City of Ryde

Integrated Transport and Land Use Strategy

Centre Report for Eastwood

August 2007



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1 Eastwood

1.1 Introduction

The Centre Report for Eastwood accompanies the City Wide Integrated Transport and Land Use Strategy (ITLUS) report, and provides a local overview of the centre, previous work undertaken, and the transport and land use context.

The Centre Report concludes with a plan for Eastwood, consisting of a Vision, Objectives and Recommended Actions.

1.2 Description of Area

Eastwood is currently the largest town centre in Ryde (as defined by the Inner North Subregional Strategy) and is second in the City of Ryde's retail hierarchy after Macquarie Centre. The redevelopment of Top Ryde shopping centre however will reduce Eastwood to third in the retail hierarchy. Retail and commercial development extends to the east and west bisected by the railway line. It is described as being of 'village character' with development generally 2-3 storeys in height within the Rowe Street precinct with isolated buildings up to 7 storeys in height.

In recent years there has been a growth in food retailing and restaurants, making it an important retailing category. Retailers of small household goods such as chemists, newsagents, bookstores, offices and professional rooms are also significantly represented.

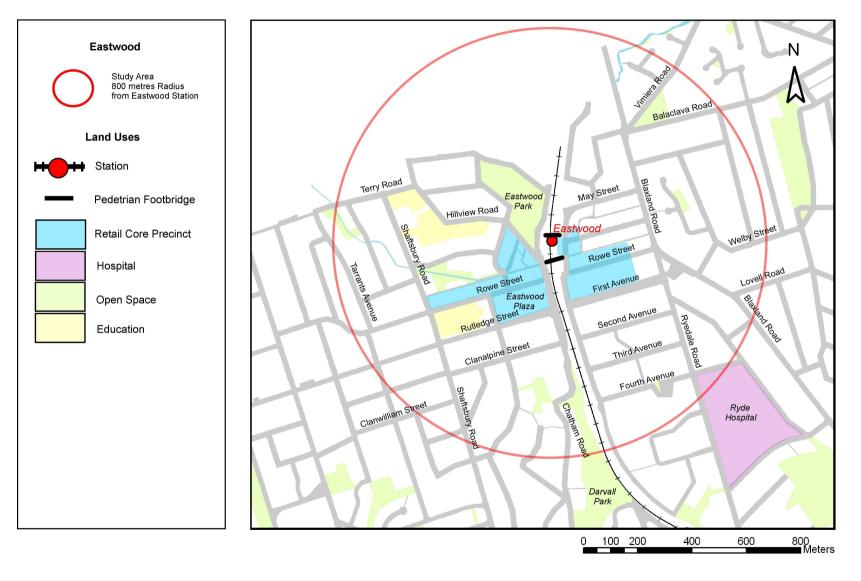
Eastwood has seen a gradual increase in the quantity of floor space used for business purposes that is having a positive effect on the centre with additional employment and a boost to retail trade. In particular there has been limited commercial development on the upper eastern end of Rowe Street.

Residential activities are generally limited to the fringe of the centre with flat buildings occurring on the eastern edge and the remaining areas characterised by single dwellings.

Within the centre there are also parks, childcare centres, schools, fire station, police station, community facilities and religious establishments.

Eastwood is located on the Northern Rail line and functions as an important transport modal interchange with a number of express train services and regional bus connections.

Figure 1 - Study Area and Land Uses



1.3 Previous Work Undertaken by Council

Previous studies, as outlined below, have been undertaken by Council in order to derive a vision, strategic framework and development controls to achieve the objectives identified for Eastwood.

In addition, Council has undertaken a range of works to improve transport in Eastwood in recent years including:

- Installation of a roundabout at Herring Road and Dora Street;
- Installation of a Bus only lane at West Parade off Rutledge Street;
- Conversion of Rowe Street (west) one way and introduced angle parking outside school; and,
- Introduction of short term parking in Shaftsbury Road between Glen Street and Hillview Lane.

1.3.1 Strategic Framework

Ryde Planning Scheme Ordinance and Local Environment Plan No 110

The Ryde Planning Scheme Ordinance provides for legally binding controls on land use and development within the City of Ryde.

For Eastwood Urban Village the planning principles and objectives are listed in Clause 51A and in Schedule 17 of the RPSO.

The RPSO also includes specific height limits for development within Eastwood Urban Village and introduces constraints and restrictions on intensification of development of certain areas identified in LEP 110 in order to minimise flooding risks.

For other areas within the Eastwood study area but outside the Eastwood Urban Village, the planning controls and objectives are similar to the equivalent zonings in other parts of the City of Ryde.

The RPSO also requires that public streets and spaces within Eastwood Urban Village are to be developed in accordance with the Eastwood Masterplan.

City of Ryde DCP 2006 - Part 4.1 Eastwood Town Centre

The Eastwood Town Centre section of the City of Ryde DCP was prepared on the basis of the Eastwood Commercial Centre Planning Study and Masterplan.

The DCP outlines a range of development principles together with general and site specific development controls in order to achieve the desired future character of the Eastwood Town Centre.

The DCP establishes guiding principles for development and outlines a series of development policies for mixed use development, architectural characteristics, vehicle access and parking, pedestrian and cycle access.

Draft Eastwood Masterplan Review (2006)

The Draft Eastwood Master Plan Review updates the 1998 Masterplan and encapsulates a 20 year vision to revitalise the Town Centre. It sets guidelines for future planning and development of the Town Centre, providing opportunity for growth and change as well as economic, social and environmental sustainability.

The Draft Master Plan Review utilises a precinct-by-precinct approach to both existing and new development in order to retain the special qualities of Eastwood Town Centre and breathe new life into degraded areas.

Various changes are proposed to building height controls and built form, although overall site densities are largely retained. Enhancements to the public domain are proposed including an upgrade of Rowe Street mall and a potential new laneway from Rowe Street to Hillview Lane and Rowe Street to Rutledge Street and a potential new cycle/pedestrian bridge over the railway line.

Eastwood Village - Landscape Upgrade (December 2005)

Actions included in this landscape upgrade plan include:

- New paving along Progress Avenue;
- Widening of foot crossing across Progress Avenue;
- Minor roadway widening along Progress Avenue to improve car parking access and circulation;
- New street trees and street furniture in Progress Avenue; and,
- Widening of outdoor dining area by removal of stairs.

Eastwood Commercial Centre Planning Study and Masterplan (1998)

The Masterplan investigated the existing situation and identified potential constraints and opportunities which were used to develop a range of strategies, specific recommendations and development controls to guide future development. The master plan proposed mixed use development over the next 20 years with some incremental retail and commercial floorspace expansion.

As the Eastwood town centre is bisected by the railway line, a key component of the master plan was to provide a better relationship between both sides through improved urban design and modifications to the railway underpasses.

Eastwood Commercial Centre Implementation Plan, 1999-2019 (February 1999)

The Eastwood Commercial Centre Implementation Plan was developed to provide more specific guidance on how the Eastwood Commercial Centre Masterplan should be implemented. Specific actions were identified together with responsibilities and timeframes. Many of these actions related specifically to transport and have not yet been implemented, in particular those relating to Eastwood as an Accessible Centre for example recommendations with regard to parking and bicycle facilities.

1.3.2 Technical and Environmental Input Studies

Eastwood and Terry's Creek Floodplain Management Study (due early 2007)

This study is expected in early 2007 and will make recommendations about development potential and flood mitigation measures affecting Eastwood.

Summary of Planning Objectives

According to the Ryde Planning Scheme Ordinance any development in Eastwood Town Centre should take into account the following objectives:

- To create a safe and attractive environment for pedestrians;
- To create a mixed use environment with emphasis on uses that promote pedestrian activity and safety at ground level;
- To create a precinct that contains opportunities and facilities for living, working, commerce, leisure, culture, community services, education and spiritual nurture; and,
- To also include the objectives for Urban Villages listed in Schedule 17 of the Ryde Planning Scheme ordinance.

The City of Ryde DCP Part 4.1 Eastwood Town Centre lists a series of planning principles which include:

- Regional Role;
- Development should contribute to the status of Eastwood as an important business, employment and residential location;
- Development is to promote a compact working and living environment to maximise the efficient use of resources and infrastructure provision;
- Integrated Planning and Development; and,
- All planning, design and development activities must take account of and effectively respond to the linkages and interfaces between public space and private land.

Public Domain

Development of the public domain is to enhance the integration between individual precincts and their surrounding areas.

Car parking facilities should be set back away from the public spaces and should not prejudice pedestrian and cycle use of the public space.

Public streets and spaces will be created generally in accordance with the Master Plan for Eastwood.

<u>Urban Form</u>

Urban form is to reflect its location in relation to transport nodes, existing residential and commercial precincts, be architecturally rich and diverse, define and enhance the public domain and allow for mixed uses.

Land Use Mix

Development is to provide a variety of housing types and employment-based activities and contribute to the character of the Village.

Development is to contribute to an integrated mixed use development pattern (both vertical and horizontal) containing a wide range of housing, employment and recreation opportunities.

Development is to facilitate the increase and diversity of employment opportunities, which are to be compatible with achieving a high quality, mixed shopping, living and working environment.

Transport and Access

Development is to promote the reduction of motor vehicle dependency and actively encourage the use of public transport, walking and cycling.

An accessible environment for people with disabilities and mobility difficulties is to be created to ensure access equity.

The intensity of development is to be in accordance with the capacity of existing and proposed public transport and road systems.

Parking provision is to acknowledge accessibility by foot, bicycle and public transport.

1.4 Land Use

The projected growth in employment and residential population within Eastwood is shown below.

Table 1:	: Projected	worker and	d resident	population in	Eastwood

	2004	2006	2011	2014	2016	2021	2024	2034
Worker Population	2 921			3 157			3 395	3 395
Resident Population		3959	4323		4507	4507		

(Employment figures derived from City of Ryde figures and residential figures derived from Planning NSW MDP projections 2006 combined with 2006 residential estimate provided by the City of Ryde)

Planning NSW MDP projections forecast an additional 210 residences within the Eastwood Study area including:

- 150 residences in the redevelopment of the Eastwood Shopping Centre which has the potential for additional floor space with mixed office/retail uses and possibly also for community uses such as childcare centre; and,
- 60 residences in the Uniting Church Site at corner Trelawney at Rutledge is likely to be predominantly residential with some other mixed uses.

In addition to these sites, the Glen Street car park site has the potential for additional floor space with mixed commercial, residential and community facilities.

1.5 A Vision for Eastwood

The following vision was developed by council in consultation with the community through the development of a Master Plan for Eastwood.

"In the future, Eastwood will be a place specifically designed for the enjoyment and utility of pedestrians and a place which allows convenient access for people between home, work, shopping and leisure.

It will also be a place which has a high level of aesthetic amenity at street level; have safe attractive and convenient public spaces; be a vibrant, viable and profitable commercial centre; and contain an appropriate mix and arrangement of uses, which satisfactorily integrate with existing surrounding activities."

1.6 Trip Demand

The NSW Transport, Population and Data Centre's (TPDC) Strategic Travel Model (STM) for the metropolitan area was used to extract traffic data for the current year (2006) and future years (2016 and 2026) for the Ryde area. The STM uses Sydney Statistical Division and is based on TPDC's 2001 Travel Zone system.

Car Driver and Public Transport trips are summarised in **Table 3**. Full modelling outputs are included Appendix L of the City Wide Report.

Car Driver AM peak trips to TZ 480 increase by 9% from 1,990 trips in 2006 to 2,173 trips in 2026. Trips from TZ 480 increase by 9% from 2,933 trips in 2006 to 3,203 trips in 2026. Public Transport Passenger AM peak trips to TZ 480 increase by 22% from 178 trips in 2006 to 217 trips in 2026. Trips from TZ 480 increase by 17% from 452 trips in 2006 to 530 trips in 2026.

Eastwood (TZ 480*) – Internal Ryde LGA Car Trips (Units: Car Driver) (Units: Passengers)

		2006		2016		2026	
		То	From	То	From	То	From
476	Marsfield	1	94	112	91	114	92
477	North Ryde	33	79	33	91	34	102
478	Ryde East	43	41	43	42	44	43
479	Ryde	85	86	84	86	86	89
480	Eastwood	151	151	145	145	147	147
481	Denistone East	80	91	79	89	80	91
482	Denistone	32	56	32	56	32	55
483	West Ryde	35	41	35	41	35	41
484	Meadowbank	32	35	32	34	35	38
485	Ryde Bridge	49	77	49	73	50	72
486	Putney	34	35	34	35	35	35
487	Field Of Mars	26	49	26	48	27	47
784	Macquarie Uni	39	142	38	150	40	169
785	Northern Suburbs Cemetery	8	41	8	47	10	60
	Total (Internal)	648	1,018	750	1,028	769	1,081
	External to Ryde LGA	1,342	1,915	1,405	2,012	1,404	2,122
	Total (Internal & External)	1,990	2,933	2,155	3,040	2,173	3,203

East	Eastwood (TZ 480*) - Internal Ryde LGA Public Transport Trips (Units: Passengers) 2006 2016 2026									
		То	From	То	From	То	From			
476	Marsfield	1	3	1	3	1	3			
477	North Ryde	3	5	3	5	4	6			
478	Ryde East	0	1	0	1	0	1			
479	Ryde	3	2	3	2	3	2			
480	Eastwood	5	5	5	5	5	5			
481	Denistone East	2	0	2	0	2	0			
482	Denistone	0	2	0	2	0	2			
483	West Ryde	0	0	0	0	0	0			
484	Meadowbank	3	1	3	1	3	1			
485	Ryde Bridge	1	7	1	5	1	5			
486	Putney	0	1	0	1	0	1			
487	Field Of Mars	0	0	0	0	0	0			
784	Macquarie Uni	5	24	5	27	5	32			
785	Northern Suburbs Cemetery	1	3	1	4	1	4			
	Total (Internal)	24	54	24	56	25	62			
	External to Ryde LGA	154	398	184	450	192	486			
	Total (Internal & External)	178	452	208	506	217	530			

* Travel Zone differs in size and coverage to the ITLUS centre study area.

1.7 Transport Modes

1.7.1 Rail

Existing

Eastwood has one train station located on West Parade just north of Rutledge Street. Eastwood is serviced by the Northern Line that runs from Hornsby to North Sydney via Strathfield. The Northern Line interchanges with the Western, Inner West and South lines at Strathfield, and with the North Shore line at Hornsby. Interchange between the Northern Line and the Eastern Suburbs, Bankstown and Airport Line can be made at Central. There is no direct interchange between the Northern Line and the Cumberland and Carlingford Lines.



As shown in **Table 4** Eastwood Station has good facilities. Although Eastwood Station does not currently cater for wheelchair access, it is undergoing an Easy Access upgrade.

Eastwood
Ν
Y
Y
Y
Y
Ν
Y
Y (515, 521, 541, 543, 549)
Y
Ν
Y
Y (300 spaces)
Ν

Table 4: Eastwood Station Facilities

The service frequency during the week and at the weekend at Eastwood Station is outlined in **Table 5** below. Eastwood is currently the most frequently serviced station in the LGA.

	To City					From City					
Period	d First Last No. of Services Train Train		First Train	Last Train	No.	of Services					
	Train	Indin	AM	PM	Day	Train	ITam	AM	PM	Day	
Weekdays	4:06 AM	12:00 AM	18	17	76	4:09 AM	2:07 AM	21	22	99	
Weekends	4:06 AM	12:00 AM	9	12	55	5:10 AM	2:07 AM	9	9	57	

Table 5: Train Frequencies at Eastwood Station

* Number of services in the AM peak period (0700-1000), PM peak period (1600-1900) and all day (24 hours). Source: www.131500.com.au

Committed

RailCorp is currently improving station access and amenity at Eastwood Station as part of the Easy Access program. This \$7.5 million upgrade includes the installation of three new lifts, improved CCTV coverage and lighting. These works are expected to be completed in 2008.

As part of the Easy Access program, RailCorp has endeavoured to improve the drainage of the pedestrian subway by removing debris and vegetation in the vicinity of the station. These measures, combined with Council's planned works to enhance the stormwater drainage network, should reduce the incidents of flooding.

A new time table for Northern Line services will be introduced in 2008, in order to integrate the rail network with the opening of the Epping Chatswood Rail Link (ECRL).

The existing Northern Line rail corridor between West Ryde and the Parramatta River is likely to be effected by the proposed Main North Line track amplification (announced in the NSW State Plan, 2006). The proposal aims to increase rail capacity for freight and passenger services and to improve the reliability of rail services by providing capacity to segregate fast passenger services from slower passenger services and freight services.

1.7.2 Bus

Existing

Eastwood has a medium sized bus interchange located at Eastwood Station. The facilities at the bus interchange are of good quality; providing seating, shelter and timetable information. The bus routes serving Eastwood are shown in **Figure 2**.



Details of route and service frequencies by route for Eastwood are shown in **Table 6**. Eastwood is reasonably well serviced by buses and when compared to other centres in Ryde LGA.

On weekdays nine routes serve the Eastwood area with 288 buses serving these routes. Over half of these services occur during the AM and PM peak periods. On Saturday the number of routes serving the area drops to five routes providing 176 services. On Sunday there are only two routes providing 67 services. During the week and on the weekends there are two bus routes running services after 7:00 pm.

Of the nine routes running through the Eastwood study area, one route runs to the city. There are three routes going to Auburn and to Parramatta respectively and one route to Chatswood and Epping. Three of the nine routes running through Eastwood terminate at Macquarie Centre with the Ryde LGA.

The bus frequency analysis shows that Eastwood is well served during the AM and PM peak periods from Monday to Friday. Weekend and evening services are more limited, especially on Sundays.

Committed

According to Council's Management Plan, Council is committed to constructing the following upgrades to bus facilities in Eastwood:

New bus shelter along Balaclava Road (during 06/07).

In addition, the Ministry of Transport in conjunction with Sydney Buses are currently developing an Integrated Network Planning process to identify opportunities for service adjustments in keeping with land use changes and travel patterns.

Table 6: Eastwood Bus Service Analysis Weekday (2-way)

Route Number	Route	To Direction			From Direction						
		First Bus Last Bus	No.	of Servic	:es*	First Bus Last Bus	No. of Services*				
			AM	PM	DAY		AM	PM	DAY		
515 (X15)	City to Eastwood	6:48 AM 8:44 PM	6	9	30	6:30 AM 8:32 PM	4	6	27		
521	Parramatta to Eastwood	6:52 AM 4:50 PM	2	1	10	9:05 AM 6:05 PM	1	3	9		
541	Eastwood to Epping	6:30 AM 6:43 PM	4	4	16	6:35 AM 6:50 PM	4	5	16		
542	Auburn to Macquarie Centre	3:38 PM 7:01 PM	0	4	4	7:02 AM 8:03 AM	3	0	3		
543	Auburn to Macquarie Centre	8:23 AM 4:21 PM	1	1	2	8:38 AM 3:35 PM	1	1	2		
544	Auburn to Macquarie Centre	6:33 AM 6:03 PM	6	4	17	6:04 AM 6:56 PM	2	7	17		
545	Chatswood to Parramatta	5:08 AM 12:09 AM	16	12	65	5:31 AM 12:01 AM	14	17	59		
549	Eastwood to Marsfield	3:37 PM 4:07 PM	0	2	2	7:47 AM 9:17 AM	3	0	3		
550	Chatswood to Parramatta	3:24 PM 4:23 PM	0	5	5	3:26 PM 3:26 PM	0	1	1		

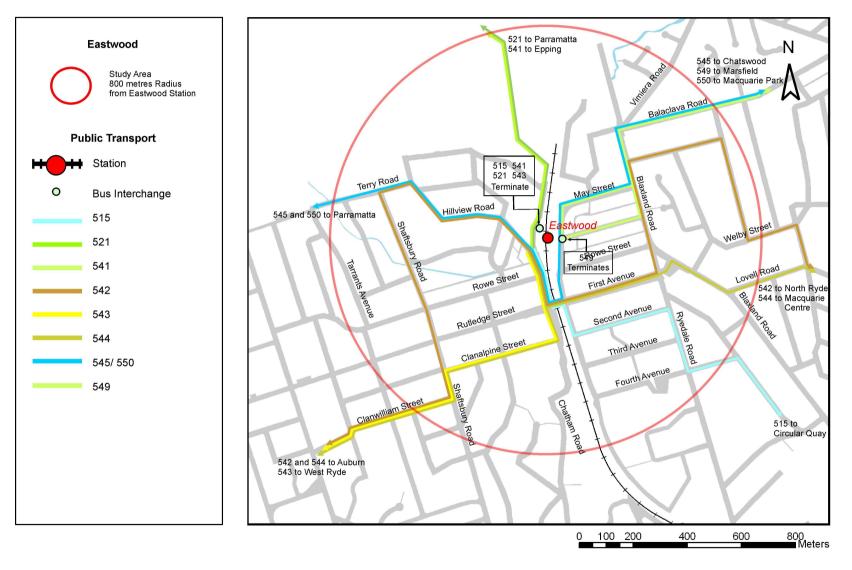
Saturday (2-way)

Route Number	Route	To Direct	To Direction					From Direction				
		First Bus	Last Bus	No	. of Servic	es*	First Bus Last Bus		No. of Services*		;es*	
				AM	PM	DAY			AM	PM	DAY	
515 (X15)	City to Eastwood	7:14 AM	7:21 PM	5	6	24	7:31 AM	7:32 PM	3	8	25	
521	Parramatta to Eastwood	8:54 AM	5:55 PM	1	2	7	9:01 AM	4:31 PM	1	2	6	
541	Eastwood to Epping	9:09 AM	6:09 PM	1	3	10	9:18 AM	5:18 PM	1	2	9	
542	Auburn to Macquarie Centre	-	-	-	-	-	-	-	-	-	-	
543	Auburn to Macquarie Centre	-	-	-	-	-	-	-	-	-	-	
544	Auburn to Macquarie Centre	8:31 AM	5:32 PM	2	2	10	8:23 AM	5:20 PM	2	2	10	
545	Chatswood to Parramatta	6:31 AM	9:04 PM	6	8	36	6:54 AM	10:18 PM	7	8	39	
549	Eastwood to Marsfield	-	-	-	-	-	-	-	-	-	-	
550	Chatswood to Parramatta	-	-	-	-	-	-	-	-	-	-	

Sunday (2-way)

Route Number	Route	To Direction From Direction			ection						
		First Bus	Last Bus	No. of Services*		First Bus Last Bus		No. of Services*			
				AM	PM	DAY			AM	PM	DAY
515 (X15)	City to Eastwood	8:21 AM	7:04 PM	2	3	12	8:37 AM	7:18 PM	1	3	12
521	Parramatta to Eastwood	-	-	-	-	-	-	-	-	-	-
541	Eastwood to Epping	-	-	-	-	-	-	-	-	-	-
542	Auburn to Macquarie Centre	-	-	-	-	-	-	-	-	-	-
543	Auburn to Macquarie Centre	-	-	-	-	-	-	-	-	-	-
544	Auburn to Macquarie Centre	-	-	-	-	-	-	-	-	-	-
545	Chatswood to Parramatta	8:02 AM	7:02 PM	2	6	21	8:25 AM	8:16 PM	4	4	22
549	Eastwood to Marsfield	-	-	-	-	-	-	-	-	-	-
550	Chatswood to Parramatta	-	-	-	-	-	-	-	-	-	-

Figure 2 - Public Transport Services



1.7.3 Taxi

Existing

It has been suggested that long waiting times are experienced at the taxi ranks in Ryde due to a lack of taxi services generally in the area.

There are 2 main taxi ranks in Eastwood town centre:

- Eastwood Station at West Parade entrance seating and shelter provided; and,
- Eastwood Station on Railway Parade seating but no shelter.

As with other taxi ranks in Ryde, neither of these ranks have a phone available to call a taxi.

Committed

There are no specific proposals for taxi services in the area.

1.7.4 Community Transport

Community transport services cover all of the Ryde LGA and are discussed in **Section 5.3.3** of the **City Wide Report**.

1.7.5 Walking

Existing

The local pedestrian network including pedestrian crossings is show in Figure 3.

Signalised crossings are provided along Shaftsbury Road, Rutledge Street, First Avenue/ Blaxland Road intersection and along Blaxland Road. Zebra crossings are situated on Rowe Street, Hillview Road, West and Railway Parades (by the station) and around the plaza.

The railway is a major barrier for east/west pedestrian movement in the study area. There are three crossings points over the railway. These are at Eastwood Station underpass, Eastwood pedestrian underpass and at Rutledge Street. There are no crossing opportunities north of the Meadowbank Station underpass, which is the centre of the study area.

To further increase accessibility in the east/west direction there is opportunity for a pedestrian crossing on Shaftsbury Road between Terry Road and Rowe Street and possibility at the intersection of Blaxland Road and Ethel Street.

Rutledge Street is a major barrier in the north/south direction for the study area because there is no opportunity to cross the street at West Parade.

All informal footpaths identified in **Figure 3** have the potential to be formalised. Key areas missing footpaths include:

- Lakeside Road (west side) between Wingate Avenue and Hillview Road;
- Tarrants Avenue (west side) between Terry Road and Rowe Street;

- Third Avenue (both sides) between East Parade and Ryedale Road;
- Forth Avenue (both sides) between East Parade and Ryedale Road;
- Auld Avenue (west side) between Terry Road and Richard Avenue; and,
- Blaxland Road (west side) north of Balaclava Road.



Pedestrian Accessibility

Figure 4 shows the 400m and 800m walk isochrones centered on the railway pedestrian pass. Overall the 400m isochrone radiates regularly in all directions, reflecting fairly high levels of accessibility within the 400m radius of the station. The 800m is also fairly circular, but isn't as strong to the south as it is to the north. This is mainly due to the restricted crossing opportunities at Rutledge Street. Accessibility to the west is also hindered by lack of appropriate crossing opportunities at Shaftsbury Road. Overall access is stronger due north and south of the railway station than it is east and west of the railway station.

Accident Analysis

An analysis of pedestrian and cycle accidents in the Ryde LGA was carried out for the five year period from 2000 to 2004 as shown in **Figure 6.3** and **6.4** in the **City Wide Report**.

A number of solutions could be provided at the accident cluster locations including:

- Separate pedestrian phases (green time not shared with turning traffic);
- Longer green times;
- Pedestrian refuges;
- Pedestrian barriers / guard rail;
- Reduced vehicle speeds;
- Speed limit enforcement;
- Improve street lighting;
- Improve vehicle and pedestrian visibility; and/or,
- Count down displays.

A detailed study of the type of pedestrian accidents occurring in this area should be carried out as part of the proposed PAMP to determine the most appropriate mitigating measures required at this location. It should be investigated if the presence of the hotel in the accident cluster location contributes to the level of accidents.

Committed

According to Council's Management Plan, Council is committed to constructing the following pedestrian works in Eastwood:

- New footpath along Brush Road from the school to Hermoyne Street, (during 08/09);
- New footpath along Brush Road from the school to Victoria Road (during 09/10);
- New footpath along Graham Avenue from Welby Street to Miham Avenue (during 09/10); and,
- Various footpath upgrades and improvements to pedestrian facilities as part of the Eastwood Town Centre Upgrade (scheduled from 06/07 to 09/10).

According to the Draft Eastwood Masterplan Review 2006, a pedestrian and cycle overpass is planned in the vicinity of the existing underpass, linking Rowe Street either side of the railway.

Figure 3 – Pedestrian Network

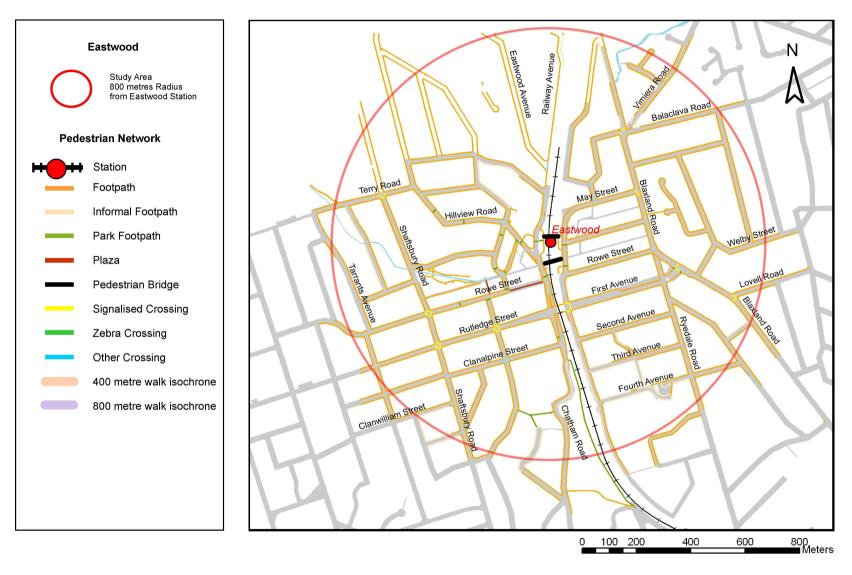
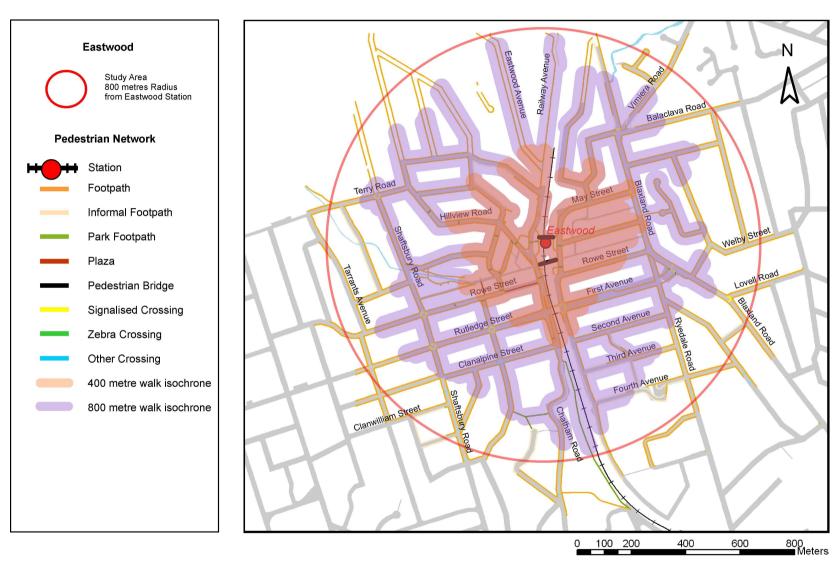


Figure 4 – Pedestrian Accessibility



1.7.6 Cycling

Existing

The existing cycling network in Eastwood is shown in Figure 5.

The RTA Action for Bikes 2010 (1999) sets out a 10 year plan for a series of arterial bicycle networks across NSW.

As shown in **Figure 6.4 (City Wide Report)** a number of cycle accidents have occurred in the vicinity of Eastwood.

Committed

Ryde have just recently released their Ryde Bicycle Strategy and Masterplan in January 2007. The cycling network for the Eastwood study centre is show in **Figure 5**. The regional cycle routes passing through the Eastwood study area include:

- RR02 Eastwood to Turramurra; and,
- RR07 Lane Cover to Parramatta via Eastwood

The local bicycle routes passing through the Eastwood study area include:

- LR02 Eastwood to Parramatta River via Denistone West;
- LR03 Eastwood to Parramatta River via West Ryde;
- LR12 Marsden High to Eastwood; and,
- LR13 Eastwood to Top Ryde.



1.7.7 Road

Existing

The existing road network is shown in **Figure 6**. The main arterial road in the Eastwood study area is Blaxland Road, running in the north/south direction on the eastern section of the study area. Blaxland Road has an AADT in the vicinity of 34,235. Secondary roads in the study area include Rutledge Street, First Avenue and Balaclava Road. All other roads in the study area are local roads.

Where Blaxland Road intersects with secondary and major local roads these intersections are signalized. Other signalized crossings include the intersection of:

- Blaxland Road and May Street;
- First Avenue and East Parade;

- Rutledge Street and Trelawney Street;
- Rutledge Parade and Shaftsbury Road;
- Shaftsbury Road and Rowe Street; and,
- Shaftsbury Road and Terry Road.

The intersections controlled by roundabouts are:

- Clanalpine Street and Trelawney Street;
- Hillview Road and Lakeside Road;
- Hillview Lane and The Avenue; and,
- Rowe Street and Railway Parade.

All other intersections are priority controlled. There are several speed control humps along Shaftsbury Road, Trelawney Street, Hillview Lane, West Parade and Chatham Road. All of these speed control humps are west of the railway line.



An analysis of vehicle accidents in the Ryde LGA was carried out for the five year period from 2000 to 2004 in **Context Report Section 3.6.5**.

Committed

According to Council's Management Plan, Council is committed to constructing the following road works in Eastwood:

 Various road upgrades and improvements as part of the Eastwood Town Centre Upgrade (scheduled from 06/07 to 09/10).

Figure 5 – Cycling Network

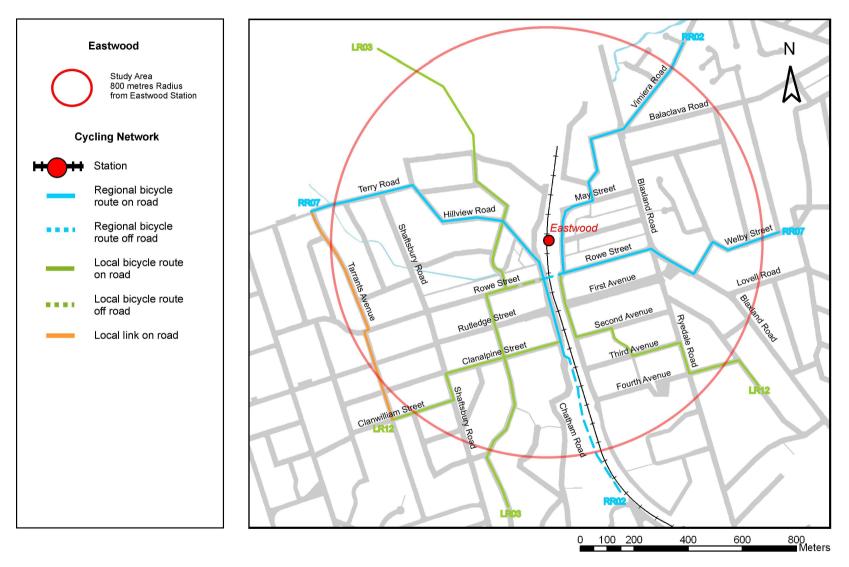
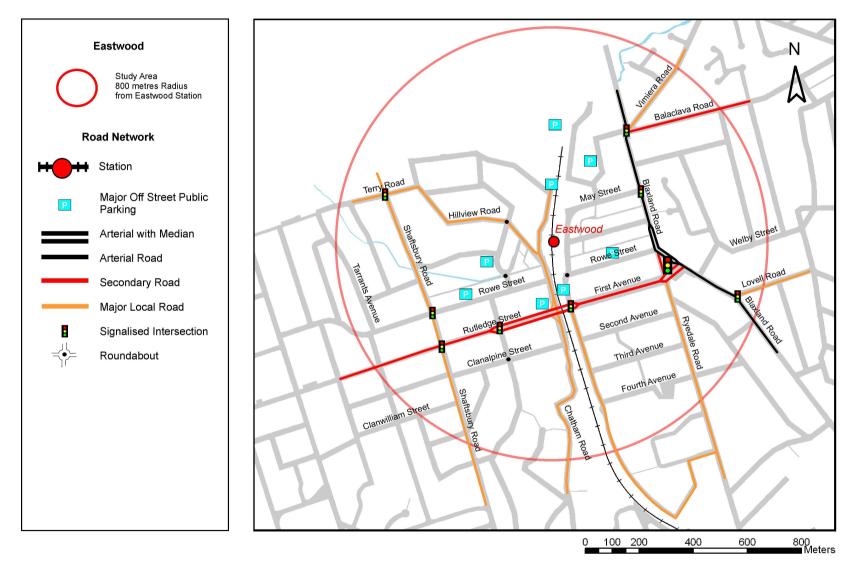


Figure 6 - Road Network



1.7.8 Parking

Existing

The current level of off street parking within Eastwood is shown in Tables 7 below.

Table 7: Off-Street Parking Provision within Eastwood

Location	No. of Spaces
Glen Street Car Park	465 time restricted car spaces – 2 hour restriction off Lakeside Street and 3 hour restriction off Glen Street
Hillview Lane Car Park	46 time restricted car spaces – 2 hour restriction
Rowe Street Car Park	53 time restricted car spaces – 2 hour restriction
East Parade Car Park	715 car spaces*
West Parade Car Park	1,519 spaces*
Railway Parade Street Parking	TBC
Ball Avenue Car Park	TBC

*Source: s96 Plan

On-street parking is provided in Eastwood; however, in some areas time restrictions and other parking restrictions apply. There is currently no formal record of where restrictions are in place, but a brief summary based on site observations is set out below:

Time restricted parking on West Parade and Railway Parade in the vicinity of the station ranging from ½ hour to 1 hour. Time restricted parking ranging from ½ hour to 1 hour at certain times is also in place on a number of roads in the centre including Ethel Street, Rowe Street and The Avenue.

1.8 Opportunities and Constraints

The review of the transport and land use context has allowed constraints and opportunities to be identified.

1.8.1 Constraints

The following constraints have been identified:

- Lack of bus priority measures and que jump facilities, especially from Marsden Road into Terry Street and at the corner of Blaxland and Balaclava Road;
- Uncontrolled pedestrian crossings in West Parade and at Eastwood Station cause delays to bus services;
- The introduction of express trains may soon be limited with introduction of the new rail line / time table;
- Flooding limits potential for redevelopment of Eastwood Town Centre and also closes down train station due to flooding of pedestrian subway and ticketing area;
- The current road network is disjointed and there is local traffic congestion; and,
- High demand for limited car parking spaces for both commercial and commuter parking.

1.8.2 Opportunities

The following opportunities have been identified:

- Development of a new pedestrian and cycle overpass over the railway line;
- Improve pedestrian amenity, cycle access in and around the station and connectivity and to improve the walkability of the town centre and links between station and parks;
- Potential for development of dormitory area for Macquarie Park with new rail line;
- Potential for improved pedestrian linkages with Brickpit and Mobbs Lane developments in Parramatta Council;
- Encourage the growth of centre to cater for new residents.
- Improved transport information; and
- There are opportunities at the local level to enhance bus interchanges including: provision of information, improving access to stations for all modes, improving the cleanliness and comfort of trains and enhancing station environments.

1.9 A Vision for Eastwood

The vision for Eastwood identifies that in the future, Eastwood should be a place specifically designed for the enjoyment and utility of pedestrians and a place which allows convenient access for people between home, work, shopping and leisure.

It will also be a place which has a high level of aesthetic amenity at street level; have safe attractive and convenient public spaces; be a vibrant, viable and profitable commercial centre; and contain an appropriate mix and arrangement of uses, which satisfactorily integrate with existing surrounding activities.

1.10 Objectives for Eastwood

The proposed objectives for Eastwood are:

- Increased safety;
- Improved amenity and identity;
- Economic prosperity; and,
- Management of through traffic.

1.11 Recommended Actions

Recommended actions for Eastwood are summarised in the following tables:

- A1 Public Transport, Community Transport, Personal Public Transport and Taxis Actions;
- A2 Walking and Cycling Actions;
- A3 Road Management Actions; and,
- A4 Integrated Land Use Planning / Car Parking Actions.

Relevant City Wide Strategies are included (from the City Wide Integrating Transport with Land Use Report), along with specific local strategies.

A1 - Public Transport, Community Transport, Personal Public Transport and Taxis Actions – Summary

Action	Primary Stakeholders	Secondary Stakeholders	Timescale	Cost to CoR
Mutually Beneficial Partnerships	CoR, STA, Sydney Ferries, RailCorp, Developers	RTA, MoT, community	Short Term (Pilot project) Medium - Long Term	Low
Public Transport Information	CoR, Community.	STA, Sydney Ferries, CityRail	Short Term	Low
Demand Responsive Transport	CoR, Community.	MOT, STA, Community Transport, Taxi operators	Short Term	Medium
Bus Infrastructure	CoR, STA	RTA, MoT	Short – Medium Term	Low -High
Train Station Infrastructure	CoR, RailCorp		Short Term	Low - High
Lobby for improved Public Transport Services				
Increased off peak frequencies	CoR, STA, MoT, RTA, Taxi Council	Community	Short – Medium Term	Low
 Accessible buses 				
 Strategic Bus Routes 				
 Legal taxi pick up/set down areas 				
Local Actions:				
 Improvements to bus stops at station 	CoR	Community	Short – Medium Term	Low
 Development of a TAG for the shopping centre 				

A2 - Walking and Cycling Actions – Summary

Action	Primary Stakeholders	Secondary Stakeholders	Timescale	Cost to CoR
Improved Safety at Pedestrian Crossings	CoR, RTA	Community	Short Term	Medium
Generic Treatments	CoR, RTA	Community	Short – Medium Term	Short – Medium Term
Accessibility Mapping	CoR,	STA, CityRail, Sydney Ferries	Short – Medium Term	Medium
Accessibility Audits	CoR, RTA, developers	Community, STA, CityRail, Sydney Ferries	Short Term (existing areas) Ongoing (DA approvals)	\$3,000 per site*
Pedestrian Access and Mobility Plan	CoR, RTA	Community, STA, CityRail, Sydney Ferries	Short Term	Medium
Accident Clusters	CoR, RTA	Community, STA	Short term	Medium - High
Local Actions:				
 Detailed analysis of pedestrian accidents and design of mitigating measures including: Separate pedestrian phases (green time not shared with turning traffic); Longer green times; Pedestrian refuges; Pedestrian barriers / guard rail; Reduced vehicle speeds; Speed limit enforcement; Improve street lighting; Improve vehicle and pedestrian visibility; and/or Count down displays. Improved connections between town centre and station Provide a better relationship between both sides of the railway through improved urban design and modifications to the railway underpasses 	CoR	Community	Short – Medium Term	Short – Medium Term

- Development of a new pedestrian and cycle overpass over the railway line.
- Upgrade or provide new footpaths:
 - Lakeside Road (west side) between Wingate Avenue and Hillview Road
 - Tarrants Avenue (west side) between Terry Road and Rowe Street
 - Third Avenue (both sides) between East Parade and Ryedale Road
 - Forth Avenue (both sides) between East Parade and Ryedale Road
 - Auld Avenue (west side) between Terry Road and Richard Avenue
 - Blaxland Road (west side) north of Balaclava Road

* Accessibility audits requested as part of the DA process will be supplied by the applicant.

A3 - Road Management Actions – Summary

Action		Primary Stakeholders	Secondary Stakeholders	Timescale	Cost to CoR
Improv	ements on Arterial Roads				
-	Improved safety at pedestrian crossings	CoR, RTA	Community	Short Term	Low
•	Generic Treatments for walking and cycling	CoR, RTA	Community	Short – Medium Term	
Improv	ements on Council Roads				
-	LATMs	CoR	STA, Community	Short Term	Medium -
-	Improved safety at Pedestrian	CoR, RTA	Community	Short Term	High
	Crossings	CoR	STA, Community	Ongoing	
•	Generic treatments for walking and cycling	CoR	STA, Community	Ongoing	
-	Reallocation of road space				
Road Network Performance Standards		CoR, RTA	STA, Community	Ongoing	Medium - High
Local A	ctions:				
•	Local road network improvements	CoR	Community	Short – Medium Term	

A4 - Integrated Land Use Planning / Car Parking Actions – Summary

Action	Primary Stakeholders	Secondary Stakeholders	Timescale	Cost to CoR
Public Transport Accessibility Level (PTAL) Analysis	CoR	STA, CityRail, MoT	Short Term	Low
Mixed Land Use	CoR	Developers, Community	Medium – Long Term	Low
Public Car Parking	CoR	Community	Short – Medium Term	Low
Private Car Parking	CoR	Developers	Short – Medium Term	Low
Motorcycle / Scooter Parking	CoR	Community	Short Term	Low
Street Networks	CoR	Community, Developers	Short Term	Low

A5 – Travel Demand Management Actions – Summary

Action	Primary Stakeholders	Secondary Stakeholders	Timescale	Cost to CoR
Workplace Travel Plans	CoR	Employers, Community	Short – Medium Term	Low
Residential Travel Plans	CoR	Developers, Community	Short – Medium Term	Low
School Travel Plans	CoR	Schools, Community	Short – Medium Term	Low
Car Pooling	CoR	Community	Short – Medium Term	Low
Car Club	CoR	Community	Short – Medium Term	Low
Transport Access Guides	CoR	Community, Developers	Short – Medium Term	Low
TravelSmart	CoR	Community	Medium – Long Term	Medium - High
Local Actions:				
 Develop a TAG for Eastwood 				