Table 5.7   **Land Use AM and PM Peak Trip Generation Rates**

Year	Stage No.	Land Use Category	PM Peak Trip Generation Rates					AM Peak Trip Generation Rates				
			TGR	Units	TGR	Units	Per	TGR	Units	TGR	Units	Per
2016	1	PRIVATE HOSPITAL	0.25	BEDS	0.4	STAFF		0.47	BEDS	0.06	STAFF	-10.21
2016	1	RETAIL - A(SS)	4.6	m2 GFA			100	2.3	m2 GFA			100
2016	2	PRIVATE HOSPITAL	0.25	BEDS	0.4	STAFF		0.47	BEDS	0.06	STAFF	
2016	3	COMMERCIAL	2	m2 GFA			100	2	m2 GFA			100
2016	3	MEDICAL CENTRE	8.8	m2 GFA			100	10.4	m2 GFA			100
2016	3	PRIVATE HOSPITAL	0.25	BEDS	0.4	STAFF		0.47	BEDS	0.06	STAFF	
2016	3	RETAIL - A(SS)	4.6	m2 GFA			100	2.3	m2 GFA			100
2016	4	PRIVATE HOSPITAL	0.25	BEDS	0.4	STAFF		0.47	BEDS	0.06	STAFF	
2016	4	RETAIL - A(SS)	4.6	m2 GFA			100	2.3	m2 GFA			100
2016	5A	N/A										
2016	5A	PRIVATE HOSPITAL	0.25	BEDS	0.4	STAFF		0.47	BEDS	0.06	STAFF	
2016	5B	GYMNASIUM	3	m2 GFA			100	3	m2 GFA			100
2016	5B	RESTAURANT	5	m2 GFA			100	2.5	m2 GFA			100
2016	5B	RETAIL - A(SM)	15.5	m2 GFA			100	7.75	m2 GFA			100
2016	5B	RETAIL - A(SS)	4.6	m2 GFA			100	2.3	m2 GFA			100
2016	5C	PRIVATE HOSPITAL	0.25	BEDS	0.4	STAFF		0.47	BEDS	0.06	STAFF	
2026	6	RESIDENTIAL UNITS	0.29	units			1	0.29	units			1
2026	7	COMMERCIAL	2	m2 GFA			100	2	m2 GFA			100
2026	7	RESIDENTIAL UNITS	0.29	units			1	0.29	units			1
2026	8A	AGED & DISABLED	0.2	bed			1	0.2	bed			1
2026	8A	N/A										
2026	8A	RETAIL - A(SS)	4.6	m2 GFA			100	2.3	m2 GFA			100
2026	8B	AGED & DISABLED	0.2	unit			1	0.2	unit			1

Note: Negative Traffic generation rate for Stage 1 Hospital is as a result of the constant in the RTA formula

Table 5.8   **Traffic Generation Prior to Directional Splits**

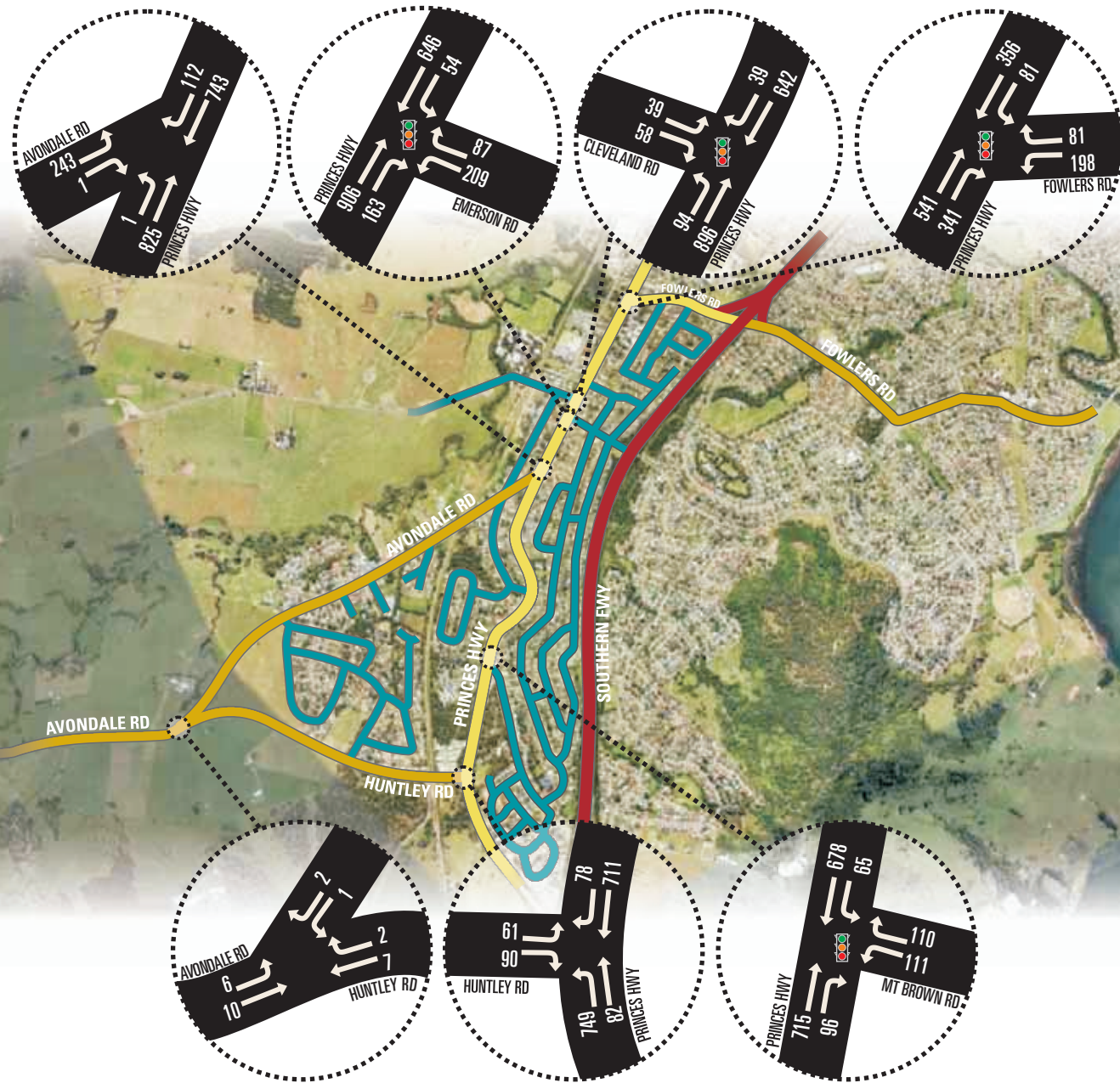| Year	Stage No.	Land Use Category	Daily Trip Generation Rates			Total Vehicle Trips			Trip Containment		External Vehicle Trips		
			TGR	Units	Per	PM (vph)	AM (vph)	Daily (vpd)	Internal	External	PM (vph)	AM (vph)	Daily (vpd)
2016	1	PRIVATE HOSPITAL				87	12	494	0%	100%	87	12	494
2016	1	RETAIL - A(SS)	55.5	m2 GFA	100	16	8	194	75%	25%	4	2	49
2016	2	PRIVATE HOSPITAL				6	1	34	0%	100%	6	1	34
2016	3	COMMERCIAL	10	m2 GFA	100	80	80	400	75%	25%	20	20	100
2016	3	MEDICAL CENTRE		m2 GFA	100	352	416	3840	10%	90%	317	374	3456
2016	3	PRIVATE HOSPITAL				9	6	74	0%	100%	9	6	74
2016	3	RETAIL - A(SS)	55.5	m2 GFA	100	16	8	194	75%	25%	4	2	49
2016	4	PRIVATE HOSPITAL				8	10	90	0%	100%	8	10	90
2016	4	RETAIL - A(SS)	55.5	m2 GFA	100	11	6	136	75%	25%	3	1	34
2016	5A	N/A							0%	100%	0	0	0
2016	5A	PRIVATE HOSPITAL				209	205	2068	0%	100%	209	205	2068
2016	5B	GYMNASIUM	20	m2 GFA	100	21	21	140	40%	60%	13	13	84
2016	5B	RESTAURANT	60	m2 GFA	100	50	25	600	50%	50%	25	13	300
2016	5B	RETAIL - A(SM)	147.5	m2 GFA	100	434	217	4130	25%	75%	326	163	3098
2016	5B	RETAIL - A(SS)	55.5	m2 GFA	100	64	32	777	25%	75%	48	24	583
2016	5C	PRIVATE HOSPITAL				7	1	38	0%	100%	7	1	38
2026	6	RESIDENTIAL UNITS	2.9	units	1	15	15	145	50%	50%	7	7	73
2026	7	COMMERCIAL	10	m2 GFA	100	199	199	995	75%	25%	50	50	249
2026	7	RESIDENTIAL UNITS	2.9	units	1	23	23	232	50%	50%	12	12	116
2026	8A	AGED & DISABLED	2	bed	1	56	56	560	0%	100%	56	56	560
2026	8A	N/A							0%	100%	0	0	0
2026	8A	RETAIL - A(SS)	55.5	m2 GFA	100	5	2	58	75%	25%	1	1	15
2026	8B	AGED & DISABLED	2	unit	1	8	8	84	0%	100%	8	8	84

       Daily Trips assumed to be 10 x average of AM/PM Peak

Note: Trip Containment has been estimated based on interaction between landuses within site

Table 5.9   **Final Traffic Generation – Scenario 1 - Business as Usual**

Year	Stage No.	Land Use Category	Directional Splits				Peak Hour Vehicle Trips (vph)			
			AM IN	AM OUT	PM IN	PM OUT	AM IN	AM OUT	PM IN	PM OUT
2016	1	PRIVATE HOSPITAL	80%	20%	35%	65%	9	2	31	57
2016	1	RETAIL - A(SS)	80%	20%	30%	70%	2	0	1	3
2016	2	PRIVATE HOSPITAL	80%	20%	35%	65%	1	0	2	4
2016	3	COMMERCIAL	80%	20%	20%	80%	16	4	4	16
2016	3	MEDICAL CENTRE	80%	20%	35%	65%	300	75	111	206
2016	3	PRIVATE HOSPITAL	80%	20%	35%	65%	5	1	3	6
2016	3	RETAIL - A(SS)	80%	20%	30%	70%	2	0	1	3
2016	4	PRIVATE HOSPITAL	80%	20%	35%	65%	8	2	3	5
2016	4	RETAIL - A(SS)	80%	20%	30%	70%	1	0	1	2
2016	5A	N/A					0	0	0	0
2016	5A	PRIVATE HOSPITAL	80%	20%	35%	65%	164	41	73	136
2016	5B	GYMNASIUM	80%	20%	50%	50%	10	3	6	6
2016	5B	RESTAURANT	80%	20%	50%	50%	10	3	13	13
2016	5B	RETAIL - A(SM)	80%	20%	30%	70%	130	33	98	228
2016	5B	RETAIL - A(SS)	80%	20%	30%	70%	19	5	14	34
2016	5C	PRIVATE HOSPITAL	80%	20%	35%	65%	1	0	2	4
2026	6	RESIDENTIAL UNITS	80%	20%	20%	80%	6	1	1	6
2026	7	COMMERCIAL	80%	20%	20%	80%	40	10	10	40
2026	7	RESIDENTIAL UNITS	80%	20%	20%	80%	9	2	2	9
2026	8A	AGED & DISABLED	80%	20%	20%	80%	45	11	11	45
2026	8A	N/A					0	0	0	0
2026	8A	RETAIL - A(SS)	80%	20%	30%	70%	0	0	0	1
2026	8B	AGED & DISABLED	80%	20%	20%	80%	7	2	2	7
						TOTAL DEVELOPMENT VEHICLE TRIPS AT 2026	**785**	**195**	**389**	**831**

Figures 5.1 to **5.6** below show the AM and PM peak background traffic volumes plus development traffic generation for 2008, 2016 and 2026.
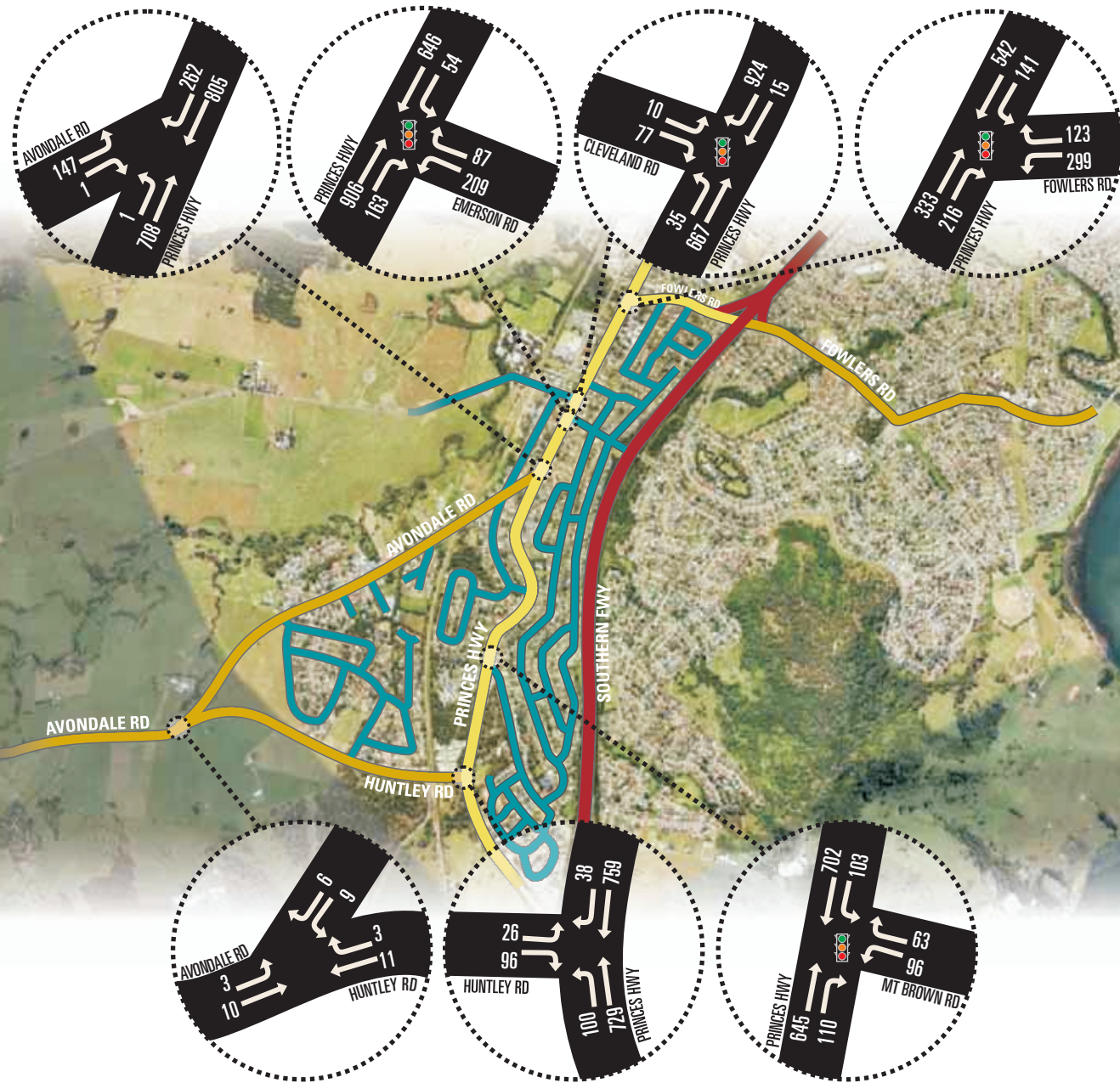
AVONDALE RD / PRINCES HWY
112
743
243
1
1
825

PRINCES HWY / EMERSON RD
646
54
87
209
906
163

CLEVELAND RD / PRINCES HWY
39
642
39
58
94
896

PRINCES HWY / FOWLERS RD
356
81
81
198
541
341

AVONDALE RD / HUNTLEY RD
2
1
2
7
6
10

HUNTLEY RD / PRINCES HWY
78
711
61
90
749
82

PRINCES HWY / MT BROWN RD
678
65
110
111
715
96

2008 AM Base plus IIHP Traffic Generation Turning Movement Volumes

Date: 06.04.09 | Project No: FR108121

Figure No: 5.1

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Avondale Rd / Princes Hwy
262 / 805
147
1
708

Princes Hwy / Emerson Rd
646 / 54
87
209
906 / 163

Cleveland Rd / Princes Hwy
10 / 924
77
15
35
667

Fowlers Rd / Princes Hwy
542 / 141
123
299
333 / 216

Avondale Rd / Huntley Rd
6 / 9
3
11
3
10

Huntley Rd / Princes Hwy
38 / 759
26
96
100
729

Princes Hwy / Mt Brown Rd
702 / 103
63
96
645 / 110

2008 PM Base plus IIHP Traffic Generation Turning Movement Volumes

Date: 06.04.09 | Project No: FR108121

Figure No: 5.2

Cardno Eppell Olsen — Shaping the Future