



NOTICE OF MEETING

Notice is hereby given that of a meeting of the Sustainable Transport Committee meeting will be held:

DATE: THURSDAY, 6th FEBRUARY 2014

TIME: From 6.30pm to 8.30pm

PLACE: Councillors' Room Town Hall, Manly Council

COMMITTEE MEMBERS:

Councillors

Cllr Cathy Griffin

Manly Council (Chair)

Cllr Hugh Burns

Manly Council

Other Members

Mr Peter Hopper

Community Member

Mr Richard Green

Community Member

Mr Jonathan Gunn

Community Member

Ms Sarah Weate

Community Member

Ms Melissa Palermo

Community Member

Council Staff

Mr Ben Hubbard

Manly Council (Traffic & Transport Manager)

Mrs Snezana Bakovic

Manly Council (Transport Planner)

All other Councillors are free to attend as observers and are invited to do so and to engage in discussions, but not in voting, on any matter before the Committee.

Beth Lawsen

Deputy General Manager – People, Place and Infrastructure

Date: 30/1/2014



AGENDA

SUSTAINABLE TRANSPORT COMMITTEE

**MEETING TO BE HELD ON THURSDAY 6 FEBRUARY 2014 AT 6.30PM
COUNCILLORS' ROOM**

- ITEM 1 Apologies and leave of absence**
- ITEM 2 Declarations of Interest – Pecuniary Non- Pecuniary**
- ITEM 3 Confirmation of minutes**
- ITEM 4 Matters arising / Item tracker**
- ITEM 5 Safety Matters**
- ITEM 6 Request for Additional Cycle Rack – South Steyne**
- ITEM 7 Request for Additional Cycle Racks – Sydney Road**
- ITEM 8 Summary of Crash Statistics 2008 - 2012**
- ITEM 9 General Business**
- ITEM 10 Dates for Next Meeting: 3rd April 2014**

ITEM 04: Matters arising / Item tracker

Table 1 provides a summary of items requiring follow up actions.

Item	Description	Action	Staff comment
3 May 2012 – Item 4	Alternative route to north head	Implement signed cycle route.	Route is scheduled to be installed in February 2014.
	Car share report	Staff to return a report on car share within Manly LGA.	Car share report to be taken to Council as per resolution 119/13. Item 8 provides some further background on car share.
3rd October 2013-General Business	Safety Audits various crossings	A prioritization list of pedestrian crossing audits to be presented to a future STAC meeting. The STC suggested that the following pedestrian crossing for the safety audits: • Darley Road/ Asburner Street Zebra Crossing; • East Esplanade/Victoria Parade pedestrian refuge	Audits will be undertaken as resource permit.

Item	Description	Action	Staff comment
5 December 2013 – Matters Arising	1. need for additional cycle racks close to Benbray Burgers on Sydney Road. 2. Cyle racks are required at Stocklands Balgowlah at road level. 3. It was reported that the cycle rack at Honolulu Grill (North Steyne) has been removed / damaged and should be replaced. 4. It was requested that an item 'safety issues' be added to future agendas. 5. It was requested that a report on the operation of the Cycle Central cycle parking station is returned to a future STAC meeting. 6. It was requested that accident statistics relating to walking and cycling be reported to a future meeting of the STAC. 7. The need for STOP signs on roads adjacent to Raglan Street was raised.		1. Refer to report Item 6. 2. There is already a cycle rack under the stairs in the front entry to Stocklands. Balgowlah. No further action. 3. To be investigated. 4. Added to agenda. 5. To be investigated and report returned. 6. Refer to report item 8. 7. To be investigated.

Item	Description	Action	Staff comment
Item 05	<i>Residential Transport Hubs</i> RECOMMENDATION That the General Manager approves: • Implement a trial Residential Transport Hub by installing two cycle hoops, a Hop Skip Jump stop sign and a active and sustainable travel information board in Addison Road. • Monitor the trial and undertake a user survey to assess the Residential Transport Hub concept.		Awaiting approval of 5 December 2013 minutes.
Item 06	<i>Additional Bike Racks at Manly Wharf</i> RECOMMENDATION That the General Manager approves installation of additional compact bike racks at Manly Wharf.		Awaiting approval of 5 December 2013 minutes.

Item	Description	Action	Staff comment
Item 07	<i>Bicycle Public Repair Station and Public Cycle Pump</i> RECOMMENDATION That the General Manager considers installing a bicycle repair station in Lagoon Park and an air pump at the wharf.		Awaiting approval of 5 December 2013 minutes.

ITEM 6 Request for Additional Bike Rack – South Steyne (Item 06 - 7/1/2014)

SUMMARY

For the General Manager to consider installing additional cycle racks near the Manly Surf Lifesaving Club, South Steyne, Manly.

REPORT

There have been several requests for additional cycle racks to be provided close to the Manly Surf Lifesaving club on the South Steyne. In the mornings and at weekends this area has a high number of visitors arriving by bicycle to participate in various beachside activities.

Currently the area has a row of 4 cycle hoop stands that can accommodate up to 8 cycles. The stands are widely spaced (approximately 1m apart) and are well suited to high turnover casual use. This area often has cycles parked against other street furniture which is likely because of a lack of cycle parking spaces.

There are several locations in proximity to the surf club where additional cycle racks / hoop stands could be located. These include;

Option 1 - Adjacent to the existing cycle hoop stands where an additional 4 stands (for up to an additional 8 cycles) could be installed between the area currently used to store 2 surf boats and a surf ski trailer. Installing hoop stands in this location would not impact on pedestrian movement even at peak times (refer to Figure 1). All cycle parking facilities on the Steyne need to be manufactured in a high quality marine grade stainless steel in order to with stand the environmental conditions. It is estimated that 4 hoop stands in this location would cost approximately \$2000 to provide and install.

Option 2 – Alongside the kerb on the promenade between the trees (Refer to Figure 2). In this location up to 10 hoop stands could be provided in a similar manner to existing cycle parking elsewhere on the Steyne. Providing 10 hoop stands would cost approximately \$5000. This location would have minimal impact on pedestrians.

The large number of cycles, particularly at weekends and in the early morning, needing to park close to the Manly Surf Lifesaving Club would benefit from additional cycle racks in the local area and it is therefore recommended that up to 10 hoop stands be provided between the trees adjacent to the road as has been provided in other locations along the Steyne.

RECOMMENDATION

That the General Manager approves installation of 10 additional hoop stand cycle racks at the South Steyne adjacent to the kerb edge.



Figure 1 – Option 1 – Extend existing cycle parking location by installing 4 additional cycle parking hoop stands in marked area



Figure 2 – Option 2 – Install 10 cycle parking hoop stands between trees in marked area

ITEM 7 Request for Additional Bike Racks – Sydney Road (Item 07 - 7/1/2014)

SUMMARY

For the General Manager to consider installing additional cycle parking on the pedestrianised section of Sydney Road, Manly.

REPORT

The STAC has identified that there is a need for additional cycle parking on the pedestrianised section of Sydney Road on the approach to the Corso (refer to Figure 1). There are existing cycle loop stands located outside the Benbray Burgers shop that can accommodate up to 8 cycle (refer to Figure 2). These stands are often fully occupied which causes bikes to be parked against other street furniture.

In the local vicinity there are the following alternative cycle facilities all within a short ,less than 50m walk(refer also to Figure 1):

- Library – approximately 40 cycle spaces
- Central Avenue – approximately 4 cycle spaces
- Sydney Road by Short Street – approximately 8 cycle spaces

There is insufficient space to install additional loop stands in Sydney Road and maintain good pedestrian accessibility and safety. On summer weekends this section of road can experience very high pedestrian volumes. Existing street furniture, benches and trees already limit the locations where pedestrians can cross from one side of the street to the other.

A solution may be to consider a higher density cycle parking rack at the location of the existing hoop stands outside the Benbray Burger shop or provide further cycle racks at the library which is already an established cycle hub.

Additional cycle parking could also be provided at the existing cycle racks on Sydney Road near Short Street.

RECOMMENDATION

That the General Manager approves installation of additional cycle racks near the library and the upgrade of the hoop stands close to Benbray Burgers shop to a higher density cycle rack.

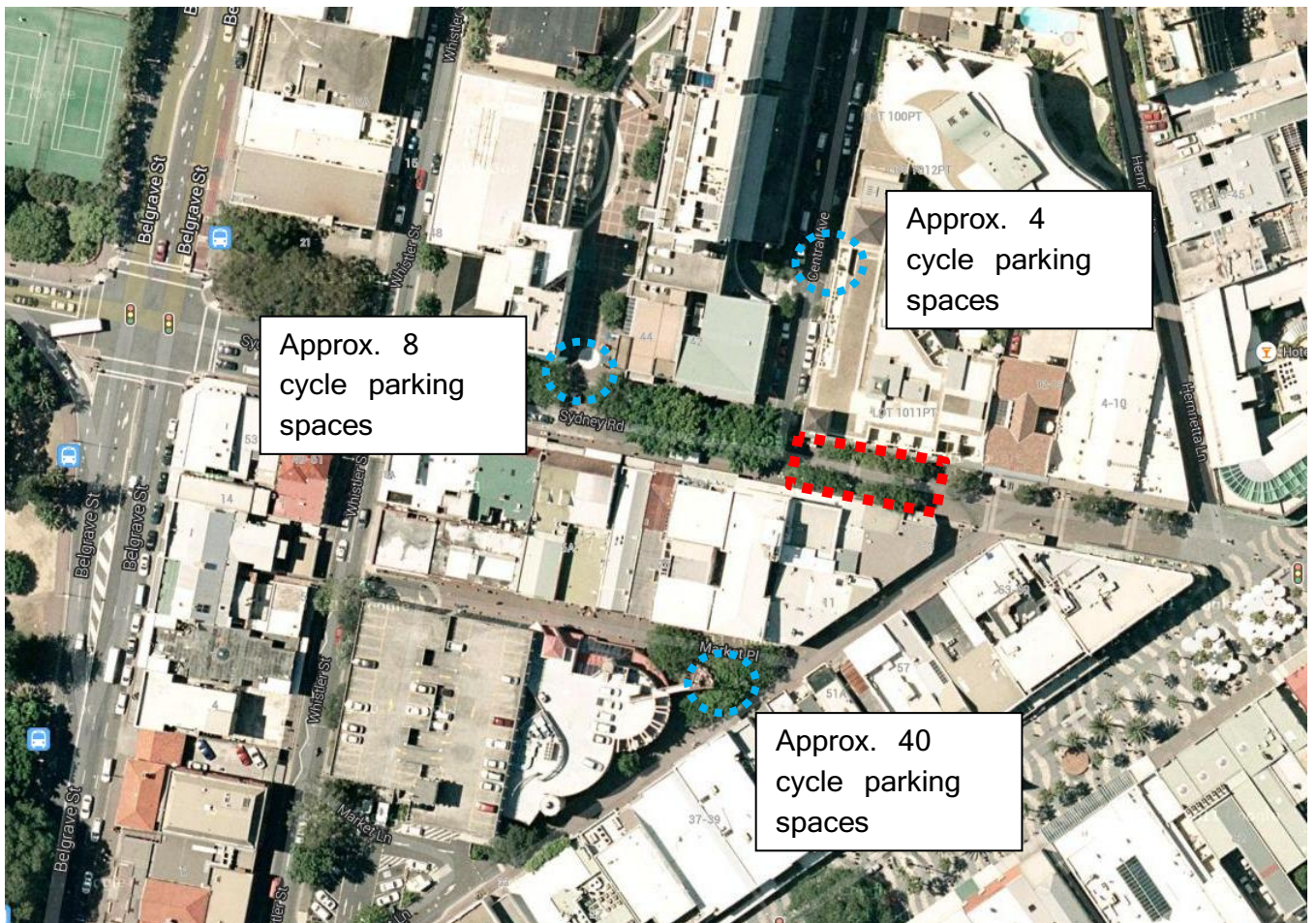


Figure 1 – cycle parking in vicinity of Sydney Road



Figure 2 – Existing cycle parking outside Benbray Burgers shop



Figure 3 – Pedestrianised section of Sydney Road

ITEM 8 Summary of Crash Statistics 2008 - 2012 (Item 08 7/1/2014)

SUMMARY

For the General Manager to note the recorded road crashes involving cyclist and pedestrian that have occurred in the 5 year period January 2008 to December 2012.

REPORT

As requested by the STAC, this report provides a summary of the road crash statistics, with a focus on pedestrian and cyclist related crashes, for the period 2008 to 2012 (the latest period for which crash data is publicly available). Appended to the report are tables summarising all pedestrian and cycle crashes in this period.

Crash data is collected by the police for all road accidents that are attended by emergency services. Data is then collated by the Roads and Maritime Service (RMS) who undertake some validation and data cleansing prior to data being provided to council.

Council undertake 2 formalised crash analysis studies each year: A review of road crash black spots; and a review of road crash themes. Both these studies inform road safety programmes funded either partly or wholly by the RMS.

An accident black spot is defined as a collection of crashes occurring within A 50m radius with a common cause or theme. No black spot sites were identified in the 2012 analysis.

Accidents are also analysed by theme such as influencing factors like alcohol and drug use, user type, speeding and distraction. Thematic trends are a key driver for road safety campaigns.

It is critical to note that crashes occur as the result of a chain of unfortunate events and are unplanned. It is not feasible or practical to treat the causes of all road crashes individually as the unique circumstances that contributed to a crash occurring may not happen again. However, were similar themes or contributing factors are identified measures can be introduced to reduce the likelihood or severity of a crash.

Five appendices are included with this report:

- A summary of crash statistics 2008 -2012
- A table of all motorcycle crashes in 2012
- A table of all pedestrian crashes in 2012
- A table of all pedal cycle crashes in 2012
- A guide to road user movement (RUM) codes these are used to describe a crash

RECOMMENDATION

That the General Manager notes the reported crash record involving cyclists and pedestrians between 2008 – 2012.

Appendix A: Summary crash statistics for Manly 2008 to 2012.

Table 1: Number of crashes by degree of severity, 2008 - 2012.

Crash Type	2008	2009	2010	2011	2012	5 Year Average
Fatal Crashes	0	0	0	0	1	0.2
Injury Crashes	76	71	88	87	73	79
Non-casualty Crashes	88	89	85	69	96	85
Total	164	160	173	156	170	165

Table 2: Number of crashes by vehicle, 2008 - 2012.

Vehicle Type	2008	2009	2010	2011	2012	5 Year Average
Cars	142	137	151	131	149	142
Trucks	38	39	30	22	35	33
Bus	5	7	4	2	8	5
Emergency Vehicle	0	0	0	1	1	0.4
Motor Cyclist	13	23	20	12	15	17
Pedal Cyclist	13	11	15	10	18	13
Pedestrian	21	9	12	17	10	14
Total	164	160	173	156	170	165

Table 3: Number of ALL crashes by gender of controller in Manly LGA, 2012.

	Male	Female	Unknown	Total
2012	170	104	8	282
2011	153	103	9	265
2010	164	140	11	315
2009	153	103	9	265
2008	160	103	12	275

Table 4: Number of casualties in Manly LGA, 2008 - 2012.

Casualty	2008	2009	2010	2011	2012	5 Year Average
Killed	0	0	0	0	1	0.2
Injured	79	81	103	105	87	91
Total	79	81	103	105	88	91

Table 5: Road User Group casualties in Manly LGA, 2008 - 2012.

Road User Group	2008	2009	2010	2011	2012	5 Year Average
Motor Vehicle Driver	22	27	39	48	33	34
Motor Vehicle Passenger	12	10	20	17	15	15
Motorcyclist	11	24	17	12	12	15
Pedal Cyclist	13	11	15	10	18	13
Pedestrian	21	9	12	18	10	14
Total	79	81	103	105	88	91

Table 6: Age group of Pedestrian casualties in Manly LGA, 2008 – 2012.

	0-4	5-12	13-16	17-20	21-25	26-29	30-39	40-49	50-59	60-69	70+	Unknown	Total
2012	1	2	0	0	1	0	0	1	2	0	3	0	10
2011	0	2	0	1	4	2	4	1	1	1	2	0	18
2010	0	0	1	1	1	2	0	1	1	3	1	1	12
2009	0	0	1	1	2	1	1	2	0	0	1	0	9
2008	0	0	3	2	2	4	2	2	3	1	2	0	21
5 Year Total	1	4	5	5	10	9	7	7	7	5	9	1	70

Table 7: Age group of Motorcyclist casualties in Manly LGA, 2008 – 2012.

	0-4	5-12	13-16	17-20	21-25	26-29	30-39	40-49	50-59	60-69	70+	Unknown	Total
2012	0	0	0	0	1	2	6	2	1	0	0	0	12
2011	0	0	0	2	1	1	5	2	0	1	0	0	12
2010	0	0	0	0	1	1	6	4	4	1	0	0	17
2009	0	0	0	2	3	5	9	1	3	0	0	1	24
2008	0	0	0	1	1	2	3	4	0	0	0	0	11
5 Year Total	0	0	0	5	7	11	29	13	8	2	0	1	76

Table 8: Age group of Pedal Cyclist casualties, 2008 – 2012.

	0-4	5-12	13-16	17-20	21-25	26-29	30-39	40-49	50-59	60-69	70+	Unknown	Total
2012	0	0	0	0	2	1	5	8	1	1	0	0	18
2011	0	0	0	0	4	0	1	3	1	0	1	0	10
2010	0	0	0	1	1	3	4	3	2	1	0	0	15
2009	0	1	1	0	0	1	7	1	0	0	0	0	11
2008	0	0	0	1	0	2	3	2	3	1	1	0	13
5 Year Total	0	1	1	2	7	7	20	17	7	3	2	0	67

Table 9: Motor vehicle controllers by age and gender in Manly LGA, 2012.

	0-16	17-20	21-25	26-29	30-39	40-49	50-59	60-69	70+	Unknown	Total
Male	0	14	14	24	35	37	18	18	7	3	170
Female	0	9	17	6	27	17	12	6	8	2	104
Unknown	0	0	0	0	0	0	1	0	0	7	8
Total	0	23	31	30	62	54	31	24	15	12	282

Table 10: Casualty Crashes of road user groups, sex and age in Manly LGA, 2012.

Age	Sex	Motor Vehicle Driver	Motor Vehicle Passenger	Motor Cyclist (inc pass)	Pedal Cyclist (inc Pass)	Pedestrian	Total
0-4	M	0	0	0	0	0	0
	F	0	1	0	0	1	2
	U	0	0	0	0	0	0
5-12	M	0	3	0	0	1	4
	F	0	1	0	0	1	2
	U	0	0	0	0	0	0
13-16	M	0	1	0	0	0	1
	F	0	0	0	0	0	0
	U	0	0	0	0	0	0
17-20	M	2	1	0	0	0	3
	F	1	0	0	0	0	1
	U	0	0	0	0	0	0
21-25	M	2	0	1	2	0	5
	F	3	1	0	0	1	5
	U	0	0	0	0	0	0
26-29	M	3	0	1	1	0	5
	F	1	0	1	0	0	2
	U	0	0	0	0	0	0
30-39	M	3	0	6	2	0	11
	F	2	0	0	3	0	5
	U	0	0	0	0	0	0
40-49	M	3	0	2	7	0	12
	F	0	0	0	1	1	2
	U	0	0	0	0	0	0
50-59	M	3	1	1	1	1	7
	F	1	1	0	0	1	3
	U	0	0	0	0	0	0
60-69	M	3	0	0	1	0	4
	F	2	2	0	0	0	4
	U	0	0	0	0	0	0
70+	M	3	0	0	0	2	5
	F	1	1	0	0	1	3
	U	0	0	0	0	0	0
Unknown	M	0	1	0	0	0	1
	F	0	1	0	0	0	1
	U	0	0	0	0	0	0
Total male		22	7	11	14	4	58
Total female		11	8	1	4	6	30
Unknown							
Total		33	15	12	18	10	88

Appendix B: Pedestrian crashes in Manly LGA, 2012.

	Pedestrian Travelling	Vehicle	Vehicle Type	Date	Time	Weather	Injury /Fatal	Speed km/h	Collision Point
1	East in Condamine St BALGOWLAH	East in Condamine St 160m north at Sydney Rd	CAR	22/11/2012 Thursday	4:30pm	Fine	1 Injury	10	Pedestrian farside RUM 2
2	**West in Sydney Rd FAIRLIGHT TOY–ped in toy vehicle	South in Sydney Rd outside house no. 168	4WD	27/08/2012 Monday	3:05pm	Fine	1 Injury	5	Driveway RUM 7
3	**East in Belgrave St MANLY	West in Sydney Rd 2m north of Sydney Rd	TRK	25/05/2012 Friday	2:00pm	Overcast	2 Injury	5	Pedestrian nearside RUM 0
4	West in Crescent St MANLY	East in Griffiths St at Griffiths St	OMV	25/04/2012 Wednesday	6:20pm	Fine	1 Injury	10	Pedestrian nearside RUM 0
5	South in East Esplanade MANLY	East in East Esplanade 1m west of Wentworth St	VAN	03/01/2012 Tuesday	9:00am	Fine	1 Injury	5	Pedestrian nearside RUM 0
6	**Pittwater Rd MANLY	Pittwater Rd 20m north Raglan St	TRK	26/09/2012 Wednesday	9:00pm	Fine	1 Injury	UNK	Pedestrian nearside RUM 0
7	South in Raglan St MANLY	South in Pittwater Rd 2m East of Pittwater Rd	CAR	08/01/2012 Sunday	8:50pm	Raining	1 Injury	5	Pedestrian nearside RUM 0
8	North in Wentworth St MANLY	West in Wentworth St 40m East East Esplanade	4WD	20/10/2012 Saturday	11:00am	Fine	1 Injury	3	Pedestrian farside RUM 2
9	South in West Esplanade MANLY	East in West Esplanade 20m East of Eustace St	4WD	27/09/2012 Thursday	12:10pm	Fine	1 Injury	20	Pedestrian emerging RUM 1

***State Roads controlled by Roads and Maritime Services*

Three of the pedestrian casualty crashes were on state roads and the other six were on local roads. (10 pedestrian injuries as item number 3 sustained 2 pedestrian injuries).

Appendix C: Motor Cyclist crashes (including Motor Scooters) in Manly LGA, 2012.

	Motorcycle (MC) Travelling	Vehicle	Vehicle Type	Date	Time	Weather	Injury Fatal	Speed km/h	Collision Point
1	South in Condamine St BALGOWLAH	CAR – South in Condamine St 26m S. of Burnt Bridge Creek Bypass 4WD – South in Condamine St	CAR 4WD	18/12/2012 Tuesday	2:00pm	Fine	1 Injury	30 CAR 30 MC 30 4WD	Lane change right RUM 34
2	West in Kitchener St BALGOWLAH	North in Rickard Street at Rickard St	CAR	22/10/2012 Monday	7:53am	Fine	1 Injury	5 CAR 10 MC	Right near RUM 13
3	**West in Sydney Road BALGOWLAH	South in Boyle St at Boyle St	OMV	29/01/2012 Sunday	5:15pm	Fine	1 Injury	20 OMV 30 MC	Cross traffic RUM 10
4	**East in Sydney Rd BALGOWLAH	West in Sydney Rd at Condamine St	OMV	16/10/2012 Tuesday	9:30pm	Fine	1 Injury	UNK CAR UMK MC	Right through RUM 21
5	**West in Sydney Road BALGOWLAH	West in Sydney Rd 130m East of Condamine St	4WD	24/09/2012 Monday	8:30am	Fine	0 Injury	50 4WD 40 MC	Lane change left RUM 35
6	**West in Sydney Road BALGOWLAH	West in Sydney Rd 150m West of Condamine St	OMV	21/02/2012 Tuesday	8:25pm	Fine	0 Injury	45 OMV 40 MC	Lane change left RUM 35
7	**West in Sydney Rd FAIRLIGHT	East in Sydney Rd at Woods Pde	TRK	29/08/2012 Wednesday	4:10pm	Fine	1 Injury	30 TRK UNK MC	Right through RUM 21
8	South in Balgowlah Rd MANLY		N/A	26/09/2012 Wednesday	6:50am	Overcast	1 Injury	30 MC	Out of control on bend RUM 88
9	**West in Pittwater Rd MANLY	East in Pittwater Rd 100m East of Balgowlah Rd	4WD	16/02/2012 Thursday	3:45pm	Fine	0 Injury	5 4WD 30 MC	Right through RUM 21
10	North in Quinton Rd MANLY	OMV, OMV – Both Parked, South in Quintin Rd, OMV – North in Quintin Rd 50m N. Sheridan Place	OMV OMV OMV	07/03/2012 Wednesday	12:15pm	Fine	1 Fatal 1 Injury	30 MC 0 OMV 0 OMV 30 OMV	Other same direction RUM 39
11	**North in Frenchs Forest Road SEAFORTH	East in Peacock St at Peacock Street	CAR	11/02/2012 Saturday	10:50am	Fine	1 Injury	15 CAR 40 MC	Right near RUM 13
12	**South in Manly Rd SEAFORTH	West in Heaton Avenue at Heaton Avenue	CAR	13/07/2012 Friday	8:05am	Fine	1 Injury	2 CAR 50 MC	Left near RUM 16
13	**North in Manly Road 200m S of Sydney Road SEAFORTH	North in Manly Road	UTE	10/12/2012 Monday	2:30pm	Overcast	1 Injury	UNK MC 0 UTE	Rear end RUM 30

14	**East in Sydney Road 10m West of Manly Road SEAFORTH	East in Sydney Road	4WD	19/06/2012 Tuesday	7:00am	Fine	1 Injury	UNK MC O 4WD	Vehicle door RUM 63
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***These crashes occurred on state roads.*

Ten of the crashes above were on state roads the other four were on local roads.

Appendix D: Pedal Cyclist crashes in Manly LGA, 2012.

	Pedal Cycle Travelling	Vehicle	Vehicle Type	Date	Time	Weather	Injury /Fatal	Speed km/h	Collision Point
1	East in Balgowlah Rd BALGOWLAH	South in Rosebery St. at Rosebery St	CAR	29/08/2012 Wednesday	5:30pm	Fine	1 Injury	5 CAR	Cross traffic RUM 10
2	East in Lauderdale Ave at King Avenue FAIRLIGHT	South in Lauderdale Ave	4WD	14/01/2012 Saturday	1:27pm	Overcast	1 Injury	0 4WD	Other maneuvering RUM 49
3	**East in Sydney Road 30m West of Brisbane Street FAIRLIGHT	East in Sydney Road (parked)	CAR	09/04/2012 Monday	12:00pm	Fine	1 Injury	0 CAR	Vehicle door RUM 63
4	North in Balgowlah Rd MANLY	South in Balgowlah Rd at Kenneth Rd	CAR	23/01/2012 Monday	10:30am	Fine	1 Injury	UNK CAR	Right through RUM 21
5	**South in Belgrave St at East Esplanade MANLY	South in Belgrave Street (parked)	TRK	27/03/2012 Tuesday	8:15am	Fine	1 Injury	0 TRK	Vehicle door RUM 63
6	North in North Steyne MANLY	South in North Steyne at North Steyne	CAR	24/05/2012 Thursday	6:45am	Fine	1 Injury	10 CAR	Right through RUM 21
7	North in Darley Rd 6m North of Ashburner St MANLY	North in Darley Road (parked)	4WD	04/11/2012 Sunday	8:50am	Fine	1 Injury	0 Car	Off road left – object RUM 71
8	West in Darley Road MANLY	East in Darley Road 185m East of Marshall St	CAR	24/05/2012 Thursday	8:10am	Fine	1 Injury	UNK CAR	Right through RUM 21
9	West in Darley Road MANLY	East in Darley Road 10m West of North Head Scenic Drive	CAR	27/12/2012 Thursday	8:35am	Fine	1 Injury	10 CAR	Right through RUM 21
10	South in North Steyne 20m South of Ceramic Lane MANLY	South in North Steyne	CAR	28/06/2012 Thursday	4:00pm	Fine	1 Injury	5 CAR	Left rear RUM 31
11	North in North Steyne St MANLY	East in Raglan St at Raglan Street	OMV	14/07/2012 Saturday	12:01am	Fine	1 Injury	UNK OMV	Right near RUM 13
12	**North in Pittwater Rd 20m North of Raglan Street MANLY	North in Pittwater Road (parked)	OMV	28/05/2012 Monday	6:00pm	Fine	1 Injury	0 OMV	Vehicle door RUM 63
13	**East in Sydney Road 200m West of Pittwater Road MANLY	East in Sydney Road	UTE	08/11/2012 Thursday	10:00am	Fine	1 Injury	0 UTE	Rear end RUM 30
14	North in	South in Brook	4WD	13/11/2012	7:30pm	Fine	1 Injury	UNK	Right

	Brook Road SEAFORTH	Rd 50m South of Yatama St		Tuesday				4WD	through RUM 21
15	**West in Manly Road at Avona Cres SEAFORTH	N/A	N/A	01/04/2012 Sunday	9:30am	Fine	1 Injury	N/A	Off road left – object RUM 71
16	**South in Spit Road at The Spit Road SEAFORTH	N/A	N/A	14/04/2012 Saturday	8:55am	Fine	1 Injury	N/A	On road – out of control RUM 74
17	XX West in North Head Scenic Drive MANLY	South in North Head Scenic Drive 10m West of North Fort St	PED	14/10/2012 Sunday	3:00pm	Fine	2 Injury	UNK	Pedestrian far side RUM 2

***These crashes occurred on state roads.*

***XX** This is in the Manly LGA, however Sydney Harbour National Park is responsible for this road.*

Six of the crashes above were on state roads and accounted for 6 injuries, one crash was on North Head Scenic Drive and accounted for 2 injuries, and ten crashes were on Manly local roads.

Appendix E: Road User Movement (RUM) codes

PEDESTRIAN ON FOOT OR IN TOY CAR	VEHICLES FROM ADJACENT DIRECTIONS (INTERSECTIONS ONLY)	VEHICLES FROM OPPOSING DIRECTIONS	VEHICLES IN SAME DIRECTION	MANOEUVRING	OVERTAKING	CN PATH	OFF PATH, ON STRAIGHT	OFF PATH, ON CURVE OR TURNING	PASSENGERS & MISCELLANEOUS
00 NEAR SIDE ON FOOT OR IN TOY CAR	10 CROSS TRAFFIC	20 HEAD ON (not overtaking)	30 REAR END	40 U TURN	50 HEAD ON (not side swept)	60 PARKED	70 OFF CARRIAGEWAY TO LEFT	80 OFF CARRIAGEWAY TO LEFT ON RIGHT BEND	90 FELL INTO/ON VEHICLE
01 EMERGING	11 RIGHT FAR	21 RIGHT THRU	31 LEFT REAR	41 U TURN INTO FIXED OBJECT/ PRO VEH	51 OUT OF CONTROL	61 DOUBLE PARKED	71 LEFT OFF CARRIAGEWAY INTO OBJECT/ PARKED VEH	81 OFF CARRIAGEWAY, LEFT ON R/H BEND INTO OBJECT/ PRO VEH	91 LOAD OR MISILE STRUCK VEHICLE
02 FAR SIDE	12 LEFT FAR	22 LEFT THRU	32 RIGHT REAR	42 LEAVING PARKING	52 PULLING OUT	62 ACCIDENT OR BROKEN DOWN	72 OFF CARRIAGEWAY TO RIGHT	82 OFF CARRIAGEWAY TO RIGHT ON RIGHT BEND	92 STRUCK TRAIN / AIRCRAFT
03 PLAYING/WORKING LYING, STANDING ON CARRIAGEWAY	13 RIGHT NEAR	23 RIGHT LEFT	33 LANE SIDE SWIPE	43 ENTERING PARKING	53 OVERTAKE TURNING	63 VEHICLE DOOR	73 RIGHT OFF CARRIAGEWAY INTO OBJECT/ PARKED VEH	83 OFF CARRIAGEWAY RIGHT ON L/H BEND INTO OBJECT/ PRO VEH	93 PARKED VEH RUN AWAY INTO OBJECT/PRO VEH
04 WALKING WITH STAFFIC	14 TWO R TURNING	24 RIGHT/RIGHT	34 LANE CHANGE RIGHT (not overtaking)	44 PARKING VEHICLES ONLY	54 CUTTING IN	64 PERMANENT OBSTRUCTION ON CARRIAGEWAY	74 OUT OF CONTROL ON CARRIAGEWAY	84 OFF CARRIAGEWAY TO RIGHT ON LEFT BEND	94 PARKED VEH RUN AWAY INTO VEHICLE
05 FACING TRAFFIC	15 RIGHT/LEFT FAR	25 LEFT/LEFT	35 LANE CHANGE LEFT	45 REVERSING	55 PULLING OUT REAR END	65 TEMPORARY OBSTRUCTIONS	75 OFF END OF ROAD AT INTERSECTION	85 OFF CARRIAGEWAY TO LEFT ON L/H BEND INTO OBSTACLE/PRO VEH	95 STRUCK WHILE PARKING ALIGHTING VEHICLE
06 ON FOOTPATH MIDWAY	16 LEFT NEAR	26 RIGHT TURN SIDE SWIPE	36 RIGHT TURN SIDE SWIPE	46 REVERSING INTO FIXED OBJECT/ PRO VEHICLE	56 PULLING OUT REAR END	66 STRUCK COLLECTOR ON CARRIAGEWAY	76 OFF CARRIAGEWAY TO LEFT ON LEFT BEND	86 OFF CARRIAGEWAY TO LEFT ON L/H BEND INTO OBSTACLE/PRO VEH	
07 DRIVEWAY	17 LEFT/RIGHT FAR	27 LEFT TURN SIDE SWIPE	37 LEFT TURN SIDE SWIPE	47 EMERGING FROM DRIVEWAY	57 PULLING OUT REAR END	67 ANIMAL (not riding)	77 OFF CARRIAGEWAY TO LEFT ON L/H BEND INTO OBSTACLE/PRO VEH	87 OFF CARRIAGEWAY TO LEFT ON L/H BEND INTO OBSTACLE/PRO VEH	
18 TWO LEFT TURNING				48 FROM FOOTPATH	58 PULLING OUT REAR END		78 OFF CARRIAGEWAY TO LEFT ON L/H BEND INTO OBSTACLE/PRO VEH	88 OUT OF CONTROL ON CARRIAGEWAY	98 OTHER
09 OTHER PEDESTRIAN	19 OTHER ADJACENT	29 OTHER OPPOSING	39 OTHER SAME DIRECTION	49 OTHER MANOEUVRING	59 OTHER OVERTAKING	69 OTHER ON PATH	79 OTHER STRAIGHT	89 OTHER CURVE	99 UNKNOWN