

CITY OF



MITCHAM



kingswood  
*traffic*  
MANAGEMENT PLAN

April 2002

**Please note that this document has been endorsed by council for consultation with the Kingswood community. Any proposal contained within this plan will require community consultation and is subject to approval by council for allocation of funds and construction.**

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## 1. Executive Summary

The impact of traffic on safety and amenity is increasingly a concern for the Kingswood community. Kingswood is subjected to daily traffic associated with commuters passing through the area, parents driving children to and from schools, and public transport negotiating narrow streets.

The Kingswood Task Group was formed to identify and discuss the issues in the area of Kingswood to the north of (and including) Tutt Avenue. Objectives have been developed to define the desirable outcomes of any network or street based improvements, thereby setting a measure for success.

The Task Group has considered issues identified from many sources and investigations including community survey, road network safety audit, origin-destination surveys, street intersection surveys, street traffic surveys, independent traffic advice and traffic impact statements and road crash data.

The outcome of this process has been the identification and confirmation of traffic safety and management issues pertaining to the whole street network, and have been compiled into the Kingswood Traffic Working Paper.

The issues identified by the Task Group are:

- High crash rate in the street network with a very high incidence of casualty crashes;
- Relatively high speeds on a number of streets;
- High traffic volumes on many streets;
- Safety issues relating to mix of different road users, including public transport, local drivers, school traffic and cut-through traffic;
- High level of cut-through traffic on most streets;
- Potential Black Spot locations, including;
  - Tutt Avenue – Harrow Terrace intersection
  - Cambridge Terrace between Cross Road and Tutt Avenue
- Concern by the local community regarding traffic safety and management in this part of Kingswood

The Kingswood Traffic Management Plan proposes a strategy for further investigation and consultation on the proposals developed by the Working Paper.

The Plan comprises:

- Objectives for improvements to the street network
- Recommendations from the Road Network Safety Audit
- Network Strategies
- Street Strategies
- Schools Strategies
- Implementation Strategy
- Monitoring Strategy

## 2. Kingswood Task Group

A key component of any local area traffic management study is the development of objectives for the area. The Kingswood Task Group has developed objectives for the Kingswood area as follows:

- *Improve safety in Kingswood for all the local community through*
  - *Reduction of cut-through traffic*
  - *Lowering traveling speeds*
  - *Improved traffic management at intersections*
  - *Better management of buses on local streets*
  - *Improvement in street slighting*
  - *Better maintenance of vegetation*
- *Improve quality of life and amenity of Kingswood for all the local community*
- *Seek a balance between the above objectives and accessibility for all the local community, including residents and schools*

### **3. Road Network Safety Audit**

The Road Network Safety Audit completed in February 2001 has identified safety issues within the Kingswood street network. These recommendations should be considered with any proposal for improvements to the street network.

#### **3.1 Immediate Recommendations**

1. Discuss the routes taken by school buses within the network with the bus operators to restrict movements to routes that can handle such vehicles or, use smaller vehicles.
2. Undertake maintenance on vegetation within the network to ensure adequate clearance for height vehicles and improve conspicuity of warning signs.
3. Install pavement markings to Cambridge Terrace to formalise parking and provide delineation.
4. Repaint pavement markings within the network and develop maintenance strategy.
5. Check entering sight distances on approaches to regulatory signs, remove vegetation and adjust parking as required.
6. Implement measures to prevent the bypass movement between Belair Road and Cross road.
7. Undertake a night survey and replace signs which are no longer retro-reflective.
8. Implement a program to sweep footpaths on a regular basis to remove branches, debris and berries.
9. Review the operation of the safety monitors at the Tutt Avenue school crossing and ensure regular surveillance by a responsible person.
10. There are a number of pedestrian tripping hazards throughout the network, which need to be removed.
11. Formalise children crossing movements on Tutt Avenue in the vicinity of the roundabout at Smith-Dorrien Street.
12. Enlist support from SAPOL to undertake surveillance of the area to reduce the reported 'vehicular hooliganism' after school and late at nights.

#### **3.2 Short Term Recommendations**

1. Investigate improvements to the Tutt Avenue/Harrow Terrace intersection to improve traffic flows and safety for all users.
2. Undertake a Traffic management Study of the network to identify appropriate treatments across the network, including the need for a lower speed limit. The benefits in the installation of traffic control devices at certain locations will provide the network with a safer environment and improve the amenity of the area.
3. Review street lighting to ensure that it meets Code requirements.

4. Undertake a parking survey to ensure residents needs are met in accordance with current standards.
5. Develop a policy in regard to the replacement of street trees with mature trees to overcome sight distance problems for pedestrians crossing the road.

### **3.3 Long-Term Recommendations**

1. Discuss improvements to Belair Road with Transport SA in respect to vehicles accessing the Kingwood network. This could include painted means with right turn lane or the banning of movements to/from the adjacent streets.
2. Rehabilitate pavements, replace kerbing and improve footpaths where necessary.
3. Reassess the storm water drainage system across the network to prevent localised pooling and scour after heavy rains.
4. Educate residents in safe entry practices to be adopted for access from their properties to their local roads.

### **3.4 Strategy**

The immediate recommendations are to be implemented as soon as possible where maintenance budgets and schedules permit. The short-term and long-term recommendations are to be considered in the Network and Street Strategies as required.

## **4. Network Strategy**

### **4.1 40km/h Speed Limit**

*Prepare an application, including consultation with the local community, for the implementation of a 40km/h speed limit in Kingswood (and part of Netherby) to the north of Princes Road for approval by the Minister for Transport.*

### **4.2 Interface with Arterial Roads**

*Install raised or flush entry thresholds on all side road junctions with Belair Road and Cross Road as appropriate.*

*Investigate improvements at the local street junctions with Transport SA to improve safety.*

### **4.3 Parking**

*Review parking controls to determine relevance and legality, and modify as required in consultation with the local community. In particular, the following locations require priority:*

1. *Seafield Avenue*
2. *Rugby Street, north of Balham Avenue*

### **4.4 Lighting**

*Review condition of lighting in the Kingswood area and identify locations for upgrading with consideration of pedestrian and driver requirements in accordance with current standards.*

### **4.5 Vegetation**

*Develop tree planting and maintenance plans for each street in Kingswood.*

*Use advance growth trees in critical locations, such as intersections, where sight distance may be affected.*

*Undertake vegetation pruning as part of a regular vegetation maintenance program to ensure safe sight distances are maintained at critical locations.*

### **4.6 Bus Routes**

#### **4.6.1 School Bus**

*Formalise school bus routes with service providers to use specific streets.*

*Develop improvements to improve safety on formalised school bus routes. These improvements may include bus bays at schools, parking controls and intersection improvements to accommodate turn paths of large vehicles.*

*Consider relocation of the Rugby Street bus stop to Seafield Avenue with provision of an indented bus bay for all the bus services.*

#### **4.6.2 Route 652 – Terminus**

*Consider changing the bus route from Tutt Avenue to Seafield Avenue to utilise a common route with the school buses.*

*Develop improvements to improve safety on formalised bus routes. These improvements may include bus bays at schools, parking controls and intersection improvements to accommodate turn paths of large vehicles.*

## **5. Street Strategies**

### **5.1 Harrow Terrace**

#### **5.1.1 Cross Road / Duthy Street Intersection**

*Investigate further the impact of altering traffic lane arrangements at this intersection.*

*Seek support from the City of Unley for Transport SA to be requested to review the intersection to reduce the number of through lanes to and from Harrow Terrace.*

*Develop a streetscape plan for this main entrance into Kingswood and the City of Mitcham.*

#### **5.1.2 Mid-Block**

*Develop traffic calming and safety improvements for Harrow Terrace with consideration for raised intersection medians on each Harrow Terrace approach to side streets, distinctive pavement at each side street intersection and improved lighting.*

#### **5.1.3 Tutt Avenue Intersection**

*Refer to 5.3.4 Harrow Terrace intersection.*

### **5.2 Cambridge Terrace**

#### **5.2.1 Cross Road Junction**

*Install an entry-threshold treatment at the Cross Road junction. Consider whether it is appropriate to raise the pavement to better control entry speeds.*

#### **5.2.2 Mid-Block**

*Consider improvements to this street as a priority Black Spot location. Improvements may include the installation of a solid raised median in Cambridge Terrace with appropriate landscaping and openings for access as required.*

#### **5.2.3 Intersections**

*Consider the installation of roundabouts at each intersection. The need for each roundabout will require review following the completion of other traffic calming measures.*

#### **5.2.4 Tutt Avenue / East Parade Intersection**

*Refer to 5.3.3 Cambridge Terrace / East Parade junctions.*

### **5.3 Tutt Avenue**

#### **5.3.1 Belair Road junction**

*Install an entry threshold treatment at the Tutt Avenue/Belair Road junction, with consideration for a raised median if space permits.*

#### **5.3.2 Rugby Street intersection**

*Develop traffic safety improvements at the Tutt Avenue/Rugby Street intersection with consideration for distinctive pavement, solid raised medians on Tutt Avenue, improved lighting and better turning radius for buses.*

### **5.3.3 Cambridge Terrace / East Parade junctions**

*Improve the intersections of East Parade and Cambridge Terrace with Tutt Avenue with distinctive pavement, increased turn radius for buses from Cambridge Terrace, solid raised medians on Tutt Avenue, improved lighting and consider turn prohibitions for minor movements during peak times.*

### **5.3.4 Harrow Terrace intersection**

*Consider improvements as a priority Black Spot location to the Harrow Terrace intersection with Tutt Avenue including distinctive pavement, solid raised intersection medians, entry threshold on Harrow Terrace (south), improved lighting, improved pedestrian access routes.*

### **5.3.5 Koala Crossing**

*Consider improvements to the Tutt Avenue Koala Crossing be made as part of the Tutt Avenue and Harrow Terrace intersection, including improved delineation of the crossing, warning drivers to not queue across the crossing, revised pedestrian fencing and access routes.*

### **5.3.6 Mid-Block**

*Develop appropriate parking delineation improvements on Tutt Avenue that may include a parking lane and parking controls.*

## **6. Schools**

### **6.1 Mitcham Girls High School**

*Develop upgrading plan for the Kyre Avenue car park entrance.*

*Consider improvements to the car park area to formalise parking.*

### **6.2 St Josephs School**

*Action the recommendations of the traffic and parking study at St Josephs School in consultation with the school.*

## **7. Streetscape and Amenity**

A key component of Local Area Traffic Management is the streetscape of a street. The streetscape defines the environment through which drivers travel. Drivers will travel in accordance with the speed environment created by the streetscape.

A key objective of the Kingswood Task Group is for the improvement of quality of life and amenity of Kingswood for all the local community.

Streetscape is therefore a key consideration in any of the recommended improvements throughout the network.

## **8. Asset Management**

This Plan offers Council an opportunity to review the assets existing within Kingswood. Kingswood was planned upon 19<sup>th</sup> century styles incorporating wide streets on a grid network. This has resulted in an extensive area of road pavement and surface drainage systems that Council is responsible to maintain and is not be necessary for effective and safe operation of the street network.

It is recommended that consideration of opportunities to reduce Council's liability for maintenance should be explored as part of improvement investigations. Other means of utilising parts of the road reserve which results in lower asset management costs and improved safety and amenity must be considered in each project.

## 9. Implementation Strategy

An implementation strategy has been developed for traffic safety improvements and is based upon the identified priority for each proposal. The strategy is subject to the outcomes of further investigation and consultation and may be adjusted accordingly.

<b>Location</b>	<b>Works</b>	<b>Year</b>
Review all streets in network	Road Safety Audit - Immediate	2002
Schools	Action Study Recommendations	2002
Cambridge Terrace	Median <sup>3</sup>	2003
Tutt Ave/Harrow Tce	Intersection Improvements <sup>3</sup>	2003
Kingswood Area	40km/h Speed Limit	2003
Harrow Terrace	Mid-Block Intersection Treatments	2004
Seafield Avenue	Bus Facilities	2004
Tutt Ave/Rugby St	Intersection	2005
Cambridge Tce/Halsbury Ave	Roundabout <sup>1</sup>	2005
Tutt Avenue / Rugby Street	Intersection Improvements	2006
Tutt Ave/Cambridge Tce	Intersection Improvements	2006
Belair Road Access Streets	Entry Treatments	2007
Cross Road Access Streets	Entry Treatments	2007
Cross Rd/Harrow Tce	Intersection Improvements	2008
Cambridge Tce/Balham Ave	Roundabout <sup>1</sup>	2008
Cambridge Tce/Seafield Ave	Intersection	2009
Harrow Terrace	Distinctive Pavement <sup>2</sup>	2009
Rugby Street	Distinctive Pavement <sup>2</sup>	2010
Kingswood Oval	Car Park Entrance	2011
Cambridge Tce/Kyre Ave	Roundabout <sup>1</sup>	2012

***This schedule is indicative only and subject to Council approval for allocation of funds and construction.***

The above implementation schedule is based upon estimated costs and subject to detailed investigation, community consultation and Council approval.

Some variations to the schedule may occur as follows:

<sup>1</sup> Warrant for roundabouts to be reviewed following implementation of 40km/h speed limit and subject to community consultation.

<sup>2</sup> Distinctive pavement may be incorporated into road reconstruction or reseal works and therefore may be rescheduled accordingly.

<sup>3</sup> Black spot funding may be applicable subject to the Black Spot Program continuing beyond 2001/2 and meeting the relevant criteria.

## 10. Monitoring

Monitoring of traffic patterns in the Kingswood area is required for analysis and comparison to determine the continued impact of traffic in this area. Traffic monitoring should be undertaken on each street to measure:

- Speed
- Volume
- Types of vehicles

It is desirable that periodical intersection turning counts are undertaken at the Tutt Avenue and Harrow Terrace intersection to assist in further evaluation of this intersection.

Transport SA can provide updated road crash information for analysis and identification of trends.

The success of any improvements will be determined through the monitoring of traffic patterns and speeds, and crashes, with the data collected as part of the Working Paper providing the basis for measurements.

It is recommended that monitoring of traffic patterns over the network be undertaken on a regular basis. A suggested monitoring program may be:

- Higher volume streets such as Tutt Avenue, Harrow Terrace - twice annually at key locations.
- Other local streets – annual basis for each segment
- Intersection turning count at Tutt and Harrow Terrace annually.