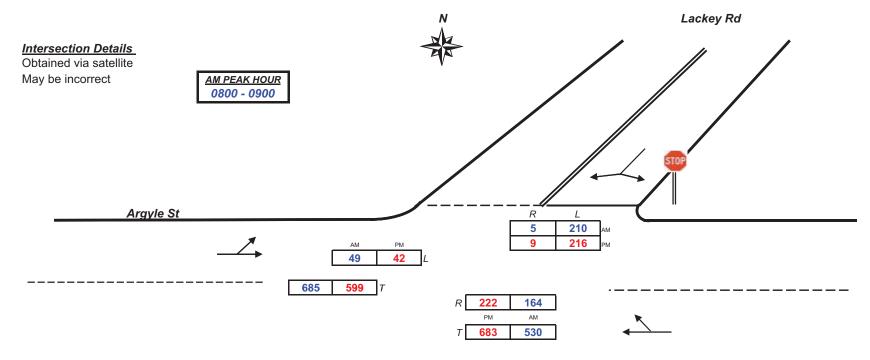
Appendix A		
Intersection Traffic Surveys		





Job No/Name : 5939 BERRIMA Additional Surveys Day/Date : Wednesday 17th February 2016



Argyle St

Combined figures only

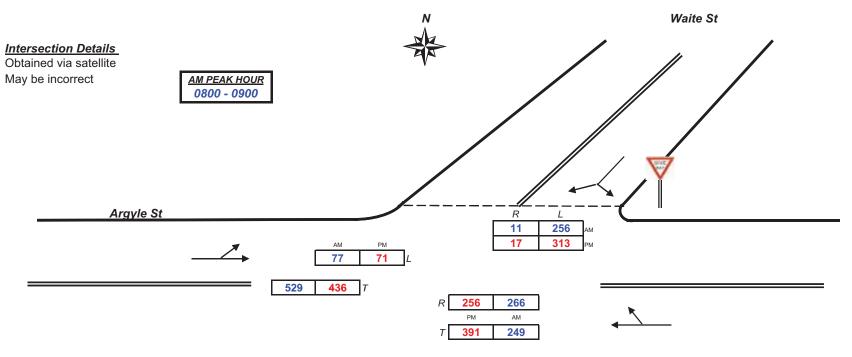
PM PEAK HOUR 1530 - 1630

Weather >>>





Job No/Name : 5939 BERRIMA Additional Surveys
Day/Date : Wednesday 17th February 2016



Argyle St

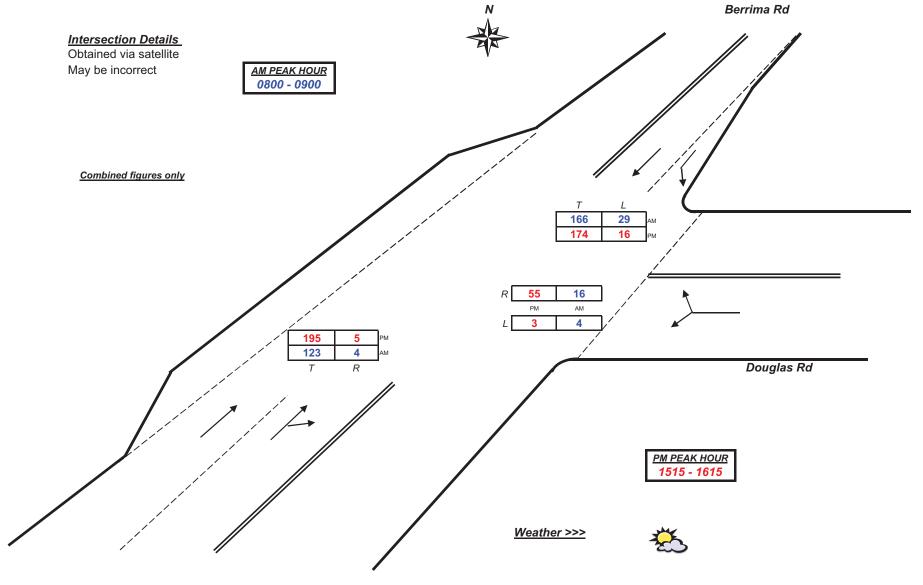
Combined figures only

PM PEAK HOUR 1500 - 1600

Weather >>>



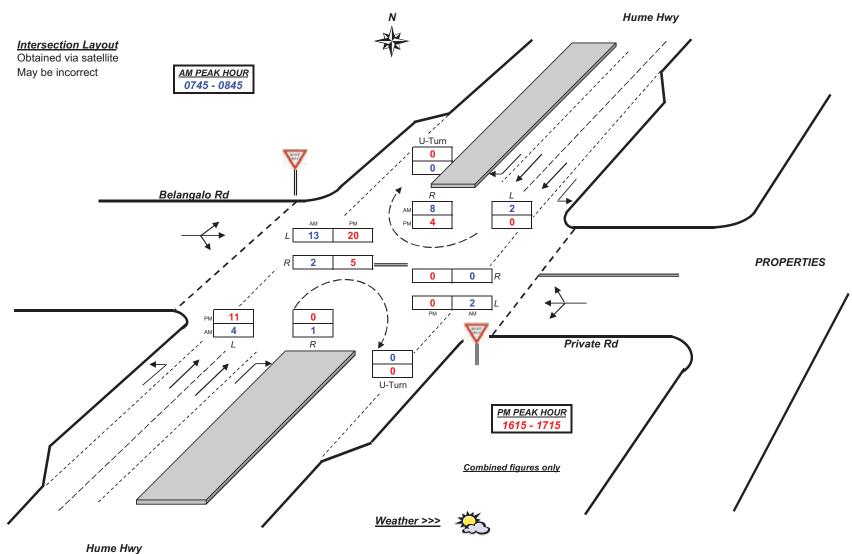
Job No/Name : 5939 BERRIMA Additional Surveys Day/Date : Thursday 18th February 2016

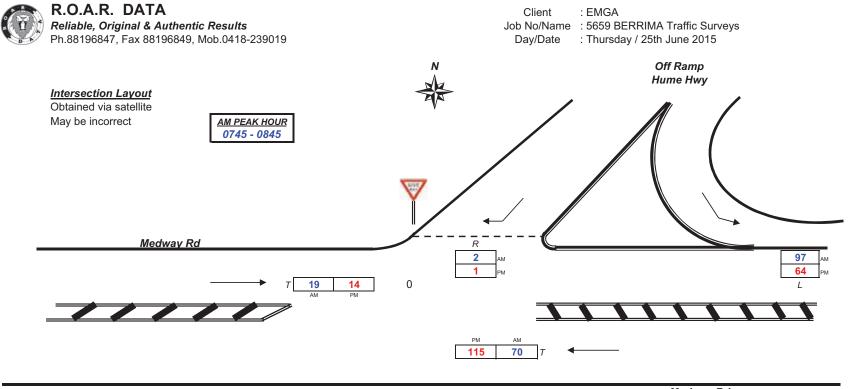


Berrima Rd



Job No/Name : 5939 BERRIMA Additional Surveys Day/Date : Thursday 18th February 2016





Medway Rd

PM PEAK HOUR 1515 - 1615

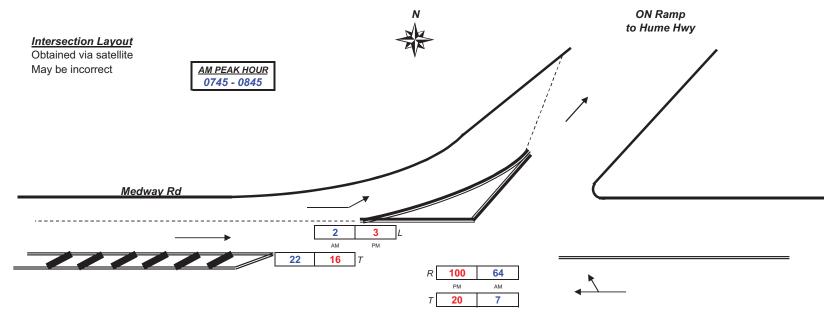
Combined figures only

Weather >>>





Job No/Name : 5659 BERRIMA Traffic Surveys Day/Date : Thursday / 25th June 2015



Medway Rd

PM PEAK HOUR 1530 - 1630

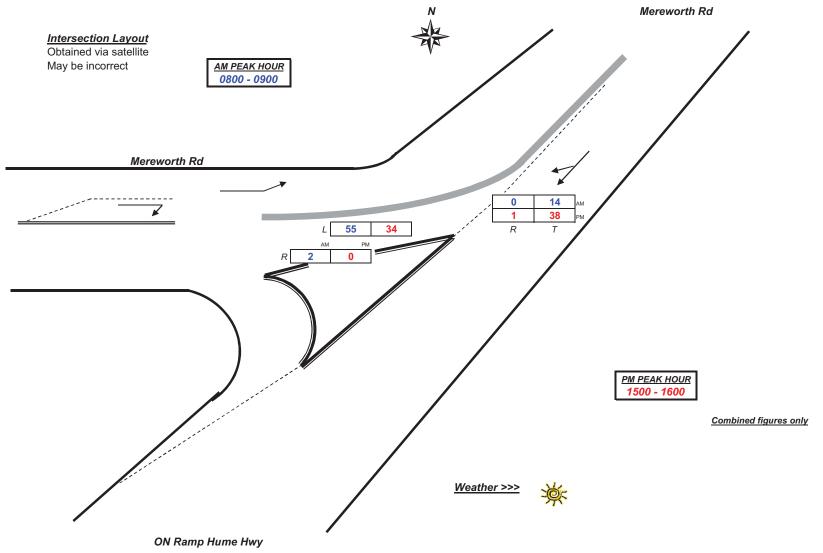
Combined figures only

Weather >>>





Job No/Name : 5659 BERRIMA Traffic Surveys Day/Date : Wednesday / 24th June 2015





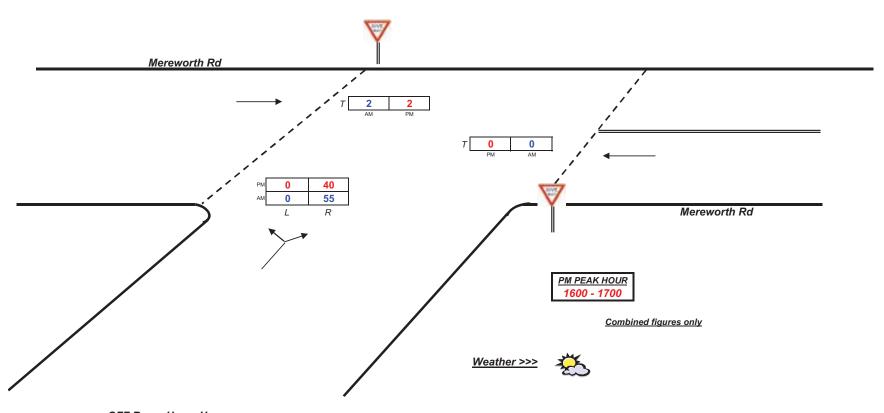
Job No/Name : 5659 BERRIMA Traffic Surveys Day/Date : Wednesday / 24th June 2015

N N

Intersection Layout
Obtained via satellite

Obtained via satellite
May be incorrect

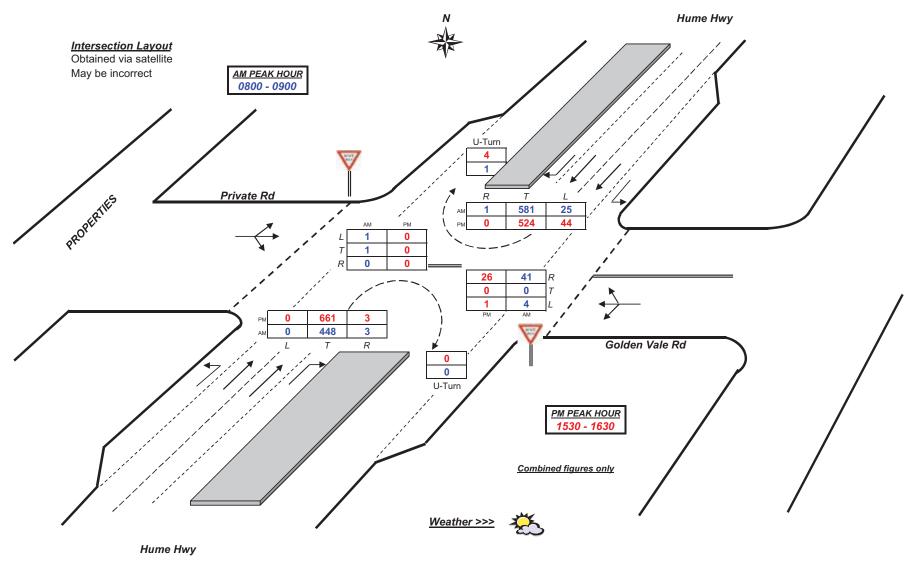
AM PEAK HOUR 0800 - 0900



OFF Ramp Hume Hwy

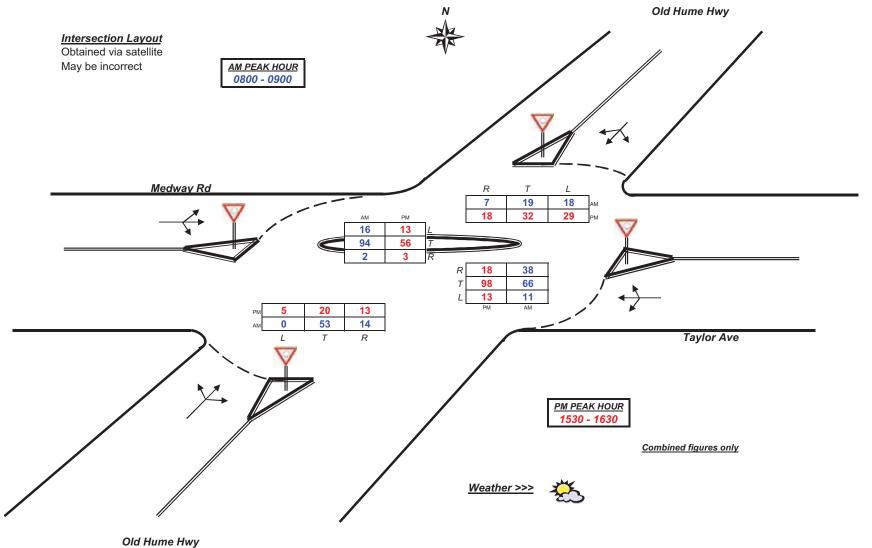


Job No/Name : 5659 BERRIMA Traffic Surveys Day/Date : Wednesday / 24th June 2015



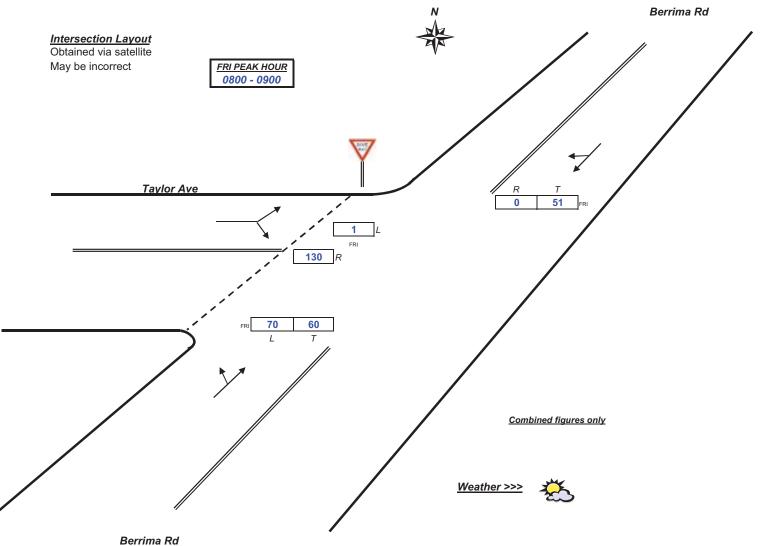


Job No/Name : 5659 BERRIMA Traffic Surveys Day/Date : Thursday / 25th June 2015



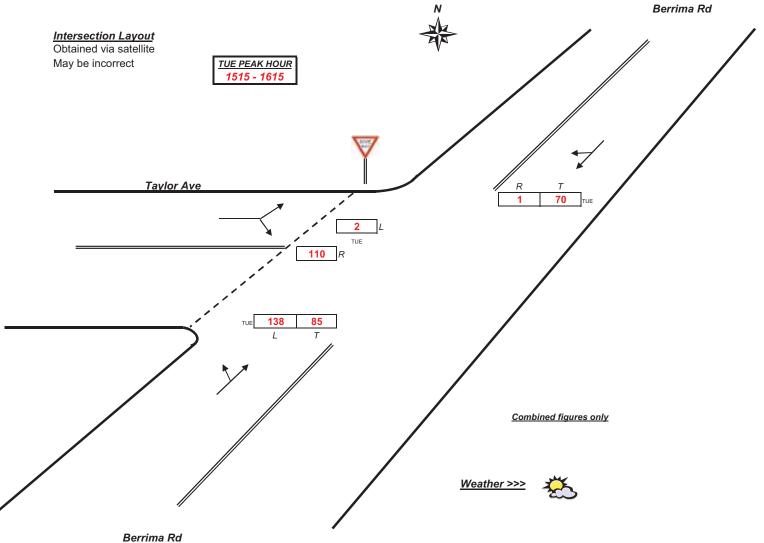


Job No/Name : 5659 BERRIMA Traffic Surveys Day/Date : Friday / 26th June 2015



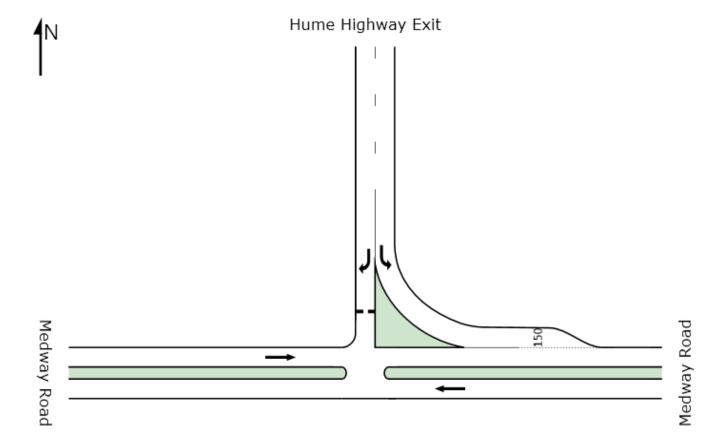


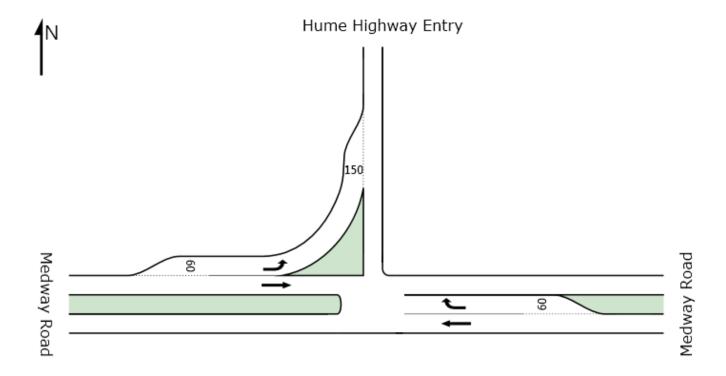
Client : EMGA
Job No/Name : 5659 BERRIMA Traffic Surveys
Day/Date : Tuesday / 23rd June 2015

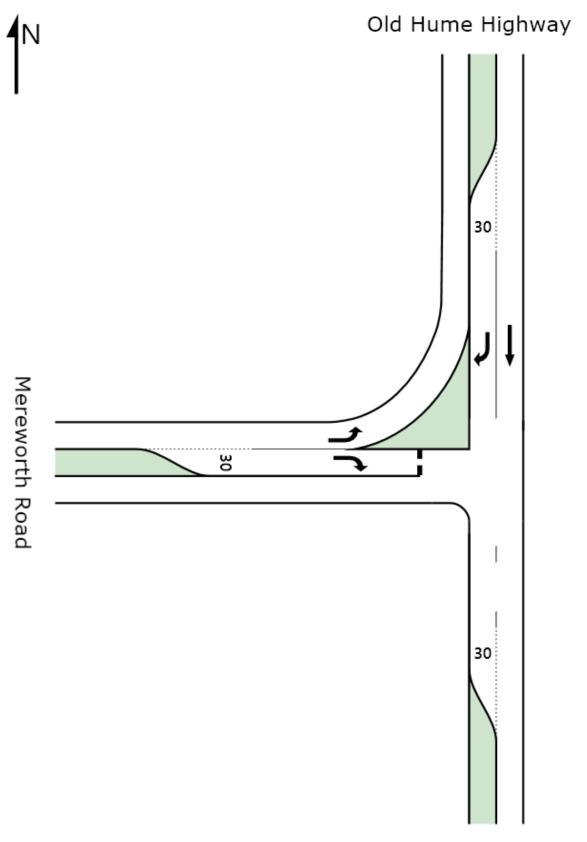


Appendix B	
SIDRA Intersection Delay Results for existing traffic	

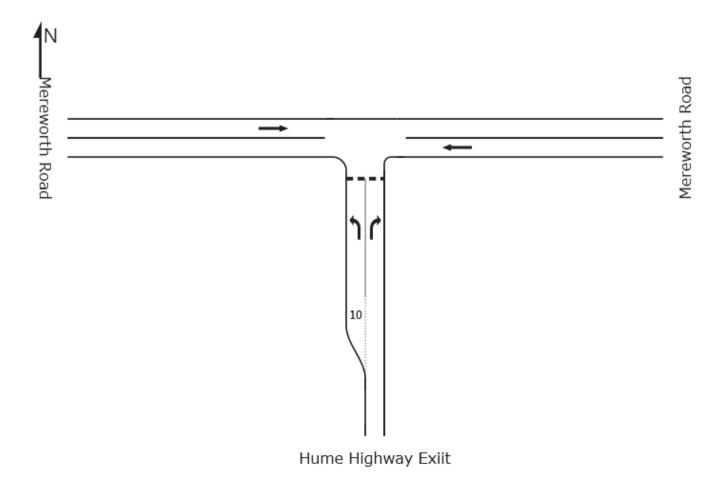


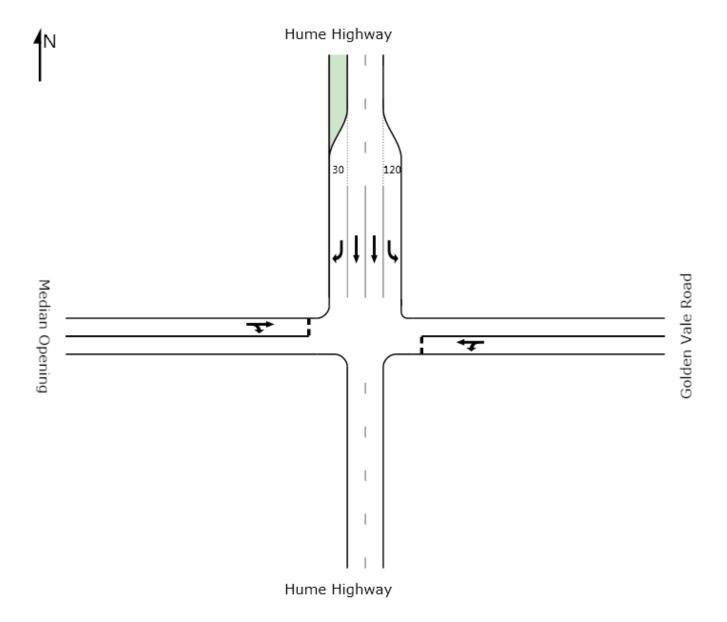


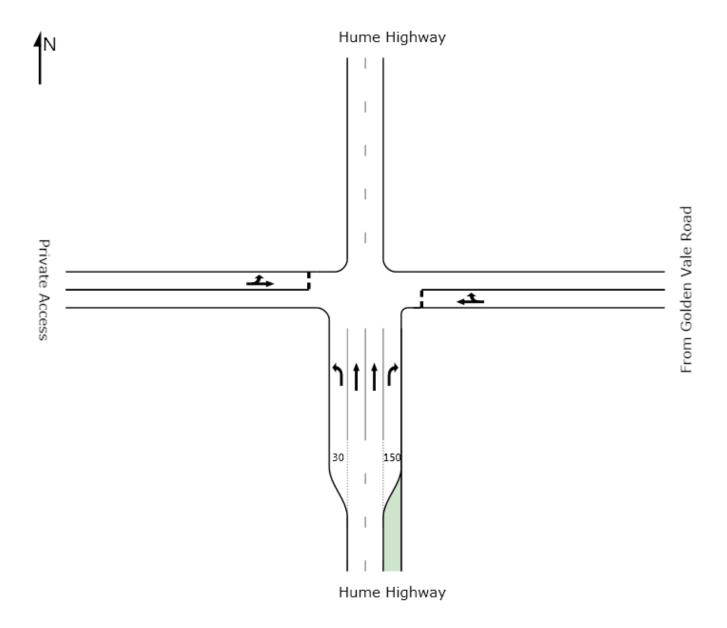




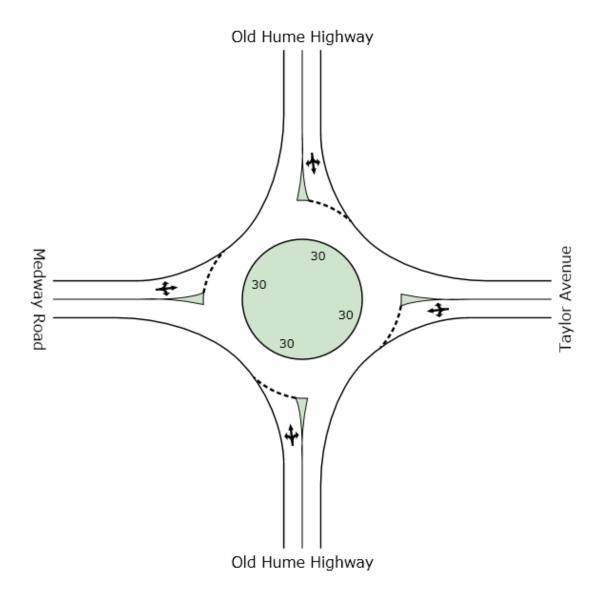
Hume Highway Entry

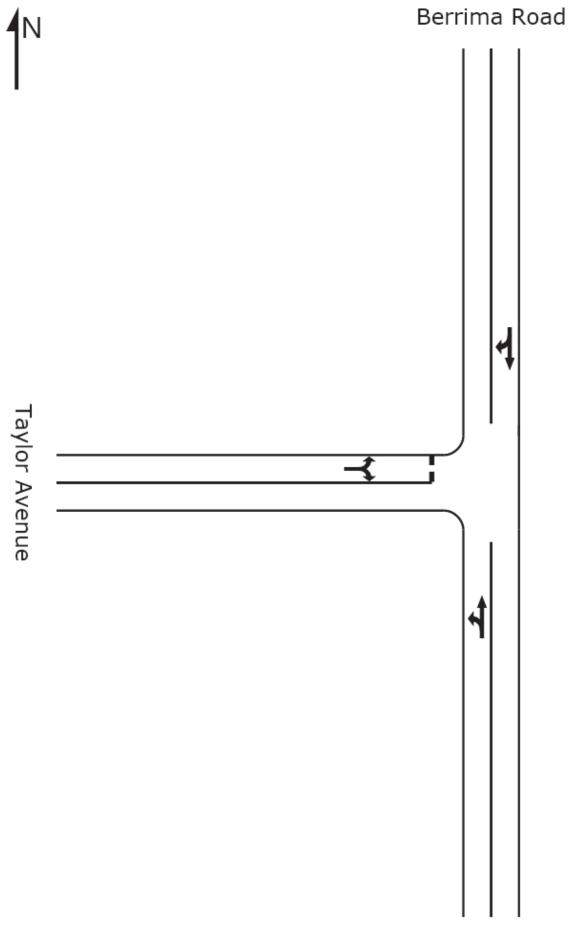








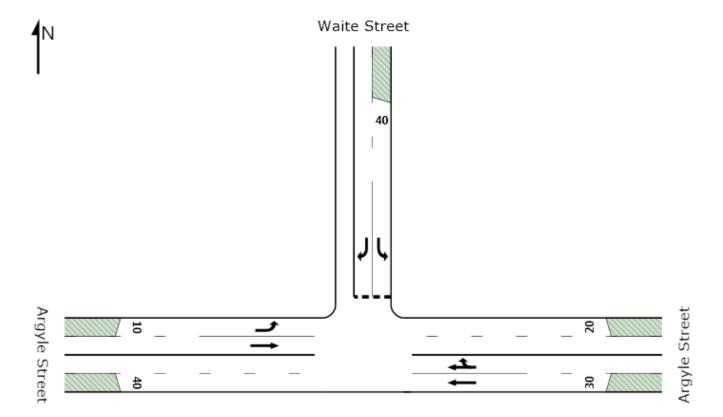


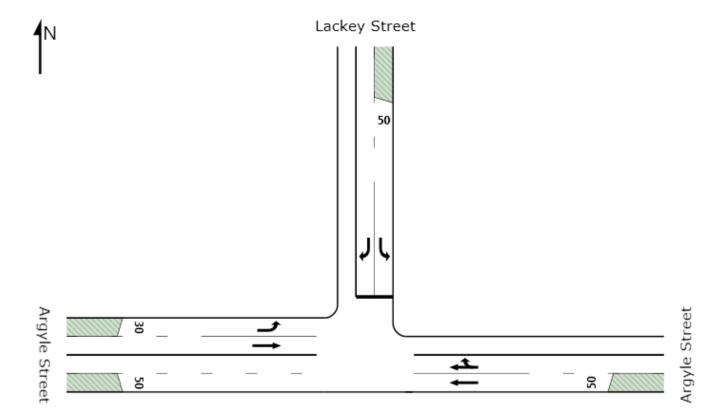


Berrima Road

Berrima Road

70





Site: Medway Road Interchange East Side AM Peak

Interchange East Side Intersection Giveway / Yield (Two-Way)

Mover	nent Per	formance - \	/ehicles								
Mov ID) Turn	Demand Flow veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Vehicles veh	of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
East: N	/ledway Ro	oad									
5	Т	74	18.6	0.042	0.0	LOSA	0.0	0.0	0.00	0.00	80.0
Approa	nch	74	18.6	0.042	0.0	NA	0.0	0.0	0.00	0.00	80.0
North: I	Hume Hig	ıhway Exit									
7	L	102	13.4	0.060	11.7	Χ	X	X	X	0.69	58.9
9	R	2	0.0	0.003	11.6	LOS A	0.0	0.1	0.25	0.66	57.9
Approa	nch	104	13.1	0.060	11.7	LOSA	0.0	0.1	0.01	0.69	58.8
West: N	Medway R	Road									
11	Т	20	5.3	0.011	0.0	LOSA	0.0	0.0	0.00	0.00	80.0
Approa	nch	20	5.3	0.011	0.0	NA	0.0	0.0	0.00	0.00	80.0
All Veh	icles	198	14.4	0.060	6.2	NA	0.0	0.1	0.00	0.36	67.3

X: Not applicable for Continuous movement.

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model used.

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Site: Medway Road Interchange East Side PM Peak

Interchange East Side Intersection Giveway / Yield (Two-Way)

Moven	nent Per	formance - \	/ehicles								
Mov ID	Turn	Demand Flow veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Vehicles veh	of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
East: N	1edway Ro	oad									
5	Т	121	7.0	0.065	0.0	LOS A	0.0	0.0	0.00	0.00	80.0
Approa	ch	121	7.0	0.065	0.0	NA	0.0	0.0	0.00	0.00	80.0
North: I	Hume Hig	hway Exit									
7	L	67	14.1	0.040	11.7	Χ	X	X	X	0.69	58.9
9	R	1	0.0	0.001	11.9	LOS A	0.0	0.0	0.30	0.65	57.5
Approa	ich	68	13.8	0.040	11.7	LOSA	0.0	0.0	0.00	0.69	58.8
West: N	Лedway R	Road									
11	Т	15	14.3	0.008	0.0	LOS A	0.0	0.0	0.00	0.00	80.0
Approa	ch	15	14.3	0.008	0.0	NA	0.0	0.0	0.00	0.00	80.0
All Vehi	icles	204	9.8	0.065	3.9	NA	0.0	0.0	0.00	0.23	71.5

X: Not applicable for Continuous movement.

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model used.

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Site: Medway Road Interchange West Side AM Peak

Interchange West Side Intersection Giveway / Yield (Two-Way)

		Demand		Deg.	Average	Level of	95% Back	of Queue	Prop.	Effective	Average
Mov ID	Turn	Flow	HV	Satn	Delay	Service	Vehicles	Distance	Queued	Stop Rate	Speed
		veh/h		v/c	sec		veh			per veh	km/h
East: Me	edway Ro	oad									
5	Т	7	0.0	0.004	0.0	LOSA	0.0	0.0	0.00	0.00	80.0
6	R	67	20.3	0.066	12.5	LOS A	0.2	1.8	0.09	0.73	58.4
Approac	h	75	18.3	0.066	11.2	NA	0.2	1.8	0.08	0.65	60.0
West: M	edway R	oad									
10	L	2	0.0	0.001	11.1	Χ	X	X	X	0.69	58.9
11	Т	23	4.5	0.012	0.0	LOSA	0.0	0.0	0.00	0.00	80.0
Approac	ch	25	4.2	0.012	0.9	NA	0.0	0.0	0.00	0.06	77.7
All Vehic	cles	100	14.7	0.066	8.6	NA	0.2	1.8	0.06	0.50	63.7

X: Not applicable for Continuous movement.

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model used.

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Site: Medway Road Interchange West Side PM Peak

Interchange West Side Intersection Giveway / Yield (Two-Way)

		Demand		Deg.	Average	Level of	95% Back	of Queue	Prop.	Effective	Average
Mov ID	Turn	Flow	HV	Satn	Delay	Service	Vehicles	Distance	Queued	Stop Rate	Speed
		veh/h		v/c	sec		veh			per veh	km/h
East: Me	edway Ro	ad									
5	Т	21	5.0	0.011	0.0	LOSA	0.0	0.0	0.00	0.00	80.0
6	R	105	7.0	0.089	11.5	LOS A	0.3	2.3	0.07	0.73	58.5
Approac	:h	126	6.7	0.089	9.6	NA	0.3	2.3	0.06	0.61	61.3
West: M	edway R	oad									
10	L	3	0.0	0.002	11.1	Χ	X	X	X	0.69	58.9
11	Т	17	6.3	0.009	0.0	LOSA	0.0	0.0	0.00	0.00	80.0
Approac	:h	20	5.3	0.009	1.7	NA	0.0	0.0	0.00	0.11	75.8
All Vehic	cles	146	6.5	0.089	8.5	NA	0.3	2.3	0.05	0.54	62.9

X: Not applicable for Continuous movement.

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

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Site: Mereworth Road Interchange **East Side AM Peak**

Interchange Ramp Intersection Giveway / Yield (Two-Way)

		Demand		Deg.	Average	Level of	95% Back	of Queue	Prop.	Effective	Average
Mov ID	Turn	Flow	HV	Satn	Delay	Service	Vehicles	Distance	Queued	Stop Rate	Speed
		veh/h		v/c	sec		veh			per veh	km/h
North: C	Old Hume	Highway									
8	Т	15	21.4	0.009	0.0	LOSA	0.0	0.0	0.00	0.00	80.0
9	R	1	0.0	0.001	10.8	LOS A	0.0	0.0	0.00	0.74	59.0
Approac	ch	16	20.0	0.009	0.7	NA	0.0	0.0	0.00	0.05	78.2
West: M	1ereworth	Road									
10	L	58	9.1	0.033	11.5	Χ	X	X	X	0.69	58.9
12	R	2	50.0	0.005	14.6	LOS B	0.0	0.1	0.11	0.72	58.3
Approac	ch	60	10.5	0.033	11.6	LOSA	0.0	0.1	0.00	0.69	58.8
All Vehic	cles	76	12.5	0.033	9.3	NA	0.0	0.1	0.00	0.56	62.1

X: Not applicable for Continuous movement.

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model used.

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Site: Mereworth Road Interchange **East Side PM Peak**

Interchange Ramp Intersection Giveway / Yield (Two-Way)

		Demand		Deg.	Average	Level of	95% Back	of Queue	Prop.	Effective	Average
Mov ID	Turn	Flow	HV	Satn	Delay	Service	Vehicles	Distance	Queued	Stop Rate	Speed
		veh/h		v/c	sec		veh			per veh	km/h
North: C	old Hume	Highway									
8	T	40	7.9	0.022	0.0	LOS A	0.0	0.0	0.00	0.00	80.0
9	R	1	0.0	0.001	10.8	LOS A	0.0	0.0	0.00	0.74	59.0
Approac	ch	41	7.7	0.022	0.3	NA	0.0	0.0	0.00	0.02	79.3
West: M	lereworth	Road									
10	L	36	8.8	0.020	11.5	Χ	X	X	X	0.69	58.9
12	R	1	0.0	0.002	11.3	LOSA	0.0	0.0	0.15	0.69	58.1
Approac	ch	37	8.6	0.020	11.5	LOSA	0.0	0.0	0.00	0.69	58.8
All Vehic	cles	78	8.1	0.022	5.6	NA	0.0	0.0	0.00	0.34	68.2

X: Not applicable for Continuous movement.

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

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Site: Mereworth Road Interchange **West Side AM Peak**

With Intersection Reconfigured to New E-W Priority Giveway / Yield (Two-Way)

Movem	ent Per	formance - \	Vehicles								
Mov ID	Turn	Demand Flow veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back (Vehicles veh	of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: F	Hume Hig	ghway Exiit									
1	L	1	0.0	0.002	10.9	LOS A	0.0	0.0	0.00	0.73	58.9
3	R	58	10.9	0.068	11.8	LOS A	0.3	2.1	0.03	0.75	58.6
Approac	ch	59	10.7	0.068	11.8	LOSA	0.3	2.1	0.03	0.75	58.6
East: Me	ereworth	Road									
5	Т	1	0.0	0.001	0.0	LOSA	0.0	0.0	0.00	0.00	80.0
Approac	ch	1	0.0	0.001	0.0	NA	0.0	0.0	0.00	0.00	80.0
West: M	ereworth	n Road									
11	Т	2	0.0	0.001	0.0	LOS A	0.0	0.0	0.00	0.00	80.0
Approac	ch	2	0.0	0.001	0.0	NA	0.0	0.0	0.00	0.00	80.0
All Vehic	cles	62	10.2	0.068	11.2	NA	0.3	2.1	0.03	0.71	59.4

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model used.

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Site: Mereworth Road Interchange **West Side PM Peak**

With Intersection Reconfigured to New E-W Priority Giveway / Yield (Two-Way)

Movem	ent Per	rformance -	Vehicles								
Mov ID	Turn	Demand Flow veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Vehicles veh	of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: F	Hume Hig	ghway Exiit									
1	L	1	0.0	0.002	10.9	LOS A	0.0	0.0	0.00	0.73	58.9
3	R	42	20.0	0.054	12.4	LOS A	0.2	1.7	0.04	0.76	58.6
Approac	ch	43	19.5	0.054	12.4	LOSA	0.2	1.7	0.04	0.75	58.6
East: Me	ereworth	Road									
5	Т	1	0.0	0.001	0.0	LOSA	0.0	0.0	0.00	0.00	80.0
Approac	ch	1	0.0	0.001	0.0	NA	0.0	0.0	0.00	0.00	80.0
West: M	lereworth	n Road									
11	Т	2	0.0	0.001	0.0	LOS A	0.0	0.0	0.00	0.00	80.0
Approac	ch	2	0.0	0.001	0.0	NA	0.0	0.0	0.00	0.00	80.0
All Vehic	cles	46	18.2	0.054	11.6	NA	0.2	1.7	0.03	0.70	59.7

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model used.

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Site: Golden Vale Road **Intersection East Side AM Peak**

Highway At Grade Access With Median Opening Giveway / Yield (Two-Way)

Moven	nent Per	formance - \	/ehicles								
Mov ID	Turn	Demand Flow veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Vehicles veh	of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
East: G	Golden Val	e Road									
4	L	4	25.0	0.127	18.8	LOS B	0.5	3.4	0.67	0.91	47.7
5	Т	43	0.0	0.127	15.4	LOS B	0.5	3.4	0.67	0.86	42.0
Approa	ich	47	2.2	0.127	15.7	LOS B	0.5	3.4	0.67	0.87	42.6
North: I	Hume Hig	hway									
7	L	26	12.0	0.015	13.2	LOS A	0.0	0.0	0.00	0.76	63.3
8	Т	612	13.4	0.170	0.0	LOS A	0.0	0.0	0.00	0.00	100.0
9	R	2	0.0	0.001	13.0	LOS A	0.0	0.0	0.00	0.80	62.5
Approa	ch	640	13.3	0.170	0.6	NA	0.0	0.0	0.00	0.03	98.1
West: N	Median Op	ening									
11	Т	4	0.0	0.015	15.5	LOS B	0.1	0.4	0.66	0.75	41.8
12	R	1	0.0	0.015	17.7	LOS B	0.1	0.4	0.66	0.86	47.8
Approa	ich	5	0.0	0.015	15.9	LOS B	0.1	0.4	0.66	0.78	43.2
All Vehi	icles	693	12.5	0.170	1.7	NA	0.5	3.4	0.05	0.10	90.9

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model used.

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Site: Golden Vale Road **Intersection East Side PM Peak**

Highway At Grade Access With Median Opening Giveway / Yield (Two-Way)

Moven	nent Per	formance - \	/ehicles								
Mov ID	Turn	Demand Flow veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Vehicles veh	of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
East: G	Golden Val	e Road								·	
4	L	1	0.0	0.075	17.0	LOS B	0.3	2.0	0.65	0.86	48.1
5	Т	27	0.0	0.075	15.0	LOS B	0.3	2.0	0.65	0.85	42.4
Approa	ich	28	0.0	0.075	15.1	LOS B	0.3	2.0	0.65	0.85	42.6
North: I	Hume Hig	hway									
7	L	46	0.0	0.025	12.5	LOS A	0.0	0.0	0.00	0.75	63.3
8	Т	552	22.3	0.162	0.0	LOS A	0.0	0.0	0.00	0.00	100.0
9	R	4	0.0	0.002	13.0	LOS A	0.0	0.0	0.00	0.80	62.5
Approa	ich	602	20.5	0.162	1.1	NA	0.0	0.0	0.00	0.06	96.4
West: N	Median Op	ening									
11	Т	3	0.0	0.012	15.4	LOS B	0.0	0.3	0.66	0.74	41.9
12	R	1	0.0	0.012	17.6	LOS B	0.0	0.3	0.66	0.84	47.9
Approa	ich	4	0.0	0.012	15.9	LOS B	0.0	0.3	0.66	0.76	43.5
All Vehi	icles	635	19.4	0.162	1.8	NA	0.3	2.0	0.03	0.10	91.7

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model used.

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Site: Golden Vale Road **Intersection West Side AM Peak**

Highway At Grade Access With Median Opening Giveway / Yield (Two-Way)

		Demand		Deg.	Average	Level of	95% Back	of Queue	Prop.	Effective	Average
Mov ID	Turn	Flow	HV	Satn	Delay	Service	Vehicles	Distance	Queued	Stop Rate	Speed
		veh/h		v/c	sec		veh			per veh	km/h
South: I	Hume Hig	hway									
1	L	1	0.0	0.001	12.5	LOS A	0.0	0.0	0.00	0.75	63.3
2	Т	472	32.4	0.146	0.0	LOS A	0.0	0.0	0.00	0.00	100.0
3	R	3	0.0	0.002	13.0	LOS A	0.0	0.0	0.00	0.80	62.5
Approac	ch	476	32.1	0.146	0.1	NA	0.0	0.0	0.00	0.01	99.6
East: Fr	om Golde	en Vale Road									
5	Т	1	0.0	0.130	15.6	LOS B	0.5	3.3	0.65	0.83	41.2
6	R	44	0.0	0.130	17.7	LOS B	0.5	3.3	0.65	0.91	47.3
Approa	ch	45	0.0	0.130	17.7	LOS B	0.5	3.3	0.65	0.90	47.2
Nest: P	rivate Acc	cess									
10	L	1	0.0	0.004	13.8	LOSA	0.0	0.1	0.56	0.69	50.7
11	Т	1	0.0	0.004	11.8	LOSA	0.0	0.1	0.56	0.65	45.1
Approad	ch	2	0.0	0.004	12.8	LOSA	0.0	0.1	0.56	0.67	48.1
All Vehi	cles	523	29.2	0.146	1.7	NA	0.5	3.3	0.06	0.09	90.7

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model used.

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Site: Golden Vale Road **Intersection West Side PM Peak**

Highway At Grade Access With Median Opening Giveway / Yield (Two-Way)

Movem	nent Per	formance - \	/ehicles								
Mov ID	Turn	Demand Flow veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Vehicles veh	of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: H	Hume Hig	hway									
1	L	1	0.0	0.001	12.5	LOS A	0.0	0.0	0.00	0.75	63.3
2	Т	696	10.6	0.191	0.0	LOS A	0.0	0.0	0.00	0.00	100.0
3	R	3	0.0	0.002	13.0	LOS A	0.0	0.0	0.00	0.80	62.5
Approac	ch	700	10.5	0.191	0.1	NA	0.0	0.0	0.00	0.00	99.7
East: Fr	om Golde	en Vale Road									
5	Т	1	0.0	0.120	18.8	LOS B	0.4	2.9	0.72	0.87	38.8
6	R	32	0.0	0.120	21.0	LOS B	0.4	2.9	0.72	0.93	44.9
Approac	ch	33	0.0	0.120	20.9	LOS B	0.4	2.9	0.72	0.92	44.7
West: P	rivate Aco	cess									
10	L	1	0.0	0.005	15.6	LOS B	0.0	0.1	0.63	0.73	49.1
11	T	1	0.0	0.005	13.6	LOSA	0.0	0.1	0.63	0.70	43.4
Approac	ch	2	0.0	0.005	14.6	LOS B	0.0	0.1	0.63	0.71	46.4
All Vehi	cles	735	10.0	0.191	1.0	NA	0.4	2.9	0.03	0.05	94.4

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model used.

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Site: Old Hume Highway Roundabout AM Peak

Four Way Roundabout Roundabout

Mover	nent Per	formance - ˈ	Vehicles								
Marrido		Demand	1.15.7	Deg.	Average	Level of	95% Back o		Prop.	Effective	Average
Mov ID) Turn	Flow	HV	Satn	Delay	Service	Vehicles	Distance	Queued	Stop Rate	Speed
South	Old Hume	veh/h	%	v/c	sec		veh	m		per veh	km/h
1	L	1	0.0	0.056	9.6	LOSA	0.3	2.0	0.28	0.58	59.6
2	T	56	0.0	0.056	9.0 8.5	LOSA	0.3	2.0	0.28	0.50	60.5
3	r R	15									
			28.6	0.056	17.1	LOS B	0.3	2.0	0.28	0.82	54.3
Approa	ich	72	5.9	0.056	10.3	LOSA	0.3	2.0	0.28	0.57	59.1
East: T	aylor Aven	iue									
4	L	12	27.3	0.090	10.6	LOSA	0.5	3.7	0.13	0.57	60.6
5	Т	69	21.2	0.090	9.1	LOSA	0.5	3.7	0.13	0.48	62.0
6	R	40	13.2	0.090	15.9	LOS B	0.5	3.7	0.13	0.82	54.3
Approa	nch	121	19.1	0.090	11.5	LOSA	0.5	3.7	0.13	0.60	59.0
	01111										
	Old Hume	0									
7	L	19	5.6	0.036	9.8	LOS A	0.2	1.3	0.27	0.57	59.4
8	Т	20	5.3	0.036	8.7	LOS A	0.2	1.3	0.27	0.49	60.4
9	R	8	12.5	0.036	16.3	LOS B	0.2	1.3	0.27	0.78	54.1
Approa	ich	47	6.7	0.036	10.5	LOSA	0.2	1.3	0.27	0.57	58.8
West: N	Medway R	oad									
10	L	17	6.3	0.097	9.9	LOS A	0.5	3.8	0.28	0.59	59.7
11	T	99	17.0	0.097	9.3	LOSA	0.5	3.8	0.28	0.52	60.7
12	R	2	0.0	0.097	15.7	LOS B	0.5	3.8	0.28	0.84	54.5
Approa		118	15.2	0.097	9.5	LOSA	0.5	3.8	0.28	0.54	60.4
Apploa	ICII	110	13.2	0.091	9.5	LOSA	0.5	3.0	0.20	0.54	00.4
All Veh	icles	358	13.5	0.097	10.5	LOSA	0.5	3.8	0.23	0.57	59.4
۷ 011		000	10.0	0.001	10.0	2007	0.0	0.0	0.20	0.01	ООТ

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Roundabout Capacity Model: SIDRA Standard.

SIDRA Standard Delay Model used.

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Site: Old Hume Highway Roundabout PM Peak

Four Way Roundabout Roundabout

Mover	nent Per	formance - '	Vehicles								
M. ID		Demand	1.15.7	Deg.	Average	Level of	95% Back		Prop.	Effective	Average
Mov ID) Turn	Flow	HV	Satn	Delay	Service	Vehicles	Distance	Queued	Stop Rate	Speed
South	Old Hume	veh/h	%	v/c	sec		veh	m		per veh	km/h
1	L	f lighway 5	0.0	0.033	9.6	LOSA	0.2	1.2	0.29	0.56	59.3
-	_	-									
2	T	21	0.0	0.033	8.6	LOSA	0.2	1.2	0.29	0.49	60.2
3	R	14	30.8	0.033	17.2	LOS B	0.2	1.2	0.29	0.77	54.0
Approa	ich	40	10.5	0.033	11.7	LOSA	0.2	1.2	0.29	0.60	57.8
East: T	aylor Aven	iue									
4	L	14	23.1	0.095	10.5	LOS A	0.5	3.6	0.18	0.59	60.4
5	Т	103	7.1	0.095	8.5	LOS A	0.5	3.6	0.18	0.50	61.6
6	R	19	0.0	0.095	15.4	LOS B	0.5	3.6	0.18	0.85	54.4
Approa	ich	136	7.8	0.095	9.7	LOSA	0.5	3.6	0.18	0.56	60.3
North:	Old Hume	Highway									
7	L	31	3.4	0.060	9.5	LOS A	0.3	2.1	0.21	0.57	59.9
8	Т	34	0.0	0.060	8.3	LOS A	0.3	2.1	0.21	0.49	61.1
9	R	19	5.6	0.060	15.8	LOS B	0.3	2.1	0.21	0.79	54.2
Approa	ich	83	2.5	0.060	10.4	LOSA	0.3	2.1	0.21	0.59	58.9
West: N	Medway R	oad									
10	L	14	7.7	0.058	9.7	LOS A	0.3	2.2	0.18	0.59	60.4
11	Т	59	16.1	0.058	8.9	LOS A	0.3	2.2	0.18	0.50	61.6
12	R	3	0.0	0.058	15.4	LOS B	0.3	2.2	0.18	0.86	54.5
Approa	ich	76	13.9	0.058	9.3	LOSA	0.3	2.2	0.18	0.53	61.1
All Veh	icles	335	8.2	0.095	10.0	LOSA	0.5	3.6	0.20	0.56	59.8
All Vell	ICIES	333	0.2	0.095	10.0	LUSA	0.5	3.0	0.20	0.56	59.6

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Roundabout Capacity Model: SIDRA Standard.

SIDRA Standard Delay Model used.

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Site: Berrima Road Taylor Avenue **AM Peak**

T Intersection Giveway / Yield (Two-Way)

		Demand		Deg.	Average	Level of	95% Back	of Queue	Prop.	Effective	Average
Mov ID	Turn	Flow	HV	Satn	Delay	Service	Vehicles	Distance	Queued	Stop Rate	Speed
		veh/h		v/c	sec		veh			per veh	km/h
South: E	Berrima R	load									
1	L	74	17.1	0.077	8.8	LOSA	0.0	0.0	0.00	0.82	49.0
2	Т	63	0.0	0.077	0.0	LOS A	0.0	0.0	0.00	0.00	60.0
Approa	ch	137	9.2	0.077	4.7	NA	0.0	0.0	0.00	0.44	53.5
North: E	Berrima R	oad									
8	Т	54	2.0	0.029	0.5	LOS A	0.2	1.2	0.27	0.00	54.9
9	R	1	0.0	0.029	9.0	LOSA	0.2	1.2	0.27	0.99	49.0
Approa	ch	55	1.9	0.029	0.7	NA	0.2	1.2	0.27	0.02	54.8
West: Ta	aylor Ave	nue									
10	L	1	0.0	0.203	10.1	LOS A	0.9	6.7	0.38	0.59	46.8
12	R	137	10.0	0.203	10.8	LOS A	0.9	6.7	0.38	0.70	46.6
Approa	ch	138	9.9	0.203	10.8	LOSA	0.9	6.7	0.38	0.70	46.6
All Vehi	cles	329	8.3	0.203	6.6	NA	0.9	6.7	0.20	0.48	50.6

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model used.

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Site: Berrima Road Taylor Avenue **PM Peak**

T Intersection Giveway / Yield (Two-Way)

		Demand		Deg.	Average	Level of	95% Back	of Queue	Prop.	Effective	Average
Mov ID	Turn	Flow	HV	Satn	Delay	Service	Vehicles	Distance	Queued	Stop Rate	Speed
		veh/h		v/c	sec		veh			per veh	km/h
South: E	Berrima R	load									
1	L	145	4.3	0.127	8.3	LOS A	0.0	0.0	0.00	0.78	49.0
2	Т	89	0.0	0.127	0.0	LOS A	0.0	0.0	0.00	0.00	60.0
Approa	ch	235	2.7	0.127	5.2	NA	0.0	0.0	0.00	0.48	52.7
North: E	Berrima R	oad									
8	Т	74	1.4	0.039	0.9	LOS A	0.3	1.8	0.37	0.00	53.4
9	R	1	0.0	0.039	9.4	LOSA	0.3	1.8	0.37	0.97	49.2
Approa	ch	75	1.4	0.039	1.1	NA	0.3	1.8	0.37	0.01	53.3
West: Ta	aylor Ave	nue									
10	L	2	0.0	0.198	11.2	LOS A	0.8	6.3	0.46	0.63	45.6
12	R	116	10.0	0.198	11.9	LOS A	0.8	6.3	0.46	0.75	45.5
Approa	ch	118	9.8	0.198	11.9	LOSA	0.8	6.3	0.46	0.75	45.5
All Vehi	cles	427	4.4	0.198	6.3	NA	0.8	6.3	0.19	0.47	50.6

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model used.

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Site: Berrima Road Douglas Road AM Peak

T intersection Giveway / Yield (Two-Way)

ent Per	formance - \	/ehicles								
Turn	Demand Flow	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Vehicles	of Queue Distance	Prop. Queued	Effective Stop Rate	Average Speed
	veh/h		v/c	sec		veh			per veh	km/h
Berrima R	Road									
Т	129	12.2	0.058	0.7	LOS A	0.4	2.7	0.27	0.00	71.0
R	4	0.0	0.058	11.1	LOS A	0.4	2.7	0.35	1.38	59.4
h	134	11.8	0.058	1.0	NA	0.4	2.7	0.27	0.04	70.6
ouglas Ro	oad									
L	4	0.0	0.054	15.1	LOS B	0.2	1.7	0.51	0.64	45.4
R	17	37.5	0.054	17.0	LOS B	0.2	1.7	0.51	0.80	45.5
h	21	30.0	0.054	16.6	LOS B	0.2	1.7	0.51	0.76	45.4
errima R	oad									
L	31	41.4	0.021	11.9	LOS A	0.0	0.0	0.00	0.71	57.1
Т	175	10.2	0.096	0.0	LOS A	0.0	0.0	0.00	0.00	80.0
ch	205	14.9	0.096	1.8	NA	0.0	0.0	0.00	0.11	76.0
cles	360	14.6	0.096	2.4	NA	0.4	2.7	0.13	0.12	71.2
	Turn Berrima R T R ch buglas Ro L R ch errima R L T	Turn Pemand Flow veh/h Berrima Road T 129 R 4 ch 134 buglas Road L 4 R 17 ch 21 errima Road L 31 T 175 ch 205	Flow veh/h % Serrima Road T 129 12.2 R 4 0.0 ch 134 11.8 buglas Road L 4 0.0 R 17 37.5 ch 21 30.0 Serrima Road L 31 41.4 T 175 10.2 ch 205 14.9	Turn Plow HV Satn v/c Flow veh/h % v/c Serrima Road T 129 12.2 0.058 R 4 0.0 0.058 Sth 134 11.8 0.058 Suglas Road L 4 0.0 0.054 R 17 37.5 0.054 Sth 21 30.0 0.054 Serrima Road L 31 41.4 0.021 T 175 10.2 0.096 Sth 205 14.9 0.096	Turn Plant Flow veh/h % V/c Satn Delay veh/h % V/c Sec Serrima Road T 129 12.2 0.058 0.7 R 4 0.0 0.058 11.1 Seh 134 11.8 0.058 1.0 souglas Road L 4 0.0 0.054 15.1 R 17 37.5 0.054 17.0 Seh 21 30.0 0.054 16.6 serrima Road L 31 41.4 0.021 11.9 T 175 10.2 0.096 0.0 Seh 205 14.9 0.096 1.8	Turn Plow HV Satn Delay Service Servic	Turn Plow HV Satn Delay Service Vehicles veh % V/c Sec Vehicles vehi	Turn Demand Flow veh/h HV satn V/c Average Service Level of Service 95% Back of Queue Vehicles Distance Vehicles Berrima Road T 129 12.2 0.058 0.7 LOS A 0.4 2.7 R 4 0.0 0.058 11.1 LOS A 0.4 2.7 ch 134 11.8 0.058 1.0 NA 0.4 2.7 ch 13 37.5 0.054 15.1 LOS B 0.2 1.7 ch 21 30.0 0.054 16.6 LOS B 0.2 1.7 ch 21 30.0 0.054 16.6 LOS B 0.2 1.7 ch 21 <td< td=""><td>Turn Demand Flow veh/h W Sath Delay Service Vehicles Distance Queued Prop. </td><td> Turn Plow veh/h Prop. Sath Delay Service Service Prop. Effective Service Vehicles Distance Queued Stop Rate Prop. Stop Rate Prop. Stop Rate Prop. Prop. Prop. Stop Rate Prop. Prop. </td></td<>	Turn Demand Flow veh/h W Sath Delay Service Vehicles Distance Queued Prop.	Turn Plow veh/h Prop. Sath Delay Service Service Prop. Effective Service Vehicles Distance Queued Stop Rate Prop. Stop Rate Prop. Stop Rate Prop. Prop. Prop. Stop Rate Prop. Prop.

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model used.

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Site: Berrima Road Douglas Road PM Peak

T intersection Giveway / Yield (Two-Way)

	4.5	·	/ . I I								
Moven	nent Per	formance - \	/enicles								
Mov ID	Turn	Demand	Ц\/	Deg.	Average	Level of	95% Back o		Prop.	Effective	Average
Mov ID	Turn	Flow	HV	Satn	Delay	Service	Vehicles	Distance	Queued	Stop Rate	Speed
		veh/h	%	v/c	sec		veh	m		per veh	km/h
South:	Berrima F	Road									
2	Т	205	4.6	0.087	0.6	LOS A	0.6	4.1	0.26	0.00	71.1
3	R	5	0.0	0.087	11.0	LOS A	0.6	4.1	0.35	1.40	59.4
Approa	ch	211	4.5	0.087	0.9	NA	0.6	4.1	0.27	0.04	70.8
East: D	ouglas Ro	oad									
4	L	3	0.0	0.134	14.5	LOS A	0.5	3.9	0.54	0.66	45.9
6	R	58	10.9	0.134	15.1	LOS B	0.5	3.9	0.54	0.83	45.9
Approa	ch	61	10.3	0.134	15.0	LOS B	0.5	3.9	0.54	0.82	45.9
North: E	Berrima R	toad									
7	L	17	37.5	0.011	11.7	LOS A	0.0	0.0	0.00	0.71	57.1
8	Т	183	4.0	0.096	0.0	LOS A	0.0	0.0	0.00	0.00	80.0
Approa	ch	200	6.8	0.096	1.0	NA	0.0	0.0	0.00	0.06	77.7
All Vehi	icles	472	6.3	0.134	2.8	NA	0.6	4.1	0.19	0.15	68.6

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model used.

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Site: Waite Street intersection AM Peak

T Intersection with Argyle Street Giveway / Yield (Two-Way)

Mover	nent Per	formance - \	/ehicles								
Mov ID	Turn	Demand Flow veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back o Vehicles veh	of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
East: A	rgyle Stre	et									
5 6	T R	262 280	2.8 4.1	0.409 0.409	1.0 11.9	LOS A LOS A	2.6 2.6	18.9 18.9	0.12 0.66	0.00 0.97	48.0 39.1
Approa	ch	542	3.5	0.409	6.6	NA	2.6	18.9	0.40	0.50	43.0
North: \	Naite Stre	et									
7	L	269	5.5	0.451	13.1	LOS A	2.5	18.0	0.65	0.97	38.1
9	R	12	18.2	0.143	51.1	LOS D	0.4	3.5	0.91	0.97	22.5
Approa	ch	281	6.0	0.451	14.6	LOS B	2.5	18.0	0.66	0.97	37.1
West: A	Argyle Stre	eet									
10	L	81	6.5	0.046	6.6	LOS A	0.0	0.0	0.00	0.61	43.3
11	Т	557	2.3	0.290	0.0	LOS A	0.0	0.0	0.00	0.00	50.0
Approa	ch	638	2.8	0.290	0.8	NA	0.0	0.0	0.00	0.08	49.0
All Veh	icles	1461	3.7	0.451	5.6	NA	2.6	18.9	0.28	0.41	44.0

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model used.

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Site: Waite Street intersection PM Peak

T Intersection with Argyle Street Giveway / Yield (Two-Way)

Moven	nent Per	formance - V	ehicles								
Mov ID	Turn	Demand Flow veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back o Vehicles veh	of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
East: A	rgyle Stre	et									
5	Т	412	2.3	0.424	2.2	LOS A	3.8	27.1	0.32	0.00	45.6
6	R	269	2.7	0.424	11.3	LOS A	3.8	27.1	0.69	1.00	40.0
Approa	ch	681	2.5	0.424	5.8	NA	3.8	27.1	0.46	0.39	43.2
North: \	Waite Stre	et									
7	L	329	3.8	0.478	11.9	LOS A	2.9	21.0	0.63	0.97	38.9
9	R	18	0.0	0.159	38.8	LOS C	0.5	3.5	0.89	0.96	25.8
Approa	ch	347	3.6	0.478	13.3	LOS A	2.9	21.0	0.64	0.97	37.9
West: A	Argyle Stre	eet									
10	L	75	5.6	0.042	6.6	LOS A	0.0	0.0	0.00	0.61	43.3
11	Т	459	2.8	0.240	0.0	LOS A	0.0	0.0	0.00	0.00	50.0
Approa	ch	534	3.2	0.240	0.9	NA	0.0	0.0	0.00	0.09	48.9
All Vehi	icles	1562	3.0	0.478	5.8	NA	3.8	27.1	0.34	0.42	43.6

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model used.

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Site: Lackey Street intersection AM Peak

T-intersection with Argyle Street Stop (Two-Way)

Moven	nent Per	formance - V	ehicles								
Mov ID	Turn	Demand Flow veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back o Vehicles veh	of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
East: A	rgyle Stre	et									
5	Т	558	3.4	0.442	4.7	LOS A	5.3	38.7	0.51	0.00	42.8
6	R	173	6.1	0.442	15.7	LOS B	5.3	38.7	0.96	1.13	37.7
Approac	ch	731	4.0	0.442	7.3	NA	5.3	38.7	0.62	0.27	41.5
North: L	ackey St	reet									
7	L	221	3.3	0.451	18.1	LOS B	2.3	16.2	0.73	1.11	35.8
9	R	5	0.0	0.093	70.6	LOS F	0.3	1.8	0.94	1.00	18.8
Approac	ch	226	3.3	0.451	19.3	LOS B	2.3	16.2	0.73	1.11	35.1
West: A	rgyle Stre	eet									
10	L	52	2.0	0.028	6.5	LOS A	0.0	0.0	0.00	0.61	43.3
11	Т	721	3.6	0.379	0.0	LOS A	0.0	0.0	0.00	0.00	50.0
Approa	ch	773	3.5	0.379	0.4	NA	0.0	0.0	0.00	0.04	49.5
All Vehi	icles	1729	3.7	0.451	5.8	NA	5.3	38.7	0.36	0.28	43.6

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model used.

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Site: Lackey Street intersection PM Peak

T-intersection with Argyle Street Stop (Two-Way)

Moven	nent Per	formance - V	ehicles								
Mov ID	Turn	Demand Flow veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back o Vehicles veh	of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
East: A	rgyle Stre	et									
5	T	719	2.6	0.541	4.9	LOS A	7.7	55.2	0.55	0.00	42.5
6	R	234	1.8	0.541	15.6	LOS B	7.7	55.2	1.00	1.20	37.7
Approa	ch	953	2.4	0.541	7.5	NA	7.7	55.2	0.66	0.29	41.2
North: L	_ackey Sti	reet									
7	L	227	0.9	0.406	16.0	LOS B	2.0	14.2	0.66	1.09	37.0
9	R	9	0.0	0.230	102.5	LOS F	0.6	4.5	0.96	1.01	14.6
Approa	ch	237	0.9	0.406	19.5	LOS B	2.0	14.2	0.67	1.08	34.8
West: A	Argyle Stre	eet									
10	L	44	9.5	0.025	6.7	LOS A	0.0	0.0	0.00	0.61	43.3
11	Т	631	2.8	0.329	0.0	LOS A	0.0	0.0	0.00	0.00	50.0
Approa	ch	675	3.3	0.329	0.4	NA	0.0	0.0	0.00	0.04	49.5
All Vehi	icles	1864	2.5	0.541	6.5	NA	7.7	55.2	0.42	0.30	42.8

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

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Appendix C				
SIDRA Intersection	n Delay Result	s for 2020 Ba	seline Traffic	



Site: Medway Road Interchange East Side 2020 AM Peak

Interchange East Side Intersection Giveway / Yield (Two-Way)

Moven	nent Per	formance - \	/ehicles								
Mov ID	Turn	Demand Flow veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back o Vehicles veh	of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
East: M	ledway Ro	oad									
5	T	78	18.9	0.045	0.0	LOS A	0.0	0.0	0.00	0.00	80.0
Approa	ch	78	18.9	0.045	0.0	NA	0.0	0.0	0.00	0.00	80.0
North: H	Hume Hig	hway Exit									
7	L	107	13.7	0.063	11.7	Χ	X	X	Х	0.69	58.9
9	R	2	0.0	0.003	11.7	LOS A	0.0	0.1	0.26	0.66	57.8
Approa	ch	109	13.5	0.063	11.7	LOS A	0.0	0.1	0.00	0.69	58.8
West: N	/ledway R	oad									
11	Т	21	5.0	0.011	0.0	LOS A	0.0	0.0	0.00	0.00	80.0
Approa	ch	21	5.0	0.011	0.0	NA	0.0	0.0	0.00	0.00	80.0
All Vehi	icles	208	14.6	0.063	6.1	NA	0.0	0.1	0.00	0.36	67.4

X: Not applicable for Continuous movement.

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

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Site: Medway Road Interchange East Side 2020 PM Peak

Interchange East Side Intersection Giveway / Yield (Two-Way)

Moven	nent Per	formance - \	/ehicles								
Mov ID	Turn	Demand Flow veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back o Vehicles veh	of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
East: M	ledway Ro	oad									
5	Т	126	6.7	0.068	0.0	LOS A	0.0	0.0	0.00	0.00	80.0
Approa	ch	126	6.7	0.068	0.0	NA	0.0	0.0	0.00	0.00	80.0
North: F	Hume Hig	hway Exit									
7	L	71	13.4	0.042	11.7	Χ	X	X	Х	0.69	58.9
9	R	1	0.0	0.001	12.0	LOS A	0.0	0.0	0.30	0.65	57.4
Approa	ch	72	13.2	0.042	11.7	LOS A	0.0	0.0	0.00	0.69	58.8
West: N	/ledway R	oad									
11	Т	16	13.3	0.009	0.0	LOS A	0.0	0.0	0.00	0.00	80.0
Approa	ch	16	13.3	0.009	0.0	NA	0.0	0.0	0.00	0.00	80.0
All Vehi	icles	214	9.4	0.068	3.9	NA	0.0	0.0	0.00	0.23	71.5

X: Not applicable for Continuous movement.

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

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Site: Medway Road Interchange West Side 2020 AM Peak

Interchange West Side Intersection Giveway / Yield (Two-Way)

		Demand		Deg.	Average	Level of	95% Back	of Queue	Prop.	Effective	Average
Mov ID	Turn	Flow	HV	Satn	Delay	Service	Vehicles	Distance	Queued	Stop Rate	Speed
		veh/h	%	v/c	sec		veh	m		per veh	km/ł
East: M	edway R	oad									
5	Т	7	0.0	0.004	0.0	LOS A	0.0	0.0	0.00	0.00	80.0
6	R	72	20.6	0.070	12.5	LOS A	0.2	2.0	0.10	0.73	58.3
Approa	ch	79	18.7	0.070	11.3	NA	0.2	2.0	0.09	0.66	59.9
West: N	/ledway F	Road									
10	L	2	0.0	0.001	11.1	Χ	X	X	Χ	0.69	58.9
11	Т	24	4.3	0.013	0.0	LOS A	0.0	0.0	0.00	0.00	80.0
Approa	ch	26	4.0	0.013	0.9	NA	0.0	0.0	0.00	0.06	77.8
All Vehi	cles	105	15.0	0.070	8.7	NA	0.2	2.0	0.07	0.51	63.6

X: Not applicable for Continuous movement.

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model used.

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Site: Medway Road Interchange West Side 2020 PM Peak

Interchange West Side Intersection Giveway / Yield (Two-Way)

Movem	nent Per	formance - V	ehicles								
Mov ID	Turn	Demand Flow veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back (Vehicles veh	of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
East: Mo	edway Ro	oad									
5	Т	22	4.8	0.012	0.0	LOS A	0.0	0.0	0.00	0.00	80.0
6	R	111	6.7	0.093	11.5	LOS A	0.3	2.4	0.08	0.73	58.4
Approac	ch	133	6.3	0.093	9.6	NA	0.3	2.4	0.06	0.61	61.2
West: M	ledway R	load									
10	L	3	0.0	0.002	11.1	Χ	X	X	X	0.69	58.9
11	Т	18	5.9	0.010	0.0	LOS A	0.0	0.0	0.00	0.00	80.0
Approac	ch	21	5.0	0.010	1.7	NA	0.0	0.0	0.00	0.10	76.0
All Vehi	cles	154	6.2	0.093	8.5	NA	0.3	2.4	0.05	0.54	62.9

X: Not applicable for Continuous movement.

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model used.

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Site: Mereworth Road Interchange East Side 2020 AM Peak

Interchange Ramp Intersection Giveway / Yield (Two-Way)

		Demand		Deg.	Average	Level of	95% Back	of Queue	Prop.	Effective	Average
Mov ID	Turn	Flow	HV	Satn	Delay	Service	Vehicles	Distance	Queued	Stop Rate	Speed
		veh/h	%	v/c	sec		veh	m		per veh	km/h
North: C	Old Hume	Highway									
8	Т	16	20.0	0.009	0.0	LOS A	0.0	0.0	0.00	0.00	80.0
9	R	1	0.0	0.001	10.8	LOS A	0.0	0.0	0.00	0.74	59.0
Approac	ch	17	18.8	0.009	0.7	NA	0.0	0.0	0.00	0.05	78.3
Nest: N	1ereworth	Road									
10	L	61	8.6	0.035	11.5	Χ	Х	X	Χ	0.69	58.9
12	R	2	50.0	0.005	14.7	LOS B	0.0	0.1	0.12	0.72	58.3
Approad	ch	63	10.0	0.035	11.6	LOS A	0.0	0.1	0.00	0.69	58.8
All Vehi	cles	80	11.8	0.035	9.3	NA	0.0	0.1	0.00	0.55	62.1

X: Not applicable for Continuous movement.

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model used.

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Site: Mereworth Road Interchange East Side 2020 PM Peak

Interchange Ramp Intersection Giveway / Yield (Two-Way)

Movem	nent Per	formance - V	ehicles								
Mov ID	Turn	Demand Flow veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back (Vehicles veh	of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
North: C	Old Hume	Highway									
8	Т	42	7.5	0.023	0.0	LOS A	0.0	0.0	0.00	0.00	80.0
9	R	1	0.0	0.001	10.8	LOS A	0.0	0.0	0.00	0.74	59.0
Approac	ch	43	7.3	0.023	0.3	NA	0.0	0.0	0.00	0.02	79.3
West: N	1ereworth	Road									
10	L	38	8.3	0.022	11.4	Χ	X	X	X	0.69	58.9
12	R	1	0.0	0.002	11.3	LOS A	0.0	0.0	0.15	0.69	58.1
Approac	ch	39	8.1	0.022	11.4	LOS A	0.0	0.0	0.00	0.69	58.8
All Vehi	cles	82	7.7	0.023	5.6	NA	0.0	0.0	0.00	0.34	68.1

X: Not applicable for Continuous movement.

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model used.

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Site: Mereworth Road Interchange West Side 2020 AM Peak

With Intersection Reconfigured to New E-W Priority Giveway / Yield (Two-Way)

Movem	nent Per	formance - V	/ehicles								
Mov ID	Turn	Demand Flow veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back o Vehicles veh	of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: H	Hume Hig	hway Exiit									
1	L	1	0.0	0.002	10.9	LOS A	0.0	0.0	0.00	0.73	58.9
3	R	60	10.5	0.071	11.8	LOS A	0.3	2.2	0.03	0.75	58.6
Approac	ch	61	10.3	0.071	11.8	LOS A	0.3	2.2	0.03	0.75	58.6
East: M	ereworth	Road									
5	Т	1	0.0	0.001	0.0	LOS A	0.0	0.0	0.00	0.00	80.0
Approac	ch	1	0.0	0.001	0.0	NA	0.0	0.0	0.00	0.00	80.0
West: N	1ereworth	Road									
11	Т	2	0.0	0.001	0.0	LOS A	0.0	0.0	0.00	0.00	80.0
Approac	ch	2	0.0	0.001	0.0	NA	0.0	0.0	0.00	0.00	80.0
All Vehi	cles	64	9.8	0.071	11.2	NA	0.3	2.2	0.03	0.72	59.4

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model used.

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Site: Mereworth Road Interchange West Side 2020 PM Peak

With Intersection Reconfigured to New E-W Priority Giveway / Yield (Two-Way)

Movem	nent Per	formance - \	/ehicles								
Mov ID	Turn	Demand Flow veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back o Vehicles veh	of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: H	Hume Hig	hway Exiit									
1	L	1	0.0	0.002	10.9	LOS A	0.0	0.0	0.00	0.73	58.9
3	R	44	19.0	0.056	12.4	LOS A	0.2	1.8	0.04	0.75	58.6
Approac	ch	45	18.6	0.056	12.3	LOS A	0.2	1.8	0.04	0.75	58.6
East: M	ereworth	Road									
5	Т	1	0.0	0.001	0.0	LOS A	0.0	0.0	0.00	0.00	80.0
Approac	ch	1	0.0	0.001	0.0	NA	0.0	0.0	0.00	0.00	80.0
West: N	1ereworth	Road									
11	Т	2	0.0	0.001	0.0	LOS A	0.0	0.0	0.00	0.00	80.0
Approac	ch	2	0.0	0.001	0.0	NA	0.0	0.0	0.00	0.00	80.0
All Vehi	cles	48	17.4	0.056	11.5	NA	0.2	1.8	0.03	0.71	59.6

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model used.

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Site: Golden Vale Road Intersection East Side 2020 AM Peak

Highway At Grade Access With Median Opening Giveway / Yield (Two-Way)

Mover	nent Per	formance - \	/ehicles								
Mov ID	Turn	Demand Flow veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back o Vehicles veh	of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
East: G	Golden Val	e Road									
4	L	4	25.0	0.149	20.3	LOS B	0.6	3.9	0.71	0.92	46.6
5	Т	45	0.0	0.149	16.9	LOS B	0.6	3.9	0.71	0.88	40.8
Approa	ch	49	2.1	0.149	17.2	LOS B	0.6	3.9	0.71	0.88	41.4
North: I	Hume Higl	hway									
7	L	27	11.5	0.016	13.2	LOS A	0.0	0.0	0.00	0.76	63.3
8	Т	673	13.5	0.188	0.0	LOS A	0.0	0.0	0.00	0.00	100.0
9	R	2	0.0	0.001	13.0	LOS A	0.0	0.0	0.00	0.80	62.5
Approa	ch	702	13.3	0.188	0.6	NA	0.0	0.0	0.00	0.03	98.2
West: N	Median Op	ening									
11	Т	4	0.0	0.017	17.0	LOS B	0.1	0.4	0.70	0.79	40.6
12	R	1	0.0	0.017	19.2	LOS B	0.1	0.4	0.70	0.89	46.6
Approa	ch	5	0.0	0.017	17.5	LOS B	0.1	0.4	0.70	0.81	42.0
All Veh	icles	757	12.5	0.188	1.8	NA	0.6	3.9	0.05	0.09	91.0

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model used.

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Site: Golden Vale Road Intersection East Side 2020 PM Peak

Highway At Grade Access With Median Opening Giveway / Yield (Two-Way)

Demand Flow veh/h Vale Road 1 28	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Vehicles veh	of Queue Distance m	Prop. Queued	Effective Stop Rate	Average Speed
1	0.0	0.007						per veh	km/h
•	0.0	0.007							
28		0.087	18.4	LOS B	0.3	2.2	0.69	0.90	46.9
	0.0	0.087	16.4	LOS B	0.3	2.2	0.69	0.87	41.2
29	0.0	0.087	16.5	LOS B	0.3	2.2	0.69	0.87	41.5
Highway									
48	0.0	0.026	12.5	LOS A	0.0	0.0	0.00	0.75	63.3
607	22.4	0.178	0.0	LOS A	0.0	0.0	0.00	0.00	100.0
4	0.0	0.002	13.0	LOS A	0.0	0.0	0.00	0.80	62.5
660	20.6	0.178	1.0	NA	0.0	0.0	0.00	0.06	96.6
Opening									
3	0.0	0.014	16.9	LOS B	0.0	0.3	0.70	0.77	40.7
1	0.0	0.014	19.1	LOS B	0.0	0.3	0.70	0.86	46.7
4	0.0	0.014	17.4	LOS B	0.0	0.3	0.70	0.80	42.4
694	19.6	0.178	1.8	NA	0.3	2.2	0.03	0.10	91.9
	29 Highway 48 607 4 660 Opening 3 1	29 0.0 Highway 48 0.0 607 22.4 4 0.0 660 20.6 Opening 3 0.0 1 0.0 4 0.0	29 0.0 0.087 Highway 48 0.0 0.026 607 22.4 0.178 4 0.0 0.002 660 20.6 0.178 1 Opening 3 0.0 0.014 1 0.0 0.014 4 0.0 0.014	29 0.0 0.087 16.5 Highway 48 0.0 0.026 12.5 607 22.4 0.178 0.0 4 0.0 0.002 13.0 660 20.6 0.178 1.0 Opening 3 0.0 0.014 16.9 1 0.0 0.014 19.1 4 0.0 0.014 17.4	29 0.0 0.087 16.5 LOS B Highway 48 0.0 0.026 12.5 LOS A 607 22.4 0.178 0.0 LOS A 4 0.0 0.002 13.0 LOS A 660 20.6 0.178 1.0 NA Opening 3 0.0 0.014 16.9 LOS B 1 0.0 0.014 19.1 LOS B 4 0.0 0.014 17.4 LOS B	29 0.0 0.087 16.5 LOS B 0.3 Highway 48 0.0 0.026 12.5 LOS A 0.0 607 22.4 0.178 0.0 LOS A 0.0 4 0.0 0.002 13.0 LOS A 0.0 660 20.6 0.178 1.0 NA 0.0 Opening 3 0.0 0.014 16.9 LOS B 0.0 1 0.0 0.014 19.1 LOS B 0.0 4 0.0 0.014 17.4 LOS B 0.0	Highway 48 0.0 0.026 12.5 LOS A 0.0 0.0 607 22.4 0.178 0.0 LOS A 0.0 0.0 4 0.0 0.002 13.0 LOS A 0.0 0.0 660 20.6 0.178 1.0 NA 0.0 0.0 Opening 3 0.0 0.014 16.9 LOS B 0.0 0.3 1 0.0 0.014 19.1 LOS B 0.0 0.3 4 0.0 0.014 17.4 LOS B 0.0 0.3	29 0.0 0.087 16.5 LOS B 0.3 2.2 0.69 Highway 48 0.0 0.026 12.5 LOS A 0.0 0.0 0.0 0.00 607 22.4 0.178 0.0 LOS A 0.0 0.0 0.0 0.00 4 0.0 0.002 13.0 LOS A 0.0 0.0 0.0 0.00 660 20.6 0.178 1.0 NA 0.0 0.0 0.0 0.00 Opening 3 0.0 0.014 16.9 LOS B 0.0 0.3 0.70 1 0.0 0.014 19.1 LOS B 0.0 0.3 0.70 4 0.0 0.014 17.4 LOS B 0.0 0.3 0.70	29 0.0 0.087 16.5 LOS B 0.3 2.2 0.69 0.87 Highway 48 0.0 0.026 12.5 LOS A 0.0 0.0 0.0 0.00 0.75 607 22.4 0.178 0.0 LOS A 0.0 0.0 0.0 0.00 0.00 4 0.0 0.002 13.0 LOS A 0.0 0.0 0.0 0.00 0.80 660 20.6 0.178 1.0 NA 0.0 0.0 0.0 0.00 0.06 Opening 3 0.0 0.014 16.9 LOS B 0.0 0.3 0.70 0.77 1 0.0 0.014 19.1 LOS B 0.0 0.3 0.70 0.86 4 0.0 0.014 17.4 LOS B 0.0 0.3 0.70 0.80

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model used.

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Site: Golden Vale Road **Intersection West Side 2020 AM Peak**

Highway At Grade Access With Median Opening Giveway / Yield (Two-Way)

Movem	ent Perl	formance - \	/ehicles								
Mov ID	Turn	Demand Flow veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back o Vehicles veh	of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: F	lume Hig	hway									
1	L	1	0.0	0.001	12.5	LOS A	0.0	0.0	0.00	0.75	63.3
2	Т	519	32.5	0.161	0.0	LOS A	0.0	0.0	0.00	0.00	100.0
3	R	3	0.0	0.002	13.0	LOS A	0.0	0.0	0.00	0.80	62.5
Approac	h	523	32.2	0.161	0.1	NA	0.0	0.0	0.00	0.01	99.6
East: Fr	om Golde	en Vale Road									
5	Т	1	0.0	0.152	17.1	LOS B	0.5	3.8	0.69	0.85	40.0
6	R	46	0.0	0.152	19.3	LOS B	0.5	3.8	0.69	0.92	46.1
Approac	h	47	0.0	0.152	19.2	LOS B	0.5	3.8	0.69	0.92	46.0
West: P	rivate Acc	cess									
10	L	1	0.0	0.005	14.6	LOS B	0.0	0.1	0.58	0.71	50.0
11	Т	1	0.0	0.005	12.6	LOS A	0.0	0.1	0.58	0.67	44.3
Approac	ch	2	0.0	0.005	13.6	LOS A	0.0	0.1	0.58	0.69	47.3
All Vehic	cles	573	29.4	0.161	1.7	NA	0.5	3.8	0.06	0.08	90.7

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model used.

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Site: Golden Vale Road **Intersection West Side 2020 PM Peak**

Highway At Grade Access With Median Opening Giveway / Yield (Two-Way)

Moven	nent Per	formance - V	/ehicles								
Mov ID	Turn	Demand Flow veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back o Vehicles veh	of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South:	Hume Hig	hway									
1	L	1	0.0	0.001	12.5	LOS A	0.0	0.0	0.00	0.75	63.3
2	Т	765	10.6	0.210	0.0	LOS A	0.0	0.0	0.00	0.00	100.0
3	R	3	0.0	0.002	13.0	LOS A	0.0	0.0	0.00	0.80	62.5
Approa	ch	769	10.5	0.210	0.1	NA	0.0	0.0	0.00	0.00	99.8
East: F	rom Golde	en Vale Road									
5	Т	1	0.0	0.146	21.2	LOS B	0.5	3.5	0.77	0.89	37.2
6	R	34	0.0	0.146	23.4	LOS B	0.5	3.5	0.77	0.94	43.2
Approa	ch	35	0.0	0.146	23.3	LOS B	0.5	3.5	0.77	0.94	43.1
West: F	Private Acc	cess									
10	L	1	0.0	0.006	16.8	LOS B	0.0	0.1	0.67	0.75	48.1
11	Т	1	0.0	0.006	14.8	LOS B	0.0	0.1	0.67	0.73	42.3
Approa	ch	2	0.0	0.006	15.8	LOS B	0.0	0.1	0.67	0.74	45.4
All Vehi	icles	806	10.1	0.210	1.1	NA	0.5	3.5	0.03	0.05	94.3

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model used.

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Site: Old Hume Highway Roundabout 2020 AM Peak

Four Way Roundabout Roundabout

Movem	ent Perf	ormance - \	Vehicles								
Mov ID	Turn	Demand	HV	Deg.	Average	Level of	95% Back o		Prop.	Effective	Average
טו ייטועו	Turri	Flow veh/h	пv %	Satn v/c	Delay sec	Service	Vehicles veh	Distance m	Queued	Stop Rate per veh	Speed km/h
South: C	Old Hume		/0	V/C	366		VEII	- ''		per veri	KIII/I
1	L	1	0.0	0.059	9.6	LOS A	0.3	2.1	0.28	0.58	59.5
2	Т	59	0.0	0.059	8.5	LOS A	0.3	2.1	0.28	0.51	60.
3	R	16	26.7	0.059	17.0	LOS B	0.3	2.1	0.28	0.82	54.3
Approac	ch	76	5.6	0.059	10.3	LOS A	0.3	2.1	0.28	0.58	59.0
East: Ta	ylor Aver	nue									
4	L	12	27.3	0.094	10.6	LOS A	0.5	3.9	0.14	0.57	60.6
5	Т	72	22.1	0.094	9.1	LOS A	0.5	3.9	0.14	0.48	62.0
6	R	42	12.5	0.094	15.9	LOS B	0.5	3.9	0.14	0.82	54.3
Approac	ch	125	19.3	0.094	11.5	LOS A	0.5	3.9	0.14	0.60	59.0
North: C	old Hume	Highway									
7	L	20	5.3	0.038	9.8	LOS A	0.2	1.4	0.28	0.57	59.4
8	Т	21	5.0	0.038	8.7	LOS A	0.2	1.4	0.28	0.50	60.4
9	R	8	12.5	0.038	16.3	LOS B	0.2	1.4	0.28	0.78	54.1
Approac	ch	49	6.4	0.038	10.4	LOS A	0.2	1.4	0.28	0.57	58.8
West: M	ledway Ro	oad									
10	L	18	5.9	0.102	9.9	LOS A	0.5	4.1	0.29	0.60	59.6
11	Т	104	17.2	0.102	9.3	LOS A	0.5	4.1	0.29	0.53	60.6
12	R	2	0.0	0.102	15.8	LOS B	0.5	4.1	0.29	0.84	54.5
Approac	ch	124	15.3	0.102	9.5	LOS A	0.5	4.1	0.29	0.54	60.3
All Vehic	cles	375	13.5	0.102	10.5	LOS A	0.5	4.1	0.23	0.57	59.4

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Roundabout Capacity Model: SIDRA Standard.

SIDRA Standard Delay Model used.

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Site: Old Hume Highway Roundabout 2020 PM Peak

Four Way Roundabout Roundabout

		Demand		Deg.	Average	Level of	95% Back o	of Queue	Prop.	Effective	Average
Mov ID	Turn	Flow	HV	Satn	Delay	Service	Vehicles	Distance	Queued	Stop Rate	Speed
0 11 6		veh/h	%	v/c	sec		veh	m		per veh	km/
	old Hume	Highway									
1	L	5	0.0	0.034	9.7	LOS A	0.2	1.2	0.30	0.57	59.
2	Т	22	0.0	0.034	8.6	LOS A	0.2	1.2	0.30	0.50	60.
3	R	14	30.8	0.034	17.3	LOS B	0.2	1.2	0.30	0.78	54.
Approac	h	41	10.3	0.034	11.6	LOS A	0.2	1.2	0.30	0.60	57.
East: Ta	ylor Aver	nue									
4	L	15	21.4	0.101	10.4	LOS A	0.5	3.8	0.18	0.59	60.
5	Т	108	6.8	0.101	8.5	LOS A	0.5	3.8	0.18	0.50	61.
6	R	20	0.0	0.101	15.4	LOS B	0.5	3.8	0.18	0.85	54.
Approac	h	143	7.4	0.101	9.6	LOS A	0.5	3.8	0.18	0.56	60.
North: C	old Hume	Highway									
7	L	32	3.3	0.063	9.5	LOS A	0.3	2.2	0.22	0.57	59.
8	T	36	0.0	0.063	8.3	LOS A	0.3	2.2	0.22	0.49	61.
9	R	20	5.3	0.063	15.8	LOS B	0.3	2.2	0.22	0.79	54.
Approac	ch	87	2.4	0.063	10.4	LOS A	0.3	2.2	0.22	0.59	58.
West: M	ledway R	oad									
10	L	15	7.1	0.060	9.7	LOS A	0.3	2.3	0.18	0.59	60.
11	Т	61	15.5	0.060	8.9	LOS A	0.3	2.3	0.18	0.50	61.
12	R	3	0.0	0.060	15.4	LOS B	0.3	2.3	0.18	0.86	54.
Approac	h	79	13.3	0.060	9.3	LOS A	0.3	2.3	0.18	0.53	61
All Vehic	rles	351	7.8	0.101	10.0	LOS A	0.5	3.8	0.21	0.56	59

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Roundabout Capacity Model: SIDRA Standard.

SIDRA Standard Delay Model used.

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Site: Berrima Road Taylor Avenue 2020 AM Peak

T Intersection Giveway / Yield (Two-Way)

Movement Performance - Vehicles											
Moven	nent Per	formance - \	/ehicles								
Mov ID	Turn	Demand Flow	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Vehicles	of Queue Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	v/c	sec	OCIVICO	veh	m	Queucu	per veh	km/h
South: I	Berrima F										
1	L	78	17.6	0.081	8.8	LOS A	0.0	0.0	0.00	0.82	49.0
2	Т	66	0.0	0.081	0.0	LOS A	0.0	0.0	0.00	0.00	60.0
Approa	ch	144	9.5	0.081	4.8	NA	0.0	0.0	0.00	0.44	53.5
North: E	Berrima R	load									
8	Т	57	1.9	0.030	0.6	LOS A	0.2	1.3	0.28	0.00	54.8
9	R	1	0.0	0.030	9.0	LOS A	0.2	1.3	0.28	0.99	49.0
Approa	ch	58	1.8	0.030	0.7	NA	0.2	1.3	0.28	0.02	54.7
West: T	aylor Ave	enue									
10	L	1	0.0	0.218	10.3	LOS A	1.0	7.3	0.39	0.60	46.6
12	R	144	10.2	0.218	10.9	LOS A	1.0	7.3	0.39	0.71	46.4
Approa	ch	145	10.1	0.218	10.9	LOS A	1.0	7.3	0.39	0.71	46.4
All Vehi	icles	347	8.5	0.218	6.7	NA	1.0	7.3	0.21	0.48	50.5

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model used.

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Site: Berrima Road Taylor Avenue 2020 PM Peak

T Intersection Giveway / Yield (Two-Way)

Movement Performance - Vehicles											
Mover	nent Per	formance - \	/ehicles								
Mov ID	Turn	Demand Flow	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Vehicles	of Queue Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	v/c	sec	CCIVICC	veh	m	Quoucu	per veh	km/h
South:	Berrima F	Road									
1	L	153	4.1	0.133	8.3	LOS A	0.0	0.0	0.00	0.78	49.0
2	Т	94	0.0	0.133	0.0	LOS A	0.0	0.0	0.00	0.00	60.0
Approa	ch	246	2.6	0.133	5.2	NA	0.0	0.0	0.00	0.48	52.6
North: E	Berrima R	load									
8	Т	77	1.4	0.041	1.0	LOS A	0.3	1.9	0.38	0.00	53.2
9	R	1	0.0	0.041	9.5	LOS A	0.3	1.9	0.38	0.97	49.2
Approa	ch	78	1.4	0.041	1.1	NA	0.3	1.9	0.38	0.01	53.1
West: T	Taylor Ave	enue									
10	L	2	0.0	0.214	11.5	LOS A	0.9	6.8	0.47	0.64	45.4
12	R	122	10.3	0.214	12.2	LOS A	0.9	6.8	0.47	0.76	45.3
Approa	ch	124	10.2	0.214	12.1	LOS A	0.9	6.8	0.47	0.76	45.3
All Veh	icles	448	4.5	0.214	6.4	NA	0.9	6.8	0.20	0.48	50.5

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model used.

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Site: Berrima Road Douglas Road 2020 AM Peak

T intersection Giveway / Yield (Two-Way)

Moven	nent Per	formance - \	/enicles								
Mov ID	Turn	Demand Flow	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Vehicles	of Queue Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	v/c	sec	33.1.33	veh	m	Quousu	per veh	km/h
South:	Berrima F	Road									
2	Т	136	12.4	0.061	0.7	LOS A	0.4	2.9	0.28	0.00	70.7
3	R	4	0.0	0.061	11.1	LOS A	0.4	2.9	0.36	1.37	59.5
Approa	ch	140	12.0	0.061	1.0	NA	0.4	2.9	0.28	0.04	70.4
East: D	ouglas Ro	oad									
4	L	4	0.0	0.058	15.3	LOS B	0.2	1.8	0.52	0.65	45.1
6	R	18	35.3	0.058	17.1	LOS B	0.2	1.8	0.52	0.81	45.2
Approa	ch	22	28.6	0.058	16.8	LOS B	0.2	1.8	0.52	0.78	45.2
North: E	Berrima R	toad									
7	L	33	41.9	0.023	11.9	LOS A	0.0	0.0	0.00	0.71	57.1
8	Т	184	10.3	0.101	0.0	LOS A	0.0	0.0	0.00	0.00	80.0
Approa	ch	217	15.0	0.101	1.8	NA	0.0	0.0	0.00	0.11	75.9
All Vehi	icles	379	14.7	0.101	2.4	NA	0.4	2.9	0.13	0.12	71.0

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model used.

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Site: Berrima Road Douglas Road 2020 PM Peak

T intersection Giveway / Yield (Two-Way)

Movement Performance - Vehicles											
Moven	nent Per		venicies								
Mov ID	Turn	Demand 	HV	Deg.	Average	Level of	95% Back o		Prop.	Effective	Average
טו ייטועו	Turri	Flow		Satn	Delay	Service	Vehicles	Distance	Queued	Stop Rate	Speed
		veh/h	%	v/c	sec		veh	m		per veh	km/h
South:	Berrima F	Road									
2	Т	215	4.4	0.091	0.7	LOS A	0.6	4.3	0.27	0.00	70.9
3	R	5	0.0	0.091	11.1	LOS A	0.6	4.3	0.36	1.40	59.5
Approa	ch	220	4.3	0.091	0.9	NA	0.6	4.3	0.27	0.03	70.6
East: D	ouglas Ro	oad									
4	L	3	0.0	0.142	14.8	LOS B	0.5	4.1	0.55	0.67	45.6
6	R	60	10.5	0.142	15.4	LOS B	0.5	4.1	0.55	0.84	45.7
Approa	ch	63	10.0	0.142	15.3	LOS B	0.5	4.1	0.55	0.83	45.7
North: E	Berrima R	Road									
7	L	18	35.3	0.012	11.6	LOS A	0.0	0.0	0.00	0.71	57.1
8	Т	192	3.8	0.101	0.0	LOS A	0.0	0.0	0.00	0.00	80.0
Approa	ch	209	6.5	0.101	1.0	NA	0.0	0.0	0.00	0.06	77.7
All Vehi	icles	493	6.0	0.142	2.8	NA	0.6	4.3	0.19	0.15	68.5

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

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Site: Waite Street intersection 2020 AM Peak

T Intersection with Argyle Street Giveway / Yield (Two-Way)

Moven	nent Per	formance - \	/ehicles								
Mov ID	Turn	Demand Flow veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back o Vehicles veh	of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
East: A	rgyle Stre	et									
5	T	275	2.7	0.444	0.9	LOS A	2.9	20.9	0.11	0.00	48.2
6	R	295	4.3	0.444	12.6	LOS A	2.9	20.9	0.69	1.00	38.6
Approa	ch	569	3.5	0.444	7.0	NA	2.9	20.9	0.41	0.52	42.7
North: \	Waite Stre	et									
7	L	283	5.6	0.495	14.0	LOS A	2.8	20.7	0.68	1.01	37.5
9	R	12	18.2	0.165	59.0	LOS E	0.5	4.0	0.93	0.98	20.7
Approa	ch	295	6.1	0.495	15.8	LOS B	2.8	20.7	0.69	1.01	36.3
West: A	Argyle Stre	eet									
10	L	85	6.2	0.048	6.6	LOS A	0.0	0.0	0.00	0.61	43.3
11	Т	585	2.3	0.305	0.0	LOS A	0.0	0.0	0.00	0.00	50.0
Approa	ch	671	2.8	0.305	0.8	NA	0.0	0.0	0.00	0.08	49.0
All Vehi	icles	1535	3.7	0.495	6.0	NA	2.9	20.9	0.29	0.42	43.7

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model used.

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Site: Waite Street intersection 2020 PM Peak

T Intersection with Argyle Street Giveway / Yield (Two-Way)

	4.5	¢									
Mover	nent Per	formance - V	enicles								
Mov ID	Turn	Demand Flow	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Vehicles	of Queue Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	v/c	sec	00.1.00	veh	m	Quouou	per veh	km/h
East: A	rgyle Stre	et									
5	Т	432	2.2	0.452	2.4	LOS A	4.2	30.2	0.32	0.00	45.5
6	R	282	2.6	0.452	11.9	LOS A	4.2	30.2	0.72	1.03	39.6
Approa	ıch	714	2.4	0.452	6.2	NA	4.2	30.2	0.48	0.41	42.9
North: \	Waite Stre	eet									
7	L	346	4.0	0.519	12.7	LOS A	3.3	24.1	0.65	1.00	38.4
9	R	19	0.0	0.191	44.6	LOS D	0.6	4.2	0.91	0.98	24.1
Approa	ich	365	3.7	0.519	14.3	LOS A	3.3	24.1	0.67	1.00	37.2
West: A	Argyle Stre	eet									
10	L	78	5.4	0.044	6.6	LOS A	0.0	0.0	0.00	0.61	43.3
11	Т	482	2.8	0.252	0.0	LOS A	0.0	0.0	0.00	0.00	50.0
Approa	ich	560	3.2	0.252	0.9	NA	0.0	0.0	0.00	0.08	48.9
All Veh	icles	1639	3.0	0.519	6.2	NA	4.2	30.2	0.36	0.43	43.3

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

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Site: Lackey Street intersection 2020 AM Peak

T-intersection with Argyle Street Stop (Two-Way)

Moven	nent Per	formance - V	ehicles								
Mov ID	Turn	Demand Flow veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back o Vehicles veh	of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
East: A	rgyle Stre	et									
5	T	586	3.4	0.479	5.3	LOS A	5.9	42.6	0.51	0.00	42.3
6	R	182	6.4	0.479	17.1	LOS B	5.9	42.6	1.00	1.16	36.8
Approa	ch	768	4.1	0.479	8.1	NA	5.9	42.6	0.63	0.28	40.8
North: L	_ackey St	reet									
7	L	232	3.2	0.499	19.3	LOS B	2.6	18.6	0.76	1.14	35.1
9	R	5	0.0	0.112	82.5	LOS F	0.3	2.2	0.95	1.00	17.0
Approa	ch	237	3.1	0.499	20.7	LOS B	2.6	18.6	0.76	1.13	34.3
West: A	Argyle Stre	eet									
10	L	54	2.0	0.029	6.5	LOS A	0.0	0.0	0.00	0.61	43.3
11	Т	757	3.6	0.397	0.0	LOS A	0.0	0.0	0.00	0.00	50.0
Approa	ch	811	3.5	0.397	0.4	NA	0.0	0.0	0.00	0.04	49.5
All Vehi	icles	1816	3.7	0.499	6.3	NA	5.9	42.6	0.37	0.28	43.1

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model used.

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Site: Lackey Street intersection 2020 PM Peak

T-intersection with Argyle Street Stop (Two-Way)

Mayray	nant Day		/abialaa								
wover	nent Per	formance - V	enicies				0.50/ 5				
Mov ID	Turn	Demand	HV	Deg.	Average	Level of	95% Back (Prop.	Effective	Average
טו ייטועו	, i uiii	Flow		Satn	Delay	Service	Vehicles	Distance	Queued	Stop Rate	Speed
		veh/h	%	v/c	sec		veh	m		per veh	km/h
	rgyle Stre	eet									
5	Т	755	2.6	0.580	5.6	LOS A	8.3	59.0	0.54	0.00	41.9
6	R	245	1.7	0.580	17.0	LOS B	8.3	59.0	1.00	1.24	36.8
Approa	ich	1000	2.4	0.580	8.4	NA	8.3	59.0	0.65	0.30	40.5
North: I	Lackey St	reet									
7	L	239	0.9	0.446	16.9	LOS B	2.3	16.2	0.69	1.11	36.4
9	R	9	0.0	0.282	129.3	LOS F	0.8	5.5	0.97	1.02	12.3
Approa	ich	248	0.8	0.446	21.2	LOS B	2.3	16.2	0.70	1.10	33.9
West: A	Argyle Stre	eet									
10	L	46	9.1	0.027	6.7	LOS A	0.0	0.0	0.00	0.61	43.3
11	Т	662	2.9	0.346	0.0	LOS A	0.0	0.0	0.00	0.00	50.0
Approa	ich	708	3.3	0.346	0.4	NA	0.0	0.0	0.00	0.04	49.5
All Veh	icles	1957	2.5	0.580	7.1	NA	8.3	59.0	0.42	0.31	42.3

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

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Appendix D	
SIDRA Intersection Delay results for early construction	n



Site: Medway Road Interchange **East Side Early Construction AM Peak**

Interchange East Side Intersection Giveway / Yield (Two-Way)

Moven	nent Per	formance - \	/ehicles								
Mov ID	Turn	Demand Flow veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back o Vehicles veh	of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
East: M	ledway Ro	oad									
5	T	81	20.8	0.047	0.0	LOS A	0.0	0.0	0.00	0.00	80.0
Approa	ch	81	20.8	0.047	0.0	NA	0.0	0.0	0.00	0.00	80.0
North: F	Hume Hig	hway Exit									
7	L	114	14.8	0.068	11.8	Χ	X	Х	Х	0.69	58.9
9	R	2	0.0	0.003	11.7	LOS A	0.0	0.1	0.26	0.66	57.8
Approa	ch	116	14.5	0.068	11.8	LOS A	0.0	0.1	0.00	0.69	58.8
West: N	/ledway R	oad									
11	Т	21	5.0	0.011	0.0	LOS A	0.0	0.0	0.00	0.00	80.0
Approa	ch	21	5.0	0.011	0.0	NA	0.0	0.0	0.00	0.00	80.0
All Vehi	icles	218	15.9	0.068	6.2	NA	0.0	0.1	0.00	0.36	67.2

X: Not applicable for Continuous movement.

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

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Site: Medway Road Interchange **East Side Early Construction PM Peak**

Interchange East Side Intersection Giveway / Yield (Two-Way)

Movem	nent Per	formance - V	/ehicles								
Mov ID	Turn	Demand Flow veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back o Vehicles veh	of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
East: M	edway Ro	oad									
5	Т	139	6.8	0.074	0.0	LOS A	0.0	0.0	0.00	0.00	80.0
Approac	ch	139	6.8	0.074	0.0	NA	0.0	0.0	0.00	0.00	80.0
North: F	Hume Hig	hway Exit									
7	L	72	14.7	0.043	11.8	Χ	X	Χ	Х	0.69	58.9
9	R	1	0.0	0.001	12.1	LOS A	0.0	0.0	0.32	0.65	57.3
Approac	ch	73	14.5	0.043	11.8	LOS A	0.0	0.0	0.00	0.69	58.8
West: N	/ledway R	toad									
11	Т	16	13.3	0.009	0.0	LOS A	0.0	0.0	0.00	0.00	80.0
Approac	ch	16	13.3	0.009	0.0	NA	0.0	0.0	0.00	0.00	80.0
All Vehi	cles	227	9.7	0.074	3.8	NA	0.0	0.0	0.00	0.22	71.8

X: Not applicable for Continuous movement.

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model used.

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Site: Medway Road Interchange **West Side Early Construction AM Peak**

Interchange West Side Intersection Giveway / Yield (Two-Way)

Movem	nent Per	formance - \	/ehicles								
Mov ID	Turn	Demand Flow veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back (Vehicles veh	of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
East: M	edway Ro	oad									
5	Т	7	0.0	0.004	0.0	LOS A	0.0	0.0	0.00	0.00	80.0
6	R	75	22.5	0.074	12.6	LOS A	0.3	2.1	0.10	0.73	58.3
Approac	ch	82	20.5	0.074	11.5	NA	0.3	2.1	0.09	0.66	59.8
West: M	ledway R	oad									
10	L	2	0.0	0.001	11.1	Χ	X	X	X	0.69	58.9
11	Т	24	4.3	0.013	0.0	LOS A	0.0	0.0	0.00	0.00	80.0
Approac	ch	26	4.0	0.013	0.9	NA	0.0	0.0	0.00	0.06	77.8
All Vehi	cles	108	16.5	0.074	8.9	NA	0.3	2.1	0.07	0.51	63.4

X: Not applicable for Continuous movement.

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model used.

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Site: Medway Road Interchange **West Side Early Construction PM Peak**

Interchange West Side Intersection Giveway / Yield (Two-Way)

Movem	nent Per	formance - V	ehicles								
Mov ID	Turn	Demand Flow veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Vehicles veh	of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
East: M	edway Ro	oad									
5	Т	23	4.5	0.012	0.0	LOS A	0.0	0.0	0.00	0.00	80.0
6	R	122	6.9	0.103	11.5	LOS A	0.4	2.7	0.08	0.73	58.4
Approac	ch	145	6.5	0.103	9.7	NA	0.4	2.7	0.06	0.61	61.1
West: N	ledway R	toad									
10	L	3	0.0	0.002	11.1	Χ	X	X	X	0.69	58.9
11	Т	18	5.9	0.010	0.0	LOS A	0.0	0.0	0.00	0.00	80.0
Approac	ch	21	5.0	0.010	1.7	NA	0.0	0.0	0.00	0.10	76.0
All Vehi	cles	166	6.3	0.103	8.7	NA	0.4	2.7	0.06	0.55	62.7

X: Not applicable for Continuous movement.

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model used.

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Site: Mereworth Road Interchange **East Side Early Construction AM Peak**

Interchange Ramp Intersection Giveway / Yield (Two-Way)

Movem	nent Per	formance - \	/ehicles								
Mov ID	Turn	Demand Flow veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Vehicles veh	of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
North: C	Old Hume	Highway									
8	Т	16	20.0	0.009	0.0	LOS A	0.0	0.0	0.00	0.00	80.0
9	R	16	26.7	0.010	12.5	LOS A	0.0	0.0	0.00	0.74	59.0
Approac	ch	32	23.3	0.010	6.3	NA	0.0	0.0	0.00	0.37	68.0
West: N	1ereworth	Road									
10	L	66	14.3	0.039	11.7	Χ	X	X	X	0.69	58.9
12	R	3	66.7	0.009	16.2	LOS B	0.0	0.3	0.18	0.71	57.7
Approac	ch	69	16.7	0.039	11.9	LOS A	0.0	0.3	0.01	0.69	58.8
All Vehi	cles	101	18.8	0.039	10.2	NA	0.0	0.3	0.01	0.59	61.4

X: Not applicable for Continuous movement.

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model used.

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Site: Mereworth Road Interchange **East Side Early Construction PM Peak**

Interchange Ramp Intersection Giveway / Yield (Two-Way)

Moven	nent Per	formance - \	/ehicles								
Mov ID	Turn	Demand Flow veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back o Vehicles veh	of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
North: C	Old Hume	Highway									
8	Т	42	7.5	0.023	0.0	LOS A	0.0	0.0	0.00	0.00	80.0
9	R	2	50.0	0.002	14.0	LOS A	0.0	0.0	0.00	0.75	59.0
Approac	ch	44	9.5	0.023	0.7	NA	0.0	0.0	0.00	0.04	78.7
West: N	1ereworth	Road									
10	L	65	6.5	0.037	11.4	Χ	X	X	X	0.69	58.9
12	R	11	0.0	0.016	11.4	LOS A	0.0	0.3	0.16	0.70	58.1
Approac	ch	76	5.6	0.037	11.4	LOS A	0.0	0.3	0.02	0.69	58.8
All Vehi	cles	120	7.0	0.037	7.4	NA	0.0	0.3	0.01	0.45	64.9

X: Not applicable for Continuous movement.

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model used.

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Site: Mereworth Road Interchange West Side Early Construction AM Peak

With Intersection Reconfigured to New E-W Priority Giveway / Yield (Two-Way)

Moven	nent Per	formance - \	/ehicles								
Mov ID	Turn	Demand Flow veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back o Vehicles veh	of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: I	Hume Hig	jhway Exiit									
1	L	5	20.0	0.011	12.2	LOS A	0.0	0.1	0.08	0.69	58.4
3	R	60	10.5	0.074	12.1	LOS A	0.3	2.2	0.14	0.71	58.1
Approac	ch	65	11.3	0.074	12.1	LOS A	0.3	2.2	0.13	0.71	58.1
East: M	ereworth	Road									
5	Т	16	26.7	0.010	0.0	LOS A	0.0	0.0	0.00	0.00	80.0
Approac	ch	16	26.7	0.010	0.0	NA	0.0	0.0	0.00	0.00	80.0
West: N	1ereworth	Road									
11	Т	8	62.5	0.006	0.0	LOS A	0.0	0.0	0.00	0.00	80.0
Approac	ch	8	62.5	0.006	0.0	NA	0.0	0.0	0.00	0.00	80.0
All Vehi	cles	89	18.8	0.074	8.8	NA	0.3	2.2	0.10	0.52	62.8

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model used.

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Site: Mereworth Road Interchange **West Side Early Construction PM Peak**

With Intersection Reconfigured to New E-W Priority Giveway / Yield (Two-Way)

Movem	nent Per	formance - \	/ehicles								
Mov ID	Turn	Demand Flow veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back o Vehicles veh	of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: H	Hume Hig	jhway Exiit									
1	L	1	0.0	0.002	10.9	LOS A	0.0	0.0	0.02	0.71	58.8
3	R	44	19.0	0.060	12.8	LOS A	0.2	1.9	0.17	0.71	58.0
Approac	ch	45	18.6	0.060	12.8	LOS A	0.2	1.9	0.16	0.71	58.0
East: M	ereworth	Road									
5	Т	2	50.0	0.001	0.0	LOS A	0.0	0.0	0.00	0.00	80.0
Approac	ch	2	50.0	0.001	0.0	NA	0.0	0.0	0.00	0.00	80.0
West: N	lereworth	Road									
11	Т	39	2.7	0.020	0.0	LOS A	0.0	0.0	0.00	0.00	80.0
Approac	ch	39	2.7	0.020	0.0	NA	0.0	0.0	0.00	0.00	80.0
All Vehi	cles	86	12.2	0.060	6.7	NA	0.2	1.9	0.09	0.37	66.8

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model used.

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Site: Golden Vale Road Intersection East Side Early Construction AM Peak

Highway At Grade Access With Median Opening Giveway / Yield (Two-Way)

ent Per	formance - \	/ehicles								
Turn	Demand Flow veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back o Vehicles veh	of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
lden Val	e Road									
L	4	25.0	0.149	20.4	LOS B	0.6	3.9	0.71	0.92	46.5
Т	45	0.0	0.149	17.0	LOS B	0.6	3.9	0.71	0.88	40.8
า	49	2.1	0.149	17.3	LOS B	0.6	3.9	0.71	0.88	41.3
ume Hig	hway									
L	27	11.5	0.016	13.2	LOS A	0.0	0.0	0.00	0.76	63.3
Т	674	13.6	0.188	0.0	LOS A	0.0	0.0	0.00	0.00	100.0
R	2	0.0	0.001	13.0	LOS A	0.0	0.0	0.00	0.80	62.5
า	703	13.5	0.188	0.6	NA	0.0	0.0	0.00	0.03	98.2
edian Op	ening									
Т	4	0.0	0.017	17.1	LOS B	0.1	0.4	0.70	0.79	40.6
R	1	0.0	0.017	19.3	LOS B	0.1	0.4	0.70	0.89	46.6
า	5	0.0	0.017	17.5	LOS B	0.1	0.4	0.70	0.81	41.9
les	758	12.6	0.188	1.8	NA	0.6	3.9	0.05	0.09	91.0
	Turn Iden Val L T I I R I Redian Op T R	Turn Pemand Flow veh/h Iden Vale Road L 4 T 45 1 49 Imme Highway L 27 T 674 R 2 1 703 Indian Opening T 4 R 1 1 5	Turn Plow veh/h % Iden Vale Road L 4 25.0 T 45 0.0 n 49 2.1 Imme Highway L 27 11.5 T 674 13.6 R 2 0.0 n 703 13.5 Idian Opening T 4 0.0 R 1 0.0 n 5 0.0	Turn Plow veh/h % Satn v/c Sat	Turn Plow veh/h % V/c Satn Delay veh/h % V/c Sec Iden Vale Road L 4 25.0 0.149 20.4 T 45 0.0 0.149 17.0 1 49 2.1 0.149 17.3 Imme Highway L 27 11.5 0.016 13.2 T 674 13.6 0.188 0.0 R 2 0.0 0.001 13.0 1 703 13.5 0.188 0.6 Edian Opening T 4 0.0 0.017 17.1 R 1 0.0 0.017 17.5	Turn Plow veh/h % Satn Delay Service S	Turn Plow veh/h % Satn Delay Service Vehicles veh /	Turn Plow veh/h % v/c Satn Delay Service Vehicles Distance veh m deen Vale Road L 4 25.0 0.149 20.4 LOS B 0.6 3.9 T 45 0.0 0.149 17.0 LOS B 0.6 3.9 1.0 49 2.1 0.149 17.3 LOS B 0.6 3.9 1.0 49 2.1 0.149 17.3 LOS B 0.6 3.9 1.0 Eligable Service Vehicles Distance veh m m deen Vale Road L 4 25.0 0.149 17.0 LOS B 0.6 3.9 1.0 Eligable Service Vehicles Distance veh m m deen Vale Road II.	Turn Plow veh/h % v/c Satn Delay Service Vehicles Distance veh m Prop. Satn Veh/h % v/c Sec Vehicles Distance veh m Queued Vehicles Distance	Turn Flow veh/h % Satn Delay Service Service Vehicles Distance Vehicles Distance Vehicles Stop Rate Prop. Stop Rate Prop. Service Vehicles Distance Vehicles Stop Rate Prop. Service S

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model used.

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Site: Golden Vale Road Intersection East Side Early Construction PM Peak

Highway At Grade Access With Median Opening Giveway / Yield (Two-Way)

Movem	nent Per	formance - \	/ehicles								
Mov ID	Turn	Demand Flow veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back o Vehicles veh	of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
East: Go	olden Val	e Road									
4	L	1	0.0	0.089	18.6	LOS B	0.3	2.3	0.70	0.91	46.8
5	Т	28	0.0	0.089	16.6	LOS B	0.3	2.3	0.70	0.88	41.1
Approac	ch	29	0.0	0.089	16.7	LOS B	0.3	2.3	0.70	0.88	41.3
North: F	łume Higl	hway									
7	L	49	0.0	0.027	12.5	LOS A	0.0	0.0	0.00	0.75	63.3
8	Т	616	22.1	0.181	0.0	LOS A	0.0	0.0	0.00	0.00	100.0
9	R	4	0.0	0.002	13.0	LOS A	0.0	0.0	0.00	0.80	62.5
Approac	ch	669	20.3	0.181	1.0	NA	0.0	0.0	0.00	0.06	96.5
West: M	ledian Op	ening									
11	Т	3	0.0	0.014	17.1	LOS B	0.0	0.3	0.70	0.78	40.5
12	R	1	0.0	0.014	19.3	LOS B	0.0	0.3	0.70	0.87	46.5
Approac	ch	4	0.0	0.014	17.6	LOS B	0.0	0.3	0.70	0.80	42.2
All Vehi	cles	703	19.3	0.181	1.8	NA	0.3	2.3	0.03	0.10	91.9

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model used.

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Site: Golden Vale Road Intersection West Side Early Construction AM Peak

Highway At Grade Access With Median Opening Giveway / Yield (Two-Way)

Moven	nent Per	formance - \	/ehicles								
Mov ID	Turn	Demand Flow veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back o Vehicles veh	of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South:	Hume Hig	hway								·	
1	L	1	0.0	0.001	12.5	LOS A	0.0	0.0	0.00	0.75	63.3
2	Т	523	32.4	0.162	0.0	LOS A	0.0	0.0	0.00	0.00	100.0
3	R	3	0.0	0.002	13.0	LOS A	0.0	0.0	0.00	0.80	62.5
Approa	ch	527	32.1	0.162	0.1	NA	0.0	0.0	0.00	0.01	99.6
East: F	rom Golde	en Vale Road									
5	Т	1	0.0	0.153	17.2	LOS B	0.6	3.9	0.69	0.86	39.9
6	R	46	0.0	0.153	19.4	LOS B	0.6	3.9	0.69	0.92	46.0
Approa	ch	47	0.0	0.153	19.4	LOS B	0.6	3.9	0.69	0.92	45.9
West: F	Private Acc	cess									
10	L	1	0.0	0.005	14.6	LOS B	0.0	0.1	0.59	0.71	49.9
11	Т	1	0.0	0.005	12.6	LOS A	0.0	0.1	0.59	0.67	44.3
Approa	ch	2	0.0	0.005	13.6	LOS A	0.0	0.1	0.59	0.69	47.3
All Vehi	icles	577	29.4	0.162	1.7	NA	0.6	3.9	0.06	0.08	90.8

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model used.

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Site: Golden Vale Road **Intersection West Side Early Construction PM Peak**

Highway At Grade Access With Median Opening Giveway / Yield (Two-Way)

Moven	nent Per	formance - \	/ehicles								
Mov ID	Turn	Demand Flow veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back o Vehicles veh	of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South:	Hume Hig	hway									
1	L	1	0.0	0.001	12.5	LOS A	0.0	0.0	0.00	0.75	63.3
2	Т	765	10.6	0.210	0.0	LOS A	0.0	0.0	0.00	0.00	100.0
3	R	3	0.0	0.002	13.0	LOS A	0.0	0.0	0.00	0.80	62.5
Approa	ch	769	10.5	0.210	0.1	NA	0.0	0.0	0.00	0.00	99.8
East: F	rom Golde	en Vale Road									
5	Т	1	0.0	0.146	21.2	LOS B	0.5	3.5	0.77	0.89	37.2
6	R	34	0.0	0.146	23.4	LOS B	0.5	3.5	0.77	0.94	43.2
Approa	ch	35	0.0	0.146	23.3	LOS B	0.5	3.5	0.77	0.94	43.1
West: F	Private Acc	cess									
10	L	1	0.0	0.006	16.8	LOS B	0.0	0.1	0.67	0.75	48.1
11	Т	1	0.0	0.006	14.8	LOS B	0.0	0.1	0.67	0.73	42.3
Approa	ch	2	0.0	0.006	15.8	LOS B	0.0	0.1	0.67	0.74	45.4
All Vehi	icles	806	10.1	0.210	1.1	NA	0.5	3.5	0.03	0.05	94.3

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model used.

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Site: Old Hume Highway **Roundabout Early Construction AM Peak**

Four Way Roundabout Roundabout

Mov ID	Turn	Demand	Ш\/	Deg.	Average	Level of	95% Back o		Prop.	Effective	Average
עו ייטוע	Turri	Flow veh/h	HV %	Satn v/c	Delay sec	Service	Vehicles veh	Distance m	Queued	Stop Rate per veh	Speed km/l
South: C	old Hume	Highway	/0	V/C	Sec		Ven	- 111		per veri	KIII/
1	L	4	50.0	0.067	12.3	LOS A	0.3	2.5	0.29	0.61	59.4
2	T	59	0.0	0.067	8.6	LOS A	0.3	2.5	0.29	0.51	60.
3	R	18	35.3	0.067	17.5	LOS B	0.3	2.5	0.29	0.81	54.
Approac	h	81	10.4	0.067	10.7	LOS A	0.3	2.5	0.29	0.58	58.
East: Ta	ylor Aver	nue									
4	L	17	31.3	0.100	10.9	LOS A	0.5	4.2	0.16	0.57	60.
5	Т	72	22.1	0.100	9.2	LOS A	0.5	4.2	0.16	0.48	61.
6	R	42	12.5	0.100	16.0	LOS B	0.5	4.2	0.16	0.81	54
Approac	h	131	20.2	0.100	11.6	LOS A	0.5	4.2	0.16	0.60	58
North: O	ld Hume	Highway									
7	L	20	5.3	0.040	9.9	LOS A	0.2	1.5	0.30	0.57	59.
8	Т	24	4.3	0.040	8.7	LOS A	0.2	1.5	0.30	0.50	60.
9	R	8	12.5	0.040	16.3	LOS B	0.2	1.5	0.30	0.79	54.
Approac	h	53	6.0	0.040	10.4	LOS A	0.2	1.5	0.30	0.57	58.
West: M	edway R	oad									
10	L	18	5.9	0.109	10.0	LOS A	0.5	4.4	0.29	0.59	59.
11	Т	104	17.2	0.109	9.4	LOS A	0.5	4.4	0.29	0.52	60.
12	R	8	25.0	0.109	17.0	LOS B	0.5	4.4	0.29	0.83	54.
Approac	h	131	16.1	0.109	9.9	LOS A	0.5	4.4	0.29	0.55	59
All Vehic	rles	395	14.9	0.109	10.7	LOS A	0.5	4.4	0.25	0.58	59

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Roundabout Capacity Model: SIDRA Standard.

SIDRA Standard Delay Model used.

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Site: Old Hume Highway **Roundabout Early Construction PM Peak**

Four Way Roundabout Roundabout

M. ID		Demand	117.7	Deg.	Average	Level of	95% Back o		Prop.	Effective	Average
Mov ID	Turn	Flow	HV	Satn	Delay	Service	Vehicles	Distance	Queued	Stop Rate	Speed
Couth: C	Nd Huma	veh/h Highway	%	v/c	sec		veh	m		per veh	km/l
30uiii. C	Jia Hullie	: підпway 18	5.9	0.054	10.0	LOS A	0.3	2.0	0.30	0.57	59.2
-	L -										
2	T	29	0.0	0.054	8.6	LOS A	0.3	2.0	0.30	0.50	60.
3	R	21	20.0	0.054	16.7	LOS B	0.3	2.0	0.30	0.78	54.
Approac	h	68	7.7	0.054	11.4	LOS A	0.3	2.0	0.30	0.60	57.
East: Ta	ıylor Avei	nue									
4	L	15	21.4	0.101	10.4	LOS A	0.5	3.8	0.19	0.59	60.
5	Т	108	6.8	0.101	8.5	LOS A	0.5	3.8	0.19	0.50	61.
6	R	20	0.0	0.101	15.4	LOS B	0.5	3.8	0.19	0.85	54.
Approac	h	143	7.4	0.101	9.7	LOS A	0.5	3.8	0.19	0.56	60.
North: O	old Hume	Highway									
7	L	32	3.3	0.063	9.6	LOS A	0.3	2.2	0.23	0.57	59.
8	Т	36	0.0	0.063	8.3	LOS A	0.3	2.2	0.23	0.49	60.
9	R	20	5.3	0.063	15.8	LOS B	0.3	2.2	0.23	0.79	54.
Approac	h	87	2.4	0.063	10.5	LOS A	0.3	2.2	0.23	0.59	58.
West: M	ledway R	oad									
10	L	15	7.1	0.063	9.7	LOS A	0.3	2.4	0.21	0.58	60.
11	Т	61	15.5	0.063	9.0	LOS A	0.3	2.4	0.21	0.50	61.
12	R	4	25.0	0.063	16.7	LOS B	0.3	2.4	0.21	0.84	54.
Approac	h	80	14.5	0.063	9.5	LOS A	0.3	2.4	0.21	0.54	60
All Vehic	alaa	379	7.8	0.101	10.1	LOS A	0.5	3.8	0.22	0.57	59

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Roundabout Capacity Model: SIDRA Standard.

SIDRA Standard Delay Model used.

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Site: Berrima Road Taylor Avenue Early Construction AM Peak

T Intersection Giveway / Yield (Two-Way)

Moven	nent Per	formance - \	/enicles								
Mov ID	Turn	Demand Flow	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Vehicles	of Queue Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	v/c	sec	OCIVICE	veh	m	Queucu	per veh	km/h
South:	Berrima F										
1	L	83	19.0	0.085	8.9	LOS A	0.0	0.0	0.00	0.81	49.0
2	Т	66	0.0	0.085	0.0	LOS A	0.0	0.0	0.00	0.00	60.0
Approa	ch	149	10.6	0.085	4.9	NA	0.0	0.0	0.00	0.45	53.3
North: E	Berrima R	Road									
8	Т	57	1.9	0.030	0.6	LOS A	0.2	1.3	0.29	0.00	54.6
9	R	1	0.0	0.030	9.0	LOS A	0.2	1.3	0.29	0.99	49.0
Approa	ch	58	1.8	0.030	0.7	NA	0.2	1.3	0.29	0.02	54.5
West: T	Taylor Ave	enue									
10	L	1	0.0	0.226	10.4	LOS A	1.0	7.6	0.40	0.60	46.5
12	R	146	11.5	0.226	11.1	LOS A	1.0	7.6	0.40	0.71	46.3
Approa	ch	147	11.4	0.226	11.1	LOS A	1.0	7.6	0.40	0.71	46.3
All Vehi	icles	355	9.5	0.226	6.8	NA	1.0	7.6	0.21	0.49	50.4

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model used.

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Site: Berrima Road Taylor Avenue Early Construction PM Peak

T Intersection Giveway / Yield (Two-Way)

Moven	nent Per	formance - V	ehicles								
Mov ID	Turn	Demand Flow	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Vehicles	of Queue Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	v/c	sec		veh			per veh	km/h
South:	Berrima F	Road									
1	L	153	4.1	0.133	8.3	LOS A	0.0	0.0	0.00	0.78	49.0
2	Т	94	0.0	0.133	0.0	LOS A	0.0	0.0	0.00	0.00	60.0
Approa	ch	246	2.6	0.133	5.2	NA	0.0	0.0	0.00	0.48	52.6
North: E	Berrima R	load									
8	Т	77	1.4	0.041	1.0	LOS A	0.3	1.9	0.38	0.00	53.2
9	R	1	0.0	0.041	9.5	LOS A	0.3	1.9	0.38	0.97	49.2
Approa	ch	78	1.4	0.041	1.1	NA	0.3	1.9	0.38	0.01	53.1
West: T	Taylor Ave	enue									
10	L	2	0.0	0.223	11.5	LOS A	0.9	7.2	0.48	0.64	45.4
12	R	128	9.8	0.223	12.1	LOS A	0.9	7.2	0.48	0.77	45.3
Approa	ch	131	9.7	0.223	12.1	LOS A	0.9	7.2	0.48	0.76	45.3
All Vehi	icles	455	4.4	0.223	6.5	NA	0.9	7.2	0.20	0.48	50.4

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model used.

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Site: Berrima Road Douglas Road Early Construction AM Peak

T intersection Giveway / Yield (Two-Way)

Moven	nent Per	formance - \	/ehicles								
Mov ID	Turn	Demand Flow veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back o Vehicles veh	of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: E	Berrima R	Road									
2	Т	140	12.8	0.063	8.0	LOS A	0.4	3.0	0.28	0.00	70.6
3	R	4	0.0	0.063	11.2	LOS A	0.4	3.0	0.37	1.37	59.5
Approac	ch	144	12.4	0.063	1.1	NA	0.4	3.0	0.28	0.04	70.3
East: Do	ouglas Ro	oad									
4	L	4	0.0	0.065	16.1	LOS B	0.2	2.1	0.54	0.65	44.6
6	R	19	38.9	0.065	18.0	LOS B	0.2	2.1	0.54	0.82	44.6
Approac	ch	23	31.8	0.065	17.7	LOS B	0.2	2.1	0.54	0.79	44.6
North: E	Berrima R	oad									
7	L	34	43.8	0.024	12.0	LOS A	0.0	0.0	0.00	0.71	57.1
8	Т	185	10.8	0.102	0.0	LOS A	0.0	0.0	0.00	0.00	80.0
Approac	ch	219	15.9	0.102	1.8	NA	0.0	0.0	0.00	0.11	75.8
All Vehi	cles	386	15.5	0.102	2.5	NA	0.4	3.0	0.14	0.12	70.8

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model used.

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Site: Berrima Road Douglas Road **Early Construction PM Peak**

T intersection Giveway / Yield (Two-Way)

Moven	nant Dar	formance - \	/objelee								
Moven	nent Per		remidles	Dog	A.,	l aval of	95% Back (of Outside	Duan	Effective	A., (2, 12, 27, 2)
Mov ID	Turn	Demand Flow	HV	Deg. Satn	Average Delay	Level of Service	Vehicles	Distance	Prop. Queued	Stop Rate	Average Speed
		veh/h	%	v/c	sec	Service	veriicies	Distance M	Queueu	per veh	km/h
South:	Berrima F		/0	V/O	300		٧٥١١			per veri	IXIII/II
2	Т	215	4.4	0.091	0.7	LOS A	0.6	4.3	0.28	0.00	70.7
3	R	5	0.0	0.091	11.1	LOS A	0.6	4.3	0.36	1.40	59.6
Approa	ch	220	4.3	0.091	0.9	NA	0.6	4.3	0.28	0.03	70.5
East: D	ouglas Ro	oad									
4	L	3	0.0	0.143	14.9	LOS B	0.5	4.2	0.55	0.67	45.5
6	R	60	10.5	0.143	15.5	LOS B	0.5	4.2	0.55	0.85	45.6
Approa	ch	63	10.0	0.143	15.5	LOS B	0.5	4.2	0.55	0.84	45.5
North: E	Berrima R	load									
7	L	18	35.3	0.012	11.6	LOS A	0.0	0.0	0.00	0.71	57.1
8	Т	198	3.7	0.104	0.0	LOS A	0.0	0.0	0.00	0.00	80.0
Approa	ch	216	6.3	0.104	1.0	NA	0.0	0.0	0.00	0.06	77.7
All Vehi	icles	499	5.9	0.143	2.8	NA	0.6	4.3	0.19	0.15	68.5

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model used.

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Site: Waite Street intersection Early Construction AM Peak

T Intersection with Argyle Street Giveway / Yield (Two-Way)

Moven	nent Per	formance - \	/ehicles								
Mov ID	Turn	Demand Flow veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back o Vehicles veh	of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
East: A	rgyle Stre	et									
5	Т	275	2.7	0.447	0.9	LOS A	2.9	21.0	0.10	0.00	48.2
6	R	297	4.6	0.447	12.6	LOS A	2.9	21.0	0.70	1.00	38.6
Approa	ch	572	3.7	0.447	7.0	NA	2.9	21.0	0.41	0.52	42.7
North: \	Waite Stre	et									
7	L	284	5.9	0.500	14.1	LOS A	2.9	21.1	0.68	1.01	37.4
9	R	12	18.2	0.166	59.4	LOS E	0.5	4.0	0.93	0.98	20.6
Approa	ch	296	6.4	0.500	15.9	LOS B	2.9	21.1	0.69	1.01	36.3
West: A	Argyle Stre	eet									
10	L	86	6.1	0.049	6.6	LOS A	0.0	0.0	0.00	0.61	43.3
11	Т	585	2.3	0.305	0.0	LOS A	0.0	0.0	0.00	0.00	50.0
Approa	ch	672	2.8	0.305	0.8	NA	0.0	0.0	0.00	0.08	49.0
All Vehi	icles	1539	3.8	0.500	6.0	NA	2.9	21.1	0.29	0.42	43.7

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model used.

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Site: Waite Street intersection Early Construction PM Peak

T Intersection with Argyle Street Giveway / Yield (Two-Way)

Mover	nent Per	formance - V	ehicles								
Mov ID	Turn	Demand Flow veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Vehicles veh	of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
East: A	rgyle Stre	et									
5 6	T R	432 282	2.2 2.6	0.452 0.452	2.4 11.9	LOS A LOS A	4.2 4.2	30.2 30.2	0.32 0.72	0.00 1.03	45.5 39.6
Approa	ch	714	2.4	0.452	6.2	NA	4.2	30.2	0.48	0.41	42.9
North: \	Waite Stre	et									
7	L	348	3.9	0.522	12.7	LOS A	3.4	24.3	0.66	1.01	38.3
9	R	21	0.0	0.213	45.5	LOS D	0.7	4.7	0.91	0.98	23.8
Approa	ch	369	3.7	0.522	14.6	LOS B	3.4	24.3	0.67	1.01	37.1
West: A	Argyle Stre	eet									
10	L	78	5.4	0.044	6.6	LOS A	0.0	0.0	0.00	0.61	43.3
11	Т	482	2.8	0.252	0.0	LOS A	0.0	0.0	0.00	0.00	50.0
Approa	ch	560	3.2	0.252	0.9	NA	0.0	0.0	0.00	0.08	48.9
All Veh	icles	1643	2.9	0.522	6.3	NA	4.2	30.2	0.36	0.43	43.2

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model used.

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Site: Lackey Street intersection **Early Construction AM Peak**

T-intersection with Argyle Street Stop (Two-Way)

Moven	nent Per	formance - V	ehicles								
Mov ID	Turn	Demand Flow veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back o Vehicles veh	of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
East: A	rgyle Stre	et									
5	Т	588	3.6	0.481	5.3	LOS A	5.9	42.8	0.51	0.00	42.2
6	R	182	6.4	0.481	17.2	LOS B	5.9	42.8	1.00	1.16	36.7
Approa	ch	771	4.2	0.481	8.1	NA	5.9	42.8	0.63	0.27	40.8
North: L	_ackey Sti	reet									
7	L	232	3.2	0.500	19.3	LOS B	2.6	18.7	0.76	1.14	35.1
9	R	5	0.0	0.113	83.1	LOS F	0.3	2.2	0.95	1.00	16.9
Approa	ch	237	3.1	0.500	20.8	LOS B	2.6	18.7	0.77	1.13	34.3
West: A	Argyle Stre	eet									
10	L	54	2.0	0.029	6.5	LOS A	0.0	0.0	0.00	0.61	43.3
11	Т	758	3.8	0.398	0.0	LOS A	0.0	0.0	0.00	0.00	50.0
Approa	ch	812	3.6	0.398	0.4	NA	0.0	0.0	0.00	0.04	49.5
All Vehi	icles	1819	3.8	0.500	6.3	NA	5.9	42.8	0.37	0.28	43.1

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model used.

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Site: Lackey Street intersection Early Construction PM Peak

T-intersection with Argyle Street Stop (Two-Way)

Moven	nent Per	formance - V	ehicles								
Mov ID	Turn	Demand Flow veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back o Vehicles veh	of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
East: A	rgyle Stre	et									
5	Т	755	2.6	0.581	5.6	LOS A	8.3	59.0	0.54	0.00	41.9
6	R	245	1.7	0.581	17.0	LOS B	8.3	59.0	1.00	1.24	36.8
Approa	ch	1000	2.4	0.581	8.4	NA	8.3	59.0	0.65	0.30	40.5
North: L	ackey St	reet									
7	L	239	0.9	0.448	17.0	LOS B	2.3	16.3	0.69	1.11	36.4
9	R	9	0.0	0.283	130.1	LOS F	0.8	5.5	0.97	1.02	12.2
Approa	ch	248	0.8	0.448	21.3	LOS B	2.3	16.3	0.70	1.10	33.9
West: A	rgyle Stre	eet									
10	L	46	9.1	0.027	6.7	LOS A	0.0	0.0	0.00	0.61	43.3
11	Т	664	2.9	0.347	0.0	LOS A	0.0	0.0	0.00	0.00	50.0
Approa	ch	711	3.3	0.347	0.4	NA	0.0	0.0	0.00	0.04	49.5
All Vehi	icles	1959	2.5	0.581	7.1	NA	8.3	59.0	0.42	0.31	42.2

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model used.

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Appendix E	
SIDRA Intersection Delay Results for peak construction	



Site: Medway Road Interchange **East Side Peak Construction AM Peak**

Interchange East Side Intersection Giveway / Yield (Two-Way)

Moven	nent Pe	rformance - \	Vehicles								
Mov ID	Turn	Demand Flow veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back o Vehicles veh	of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
East: M	ledway R	Road									
5	Т	83	22.8	0.049	0.0	LOS A	0.0	0.0	0.00	0.00	80.0
Approa	ch	83	22.8	0.049	0.0	NA	0.0	0.0	0.00	0.00	80.0
North: F	Hume Hig	ghway Exit									
7	L	116	15.5	0.069	11.8	Х	X	X	Х	0.69	58.9
9	R	2	0.0	0.003	11.7	LOS A	0.0	0.1	0.27	0.66	57.7
Approa	ch	118	15.2	0.069	11.8	LOS A	0.0	0.1	0.00	0.69	58.8
West: N	Medway F	Road									
11	Т	21	5.0	0.011	0.0	LOS A	0.0	0.0	0.00	0.00	80.0
Approa	ch	21	5.0	0.011	0.0	NA	0.0	0.0	0.00	0.00	80.0
All Vehi	icles	222	17.1	0.069	6.3	NA	0.0	0.1	0.00	0.36	67.2

X: Not applicable for Continuous movement.

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model used.

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Site: Medway Road Interchange **East Side Peak Construction PM Peak**

Interchange East Side Intersection Giveway / Yield (Two-Way)

Moven	Movement Performance - Vehicles													
Mov ID	Turn	Demand Flow veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back o Vehicles veh	of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h			
East: M	East: Medway Road													
5	Т	129	7.3	0.070	0.0	LOS A	0.0	0.0	0.00	0.00	80.0			
Approa	ch	129	7.3	0.070	0.0	NA	0.0	0.0	0.00	0.00	80.0			
North: F	Hume Hig	hway Exit												
7	L	72	14.7	0.043	11.8	Χ	X	Χ	Χ	0.69	58.9			
9	R	1	0.0	0.001	12.0	LOS A	0.0	0.0	0.31	0.65	57.4			
Approa	ch	73	14.5	0.043	11.8	LOS A	0.0	0.0	0.00	0.69	58.8			
West: N	/ledway R	toad												
11	Т	16	13.3	0.009	0.0	LOS A	0.0	0.0	0.00	0.00	80.0			
Approa	ch	16	13.3	0.009	0.0	NA	0.0	0.0	0.00	0.00	80.0			
All Vehi	cles	218	10.1	0.070	3.9	NA	0.0	0.0	0.00	0.23	71.5			

X: Not applicable for Continuous movement.

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model used.

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Site: Medway Road Interchange **West Side Peak Construction AM Peak**

Interchange West Side Intersection Giveway / Yield (Two-Way)

		Demand		Deg.	Average	Level of	95% Back		Prop.	Effective	Average
Mov ID	Turn	Flow	HV	Satn	Delay	Service	Vehicles	Distance	Queued	Stop Rate	Speed
		veh/h	%	v/c	sec		veh	m		per veh	km/h
ast: Me	edway Ro	oad									
5	Т	7	0.0	0.004	0.0	LOS A	0.0	0.0	0.00	0.00	80.0
6	R	77	24.7	0.078	12.8	LOS A	0.3	2.3	0.10	0.73	58.3
Approac	ch	84	22.5	0.078	11.7	NA	0.3	2.3	0.09	0.66	59.8
Vest: M	ledway R	toad									
10	L	2	0.0	0.001	11.1	Χ	X	X	X	0.69	58.9
11	Т	24	4.3	0.013	0.0	LOS A	0.0	0.0	0.00	0.00	80.0
Approac	ch	26	4.0	0.013	0.9	NA	0.0	0.0	0.00	0.06	77.8
All Vehic	cles	111	18.1	0.078	9.1	NA	0.3	2.3	0.07	0.52	63.3

X: Not applicable for Continuous movement.

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model used.

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Site: Medway Road Interchange **West Side Peak Construction PM Peak**

Interchange West Side Intersection Giveway / Yield (Two-Way)

Movem	ent Per	formance - V	ehicles								
Mov ID	Turn	Demand Flow veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back Vehicles veh	of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
East: Medway Road											
5	Т	22	4.8	0.012	0.0	LOS A	0.0	0.0	0.00	0.00	80.0
6	R	114	7.4	0.097	11.6	LOS A	0.3	2.6	0.08	0.73	58.4
Approac	h	136	7.0	0.097	9.7	NA	0.3	2.6	0.06	0.61	61.2
West: M	ledway R	oad									
10	L	3	0.0	0.002	11.1	Χ	X	X	X	0.69	58.9
11	Т	18	5.9	0.010	0.0	LOS A	0.0	0.0	0.00	0.00	80.0
Approac	ch	21	5.0	0.010	1.7	NA	0.0	0.0	0.00	0.10	76.0
All Vehic	cles	157	6.7	0.097	8.6	NA	0.3	2.6	0.06	0.54	62.8

X: Not applicable for Continuous movement.

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model used.

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Site: Mereworth Road Interchange **East Side Peak Construction AM Peak**

Interchange Ramp Intersection Giveway / Yield (Two-Way)

		Demand		Deg.	Average	Level of	95% Back	of Queue	Prop.	Effective	Average
Mov ID	Turn	Flow	HV	Satn	Delay	Service	Vehicles	Distance	Queued	Stop Rate	Speed
		veh/h		v/c	sec		veh			per veh	· km/ł
North: Old Hume Highway											
8	Т	16	20.0	0.009	0.0	LOS A	0.0	0.0	0.00	0.00	80.0
9	R	33	19.4	0.020	12.1	LOS A	0.0	0.0	0.00	0.74	59.0
Approac	ch	48	19.6	0.020	8.1	NA	0.0	0.0	0.00	0.50	64.0
Nest: M	lereworth	Road									
10	L	75	18.3	0.046	11.9	Χ	X	X	X	0.69	58.9
12	R	5	60.0	0.014	16.1	LOS B	0.0	0.4	0.23	0.70	57.3
Approac	ch	80	21.1	0.046	12.2	LOS A	0.0	0.4	0.01	0.69	58.
All Vehic	cles	128	20.5	0.046	10.7	NA	0.0	0.4	0.01	0.62	60.

X: Not applicable for Continuous movement.

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model used.

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Site: Mereworth Road Interchange **East Side Peak Construction PM Peak**

Interchange Ramp Intersection Giveway / Yield (Two-Way)

Movement Performance - Vehicles													
Mov ID	Turn	Demand Flow veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Vehicles veh	of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h		
North: Old Hume Highway													
8	Т	42	7.5	0.023	0.0	LOS A	0.0	0.0	0.00	0.00	80.0		
9	R	2	50.0	0.002	14.0	LOS A	0.0	0.0	0.00	0.75	59.0		
Approac	ch	44	9.5	0.023	0.7	NA	0.0	0.0	0.00	0.04	78.7		
West: N	1ereworth	Road											
10	L	48	10.9	0.028	11.6	Χ	X	X	X	0.69	58.9		
12	R	2	0.0	0.003	11.4	LOS A	0.0	0.1	0.16	0.69	58.1		
Approac	ch	51	10.4	0.028	11.6	LOS A	0.0	0.1	0.01	0.69	58.8		
All Vehi	cles	95	10.0	0.028	6.5	NA	0.0	0.1	0.00	0.38	66.7		

X: Not applicable for Continuous movement.

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model used.

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Site: Mereworth Road Interchange **West Side Peak Construction AM Peak**

With Intersection Reconfigured to New E-W Priority Giveway / Yield (Two-Way)

Movem	Movement Performance - Vehicles													
Mov ID	Turn	Demand Flow veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back o Vehicles veh	of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h			
South: H	Hume Hig	jhway Exiit												
1	L	6	33.3	0.016	13.2	LOS A	0.0	0.2	0.13	0.68	58.2			
3	R	60	10.5	0.078	12.4	LOS A	0.3	2.4	0.21	0.71	57.8			
Approac	ch	66	12.7	0.078	12.5	LOS A	0.3	2.4	0.20	0.70	57.8			
East: M	ereworth	Road												
5	Т	33	19.4	0.019	0.0	LOS A	0.0	0.0	0.00	0.00	80.0			
Approac	ch	33	19.4	0.019	0.0	NA	0.0	0.0	0.00	0.00	80.0			
West: N	lereworth	Road												
11	Т	19	55.6	0.013	0.0	LOS A	0.0	0.0	0.00	0.00	80.0			
Approac	ch	19	55.6	0.013	0.0	NA	0.0	0.0	0.00	0.00	80.0			
All Vehi	cles	118	21.4	0.078	7.0	NA	0.3	2.4	0.11	0.40	65.9			

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model used.

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Site: Mereworth Road Interchange **West Side Peak Construction PM Peak**

With Intersection Reconfigured to New E-W Priority Giveway / Yield (Two-Way)

Moven	Movement Performance - Vehicles													
Mov ID	Turn	Demand Flow veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back o Vehicles veh	of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h			
South: I	Hume Hig	ghway Exiit												
1	L	1	0.0	0.002	10.9	LOS A	0.0	0.0	0.02	0.71	58.8			
3	R	44	19.0	0.058	12.5	LOS A	0.2	1.8	0.10	0.73	58.3			
Approa	ch	45	18.6	0.058	12.5	LOS A	0.2	1.8	0.10	0.73	58.3			
East: M	ereworth	Road												
5	Т	2	50.0	0.001	0.0	LOS A	0.0	0.0	0.00	0.00	80.0			
Approa	ch	2	50.0	0.001	0.0	NA	0.0	0.0	0.00	0.00	80.0			
West: N	1ereworth	Road												
11	Т	14	15.4	0.008	0.0	LOS A	0.0	0.0	0.00	0.00	80.0			
Approac	ch	14	15.4	0.008	0.0	NA	0.0	0.0	0.00	0.00	80.0			
All Vehi	cles	61	19.0	0.058	9.3	NA	0.2	1.8	0.07	0.54	62.7			

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model used.

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Site: Golden Vale Road **Intersection East Side Peak Construction AM Peak**

Highway At Grade Access With Median Opening Giveway / Yield (Two-Way)

Moven	nent Per	formance - \	/ehicles								
Mov ID	Turn	Demand Flow veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back o Vehicles veh	of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
East: G	iolden Val	e Road									
4	L	4	25.0	0.150	20.5	LOS B	0.6	4.0	0.71	0.92	46.5
5	Т	45	0.0	0.150	17.1	LOS B	0.6	4.0	0.71	0.88	40.7
Approa	ch	49	2.1	0.150	17.3	LOS B	0.6	4.0	0.71	0.89	41.3
North: I	Hume Higl	hway									
7	L	27	11.5	0.016	13.2	LOS A	0.0	0.0	0.00	0.76	63.3
8	Т	676	13.7	0.189	0.0	LOS A	0.0	0.0	0.00	0.00	100.0
9	R	2	0.0	0.001	13.0	LOS A	0.0	0.0	0.00	0.80	62.5
Approa	ch	705	13.6	0.189	0.6	NA	0.0	0.0	0.00	0.03	98.2
West: N	/ledian Op	ening									
11	Т	4	0.0	0.017	17.1	LOS B	0.1	0.4	0.70	0.79	40.6
12	R	1	0.0	0.017	19.3	LOS B	0.1	0.4	0.70	0.89	46.5
Approa	ch	5	0.0	0.017	17.6	LOS B	0.1	0.4	0.70	0.81	41.9
All Veh	icles	760	12.7	0.189	1.8	NA	0.6	4.0	0.05	0.09	91.0

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model used.

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Site: Golden Vale Road Intersection East Side Peak Construction PM Peak

Highway At Grade Access With Median Opening Giveway / Yield (Two-Way)

Moven	nent Per	formance - \	/ehicles								
Mov ID	Turn	Demand Flow veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Vehicles veh	of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
East: G	Golden Val	e Road									
4	L	1	0.0	0.087	18.4	LOS B	0.3	2.2	0.69	0.90	46.9
5	Т	28	0.0	0.087	16.5	LOS B	0.3	2.2	0.69	0.87	41.2
Approa	ch	29	0.0	0.087	16.5	LOS B	0.3	2.2	0.69	0.88	41.5
North: I	Hume Higl	hway									
7	L	48	0.0	0.026	12.5	LOS A	0.0	0.0	0.00	0.75	63.3
8	Т	608	22.3	0.179	0.0	LOS A	0.0	0.0	0.00	0.00	100.0
9	R	4	0.0	0.002	13.0	LOS A	0.0	0.0	0.00	0.80	62.5
Approa	ch	661	20.5	0.179	1.0	NA	0.0	0.0	0.00	0.06	96.6
West: N	Median Op	ening									
11	Т	3	0.0	0.014	16.9	LOS B	0.0	0.3	0.70	0.78	40.7
12	R	1	0.0	0.014	19.1	LOS B	0.0	0.3	0.70	0.86	46.7
Approa	ch	4	0.0	0.014	17.5	LOS B	0.0	0.3	0.70	0.80	42.3
All Veh	icles	695	19.5	0.179	1.8	NA	0.3	2.2	0.03	0.10	91.9

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model used.

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Site: Golden Vale Road **Intersection West Side Peak Construction AM Peak**

Highway At Grade Access With Median Opening Giveway / Yield (Two-Way)

Movem	ent Per	formance - \	/ehicles								
Mov ID	Turn	Demand Flow veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back o Vehicles veh	of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: F	lume Hig	hway									
1	L	1	0.0	0.001	12.5	LOS A	0.0	0.0	0.00	0.75	63.3
2	Т	524	32.5	0.163	0.0	LOS A	0.0	0.0	0.00	0.00	100.0
3	R	3	0.0	0.002	13.0	LOS A	0.0	0.0	0.00	0.80	62.5
Approac	h	528	32.3	0.163	0.1	NA	0.0	0.0	0.00	0.01	99.6
East: Fr	om Golde	en Vale Road									
5	Т	1	0.0	0.154	17.3	LOS B	0.6	3.9	0.70	0.86	39.9
6	R	46	0.0	0.154	19.5	LOS B	0.6	3.9	0.70	0.92	46.0
Approac	h	47	0.0	0.154	19.4	LOS B	0.6	3.9	0.70	0.92	45.9
West: P	rivate Acc	cess									
10	L	1	0.0	0.005	14.7	LOS B	0.0	0.1	0.59	0.71	49.9
11	Т	1	0.0	0.005	12.7	LOS A	0.0	0.1	0.59	0.67	44.2
Approac	ch	2	0.0	0.005	13.7	LOS A	0.0	0.1	0.59	0.69	47.3
All Vehic	cles	578	29.5	0.163	1.7	NA	0.6	3.9	0.06	0.08	90.8

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model used.

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Site: Golden Vale Road **Intersection West Side Peak Construction PM Peak**

Highway At Grade Access With Median Opening Giveway / Yield (Two-Way)

Movem	nent Per	formance - \	/ehicles								
Mov ID	Turn	Demand Flow veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back o Vehicles veh	of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: F	Hume Hig	hway									
1	L	1	0.0	0.001	12.5	LOS A	0.0	0.0	0.00	0.75	63.3
2	Т	765	10.6	0.210	0.0	LOS A	0.0	0.0	0.00	0.00	100.0
3	R	3	0.0	0.002	13.0	LOS A	0.0	0.0	0.00	0.80	62.5
Approac	ch	769	10.5	0.210	0.1	NA	0.0	0.0	0.00	0.00	99.8
East: Fr	om Golde	en Vale Road									
5	Т	1	0.0	0.146	21.2	LOS B	0.5	3.5	0.77	0.89	37.2
6	R	34	0.0	0.146	23.4	LOS B	0.5	3.5	0.77	0.94	43.2
Approac	ch	35	0.0	0.146	23.3	LOS B	0.5	3.5	0.77	0.94	43.1
West: P	rivate Acc	cess									
10	L	1	0.0	0.006	16.8	LOS B	0.0	0.1	0.67	0.75	48.1
11	Т	1	0.0	0.006	14.8	LOS B	0.0	0.1	0.67	0.73	42.3
Approac	ch	2	0.0	0.006	15.8	LOS B	0.0	0.1	0.67	0.74	45.4
All Vehic	cles	806	10.1	0.210	1.1	NA	0.5	3.5	0.03	0.05	94.3

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model used.

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Site: Old Hume Highway **Roundabout Peak Construction AM Peak**

Four Way Roundabout Roundabout

Move	ment Peri	formance - \	Vehicles			_		_	_		
Mov IC) Turn	Demand Flow veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back o Vehicles veh	of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South:	Old Hume		,,	• • • • • • • • • • • • • • • • • • • •			7011			por vori	1311/11
1	L	6	66.7	0.077	13.3	LOS A	0.4	2.9	0.30	0.61	59.3
2	Т	61	0.0	0.077	8.6	LOS A	0.4	2.9	0.30	0.51	60.2
3	R	22	38.1	0.077	17.7	LOS B	0.4	2.9	0.30	0.80	54.2
Approa	ach	89	14.1	0.077	11.2	LOS A	0.4	2.9	0.30	0.59	58.5
East: T	aylor Aver	nue									
4	L	24	26.1	0.108	10.7	LOS A	0.5	4.5	0.19	0.57	60.2
5	Т	72	22.1	0.108	9.2	LOS A	0.5	4.5	0.19	0.48	61.4
6	R	42	12.5	0.108	16.0	LOS B	0.5	4.5	0.19	0.80	54.2
Approa	ach	138	19.8	0.108	11.6	LOS A	0.5	4.5	0.19	0.60	58.7
North:	Old Hume	Highway									
7	L	20	5.3	0.046	9.9	LOS A	0.2	1.7	0.31	0.58	59.2
8	Т	32	3.3	0.046	8.7	LOS A	0.2	1.7	0.31	0.51	60.2
9	R	8	12.5	0.046	16.4	LOS B	0.2	1.7	0.31	0.79	54.2
Approa	ach	60	5.3	0.046	10.2	LOS A	0.2	1.7	0.31	0.57	58.9
West: I	Medway R	oad									
10	L	18	5.9	0.112	10.0	LOS A	0.6	4.5	0.31	0.59	59.4
11	T	104	17.2	0.112	9.4	LOS A	0.6	4.5	0.31	0.53	60.3
12	R	11	30.0	0.112	17.3	LOS B	0.6	4.5	0.31	0.83	54.4
Approa	ach	133	16.7	0.112	10.1	LOS A	0.6	4.5	0.31	0.56	59.6
All Veh	nicles	420	15.5	0.112	10.8	LOS A	0.6	4.5	0.27	0.58	59.0

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Roundabout Capacity Model: SIDRA Standard.

SIDRA Standard Delay Model used.

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Site: Old Hume Highway Roundabout Peak Construction PM Peak

Four Way Roundabout Roundabout

		Demand		Deg.	Average	Level of	95% Back of	of Queue	Prop.	Effective	Averag
Mov ID	Turn	Flow	HV	Satn	Delay	Service	Vehicles	Distance	Queued	Stop Rate	Speed
		veh/h	%	v/c	sec		veh	m		per veh	km.
South: C	old Hume	Highway									
1	L	8	12.5	0.043	10.4	LOS A	0.2	1.6	0.30	0.57	59
2	Т	25	0.0	0.043	8.6	LOS A	0.2	1.6	0.30	0.50	60
3	R	18	29.4	0.043	17.2	LOS B	0.2	1.6	0.30	0.77	54
Approac	:h	52	12.2	0.043	11.9	LOS A	0.2	1.6	0.30	0.61	57
East: Ta	ıylor Aver	nue									
4	L	15	21.4	0.101	10.4	LOS A	0.5	3.8	0.19	0.59	60
5	Т	108	6.8	0.101	8.5	LOS A	0.5	3.8	0.19	0.50	61
6	R	20	0.0	0.101	15.4	LOS B	0.5	3.8	0.19	0.85	54
Approac	:h	143	7.4	0.101	9.7	LOS A	0.5	3.8	0.19	0.56	60
North: O	ld Hume	Highway									
7	L	32	3.3	0.063	9.6	LOS A	0.3	2.2	0.23	0.57	59
8	T	36	0.0	0.063	8.3	LOS A	0.3	2.2	0.23	0.49	60
9	R	20	5.3	0.063	15.8	LOS B	0.3	2.2	0.23	0.79	54
Approac	:h	87	2.4	0.063	10.5	LOS A	0.3	2.2	0.23	0.59	58
West: M	edway R	oad									
10	L	15	7.1	0.062	9.7	LOS A	0.3	2.4	0.20	0.58	60
11	Т	61	15.5	0.062	9.0	LOS A	0.3	2.4	0.20	0.50	61
12	R	4	25.0	0.062	16.6	LOS B	0.3	2.4	0.20	0.85	54
Approac	h	80	14.5	0.062	9.5	LOS A	0.3	2.4	0.20	0.53	60
All Vehic	عاد	362	8.4	0.101	10.1	LOS A	0.5	3.8	0.22	0.57	59

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Roundabout Capacity Model: SIDRA Standard.

SIDRA Standard Delay Model used.

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Site: Berrima Road Taylor Avenue Peak Construction AM Peak

T Intersection Giveway / Yield (Two-Way)

Moven	nent Per	formance - \	/ehicles								
Mov ID	Turn	Demand Flow	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Vehicles	of Queue Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	v/c	sec	CCIVICC	veh	m	Quoucu	per veh	km/h
South:	Berrima F	Road									
1	L	89	18.8	0.089	8.9	LOS A	0.0	0.0	0.00	0.80	49.0
2	Т	66	0.0	0.089	0.0	LOS A	0.0	0.0	0.00	0.00	60.0
Approa	ch	156	10.8	0.089	5.1	NA	0.0	0.0	0.00	0.46	53.1
North: E	Berrima R	Road									
8	Т	57	1.9	0.030	0.6	LOS A	0.2	1.3	0.30	0.00	54.5
9	R	1	0.0	0.030	9.1	LOS A	0.2	1.3	0.30	0.98	49.1
Approa	ch	58	1.8	0.030	0.8	NA	0.2	1.3	0.30	0.02	54.4
West: T	Taylor Ave	enue									
10	L	1	0.0	0.236	10.5	LOS A	1.0	8.1	0.41	0.60	46.3
12	R	151	12.6	0.236	11.3	LOS A	1.0	8.1	0.41	0.72	46.2
Approa	ch	152	12.5	0.236	11.3	LOS A	1.0	8.1	0.41	0.72	46.2
All Veh	icles	365	10.1	0.236	7.0	NA	1.0	8.1	0.22	0.50	50.2

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model used.

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Site: Berrima Road Taylor Avenue Peak Construction PM Peak

T Intersection Giveway / Yield (Two-Way)

		Demand		Deg.	Average	Level of	95% Back	of Queue	Prop.	Effective	Average
Mov ID	Turn	Flow	HV	Satn	Delay	Service	Vehicles	Distance	Queued	Stop Rate	Speed
		veh/h	%	v/c	sec		veh	m		per veh	· km/r
South: I	Berrima R	oad									
1	L	153	4.1	0.133	8.3	LOS A	0.0	0.0	0.00	0.78	49.0
2	Т	94	0.0	0.133	0.0	LOS A	0.0	0.0	0.00	0.00	60.0
Approa	ch	246	2.6	0.133	5.2	NA	0.0	0.0	0.00	0.48	52.6
North: Berrima Roa		oad									
8	Т	77	1.4	0.041	1.0	LOS A	0.3	1.9	0.38	0.00	53.2
9	R	1	0.0	0.041	9.5	LOS A	0.3	1.9	0.38	0.97	49.2
Approa	ch	78	1.4	0.041	1.1	NA	0.3	1.9	0.38	0.01	53.1
West: T	aylor Ave	nue									
10	L	2	0.0	0.222	11.5	LOS A	0.9	7.2	0.48	0.64	45.3
12	R	126	10.8	0.222	12.2	LOS A	0.9	7.2	0.48	0.77	45.2
Approa	ch	128	10.7	0.222	12.2	LOS A	0.9	7.2	0.48	0.76	45.2
All Vehi	icles	453	4.7	0.222	6.5	NA	0.9	7.2	0.20	0.48	50.4

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model used.

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Site: Berrima Road Douglas Road Peak Construction AM Peak

T intersection Giveway / Yield (Two-Way)

Moven	nent Per	formance - \	/ehicles								
Mov ID	Turn	Demand Flow veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back o Vehicles veh	of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: E	Berrima R	Road									
2	Т	145	12.3	0.065	8.0	LOS A	0.4	3.1	0.28	0.00	70.5
3	R	4	0.0	0.065	11.2	LOS A	0.4	3.1	0.37	1.37	59.6
Approac	ch	149	12.0	0.065	1.1	NA	0.4	3.1	0.29	0.04	70.2
East: Do	ouglas Ro	oad									
4	L	4	0.0	0.073	16.8	LOS B	0.3	2.4	0.55	0.66	43.9
6	R	20	42.1	0.073	19.0	LOS B	0.3	2.4	0.55	0.84	44.0
Approac	ch	24	34.8	0.073	18.6	LOS B	0.3	2.4	0.55	0.81	44.0
North: E	Berrima R	oad									
7	L	35	45.5	0.025	12.1	LOS A	0.0	0.0	0.00	0.71	57.1
8	Т	188	11.2	0.104	0.0	LOS A	0.0	0.0	0.00	0.00	80.0
Approac	ch	223	16.5	0.104	1.9	NA	0.0	0.0	0.00	0.11	75.8
All Vehi	cles	397	15.9	0.104	2.6	NA	0.4	3.1	0.14	0.13	70.6

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model used.

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Site: Berrima Road Douglas Road Peak Construction PM Peak

T intersection Giveway / Yield (Two-Way)

Moven	nent Per	formance - \	/ehicles								
Mov ID	Turn	Demand Flow veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Vehicles veh	of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: I	Berrima R										
2	T R	215 5	4.4 0.0	0.091 0.091	0.7 11.1	LOS A LOS A	0.6 0.6	4.3 4.3	0.27 0.36	0.00 1.40	70.8 59.6
Approa		220	4.3	0.091	0.9	NA	0.6	4.3	0.28	0.03	70.5
East: D	ouglas Ro	oad									
4	L	3	0.0	0.143	14.9	LOS B	0.5	4.1	0.55	0.67	45.5
6	R	60	10.5	0.143	15.4	LOS B	0.5	4.1	0.55	0.85	45.6
Approa	ch	63	10.0	0.143	15.4	LOS B	0.5	4.1	0.55	0.84	45.6
North: E	Berrima R	oad									
7	L	18	35.3	0.012	11.6	LOS A	0.0	0.0	0.00	0.71	57.1
8	Т	196	4.3	0.103	0.0	LOS A	0.0	0.0	0.00	0.00	80.0
Approa	ch	214	6.9	0.103	1.0	NA	0.0	0.0	0.00	0.06	77.7
All Vehi	icles	497	6.1	0.143	2.8	NA	0.6	4.3	0.19	0.15	68.5

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model used.

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Site: Waite Street intersection Peak Construction AM Peak

T Intersection with Argyle Street Giveway / Yield (Two-Way)

	4.5										
Mover	nent Per	formance - \	/ehicles								
Mov ID	Turn	Demand Flow	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Vehicles	of Queue Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h		v/c	sec		veh			per veh	km/h
East: A	rgyle Stre	et									
5	Т	275	2.7	0.450	0.9	LOS A	2.9	21.2	0.10	0.00	48.3
6	R	299	4.6	0.450	12.7	LOS A	2.9	21.2	0.70	1.01	38.6
Approa	ich	574	3.7	0.450	7.0	NA	2.9	21.2	0.41	0.52	42.7
North: \	Waite Stre	eet									
7	L	285	5.9	0.502	14.2	LOS A	2.9	21.3	0.69	1.02	37.4
9	R	13	16.7	0.174	57.8	LOS E	0.5	4.2	0.92	0.98	21.0
Approa	ich	298	6.4	0.502	16.0	LOS B	2.9	21.3	0.70	1.01	36.2
West: A	Argyle Stre	eet									
10	L	88	6.0	0.050	6.6	LOS A	0.0	0.0	0.00	0.61	43.3
11	Т	585	2.3	0.305	0.0	LOS A	0.0	0.0	0.00	0.00	50.0
Approa	ich	674	2.8	0.305	0.9	NA	0.0	0.0	0.00	0.08	49.0
All Veh	icles	1545	3.8	0.502	6.1	NA	2.9	21.3	0.29	0.42	43.6

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model used.

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Site: Waite Street intersection Peak Construction PM Peak

T Intersection with Argyle Street Giveway / Yield (Two-Way)

Moven	nent Per	formance - V	ehicles								
Mov ID	Turn	Demand Flow veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Vehicles veh	of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
East: A	rgyle Stre	et									
5 6	T R	432 282	2.2 2.6	0.452 0.452	2.4 11.9	LOS A LOS A	4.2 4.2	30.2 30.2	0.32 0.72	0.00 1.03	45.5 39.6
Approa	ch	714	2.4	0.452	6.2	NA	4.2	30.2	0.48	0.41	42.9
North: \	Waite Stre	et									
7	L	348	4.2	0.522	12.7	LOS A	3.4	24.4	0.66	1.01	38.3
9	R	20	0.0	0.202	45.1	LOS D	0.6	4.4	0.91	0.98	23.9
Approa	ch	368	4.0	0.522	14.5	LOS A	3.4	24.4	0.67	1.01	37.1
West: A	Argyle Stre	eet									
10	L	78	5.4	0.044	6.6	LOS A	0.0	0.0	0.00	0.61	43.3
11	Т	482	2.8	0.252	0.0	LOS A	0.0	0.0	0.00	0.00	50.0
Approa	ch	560	3.2	0.252	0.9	NA	0.0	0.0	0.00	0.08	48.9
All Vehi	icles	1642	3.0	0.522	6.2	NA	4.2	30.2	0.36	0.43	43.2

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model used.

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Site: Lackey Street intersection Peak Construction AM Peak

T-intersection with Argyle Street Stop (Two-Way)

	4.5	<u> </u>									
Mover	nent Per	formance - V	enicles								
Mov ID	Turn	Demand Flow	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Vehicles	of Queue Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	v/c	sec	CCIVICC	veh	m	Queucu	per veh	km/h
East: A	rgyle Stre	et									
5	Т	591	3.6	0.482	5.4	LOS A	5.9	43.0	0.51	0.00	42.2
6	R	182	6.4	0.482	17.2	LOS B	5.9	43.0	1.00	1.16	36.7
Approa	ıch	773	4.2	0.482	8.2	NA	5.9	43.0	0.63	0.27	40.8
North:	Lackey St	reet									
7	L	232	3.2	0.502	19.4	LOS B	2.6	18.7	0.76	1.14	35.1
9	R	5	0.0	0.114	83.8	LOS F	0.3	2.2	0.95	1.00	16.8
Approa	ich	237	3.1	0.502	20.8	LOS B	2.6	18.7	0.77	1.13	34.2
West: A	Argyle Stre	eet									
10	L	54	2.0	0.029	6.5	LOS A	0.0	0.0	0.00	0.61	43.3
11	Т	760	3.9	0.400	0.0	LOS A	0.0	0.0	0.00	0.00	50.0
Approa	ich	814	3.8	0.400	0.4	NA	0.0	0.0	0.00	0.04	49.5
All Veh	icles	1823	3.9	0.502	6.4	NA	5.9	43.0	0.37	0.28	43.1

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model used.

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Site: Lackey Street intersection Peak Construction PM Peak

T-intersection with Argyle Street Stop (Two-Way)

Mayray	nant Day	·fa	/abialaa								
wover	nent Per	formance - V	enicies				0.50/ 5				
Mov ID	Turn	Demand	HV	Deg.	Average	Level of	95% Back (Prop.	Effective	Average
IVIOV ID	, i ui i i	Flow		Satn	Delay	Service	Vehicles	Distance	Queued	Stop Rate	Speed
- · · · · ·		veh/h	%	v/c	sec		veh	m		per veh	km/h
	rgyle Stre										
5	Т	755	2.6	0.581	5.6	LOS A	8.3	59.0	0.54	0.00	41.9
6	R	245	1.7	0.581	17.0	LOS B	8.3	59.0	1.00	1.24	36.8
Approa	ıch	1000	2.4	0.581	8.4	NA	8.3	59.0	0.65	0.30	40.5
North:	Lackey St	reet									
7	L	239	0.9	0.448	17.0	LOS B	2.3	16.3	0.69	1.11	36.4
9	R	9	0.0	0.283	130.1	LOS F	0.8	5.5	0.97	1.02	12.2
Approa	ich	248	0.8	0.448	21.3	LOS B	2.3	16.3	0.70	1.10	33.9
West: A	Argyle Stre	eet									
10	L	46	9.1	0.027	6.7	LOS A	0.0	0.0	0.00	0.61	43.3
11	Т	664	3.0	0.347	0.0	LOS A	0.0	0.0	0.00	0.00	50.0
Approa	ich	711	3.4	0.347	0.4	NA	0.0	0.0	0.00	0.04	49.5
All Veh	icles	1959	2.6	0.581	7.1	NA	8.3	59.0	0.42	0.31	42.2

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model used.

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Appendix F	
SIDRA Intersection Delay Results for project operations	



Site: Medway Road Interchange East Side Operations AM Peak

Interchange East Side Intersection Giveway / Yield (Two-Way)

Moven	nent Per	formance - \	/ehicles								
Mov ID	Turn	Demand Flow veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back o Vehicles veh	of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
East: M	edway R	oad									
5	T	86	17.1	0.049	0.0	LOS A	0.0	0.0	0.00	0.00	80.0
Approac	ch	86	17.1	0.049	0.0	NA	0.0	0.0	0.00	0.00	80.0
North: F	Hume Hig	hway Exit									
7	L	108	14.6	0.064	11.7	Χ	X	X	Х	0.69	58.9
9	R	2	0.0	0.003	11.7	LOS A	0.0	0.1	0.27	0.66	57.8
Approac	ch	111	14.3	0.064	11.7	LOS A	0.0	0.1	0.01	0.69	58.8
West: N	∕ledway R	Road									
11	Т	21	5.0	0.011	0.0	LOS A	0.0	0.0	0.00	0.00	80.0
Approac	ch	21	5.0	0.011	0.0	NA	0.0	0.0	0.00	0.00	80.0
All Vehi	cles	218	14.5	0.064	6.0	NA	0.0	0.1	0.00	0.35	67.7

X: Not applicable for Continuous movement.

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model used.

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Site: Medway Road Interchange East Side Operations PM Peak

Interchange East Side Intersection Giveway / Yield (Two-Way)

Moven	nent Per	formance - \	/ehicles								
Mov ID	Turn	Demand Flow veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back o Vehicles veh	of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
East: M	edway Ro	oad									
5	Т	138	6.9	0.074	0.0	LOS A	0.0	0.0	0.00	0.00	80.0
Approa	ch	138	6.9	0.074	0.0	NA	0.0	0.0	0.00	0.00	80.0
North: F	Hume Hig	hway Exit									
7	L	72	14.7	0.043	11.8	Χ	X	Χ	Х	0.69	58.9
9	R	1	0.0	0.001	12.1	LOS A	0.0	0.0	0.32	0.65	57.3
Approa	ch	73	14.5	0.043	11.8	LOS A	0.0	0.0	0.00	0.69	58.8
West: N	/ledway R	toad									
11	Т	16	13.3	0.009	0.0	LOS A	0.0	0.0	0.00	0.00	80.0
Approa	ch	16	13.3	0.009	0.0	NA	0.0	0.0	0.00	0.00	80.0
All Vehi	cles	226	9.8	0.074	3.8	NA	0.0	0.0	0.00	0.22	71.8

X: Not applicable for Continuous movement.

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model used.

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Site: Medway Road Interchange **West Side Operations AM Peak**

Interchange West Side Intersection Giveway / Yield (Two-Way)

Movem	ent Per	formance - \	/ehicles								
Mov ID	Turn	Demand Flow veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back (Vehicles veh	of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
East: Me	edway Ro	oad									
5	Т	7	0.0	0.004	0.0	LOS A	0.0	0.0	0.00	0.00	80.0
6	R	80	18.4	0.077	12.4	LOS A	0.3	2.1	0.10	0.73	58.4
Approac	ch	87	16.9	0.077	11.3	NA	0.3	2.1	0.09	0.66	59.7
West: M	ledway R	Road									
10	L	2	0.0	0.001	11.1	Χ	X	X	Х	0.69	58.9
11	Т	24	4.3	0.013	0.0	LOS A	0.0	0.0	0.00	0.00	80.0
Approac	ch	26	4.0	0.013	0.9	NA	0.0	0.0	0.00	0.06	77.8
All Vehic	cles	114	13.9	0.077	8.9	NA	0.3	2.1	0.07	0.52	63.2

X: Not applicable for Continuous movement.

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model used.

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Site: Medway Road Interchange **West Side Operations PM Peak**

Interchange West Side Intersection Giveway / Yield (Two-Way)

		Demand		Deg.	Average	Level of	95% Back	of Queue	Prop.	Effective	Average
Mov ID	Turn	Flow	HV	Satn	Delay	Service	Vehicles	Distance	Queued	Stop Rate	Speed
		veh/h	%	v/c	sec		veh	m		per veh	km/h
East: M	edway Ro	oad									
5	Т	22	4.8	0.012	0.0	LOS A	0.0	0.0	0.00	0.00	80.0
6	R	122	6.9	0.103	11.5	LOS A	0.4	2.7	0.08	0.73	58.4
Approac	ch	144	6.6	0.103	9.8	NA	0.4	2.7	0.07	0.62	61.0
Nest: N	ledway R	toad									
10	L	3	0.0	0.002	11.1	Χ	X	X	X	0.69	58.9
11	Т	18	5.9	0.010	0.0	LOS A	0.0	0.0	0.00	0.00	80.0
Approac	ch	21	5.0	0.010	1.7	NA	0.0	0.0	0.00	0.10	76.0
All Vehi	cles	165	6.4	0.103	8.7	NA	0.4	2.7	0.06	0.55	62.6

X: Not applicable for Continuous movement.

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model used.

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Site: Mereworth Road Interchange **East Side Operations AM Peak**

Interchange Ramp Intersection Giveway / Yield (Two-Way)

Movem	nent Per	formance - \	/ehicles								
Mov ID	Turn	Demand Flow veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back (Vehicles veh	of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
North: C	Old Hume	Highway									
8	Т	16	20.0	0.009	0.0	LOS A	0.0	0.0	0.00	0.00	80.0
9	R	5	40.0	0.004	13.4	LOS A	0.0	0.0	0.00	0.75	59.0
Approac	ch	21	25.0	0.009	3.3	NA	0.0	0.0	0.00	0.19	73.6
West: N	1ereworth	Road									
10	L	100	5.3	0.056	11.3	Χ	X	X	X	0.69	58.9
12	R	7	14.3	0.013	12.2	LOS A	0.0	0.3	0.12	0.71	58.3
Approac	ch	107	5.9	0.056	11.4	LOS A	0.0	0.3	0.01	0.69	58.8
All Vehi	cles	128	9.0	0.056	10.1	NA	0.0	0.3	0.01	0.61	60.8

X: Not applicable for Continuous movement.

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model used.

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Site: Mereworth Road Interchange **East Side Operations PM Peak**

Interchange Ramp Intersection Giveway / Yield (Two-Way)

Movem	nent Per	formance - \	/ehicles								
Mov ID	Turn	Demand Flow veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back (Vehicles veh	of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
North: C	Old Hume	Highway									
8	Т	42	7.5	0.023	0.0	LOS A	0.0	0.0	0.00	0.00	80.0
9	R	3	33.3	0.002	13.0	LOS A	0.0	0.0	0.00	0.75	59.0
Approac	ch	45	9.3	0.023	0.9	NA	0.0	0.0	0.00	0.05	78.1
West: N	1ereworth	Road									
10	L	88	4.8	0.049	11.3	Χ	X	X	X	0.69	58.9
12	R	7	0.0	0.011	11.4	LOS A	0.0	0.2	0.16	0.70	58.1
Approac	ch	96	4.4	0.049	11.3	LOS A	0.0	0.2	0.01	0.69	58.8
All Vehi	cles	141	6.0	0.049	8.0	NA	0.0	0.2	0.01	0.48	63.9

X: Not applicable for Continuous movement.

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

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Site: Mereworth Road Interchange West Side Operations AM Peak

With Intersection Reconfigured to New E-W Priority Giveway / Yield (Two-Way)

		Demand		Deg.	Average	Level of	95% Back	of Queue	Prop.	Effective	Average
Mov ID	Turn	Flow	HV	Satn	Delay	Service	Vehicles	Distance	Queued	Stop Rate	Speed
		veh/h		v/c	sec		veh			per veh	km/h
South: H	lume Hig	hway Exiit									
1	L	1	0.0	0.002	10.9	LOS A	0.0	0.0	0.04	0.70	58.7
3	R	60	10.5	0.076	12.3	LOS A	0.3	2.3	0.18	0.71	57.9
Approac	:h	61	10.3	0.076	12.3	LOS A	0.3	2.3	0.18	0.71	57.9
East: Me	ereworth	Road									
5	Т	5	40.0	0.003	0.0	LOS A	0.0	0.0	0.00	0.00	80.0
Approac	:h	5	40.0	0.003	0.0	NA	0.0	0.0	0.00	0.00	80.0
West: M	ereworth	Road									
11	Т	46	0.0	0.024	0.0	LOS A	0.0	0.0	0.00	0.00	80.0
Approac	h	46	0.0	0.024	0.0	NA	0.0	0.0	0.00	0.00	80.0
All Vehic	cles	113	7.5	0.076	6.6	NA	0.3	2.3	0.10	0.38	66.4

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

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Site: Mereworth Road Interchange West Side Operations PM Peak

With Intersection Reconfigured to New E-W Priority Giveway / Yield (Two-Way)

Moven	nent Per	formance - V	/ehicles								
Mov ID	Turn	Demand Flow veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back o Vehicles veh	of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: I	Hume Hig	hway Exiit									
1	L	1	0.0	0.002	10.9	LOS A	0.0	0.0	0.02	0.71	58.8
3	R	44	19.0	0.062	13.1	LOS A	0.2	2.0	0.21	0.71	57.7
Approac	ch	45	18.6	0.062	13.0	LOS A	0.2	2.0	0.21	0.71	57.7
East: M	ereworth	Road									
5	Т	3	33.3	0.002	0.0	LOS A	0.0	0.0	0.00	0.00	80.0
Approac	ch	3	33.3	0.002	0.0	NA	0.0	0.0	0.00	0.00	80.0
West: N	1ereworth	Road									
11	Т	59	1.8	0.031	0.0	LOS A	0.0	0.0	0.00	0.00	80.0
Approac	ch	59	1.8	0.031	0.0	NA	0.0	0.0	0.00	0.00	80.0
All Vehi	cles	107	9.8	0.062	5.5	NA	0.2	2.0	0.09	0.30	68.9

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model used.

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Site: Golden Vale Road **Intersection East Side Operations AM Peak**

Highway At Grade Access With Median Opening Giveway / Yield (Two-Way)

Moven	nent Per	formance - \	/ehicles								
Mov ID	Turn	Demand Flow veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back o Vehicles veh	of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
East: G	olden Val	e Road									
4	L	4	25.0	0.150	20.4	LOS B	0.6	4.0	0.71	0.92	46.5
5	Т	45	0.0	0.150	17.0	LOS B	0.6	4.0	0.71	0.88	40.8
Approa	ch	49	2.1	0.150	17.3	LOS B	0.6	4.0	0.71	0.89	41.3
North: I	Hume Higl	hway									
7	L	29	10.7	0.017	13.1	LOS A	0.0	0.0	0.00	0.76	63.3
8	Т	676	13.4	0.188	0.0	LOS A	0.0	0.0	0.00	0.00	100.0
9	R	2	0.0	0.001	13.0	LOS A	0.0	0.0	0.00	0.80	62.5
Approa	ch	707	13.2	0.188	0.6	NA	0.0	0.0	0.00	0.03	98.1
West: N	/ledian Op	ening									
11	Т	4	0.0	0.017	17.1	LOS B	0.1	0.4	0.70	0.79	40.6
12	R	1	0.0	0.017	19.3	LOS B	0.1	0.4	0.70	0.89	46.6
Approa	ch	5	0.0	0.017	17.6	LOS B	0.1	0.4	0.70	0.81	41.9
All Veh	icles	762	12.4	0.188	1.8	NA	0.6	4.0	0.05	0.09	90.9

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model used.

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Site: Golden Vale Road **Intersection East Side Operations PM Peak**

Highway At Grade Access With Median Opening Giveway / Yield (Two-Way)

Mover	nent Per	formance - \	/ehicles								
Mov ID	Turn	Demand Flow veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Vehicles veh	of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
East: G	Golden Val	e Road									
4	L	1	0.0	0.088	18.5	LOS B	0.3	2.3	0.70	0.91	46.9
5	Т	28	0.0	0.088	16.5	LOS B	0.3	2.3	0.70	0.87	41.2
Approa	ch	29	0.0	0.088	16.6	LOS B	0.3	2.3	0.70	0.88	41.4
North: I	Hume Higl	hway									
7	L	51	0.0	0.027	12.5	LOS A	0.0	0.0	0.00	0.75	63.3
8	Т	612	22.2	0.179	0.0	LOS A	0.0	0.0	0.00	0.00	100.0
9	R	4	0.0	0.002	13.0	LOS A	0.0	0.0	0.00	0.80	62.5
Approa	ch	666	20.4	0.179	1.0	NA	0.0	0.0	0.00	0.06	96.5
West: N	Median Op	ening									
11	Т	3	0.0	0.014	17.0	LOS B	0.0	0.3	0.70	0.78	40.6
12	R	1	0.0	0.014	19.2	LOS B	0.0	0.3	0.70	0.86	46.6
Approa	ch	4	0.0	0.014	17.6	LOS B	0.0	0.3	0.70	0.80	42.3
All Veh	icles	700	19.4	0.179	1.8	NA	0.3	2.3	0.03	0.10	91.8

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model used.

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Site: Golden Vale Road Intersection West Side Operations AM Peak

Highway At Grade Access With Median Opening Giveway / Yield (Two-Way)

Movem	ent Perl	formance - \	/ehicles								
Mov ID	Turn	Demand Flow veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back o Vehicles veh	of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: F	lume Hig	hway									
1	L	1	0.0	0.001	12.5	LOS A	0.0	0.0	0.00	0.75	63.3
2	Т	519	32.5	0.161	0.0	LOS A	0.0	0.0	0.00	0.00	100.0
3	R	3	0.0	0.002	13.0	LOS A	0.0	0.0	0.00	0.80	62.5
Approac	h	523	32.2	0.161	0.1	NA	0.0	0.0	0.00	0.01	99.6
East: Fr	om Golde	en Vale Road									
5	Т	1	0.0	0.152	17.1	LOS B	0.5	3.8	0.69	0.85	40.0
6	R	46	0.0	0.152	19.3	LOS B	0.5	3.8	0.69	0.92	46.1
Approac	h	47	0.0	0.152	19.2	LOS B	0.5	3.8	0.69	0.92	46.0
West: P	rivate Acc	cess									
10	L	1	0.0	0.005	14.6	LOS B	0.0	0.1	0.58	0.71	50.0
11	Т	1	0.0	0.005	12.6	LOS A	0.0	0.1	0.58	0.67	44.3
Approac	ch	2	0.0	0.005	13.6	LOS A	0.0	0.1	0.58	0.69	47.3
All Vehic	cles	573	29.4	0.161	1.7	NA	0.5	3.8	0.06	0.08	90.7

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model used.

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Site: Golden Vale Road **Intersection West Side Operations PM Peak**

Highway At Grade Access With Median Opening Giveway / Yield (Two-Way)

Movem	nent Per	formance - \	/ehicles								
Mov ID	Turn	Demand Flow veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back o Vehicles veh	of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: F	Hume Hig	hway									
1	L	1	0.0	0.001	12.5	LOS A	0.0	0.0	0.00	0.75	63.3
2	Т	765	10.6	0.210	0.0	LOS A	0.0	0.0	0.00	0.00	100.0
3	R	3	0.0	0.002	13.0	LOS A	0.0	0.0	0.00	0.80	62.5
Approac	ch	769	10.5	0.210	0.1	NA	0.0	0.0	0.00	0.00	99.8
East: Fr	om Golde	en Vale Road									
5	Т	1	0.0	0.146	21.2	LOS B	0.5	3.5	0.77	0.89	37.2
6	R	34	0.0	0.146	23.4	LOS B	0.5	3.5	0.77	0.94	43.2
Approac	ch	35	0.0	0.146	23.3	LOS B	0.5	3.5	0.77	0.94	43.1
West: P	rivate Acc	cess									
10	L	1	0.0	0.006	16.8	LOS B	0.0	0.1	0.67	0.75	48.1
11	Т	1	0.0	0.006	14.8	LOS B	0.0	0.1	0.67	0.73	42.3
Approac	ch	2	0.0	0.006	15.8	LOS B	0.0	0.1	0.67	0.74	45.4
All Vehic	cles	806	10.1	0.210	1.1	NA	0.5	3.5	0.03	0.05	94.3

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model used.

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Site: Old Hume Highway **Roundabout Operations AM Peak**

Four Way Roundabout Roundabout

Movem	ent Perf	ormance - \	Vehicles								
M 10		Demand	1.15.7	Deg.	Average	Level of	95% Back		Prop.	Effective	Averag
Mov ID	Turn	Flow	HV	Satn	Delay	Service	Vehicles	Distance	Queued	Stop Rate	Speed
South: C	Old Hume	veh/h Highway	%	v/c	sec		veh	m		per veh	km/
1	L	1 ligitway 9	0.0	0.088	9.6	LOS A	0.4	3.1	0.29	0.58	59.
2	T	75	0.0	0.088	9.0 8.5	LOS A	0.4	3.1	0.29	0.50	60.
3	R	75 31	13.8	0.088	16.4	LOS A	0.4	3.1	0.29	0.80	
											54.
Approac	n	115	3.7	0.088	10.7	LOS A	0.4	3.1	0.29	0.59	58.
East: Ta	ylor Aven	iue									
4	L	14	30.8	0.096	10.8	LOS A	0.5	4.0	0.14	0.57	60.
5	Т	72	22.1	0.096	9.1	LOS A	0.5	4.0	0.14	0.48	61.
6	R	42	12.5	0.096	15.9	LOS B	0.5	4.0	0.14	0.82	54.
Approac	:h	127	19.8	0.096	11.6	LOS A	0.5	4.0	0.14	0.60	58.
North: C	ld Hume	Highway									
7	L	20	5.3	0.039	9.9	LOS A	0.2	1.4	0.30	0.57	59.
8	Т	22	4.8	0.039	8.7	LOS A	0.2	1.4	0.30	0.50	60.
9	R	8	12.5	0.039	16.3	LOS B	0.2	1.4	0.30	0.78	54.
Approac	:h	51	6.3	0.039	10.5	LOS A	0.2	1.4	0.30	0.58	58.
West: M	edway Ro	oad									
10	L	18	5.9	0.107	10.1	LOS A	0.5	4.3	0.32	0.60	59.
11	Т	104	17.2	0.107	9.5	LOS A	0.5	4.3	0.32	0.54	60.
12	R	3	33.3	0.107	17.5	LOS B	0.5	4.3	0.32	0.84	54.
Approac	h	125	16.0	0.107	9.8	LOS A	0.5	4.3	0.32	0.55	59
All Vehic	cles	418	12.6	0.107	10.7	LOS A	0.5	4.3	0.26	0.58	59

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Roundabout Capacity Model: SIDRA Standard.

SIDRA Standard Delay Model used.

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Site: Old Hume Highway **Roundabout Operations PM Peak**

Four Way Roundabout Roundabout

Mov ID Turn Demand Flow veh/h HV Satn Delay V/c Average Service Ser	
veh/h % v/c sec South: Old Hume Highway 1 L 17 6.3 0.071 10.0 LOS A 2 T 42 0.0 0.071 8.6 LOS A	
South: Old Hume Highway 1 L 17 6.3 0.071 10.0 LOS A 2 T 42 0.0 0.071 8.6 LOS A	
2 T 42 0.0 0.071 8.6 LOS A	
	A 0.4 2.6 0.30 0.57 59.2
3 R 33 12.9 0.071 16.4 LOS E	A 0.4 2.6 0.30 0.50 60.1
	B 0.4 2.6 0.30 0.77 53.9
Approach 92 5.7 0.071 11.6 LOS A	A 0.4 2.6 0.30 0.61 57.5
East: Taylor Avenue	
4 L 15 21.4 0.101 10.4 LOS A	A 0.5 3.8 0.19 0.59 60.3
5 T 108 6.8 0.101 8.5 LOS A	A 0.5 3.8 0.19 0.50 61.5
6 R 20 0.0 0.101 15.4 LOS E	B 0.5 3.8 0.19 0.84 54.4
Approach 143 7.4 0.101 9.7 LOS A	A 0.5 3.8 0.19 0.56 60.2
North: Old Hume Highway	
7 L 32 3.3 0.065 9.6 LOS A	A 0.3 2.3 0.25 0.57 59.7
8 T 37 0.0 0.065 8.3 LOS A	A 0.3 2.3 0.25 0.49 60.7
9 R 20 5.3 0.065 15.8 LOS E	B 0.3 2.3 0.25 0.79 54.1
Approach 88 2.4 0.065 10.5 LOS A	A 0.3 2.3 0.25 0.59 58.7
West: Medway Road	
10 L 15 7.1 0.064 9.8 LOS A	A 0.3 2.5 0.25 0.58 59.9
11 T 61 15.5 0.064 9.1 LOS A	A 0.3 2.5 0.25 0.51 60.9
12 R 4 25.0 0.064 16.8 LOSE	B 0.3 2.5 0.25 0.83 54.4
Approach 80 14.5 0.064 9.6 LOS A	A 0.3 2.5 0.25 0.54 60.3
All Vehicles 403 7.3 0.101 10.3 LOS A	A 0.5 3.8 0.24 0.57 59.3

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Roundabout Capacity Model: SIDRA Standard.

SIDRA Standard Delay Model used.

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Site: Berrima Road Taylor Avenue Operations AM Peak

T Intersection Giveway / Yield (Two-Way)

Moven	nent Per	formance - \	/ehicles								
Mov ID	Turn	Demand Flow veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back o Vehicles veh	of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: I	Berrima R		,,	· · · · ·			¥311			per veri	1(11)/11
1	L	80	18.4	0.083	8.9	LOS A	0.0	0.0	0.00	0.81	49.0
2	Т	66	0.0	0.083	0.0	LOS A	0.0	0.0	0.00	0.00	60.0
Approa	ch	146	10.1	0.083	4.8	NA	0.0	0.0	0.00	0.45	53.4
North: E	Berrima R	oad									
8	Т	57	1.9	0.030	0.6	LOS A	0.2	1.3	0.29	0.00	54.7
9	R	1	0.0	0.030	9.0	LOS A	0.2	1.3	0.29	0.99	49.0
Approac	ch	58	1.8	0.030	0.7	NA	0.2	1.3	0.29	0.02	54.6
West: T	aylor Ave	nue									
10	L	1	0.0	0.235	10.3	LOS A	1.0	7.9	0.40	0.60	46.6
12	R	157	9.4	0.235	10.9	LOS A	1.0	7.9	0.40	0.71	46.4
Approa	ch	158	9.3	0.235	10.9	LOS A	1.0	7.9	0.40	0.71	46.4
All Vehi	cles	362	8.4	0.235	6.8	NA	1.0	7.9	0.22	0.49	50.3

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model used.

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Site: Berrima Road Taylor Avenue Operations PM Peak

T Intersection Giveway / Yield (Two-Way)

Moven	nent Per	formance - V	ehicles								
Mov ID	Turn	Demand Flow	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Vehicles	of Queue Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	v/c	sec	33,1,33	veh	m	Quousu	per veh	km/h
South:	Berrima F	Road									
1	L	153	4.1	0.133	8.3	LOS A	0.0	0.0	0.00	0.78	49.0
2	Т	94	0.0	0.133	0.0	LOS A	0.0	0.0	0.00	0.00	60.0
Approa	ch	246	2.6	0.133	5.2	NA	0.0	0.0	0.00	0.48	52.6
North: E	Berrima R	load									
8	Т	77	1.4	0.041	1.0	LOS A	0.3	1.9	0.38	0.00	53.2
9	R	1	0.0	0.041	9.5	LOS A	0.3	1.9	0.38	0.97	49.2
Approa	ch	78	1.4	0.041	1.1	NA	0.3	1.9	0.38	0.01	53.1
West: T	Taylor Ave	enue									
10	L	2	0.0	0.239	11.5	LOS A	1.0	7.7	0.48	0.65	45.4
12	R	139	9.1	0.239	12.1	LOS A	1.0	7.7	0.48	0.77	45.3
Approa	ch	141	9.0	0.239	12.1	LOS A	1.0	7.7	0.48	0.77	45.3
All Vehi	icles	465	4.3	0.239	6.6	NA	1.0	7.7	0.21	0.49	50.3

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model used.

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Site: Berrima Road Douglas Road Operations AM Peak

T intersection Giveway / Yield (Two-Way)

Moven	nent Per	formance - \	/ehicles								
Mov ID	Turn	Demand Flow veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back o Vehicles veh	of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: E	Berrima R	Road									
2	T	138	13.0	0.062	0.8	LOS A	0.4	3.0	0.28	0.00	70.5
3	R	4	0.0	0.062	11.2	LOS A	0.4	3.0	0.37	1.37	59.6
Approac	ch	142	12.6	0.062	1.1	NA	0.4	3.0	0.29	0.04	70.1
East: Do	ouglas Ro	oad									
4	L	4	0.0	0.060	15.7	LOS B	0.2	1.9	0.53	0.65	44.8
6	R	18	35.3	0.060	17.5	LOS B	0.2	1.9	0.53	0.81	44.9
Approac	ch	22	28.6	0.060	17.2	LOS B	0.2	1.9	0.53	0.78	44.9
North: E	Berrima R	oad									
7	L	33	41.9	0.023	11.9	LOS A	0.0	0.0	0.00	0.71	57.1
8	Т	197	9.6	0.107	0.0	LOS A	0.0	0.0	0.00	0.00	80.0
Approac	ch	229	14.2	0.107	1.7	NA	0.0	0.0	0.00	0.10	76.1
All Vehi	cles	394	14.4	0.107	2.3	NA	0.4	3.0	0.13	0.12	71.2

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model used.

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Site: Berrima Road Douglas Road Operations PM Peak

T intersection Giveway / Yield (Two-Way)

Moven	nent Per	formance - \	/ehicles								
Marrido		Demand	1107	Deg.	Average	Level of	95% Back		Prop.	Effective	Average
Mov ID	Turn	Flow	HV	Satn	Delay	Service	Vehicles	Distance	Queued	Stop Rate	Speed
		veh/h	%	v/c	sec		veh	m		per veh	km/h
South:	Berrima F	Road									
2	Т	215	4.4	0.091	0.7	LOS A	0.6	4.4	0.28	0.00	70.5
3	R	5	0.0	0.091	11.1	LOS A	0.6	4.4	0.37	1.39	59.6
Approa	ch	220	4.3	0.091	1.0	NA	0.6	4.4	0.28	0.03	70.3
East: D	ouglas Ro	oad									
4	L	3	0.0	0.146	15.1	LOS B	0.6	4.2	0.56	0.68	45.3
6	R	60	10.5	0.146	15.7	LOS B	0.6	4.2	0.56	0.85	45.4
Approa	ch	63	10.0	0.146	15.7	LOS B	0.6	4.2	0.56	0.84	45.4
North: E	Berrima R	toad									
7	L	18	35.3	0.012	11.6	LOS A	0.0	0.0	0.00	0.71	57.1
8	Т	208	3.5	0.109	0.0	LOS A	0.0	0.0	0.00	0.00	80.0
Approa	ch	226	6.0	0.109	0.9	NA	0.0	0.0	0.00	0.06	77.8
All Vehi	icles	509	5.8	0.146	2.8	NA	0.6	4.4	0.19	0.14	68.6

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model used.

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Site: Waite Street intersection Operations AM Peak

T Intersection with Argyle Street Giveway / Yield (Two-Way)

Moven	nent Per	formance - \	/ehicles								
Mov ID	Turn	Demand Flow veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back o Vehicles veh	of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
East: A	rgyle Stre	et									
5	Т	275	2.7	0.446	0.9	LOS A	2.9	21.0	0.10	0.00	48.2
6	R	297	4.6	0.446	12.6	LOS A	2.9	21.0	0.70	1.00	38.6
Approa	ch	572	3.7	0.446	7.0	NA	2.9	21.0	0.41	0.52	42.7
North: \	Naite Stre	et									
7	L	288	5.5	0.503	14.1	LOS A	2.9	21.3	0.68	1.02	37.4
9	R	16	13.3	0.194	53.3	LOS D	0.6	4.6	0.92	0.98	21.9
Approa	ch	304	5.9	0.503	16.1	LOS B	2.9	21.3	0.70	1.01	36.1
West: A	Argyle Stre	eet									
10	L	85	6.2	0.048	6.6	LOS A	0.0	0.0	0.00	0.61	43.3
11	Т	585	2.3	0.305	0.0	LOS A	0.0	0.0	0.00	0.00	50.0
Approa	ch	671	2.8	0.305	0.8	NA	0.0	0.0	0.00	0.08	49.0
All Vehi	icles	1546	3.7	0.503	6.1	NA	2.9	21.3	0.29	0.43	43.6

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model used.

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Site: Waite Street intersection Operations PM Peak

T Intersection with Argyle Street Giveway / Yield (Two-Way)

Moven	nent Per	formance - V	ehicles								
Mov ID	Turn	Demand Flow veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back o Vehicles veh	of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
East: A	rgyle Stre	et									
5	Т	432	2.2	0.452	2.4	LOS A	4.2	30.2	0.32	0.00	45.5
6	R	282	2.6	0.452	11.9	LOS A	4.2	30.2	0.72	1.03	39.6
Approa	ch	714	2.4	0.452	6.2	NA	4.2	30.2	0.48	0.41	42.9
North: \	Waite Stre	et									
7	L	353	3.9	0.528	12.8	LOS A	3.4	24.9	0.66	1.01	38.3
9	R	24	0.0	0.245	46.9	LOS D	0.8	5.5	0.91	0.99	23.4
Approa	ch	377	3.6	0.528	15.0	LOS B	3.4	24.9	0.67	1.01	36.8
West: A	Argyle Stre	eet									
10	L	78	5.4	0.044	6.6	LOS A	0.0	0.0	0.00	0.61	43.3
11	Т	482	2.8	0.252	0.0	LOS A	0.0	0.0	0.00	0.00	50.0
Approa	ch	560	3.2	0.252	0.9	NA	0.0	0.0	0.00	0.08	48.9
All Vehi	icles	1651	2.9	0.528	6.4	NA	4.2	30.2	0.36	0.44	43.1

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model used.

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Site: Lackey Street intersection Operations AM Peak

T-intersection with Argyle Street Stop (Two-Way)

Moven	nent Per	formance - V	ehicles								
Mov ID	Turn	Demand Flow veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back o Vehicles veh	of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
East: A	rgyle Stre	et									
5	Т	588	3.6	0.482	5.4	LOS A	5.9	42.8	0.51	0.00	42.2
6	R	182	6.4	0.482	17.3	LOS B	5.9	42.8	1.00	1.16	36.7
Approa	ch	771	4.2	0.482	8.2	NA	5.9	42.8	0.63	0.28	40.8
North: L	_ackey Sti	reet									
7	L	232	3.2	0.503	19.5	LOS B	2.6	18.8	0.76	1.14	35.0
9	R	5	0.0	0.114	83.8	LOS F	0.3	2.2	0.95	1.00	16.8
Approa	ch	237	3.1	0.503	20.9	LOS B	2.6	18.8	0.77	1.14	34.2
West: A	Argyle Stre	eet									
10	L	54	2.0	0.029	6.5	LOS A	0.0	0.0	0.00	0.61	43.3
11	Т	762	3.6	0.400	0.0	LOS A	0.0	0.0	0.00	0.00	50.0
Approa	ch	816	3.5	0.400	0.4	NA	0.0	0.0	0.00	0.04	49.5
All Vehi	icles	1823	3.8	0.503	6.4	NA	5.9	42.8	0.36	0.28	43.1

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model used.

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Site: Lackey Street intersection Operations PM Peak

T-intersection with Argyle Street Stop (Two-Way)

Movement Performance - Vehicles											
Mov ID	Turn	Demand Flow veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back o Vehicles veh	of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
East: Argyle Street											
5	T	755	2.6	0.582	5.7	LOS A	8.3	59.0	0.54	0.00	41.9
6	R	245	1.7	0.582	17.1	LOS B	8.3	59.0	1.00	1.24	36.7
Approa	ch	1000	2.4	0.582	8.5	NA	8.3	59.0	0.65	0.30	40.5
North: Lackey Street											
7	L	239	0.9	0.450	17.1	LOS B	2.3	16.4	0.70	1.11	36.4
9	R	9	0.0	0.287	131.8	LOS F	8.0	5.6	0.97	1.02	12.1
Approa	ch	248	0.8	0.450	21.4	LOS B	2.3	16.4	0.71	1.11	33.8
West: A	Argyle Stre	eet									
10	L	46	9.1	0.027	6.7	LOS A	0.0	0.0	0.00	0.61	43.3
11	Т	668	2.8	0.349	0.0	LOS A	0.0	0.0	0.00	0.00	50.0
Approa	ch	715	3.2	0.349	0.4	NA	0.0	0.0	0.00	0.04	49.5
All Vehi	icles	1963	2.5	0.582	7.2	NA	8.3	59.0	0.42	0.31	42.2

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model used.

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