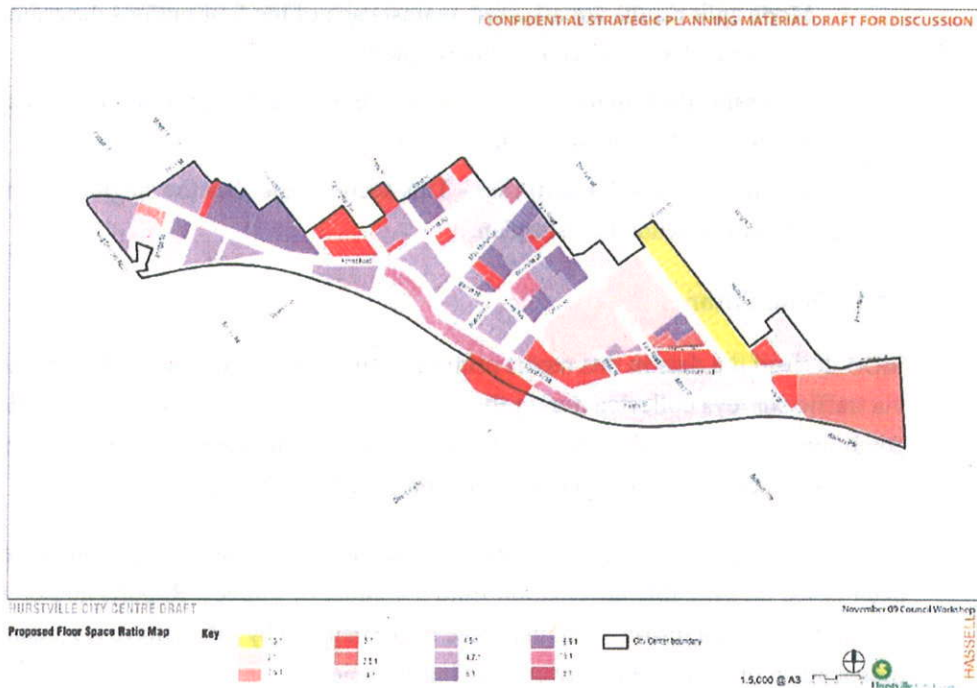
# 1. Introduction

SKM were commissioned, by HCC on 10<sup>th</sup> March 2010 to provide a strategic review of the accessibility impacts of the proposed Amended Masterplan, as it stood.

Hurstville City Council (HCC) has developed a Draft Amended Masterplan for the Hurstville City Centre area. This Masterplan proposes that the Hurstville City Centre (Figure 1-1) be developed into a major activity centre. The Amended Masterplan will result in a significant growth of retail, commercial and residential activities over a 20-year period.

The area of Hurstville City Centre and the outline development parameters are shown in Figure 1-1.

■ **Figure 1-1: Draft Amended Masterplan for Hurstville City Centre**



Data Source: Hurstville City Council – Amended Masterplan Prior to Council Workshop May 2010



This report describes the strategic review of the accessibility impacts of the proposed Draft Amended Masterplan. It is divided into six main sections:

- **Hurstville Draft Amended Masterplan** – This section details the future employment and population growth numbers based on the Amended Master Plan, as well as an estimate of the requirement for additional parking spaces based on the recommended parking rate<sup>2</sup>;
- **Impact of the Hurstville Draft Amended Masterplan** – This section explains the existing travel behaviour and public transport service provision within the study precinct;
- **Masterplan Development Options** – This chapter assesses four of the: full development, 75% development, 66% development and 50% development options. Road infrastructure upgrades as well as mode shift requirements associated with each of the options are summarised;
- **Masterplan Mode Shift requirements** – This section details the achievable mode split target between private vehicles and sustainable modes, including bus, rail, walk and cycle. Mode split results are assessed against each of the four options described in the previous chapter and a preferred option provided;
- **Accessibility impacts** – This sections details the accessibility impacts of the preferred Masterplan Development Option; and
- **Staging and implementation** - This section describes the staging and implementation of the draft amended Masterplan.

### 1.1. Disclaimer

SKM derived the data in this report primarily from inputs provided by Hurstville City Council and via traffic surveys collected during the project. The passage of time, manifestation of latent conditions or impacts of future events may require further data analysis and re-evaluation of the findings, observations and conclusions expressed in this report.

The model development and associated traffic and development assessments presented have also been based on available information from a number of sources. Reports and/or guidelines used in preparation of this traffic study that have been prepared by others have not been subject to independent checking and may contain inaccuracies.

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<sup>2</sup> Hurstville City Centre Parking Rate Review, Arup, August 2009