

MOVEMENT SUMMARY

Site: 501 [ONR - Castle - Crane - Existing AM]

Old Northern Road - Castle Street - Crane Road

Existing AM Peak

Signals - Fixed Time Isolated Cycle Time = 50 seconds (Practical Cycle Time)

Variable Sequence Analysis applied. The results are given for the selected output sequence.

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Back of Queue Distance	Prop. Queued	Effective Stop Rate	Average Speed
		Total veh/h	HV %	v/c	sec		veh	m		per veh	km/h
South: Old Northern Road											
1	L2	61	2.0	0.208	26.4	LOS B	1.4	9.8	0.90	0.74	36.6
2	T1	200	2.0	0.752	25.2	LOS B	6.1	43.5	1.00	0.92	37.9
3	R2	30	2.0	0.752	30.7	LOS C	6.1	43.5	1.00	0.92	24.4
Approach		291	2.0	0.752	26.0	LOS B	6.1	43.5	0.98	0.88	36.6
East: Crane Road											
4	L2	86	2.0	0.419	18.9	LOS B	5.4	38.5	0.80	0.71	32.0
5	T1	200	2.0	0.419	13.4	LOS A	5.4	38.5	0.80	0.71	42.4
6	R2	148	2.0	0.674	31.2	LOS C	3.9	27.7	1.00	0.86	31.1
Approach		434	2.0	0.674	20.5	LOS B	5.4	38.5	0.87	0.76	36.1
NorthEast: Old Northern ROad											
24b	L3	10	100.0	0.147	30.5	LOS C	0.5	6.3	0.93	0.71	19.9
24a	L1	10	100.0	0.147	28.4	LOS B	0.5	6.3	0.93	0.71	27.7
Approach		20	100.0	0.147	29.5	LOS C	0.5	6.3	0.93	0.71	23.8
West: Castle Street											
10	L2	95	2.0	0.482	29.6	LOS C	2.6	18.8	0.98	0.77	39.8
11	T1	123	2.0	0.482	24.0	LOS B	2.8	19.6	0.98	0.76	35.8
Approach		218	2.0	0.482	26.5	LOS B	2.8	19.6	0.98	0.76	38.0
All Vehicles		963	4.0	0.752	23.7	LOS B	6.1	43.5	0.93	0.80	36.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

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.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians									
Mov ID	Description	Demand Flow	Average Delay	Level of Service	Average Back of Queue	Back of Queue Distance	Prop. Queued	Effective Stop Rate	
		ped/h	sec		Pedestrian ped	m		per ped	
P1	South Full Crossing	50	19.4	LOS B	0.1	0.1	0.88	0.88	
P2	East Full Crossing	50	19.4	LOS B	0.1	0.1	0.88	0.88	
P6	NorthEast Full Crossing	50	4.4	LOS A	0.0	0.0	0.42	0.42	
P3	North Full Crossing	50	19.4	LOS B	0.1	0.1	0.88	0.88	
P4	West Full Crossing	50	19.4	LOS B	0.1	0.1	0.88	0.88	
All Pedestrians		250	16.4	LOS B			0.79	0.79	

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 501 [ONR - Castle - Crane - Existing PM]

Old Northern Road - Castle Street - Crane Road

Existing PM Peak

Signals - Fixed Time Isolated Cycle Time = 50 seconds (Practical Cycle Time)

Variable Sequence Analysis applied. The results are given for the selected output sequence.

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Back of Queue Distance	Prop. Queued	Effective Stop Rate	Average Speed
		Total veh/h	HV %	v/c	sec		veh	m		per veh	km/h
South: Old Northern Road											
1	L2	79	2.0	0.270	26.7	LOS B	1.8	12.8	0.92	0.75	36.5
2	T1	158	2.0	0.622	23.1	LOS B	4.7	33.6	0.98	0.83	38.9
3	R2	32	2.0	0.622	28.6	LOS C	4.7	33.6	0.98	0.83	25.4
Approach		269	2.0	0.622	24.8	LOS B	4.7	33.6	0.96	0.80	37.0
East: Crane Road											
4	L2	62	2.0	0.331	18.4	LOS B	4.1	29.3	0.77	0.67	32.6
5	T1	164	2.0	0.331	12.8	LOS A	4.1	29.3	0.77	0.67	43.0
6	R2	115	2.0	0.523	29.8	LOS C	2.9	20.5	0.98	0.78	31.8
Approach		341	2.0	0.523	19.6	LOS B	4.1	29.3	0.84	0.71	36.9
NorthEast: Old Northern ROad											
24b	L3	10	100.0	0.147	30.5	LOS C	0.5	6.3	0.93	0.71	19.9
24a	L1	10	100.0	0.147	28.4	LOS B	0.5	6.3	0.93	0.71	27.7
Approach		20	100.0	0.147	29.5	LOS C	0.5	6.3	0.93	0.71	23.8
West: Castle Street											
10	L2	85	2.0	0.605	30.5	LOS C	3.5	24.7	0.99	0.82	40.1
11	T1	190	2.0	0.605	24.9	LOS B	3.6	25.4	0.99	0.82	35.1
Approach		275	2.0	0.605	26.6	LOS B	3.6	25.4	0.99	0.82	37.1
All Vehicles		905	4.2	0.622	23.5	LOS B	4.7	33.6	0.92	0.77	36.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

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.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians									
Mov ID	Description	Demand Flow	Average Delay	Level of Service	Average Back of Queue	Back of Queue Distance	Prop. Queued	Effective Stop Rate	
		ped/h	sec		Pedestrian ped	m		per ped	
P1	South Full Crossing	50	19.4	LOS B	0.1	0.1	0.88	0.88	
P2	East Full Crossing	50	19.4	LOS B	0.1	0.1	0.88	0.88	
P6	NorthEast Full Crossing	50	4.4	LOS A	0.0	0.0	0.42	0.42	
P3	North Full Crossing	50	19.4	LOS B	0.1	0.1	0.88	0.88	
P4	West Full Crossing	50	19.4	LOS B	0.1	0.1	0.88	0.88	
All Pedestrians		250	16.4	LOS B			0.79	0.79	

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

 **Site: 301 [ONR - Cecil - Existing AM]**

Old Northern Road - Cecil Avenue

Existing AM Peak

Signals - Fixed Time Isolated Cycle Time = 70 seconds (Optimum Cycle Time - Minimum Delay)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Old Northern Road											
1	L2	129	2.0	0.461	20.4	LOS B	9.3	66.2	0.75	0.70	26.2
2	T1	637	2.0	0.461	15.2	LOS B	9.3	66.4	0.75	0.67	36.8
3	R2	713	2.0	0.852	41.5	LOS C	13.9	98.9	1.00	0.99	22.0
Approach		1479	2.0	0.852	28.3	LOS B	13.9	98.9	0.87	0.83	27.2
East: Cecil Avenue											
4	L2	992	2.0	0.558	19.4	LOS B	12.0	85.7	0.76	0.80	32.8
5	T1	230	2.0	0.697	31.9	LOS C	8.0	56.7	0.99	0.87	14.4
6	R2	95	2.0	0.303	33.9	LOS C	3.0	21.0	0.91	0.76	17.5
Approach		1317	2.0	0.697	22.6	LOS B	12.0	85.7	0.81	0.81	28.6
North: Old Northern Road											
7	L2	84	2.0	0.827	38.0	LOS C	6.8	48.4	1.00	0.98	17.5
8	T1	305	2.0	0.827	36.4	LOS C	7.0	50.0	1.00	0.97	24.2
Approach		389	2.0	0.827	36.8	LOS C	7.0	50.0	1.00	0.97	23.0
West: Cecil Avenue											
10	L2	85	2.0	0.885	45.5	LOS D	7.8	55.5	1.00	1.05	11.3
11	T1	172	2.0	0.885	42.2	LOS C	7.8	55.5	1.00	1.05	11.1
12	R2	127	2.0	0.885	45.7	LOS D	7.8	55.3	1.00	1.05	18.3
Approach		384	2.0	0.885	44.1	LOS D	7.8	55.5	1.00	1.05	13.8
All Vehicles		3569	2.0	0.885	28.8	LOS C	13.9	98.9	0.88	0.86	25.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

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.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians									
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate per ped	
P1	South Full Crossing	50	29.3	LOS C	0.1	0.1	0.92	0.92	
P2	East Full Crossing	50	29.3	LOS C	0.1	0.1	0.92	0.92	
P2S	East Slip/Bypass Lane Crossing	50	17.9	LOS B	0.1	0.1	0.72	0.72	
P3	North Full Crossing	50	29.3	LOS C	0.1	0.1	0.92	0.92	
P4	West Full Crossing	50	19.4	LOS B	0.1	0.1	0.74	0.74	
All Pedestrians		250	25.0	LOS C			0.84	0.84	

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

 **Site: 301 [ONR - Cecil - Existing PM]**

Old Northern Road - Cecil Avenue

Existing PM Peak

Signals - Fixed Time Isolated Cycle Time = 80 seconds (Optimum Cycle Time - Minimum Delay)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Old Northern Road											
1	L2	125	2.0	0.437	21.8	LOS B	9.9	70.8	0.73	0.69	25.4
2	T1	614	2.0	0.437	16.6	LOS B	10.0	71.2	0.74	0.66	35.6
3	R2	778	2.0	0.895	50.2	LOS D	18.3	130.4	1.00	1.03	19.5
Approach		1517	2.0	0.895	34.3	LOS C	18.3	130.4	0.87	0.85	24.5
East: Cecil Avenue											
4	L2	1136	2.0	0.698	22.2	LOS B	19.0	135.0	0.80	0.82	30.9
5	T1	263	2.0	0.924	51.8	LOS D	12.9	91.7	1.00	1.13	9.8
6	R2	172	2.0	0.537	39.2	LOS C	6.4	45.2	0.96	0.80	15.9
Approach		1571	2.0	0.924	29.0	LOS C	19.0	135.0	0.85	0.87	24.9
North: Old Northern Road											
7	L2	103	2.0	0.890	48.0	LOS D	9.9	70.5	1.00	1.06	14.6
8	T1	351	2.0	0.890	45.9	LOS D	9.9	70.8	1.00	1.05	21.0
Approach		454	2.0	0.890	46.4	LOS D	9.9	70.8	1.00	1.06	19.7
West: Cecil Avenue											
10	L2	76	2.0	0.910	53.3	LOS D	9.6	68.5	0.99	1.09	9.9
11	T1	230	2.0	0.910	50.0	LOS D	9.6	68.5	0.99	1.09	9.7
12	R2	101	2.0	0.910	53.5	LOS D	9.6	68.3	0.99	1.09	16.5
Approach		407	2.0	0.910	51.5	LOS D	9.6	68.5	0.99	1.09	11.7
All Vehicles		3949	2.0	0.924	35.3	LOS C	19.0	135.0	0.89	0.91	22.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

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.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians									
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate per ped	
P1	South Full Crossing	50	34.3	LOS D	0.1	0.1	0.93	0.93	
P2	East Full Crossing	50	34.3	LOS D	0.1	0.1	0.93	0.93	
P2S	East Slip/Bypass Lane Crossing	50	18.9	LOS B	0.1	0.1	0.69	0.69	
P3	North Full Crossing	50	34.3	LOS D	0.1	0.1	0.93	0.93	
P4	West Full Crossing	50	20.3	LOS C	0.1	0.1	0.71	0.71	
All Pedestrians		250	28.4	LOS C			0.84	0.84	

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 601 [ONR - McMullen - Existing AM]

Old Northern Road - McMullen Road

Existing AM Peak

Signals - Fixed Time Isolated Cycle Time = 65 seconds (Optimum Cycle Time - Minimum Delay)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Back of Queue Distance	Prop. Queued	Effective Stop Rate	Average Speed
		Total veh/h	HV %	v/c	sec		veh	m		per veh	km/h
NorthEast: Old Northern Road											
25	T1	1228	2.0	0.494	6.4	LOS A	10.1	72.0	0.56	0.50	50.4
26	R2	807	2.0	0.843	37.3	LOS C	14.5	102.9	1.00	0.99	30.7
Approach		2035	2.0	0.843	18.7	LOS B	14.5	102.9	0.73	0.69	39.3
NorthWest: McMullen Avenue											
27	L2	767	2.0	0.400	15.7	LOS B	7.4	52.5	0.64	0.76	41.7
29	R2	388	2.0	0.626	34.5	LOS C	6.1	43.5	0.98	0.83	15.3
Approach		1155	2.0	0.626	22.0	LOS B	7.4	52.5	0.76	0.79	33.8
SouthWest: Old Northern Road											
30	L2	69	2.0	0.060	7.4	LOS A	0.7	5.1	0.41	0.62	36.3
31	T1	957	2.0	0.850	30.8	LOS C	17.1	122.0	1.00	1.03	31.4
Approach		1026	2.0	0.850	29.2	LOS C	17.1	122.0	0.96	1.01	31.5
All Vehicles		4216	2.0	0.850	22.2	LOS B	17.1	122.0	0.80	0.80	35.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

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.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians									
Mov ID	Description	Demand Flow	Average Delay	Level of Service	Average Back of Queue Pedestrian	Back of Queue Distance	Prop. Queued	Effective Stop Rate	
		ped/h	sec		ped	m		per ped	
P6	NorthEast Full Crossing	50	26.8	LOS C	0.1	0.1	0.91	0.91	
P7	NorthWest Full Crossing	50	26.8	LOS C	0.1	0.1	0.91	0.91	
All Pedestrians		100	26.8	LOS C			0.91	0.91	

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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Project: C:\Users\tomguerni\Dropbox (TDG)\Australia Business\Australia Jobs\14500 - 14999\14875 - Castle Hill South Traffic Study\SIDRA\14875 SIDRA - Existing Intersections.sip7

MOVEMENT SUMMARY

Site: 601 [ONR - McMullen - Existing PM]

Old Northern Road - McMullen Road

Existing PM Peak

Signals - Fixed Time Isolated Cycle Time = 65 seconds (Optimum Cycle Time - Minimum Delay)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Back of Queue Distance	Prop. Queued	Effective Stop Rate	Average Speed
		Total veh/h	HV %	v/c	sec		veh	m		per veh	km/h
NorthEast: Old Northern Road											
25	T1	514	2.0	0.207	5.0	LOS A	3.3	23.5	0.43	0.37	52.2
26	R2	963	2.0	0.855	36.6	LOS C	17.4	124.2	1.00	1.00	31.0
Approach		1477	2.0	0.855	25.6	LOS B	17.4	124.2	0.80	0.78	35.4
NorthWest: McMullen Avenue											
27	L2	1093	2.0	0.524	14.9	LOS B	10.7	76.2	0.66	0.78	42.3
29	R2	384	2.0	0.620	34.4	LOS C	6.0	42.9	0.98	0.83	15.3
Approach		1477	2.0	0.620	19.9	LOS B	10.7	76.2	0.74	0.79	36.1
SouthWest: Old Northern Road											
30	L2	123	2.0	0.114	8.6	LOS A	1.5	10.9	0.48	0.64	34.2
31	T1	820	2.0	0.865	34.0	LOS C	15.2	108.1	1.00	1.05	29.9
Approach		943	2.0	0.865	30.7	LOS C	15.2	108.1	0.93	1.00	30.1
All Vehicles		3897	2.0	0.865	24.7	LOS B	17.4	124.2	0.81	0.84	34.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

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.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians									
Mov ID	Description	Demand Flow	Average Delay	Level of Service	Average Back of Queue Pedestrian	Back of Queue Distance	Prop. Queued	Effective Stop Rate	
		ped/h	sec		ped	m		per ped	
P6	NorthEast Full Crossing	50	26.8	LOS C	0.1	0.1	0.91	0.91	
P7	NorthWest Full Crossing	50	26.8	LOS C	0.1	0.1	0.91	0.91	
All Pedestrians		100	26.8	LOS C			0.91	0.91	

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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Organisation: TRAFFIC DESIGN GROUP LTD (TDG) | Processed: Tuesday, 26 September 2017 12:07:14 PM

Project: C:\Users\tomguerni\Dropbox (TDG)\Australia Business\Australia Jobs\14500 - 14999\14875 - Castle Hill South Traffic Study\SIDRA\14875 SIDRA - Existing Intersections.sip7

MOVEMENT SUMMARY

 **Site: 401 [ONR - Showground - Existing AM]**

Old Northern Road - Showground Road

Existing AM Peak

Signals - Fixed Time Isolated Cycle Time = 40 seconds (Practical Cycle Time)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Back of Queue Distance	Prop. Queued	Effective Stop Rate	Average Speed
		Total veh/h	HV %	v/c	sec		veh	m		per veh	km/h
South: Old Northern Road											
1	L2	451	2.0	0.742	18.5	LOS B	10.5	74.5	0.90	0.91	41.3
2	T1	390	2.0	0.742	17.5	LOS B	10.5	74.5	0.97	0.92	32.2
Approach		841	2.0	0.742	18.1	LOS B	10.5	74.5	0.93	0.91	37.8
North: Old Northern Road											
8	T1	51	2.0	0.053	5.6	LOS A	0.5	3.7	0.54	0.41	47.7
9	R2	56	2.0	0.204	22.9	LOS B	1.0	7.4	0.91	0.73	38.5
Approach		107	2.0	0.204	14.6	LOS B	1.0	7.4	0.73	0.58	40.9
West: Showground Road											
10	L2	72	2.0	0.780	25.4	LOS B	6.7	47.9	0.99	0.97	37.1
12	R2	521	2.0	0.780	25.7	LOS B	6.7	47.9	1.00	0.97	35.1
Approach		593	2.0	0.780	25.7	LOS B	6.7	47.9	1.00	0.97	35.3
All Vehicles		1541	2.0	0.780	20.8	LOS B	10.5	74.5	0.94	0.91	36.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

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.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians									
Mov ID	Description	Demand Flow	Average Delay	Level of Service	Average Back of Queue Pedestrian	Back of Queue Distance	Prop. Queued	Effective Stop Rate	
		ped/h	sec		ped	m		per ped	
P3	North Full Crossing	50	14.5	LOS B	0.0	0.0	0.85	0.85	
P4	West Full Crossing	50	14.5	LOS B	0.0	0.0	0.85	0.85	
All Pedestrians		100	14.5	LOS B			0.85	0.85	

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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MOVEMENT SUMMARY

 **Site: 401 [ONR - Showground - Existing PM]**

Old Northern Road - Showground Road

Existing PM Peak

Signals - Fixed Time Isolated Cycle Time = 40 seconds (Practical Cycle Time)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows 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: Old Northern Road											
1	L2	398	2.0	0.634	16.0	LOS B	7.9	56.0	0.84	0.81	43.2
2	T1	332	2.0	0.634	15.6	LOS B	7.9	56.0	0.93	0.82	33.8
Approach		730	2.0	0.634	15.8	LOS B	7.9	56.0	0.88	0.82	39.7
North: Old Northern Road											
8	T1	52	2.0	0.054	5.6	LOS A	0.5	3.7	0.54	0.41	47.7
9	R2	49	2.0	0.178	22.8	LOS B	0.9	6.4	0.91	0.73	38.5
Approach		101	2.0	0.178	13.9	LOS A	0.9	6.4	0.72	0.56	41.2
West: Showground Road											
10	L2	65	2.0	0.594	21.9	LOS B	4.5	32.1	0.94	0.83	39.0
12	R2	390	2.0	0.594	22.4	LOS B	4.5	32.1	0.95	0.83	37.0
Approach		455	2.0	0.594	22.3	LOS B	4.5	32.1	0.95	0.83	37.3
All Vehicles		1286	2.0	0.634	17.9	LOS B	7.9	56.0	0.89	0.80	38.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

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.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians									
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back Pedestrian ped	of Queue Distance m	Prop. Queued	Effective Stop Rate per ped	
P3	North Full Crossing	50	14.5	LOS B	0.0	0.0	0.85	0.85	
P4	West Full Crossing	50	14.5	LOS B	0.0	0.0	0.85	0.85	
All Pedestrians		100	14.5	LOS B			0.85	0.85	

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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MOVEMENT SUMMARY

 **Site: 502 [Terminus - Crane - Existing AM]**

Terminus Street - Crane Street

Existing AM Peak

Signals - Fixed Time Isolated Cycle Time = 105 seconds (Optimum Cycle Time - Minimum Delay)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Terminus Street											
1	L2	106	2.0	0.538	32.1	LOS C	15.8	112.2	0.83	0.75	17.6
2	T1	695	2.0	0.538	26.5	LOS B	15.8	112.5	0.82	0.73	30.8
3	R2	79	2.0	0.453	56.3	LOS D	4.0	28.6	0.99	0.77	15.0
Approach		880	2.0	0.538	29.8	LOS C	15.8	112.5	0.84	0.74	27.2
East: Crane Road											
4	L2	109	2.0	0.881	61.2	LOS E	18.5	131.5	1.00	1.03	14.9
5	T1	251	2.0	0.881	55.7	LOS D	18.5	131.5	1.00	1.03	10.6
6	R2	267	2.0	0.881	61.4	LOS E	18.1	128.5	1.00	0.99	15.7
Approach		627	2.0	0.881	59.1	LOS E	18.5	131.5	1.00	1.01	13.7
North: Terminus Street											
7	L2	76	2.0	0.880	49.1	LOS D	36.4	259.2	1.00	1.04	16.2
8	T1	1141	2.0	0.880	42.4	LOS C	36.4	259.2	0.96	1.01	24.0
9	R2	236	2.0	0.667	25.0	LOS B	6.9	49.0	0.90	0.82	26.1
Approach		1453	2.0	0.880	40.0	LOS C	36.4	259.2	0.95	0.98	23.8
West: Crane Road											
10	L2	22	2.0	0.475	56.3	LOS D	4.4	31.1	0.99	0.77	17.1
11	T1	64	2.0	0.475	50.8	LOS D	4.4	31.1	0.99	0.77	11.6
12	R2	143	2.0	0.820	62.9	LOS E	8.0	57.2	1.00	0.92	13.7
Approach		229	2.0	0.820	58.9	LOS E	8.0	57.2	1.00	0.86	13.5
All Vehicles		3189	2.0	0.881	42.3	LOS C	36.4	259.2	0.93	0.91	21.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

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.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians									
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate per ped	
P1	South Full Crossing	50	46.8	LOS E	0.1	0.1	0.94	0.94	
P2	East Full Crossing	50	46.8	LOS E	0.1	0.1	0.94	0.94	
P4	West Full Crossing	50	26.1	LOS C	0.1	0.1	0.71	0.71	
All Pedestrians		150	39.9	LOS D			0.87	0.87	

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

 **Site: 502 [Terminus - Crane - Existing PM]**

Terminus Street - Crane Street

Existing PM Peak

Signals - Fixed Time Isolated Cycle Time = 100 seconds (Optimum Cycle Time - Minimum Delay)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Terminus Street											
1	L2	160	2.0	0.676	29.5	LOS C	21.9	156.0	0.86	0.79	18.3
2	T1	885	2.0	0.676	23.1	LOS B	21.9	156.0	0.83	0.74	32.7
3	R2	154	2.0	0.841	61.3	LOS E	8.4	59.6	1.00	0.94	14.1
Approach		1199	2.0	0.841	28.9	LOS C	21.9	156.0	0.85	0.77	27.2
East: Crane Road											
4	L2	85	2.0	0.757	54.1	LOS D	10.1	72.0	1.00	0.90	16.3
5	T1	157	2.0	0.757	48.6	LOS D	10.1	72.0	1.00	0.90	11.7
6	R2	154	2.0	0.757	54.2	LOS D	10.0	70.9	1.00	0.89	17.2
Approach		396	2.0	0.757	52.0	LOS D	10.1	72.0	1.00	0.90	15.0
North: Terminus Street											
7	L2	165	2.0	0.843	38.2	LOS C	33.6	239.6	0.96	0.96	18.5
8	T1	1147	2.0	0.843	31.9	LOS C	33.6	239.6	0.91	0.92	28.1
9	R2	241	2.0	0.736	26.8	LOS B	6.4	45.5	0.96	0.88	25.2
Approach		1553	2.0	0.843	31.8	LOS C	33.6	239.6	0.93	0.92	26.5
West: Crane Road											
10	L2	47	2.0	0.827	61.8	LOS E	6.8	48.2	1.00	0.93	15.8
11	T1	78	2.0	0.827	56.3	LOS D	6.8	48.2	1.00	0.93	10.6
12	R2	110	2.0	0.751	59.4	LOS E	5.8	41.1	1.00	0.87	14.3
Approach		235	2.0	0.827	58.8	LOS E	6.8	48.2	1.00	0.90	13.5
All Vehicles		3383	2.0	0.843	35.0	LOS C	33.6	239.6	0.91	0.86	24.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

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.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians									
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate per ped	
P1	South Full Crossing	50	44.3	LOS E	0.1	0.1	0.94	0.94	
P2	East Full Crossing	50	44.3	LOS E	0.1	0.1	0.94	0.94	
P4	West Full Crossing	50	21.8	LOS C	0.1	0.1	0.66	0.66	
All Pedestrians		150	36.8	LOS D			0.85	0.85	

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

 **Site: 402 [Terminus - SC - Existing AM]**

Terminus Road - Shopping Centre

Existing AM Peak

Signals - Fixed Time Isolated Cycle Time = 50 seconds (Practical Cycle Time)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Back of Queue Distance	Prop. Queued	Effective Stop Rate	Average Speed
		Total veh/h	HV %	v/c	sec		veh	m		per veh	km/h
South: Terminus Road											
1	L2	19	2.0	0.016	9.0	LOS A	0.2	1.2	0.38	0.63	46.6
2	T1	878	2.0	0.714	18.0	LOS B	10.3	73.4	0.94	0.86	31.9
Approach		897	2.0	0.714	17.8	LOS B	10.3	73.4	0.93	0.85	32.3
North: Terminus Road											
8	T1	1040	2.0	0.482	7.2	LOS A	7.7	55.2	0.65	0.57	44.3
9	R2	64	2.0	0.146	28.3	LOS B	0.7	5.3	0.93	0.71	35.5
Approach		1104	2.0	0.482	8.5	LOS A	7.7	55.2	0.66	0.58	43.1
West: Shopping Centre Access											
10	L2	187	2.0	0.511	25.9	LOS B	4.3	30.7	0.94	0.80	36.6
12	R2	258	2.0	0.705	28.2	LOS B	6.5	46.4	0.98	0.89	33.7
Approach		445	2.0	0.705	27.3	LOS B	6.5	46.4	0.96	0.85	34.9
All Vehicles		2446	2.0	0.714	15.3	LOS B	10.3	73.4	0.81	0.73	36.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

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.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians									
Mov ID	Description	Demand Flow	Average Delay	Level of Service	Average Back of Queue Pedestrian	Back of Queue Distance	Prop. Queued	Effective Stop Rate	
		ped/h	sec		ped	m		per ped	
P3	North Full Crossing	50	19.4	LOS B	0.1	0.1	0.88	0.88	
P4	West Full Crossing	50	19.4	LOS B	0.1	0.1	0.88	0.88	
All Pedestrians		100	19.4	LOS B			0.88	0.88	

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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MOVEMENT SUMMARY

 **Site: 402 [Terminus - SC - Existing PM]**

Terminus Road - Shopping Centre

Existing PM Peak

Signals - Fixed Time Isolated Cycle Time = 40 seconds (Practical Cycle Time)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Back of Queue Distance	Prop. Queued	Effective Stop Rate	Average Speed
		Total veh/h	HV %	v/c	sec		veh	m		per veh	km/h
South: Terminus Road											
1	L2	5	2.0	0.005	9.9	LOS A	0.0	0.3	0.46	0.62	45.8
2	T1	787	2.0	0.818	20.3	LOS B	8.9	63.1	1.00	1.02	30.1
Approach		792	2.0	0.818	20.2	LOS B	8.9	63.1	1.00	1.01	30.2
North: Terminus Road											
8	T1	1190	2.0	0.562	6.5	LOS A	7.8	55.2	0.70	0.61	45.6
9	R2	74	2.0	0.135	22.6	LOS B	0.7	4.8	0.90	0.71	38.4
Approach		1264	2.0	0.562	7.4	LOS A	7.8	55.2	0.71	0.62	44.6
West: Shopping Centre Access											
10	L2	66	2.0	0.240	23.0	LOS B	1.2	8.7	0.92	0.74	38.1
12	R2	112	2.0	0.408	23.7	LOS B	2.2	15.4	0.95	0.77	36.1
Approach		178	2.0	0.408	23.4	LOS B	2.2	15.4	0.94	0.76	36.9
All Vehicles		2234	2.0	0.818	13.2	LOS A	8.9	63.1	0.83	0.77	37.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

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.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians									
Mov ID	Description	Demand Flow	Average Delay	Level of Service	Average Back of Queue Pedestrian	Back of Queue Distance	Prop. Queued	Effective Stop Rate	
		ped/h	sec		ped	m		per ped	
P3	North Full Crossing	50	14.5	LOS B	0.0	0.0	0.85	0.85	
P4	West Full Crossing	50	14.5	LOS B	0.0	0.0	0.85	0.85	
All Pedestrians		100	14.5	LOS B			0.85	0.85	

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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MOVEMENT SUMMARY

 **Site: 303 [Orange - Cecil Existing AM]**

Orange Grove - Cecil Avenue
Existing AM Peak
Roundabout

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Orange Grove											
1	L2	24	2.0	0.149	5.0	LOS A	0.8	5.5	0.33	0.53	41.4
2	T1	103	2.0	0.149	4.7	LOS A	0.8	5.5	0.33	0.53	43.5
3	R2	35	2.0	0.149	7.5	LOS A	0.8	5.5	0.33	0.53	44.4
3u	U	1	2.0	0.149	8.8	LOS A	0.8	5.5	0.33	0.53	41.8
Approach		163	2.0	0.149	5.4	LOS A	0.8	5.5	0.33	0.53	43.5
East: Cecil Avenue											
4	L2	66	2.0	0.132	4.9	LOS A	0.7	4.8	0.31	0.52	44.1
5	T1	63	2.0	0.132	4.6	LOS A	0.7	4.8	0.31	0.52	45.3
6	R2	17	2.0	0.132	7.3	LOS A	0.7	4.8	0.31	0.52	45.5
6u	U	1	2.0	0.132	8.7	LOS A	0.7	4.8	0.31	0.52	46.5
Approach		147	2.0	0.132	5.1	LOS A	0.7	4.8	0.31	0.52	44.8
North: Orange Grove											
7	L2	12	2.0	0.102	4.4	LOS A	0.5	3.7	0.18	0.53	44.9
8	T1	58	2.0	0.102	4.1	LOS A	0.5	3.7	0.18	0.53	43.6
9	R2	55	2.0	0.102	6.9	LOS A	0.5	3.7	0.18	0.53	43.8
9u	U	3	2.0	0.102	8.2	LOS A	0.5	3.7	0.18	0.53	44.9
Approach		128	2.0	0.102	5.4	LOS A	0.5	3.7	0.18	0.53	43.9
West: Cecil Avenue											
10	L2	21	2.0	0.032	5.0	LOS A	0.2	1.1	0.33	0.53	43.1
11	T1	6	2.0	0.032	4.7	LOS A	0.2	1.1	0.33	0.53	45.1
12	R2	5	2.0	0.032	7.4	LOS A	0.2	1.1	0.33	0.53	42.0
12u	U	2	2.0	0.032	8.8	LOS A	0.2	1.1	0.33	0.53	43.4
Approach		34	2.0	0.032	5.5	LOS A	0.2	1.1	0.33	0.53	43.4
All Vehicles		472	2.0	0.149	5.3	LOS A	0.8	5.5	0.28	0.53	44.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

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 is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

 **Site: 303 [Orange - Cecil Existing PM]**

Orange Grove - Cecil Avenue
Existing PM Peak
Roundabout

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows 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: Orange Grove											
1	L2	15	2.0	0.147	4.5	LOS A	0.8	5.5	0.19	0.53	41.5
2	T1	87	2.0	0.147	4.1	LOS A	0.8	5.5	0.19	0.53	43.6
3	R2	85	2.0	0.147	6.9	LOS A	0.8	5.5	0.19	0.53	44.4
3u	U	1	2.0	0.147	8.3	LOS A	0.8	5.5	0.19	0.53	41.9
Approach		188	2.0	0.147	5.4	LOS A	0.8	5.5	0.19	0.53	43.9
East: Cecil Avenue											
4	L2	29	2.0	0.053	4.6	LOS A	0.3	1.8	0.23	0.50	44.3
5	T1	22	2.0	0.053	4.3	LOS A	0.3	1.8	0.23	0.50	45.5
6	R2	9	2.0	0.053	7.0	LOS A	0.3	1.8	0.23	0.50	45.6
6u	U	1	2.0	0.053	8.4	LOS A	0.3	1.8	0.23	0.50	46.6
Approach		61	2.0	0.053	4.9	LOS A	0.3	1.8	0.23	0.50	45.0
North: Orange Grove											
7	L2	5	2.0	0.057	4.8	LOS A	0.3	1.9	0.28	0.52	44.9
8	T1	40	2.0	0.057	4.5	LOS A	0.3	1.9	0.28	0.52	43.5
9	R2	16	2.0	0.057	7.3	LOS A	0.3	1.9	0.28	0.52	43.7
9u	U	3	2.0	0.057	8.6	LOS A	0.3	1.9	0.28	0.52	44.9
Approach		64	2.0	0.057	5.4	LOS A	0.3	1.9	0.28	0.52	43.8
West: Cecil Avenue											
10	L2	63	2.0	0.092	5.2	LOS A	0.5	3.2	0.36	0.56	43.1
11	T1	15	2.0	0.092	4.9	LOS A	0.5	3.2	0.36	0.56	45.0
12	R2	15	2.0	0.092	7.7	LOS A	0.5	3.2	0.36	0.56	41.9
12u	U	3	2.0	0.092	9.0	LOS A	0.5	3.2	0.36	0.56	43.4
Approach		96	2.0	0.092	5.7	LOS A	0.5	3.2	0.36	0.56	43.3
All Vehicles		409	2.0	0.147	5.4	LOS A	0.8	5.5	0.25	0.53	43.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

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 is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

 **Site: 203 [Francis - Orange - Existing AM]**

Francis Street - Orange Grove
Existing AM Peak
Roundabout

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		Total veh/h	HV %	v/c	sec		veh	m		per veh	km/h
East: Francis Street											
5	T1	20	2.0	0.034	5.7	LOS A	0.2	1.1	0.30	0.58	48.8
6	R2	16	2.0	0.034	8.2	LOS A	0.2	1.1	0.30	0.58	49.3
Approach		36	2.0	0.034	6.8	LOS A	0.2	1.1	0.30	0.58	49.0
North: Orange Grove											
7	L2	5	2.0	0.097	5.7	LOS A	0.5	3.4	0.04	0.67	48.6
9	R2	142	2.0	0.097	7.4	LOS A	0.5	3.4	0.04	0.67	40.9
Approach		147	2.0	0.097	7.4	LOS A	0.5	3.4	0.04	0.67	41.4
West: Francis Street											
10	L2	145	2.0	0.108	5.7	LOS A	0.6	4.1	0.09	0.58	41.8
11	T1	5	2.0	0.108	5.0	LOS A	0.6	4.1	0.09	0.58	49.9
Approach		150	2.0	0.108	5.7	LOS A	0.6	4.1	0.09	0.58	42.3
All Vehicles		333	2.0	0.108	6.6	LOS A	0.6	4.1	0.09	0.62	43.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

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 is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

 **Site: 203 [Francis - Orange - Existing PM]**

Francis Street - Orange Grove
Existing PM Peak
Roundabout

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	of Queue Distance	Prop. Queued	Effective Stop Rate	Average Speed
		Total veh/h	HV %	v/c	sec		veh	m		per veh	km/h
East: Francis Street											
5	T1	5	2.0	0.009	5.2	LOS A	0.0	0.3	0.18	0.57	49.1
6	R2	5	2.0	0.009	7.7	LOS A	0.0	0.3	0.18	0.57	49.6
Approach		10	2.0	0.009	6.5	LOS A	0.0	0.3	0.18	0.57	49.3
North: Orange Grove											
7	L2	18	2.0	0.058	5.8	LOS A	0.3	1.9	0.11	0.63	48.7
9	R2	57	2.0	0.058	7.5	LOS A	0.3	1.9	0.11	0.63	41.0
Approach		75	2.0	0.058	7.1	LOS A	0.3	1.9	0.11	0.63	43.8
West: Francis Street											
10	L2	199	2.0	0.143	5.7	LOS A	0.8	5.5	0.04	0.60	42.2
11	T1	23	2.0	0.143	4.9	LOS A	0.8	5.5	0.04	0.60	50.2
Approach		222	2.0	0.143	5.6	LOS A	0.8	5.5	0.04	0.60	43.4
All Vehicles		307	2.0	0.143	6.0	LOS A	0.8	5.5	0.06	0.60	43.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

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 is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY



Site: 302 [Terminus - Cecil - Existing AM]

Terminus Street - Cecil Avenue
Existing AM Peak
Stop (Two-Way)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows 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
SouthEast: Cecil Avenue											
21	L2	141	2.0	0.200	12.0	LOS A	0.8	5.6	0.58	1.00	39.2
Approach		141	2.0	0.200	12.0	LOS A	0.8	5.6	0.58	1.00	39.2
NorthEast: Terminus Street											
24	L2	43	2.0	0.333	5.6	LOS A	0.0	0.0	0.00	0.04	54.4
25	T1	1237	2.0	0.333	0.0	LOS A	0.0	0.0	0.00	0.02	59.2
Approach		1280	2.0	0.333	0.2	NA	0.0	0.0	0.00	0.02	58.9
All Vehicles		1421	2.0	0.333	1.4	NA	0.8	5.6	0.06	0.12	54.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

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 is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY



Site: 302 [Terminus - Cecil - Existing PM]

Terminus Street - Cecil Avenue
Existing PM Peak
Stop (Two-Way)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows 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
SouthEast: Cecil Avenue											
21	L2	82	2.0	0.132	12.6	LOS A	0.5	3.5	0.60	1.00	38.5
Approach		82	2.0	0.132	12.6	LOS A	0.5	3.5	0.60	1.00	38.5
NorthEast: Terminus Street											
24	L2	85	2.0	0.399	5.6	LOS A	0.0	0.0	0.00	0.07	53.9
25	T1	1445	2.0	0.399	0.0	LOS A	0.0	0.0	0.00	0.03	58.7
Approach		1530	2.0	0.399	0.3	NA	0.0	0.0	0.00	0.03	58.2
All Vehicles		1612	2.0	0.399	0.9	NA	0.5	3.5	0.03	0.08	56.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

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 is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 202 [Francis - Roger - Existing AM]

Francis Street - Roger Avenue
Existing AM Peak
Giveway / Yield (Two-Way)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows 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: Francis Street											
5	T1	202	2.0	0.106	0.0	LOS A	0.0	0.1	0.00	0.00	49.9
6	R2	1	2.0	0.106	5.1	LOS A	0.0	0.1	0.00	0.00	46.0
Approach		203	2.0	0.106	0.0	NA	0.0	0.1	0.00	0.00	49.9
North: Roger Avenue											
7	L2	2	2.0	0.003	5.0	LOS A	0.0	0.1	0.25	0.51	37.4
9	R2	1	2.0	0.003	5.9	LOS A	0.0	0.1	0.25	0.51	40.1
Approach		3	2.0	0.003	5.3	LOS A	0.0	0.1	0.25	0.51	38.5
West: Francis Street											
10	L2	2	2.0	0.082	4.6	LOS A	0.0	0.0	0.00	0.01	48.4
11	T1	156	2.0	0.082	0.0	LOS A	0.0	0.0	0.00	0.01	49.9
Approach		158	2.0	0.082	0.1	NA	0.0	0.0	0.00	0.01	49.9
All Vehicles		364	2.0	0.106	0.1	NA	0.0	0.1	0.00	0.01	49.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

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 is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

▼ Site: 202 [Francis - Roger - Existing PM]

Francis Street - Roger Avenue
Existing PM Peak
Giveway / Yield (Two-Way)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows 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: Francis Street											
5	T1	77	2.0	0.041	0.0	LOS A	0.0	0.1	0.02	0.01	49.7
6	R2	2	2.0	0.041	5.2	LOS A	0.0	0.1	0.02	0.01	45.6
Approach		79	2.0	0.041	0.2	NA	0.0	0.1	0.02	0.01	49.6
North: Roger Avenue											
7	L2	1	2.0	0.003	5.1	LOS A	0.0	0.1	0.28	0.52	37.2
9	R2	2	2.0	0.003	5.5	LOS A	0.0	0.1	0.28	0.52	40.0
Approach		3	2.0	0.003	5.4	LOS A	0.0	0.1	0.28	0.52	39.3
West: Francis Street											
10	L2	3	2.0	0.097	4.6	LOS A	0.0	0.0	0.00	0.01	48.4
11	T1	183	2.0	0.097	0.0	LOS A	0.0	0.0	0.00	0.01	49.9
Approach		186	2.0	0.097	0.1	NA	0.0	0.0	0.00	0.01	49.8
All Vehicles		268	2.0	0.097	0.2	NA	0.0	0.1	0.01	0.02	49.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

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 is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

▽ Site: 602 [ONR - Brisbane - Existing AM]

Old Northern Road - Brisbane Road
Existing AM Peak
Giveaway / Yield (Two-Way)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows 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
SouthEast: Brisbane Road											
21	L2	66	2.0	0.112	10.0	LOS A	0.4	2.7	0.58	0.82	47.6
23	R2	78	2.0	13.000	10956.2	LOS F	72.0	512.7	1.00	1.39	0.2
Approach		144	2.0	13.000	5939.2	LOS F	72.0	512.7	0.81	1.13	0.4
NorthEast: Old Northern Road											
24	L2	130	2.0	0.421	3.5	LOS A	0.0	0.0	0.00	0.09	55.9
25	T1	1486	2.0	0.421	0.0	LOS A	0.0	0.0	0.00	0.04	59.1
Approach		1616	2.0	0.421	0.3	NA	0.0	0.0	0.00	0.05	58.6
SouthWest: Old Northern Road											
31	T1	948	2.0	0.164	0.0	LOS A	0.0	0.0	0.00	0.00	60.0
32	R2	50	2.0	0.374	39.6	LOS C	1.2	8.8	0.94	1.01	31.7
Approach		998	2.0	0.374	2.0	NA	1.2	8.8	0.05	0.05	54.3
All Vehicles		2758	2.0	13.000	311.0	NA	72.0	512.7	0.06	0.10	3.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

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 is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

▽ Site: 602 [ONR - Brisbane - Existing PM]

Old Northern Road - Brisbane Road
Existing PM Peak
Giveway / Yield (Two-Way)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows 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
SouthEast: Brisbane Road											
21	L2	37	2.0	0.062	9.7	LOS A	0.2	1.5	0.56	0.78	47.8
23	R2	21	2.0	3.500	2635.4	LOS F	17.0	121.0	1.00	1.30	0.7
Approach		58	2.0	3.500	960.4	LOS F	17.0	121.0	0.72	0.97	2.2
NorthEast: Old Northern Road											
24	L2	75	2.0	0.385	3.5	LOS A	0.0	0.0	0.00	0.06	56.3
25	T1	1402	2.0	0.385	0.0	LOS A	0.0	0.0	0.00	0.03	59.4
Approach		1477	2.0	0.385	0.2	NA	0.0	0.0	0.00	0.03	59.1
SouthWest: Old Northern Road											
31	T1	922	2.0	0.160	0.0	LOS A	0.0	0.0	0.00	0.00	60.0
32	R2	30	2.0	0.166	25.8	LOS B	0.5	3.7	0.89	0.96	37.6
Approach		952	2.0	0.166	0.8	NA	0.5	3.7	0.03	0.03	57.4
All Vehicles		2487	2.0	3.500	22.8	NA	17.0	121.0	0.03	0.05	25.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

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 is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY



Site: 101 [ONR - Church - Existing AM]

Old Northern Road - Church Street
Existing AM Peak

Stop (Two-Way)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows 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: Old Northern Road											
2	T1	1281	2.0	0.376	2.1	LOS A	2.3	16.5	0.10	0.01	56.3
3	R2	16	2.0	0.376	35.4	LOS C	2.3	16.5	0.22	0.02	49.8
Approach		1297	2.0	0.376	2.5	NA	2.3	16.5	0.10	0.01	56.2
East: Church Street											
4	L2	31	2.0	0.066	13.4	LOS A	0.2	1.6	0.62	0.99	43.9
6	R2	21	2.0	1.000	381.4	LOS F	3.4	24.1	1.00	1.19	3.5
Approach		52	2.0	1.000	162.0	LOS F	3.4	24.1	0.77	1.07	11.0
North: Old Northern Road											
7	L2	49	2.0	0.393	5.6	LOS A	0.0	0.0	0.00	0.04	54.4
8	T1	1462	2.0	0.393	0.0	LOS A	0.0	0.0	0.00	0.02	59.6
Approach		1511	2.0	0.393	0.2	NA	0.0	0.0	0.00	0.02	59.5
All Vehicles		2860	2.0	1.000	4.2	NA	3.4	24.1	0.06	0.03	53.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

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 is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY



Site: 101 [ONR - Church - Existing PM]

Old Northern Road - Church Street
Existing PM Peak

Stop (Two-Way)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows 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: Old Northern Road											
2	T1	1352	2.0	0.411	2.3	LOS A	2.9	20.8	0.13	0.01	55.9
3	R2	27	2.0	0.411	30.4	LOS C	2.9	20.8	0.30	0.03	48.8
Approach		1379	2.0	0.411	2.9	NA	2.9	20.8	0.13	0.01	55.7
East: Church Street											
4	L2	18	2.0	0.034	12.3	LOS A	0.1	0.8	0.57	0.94	44.5
6	R2	11	2.0	1.000	649.3	LOS F	3.0	21.3	1.00	1.12	2.1
Approach		29	2.0	1.000	253.9	LOS F	3.0	21.3	0.73	1.01	7.7
North: Old Northern Road											
7	L2	64	2.0	0.367	5.6	LOS A	0.0	0.0	0.00	0.05	54.2
8	T1	1346	2.0	0.367	0.0	LOS A	0.0	0.0	0.00	0.03	59.5
Approach		1410	2.0	0.367	0.3	NA	0.0	0.0	0.00	0.03	59.4
All Vehicles		2818	2.0	1.000	4.2	NA	3.0	21.3	0.07	0.03	53.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

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 is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

▽ Site: 503 [Crane - Orange - Existing AM]

Crane Road - Orange Grove
Existing AM Peak
Giveway / Yield (Two-Way)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows 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: Orange Grove											
1	L2	156	2.0	0.142	6.9	LOS A	0.6	4.1	0.42	0.65	33.4
3	R2	5	2.0	0.142	9.0	LOS A	0.6	4.1	0.42	0.65	50.9
Approach		161	2.0	0.142	7.0	LOS A	0.6	4.1	0.42	0.65	34.1
East: Crane Road											
4	L2	21	2.0	0.182	5.6	LOS A	0.0	0.0	0.00	0.03	57.6
5	T1	351	2.0	0.182	0.0	LOS A	0.0	0.0	0.00	0.03	59.5
Approach		372	2.0	0.182	0.3	NA	0.0	0.0	0.00	0.03	59.3
West: Crane Road											
11	T1	146	2.0	0.176	1.2	LOS A	0.9	6.5	0.41	0.31	53.7
12	R2	128	2.0	0.176	7.1	LOS A	0.9	6.5	0.41	0.31	48.8
Approach		274	2.0	0.176	3.9	NA	0.9	6.5	0.41	0.31	51.6
All Vehicles		807	2.0	0.182	2.9	NA	0.9	6.5	0.22	0.25	50.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

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 is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

▽ Site: 503 [Crane - Orange - Existing PM]

Crane Road - Orange Grove
Existing PM Peak
Giveway / Yield (Two-Way)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows 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: Orange Grove											
1	L2	122	2.0	0.105	6.1	LOS A	0.4	3.0	0.27	0.58	33.8
3	R2	13	2.0	0.105	8.4	LOS A	0.4	3.0	0.27	0.58	51.4
Approach		135	2.0	0.105	6.3	LOS A	0.4	3.0	0.27	0.58	35.9
East: Crane Road											
4	L2	7	2.0	0.086	5.6	LOS A	0.0	0.0	0.00	0.02	57.7
5	T1	169	2.0	0.086	0.0	LOS A	0.0	0.0	0.00	0.02	59.6
Approach		176	2.0	0.086	0.2	NA	0.0	0.0	0.00	0.02	59.5
West: Crane Road											
11	T1	314	2.0	0.202	0.2	LOS A	0.6	4.0	0.14	0.11	57.4
12	R2	72	2.0	0.202	6.2	LOS A	0.6	4.0	0.14	0.11	52.9
Approach		386	2.0	0.202	1.3	NA	0.6	4.0	0.14	0.11	56.7
All Vehicles		697	2.0	0.202	2.0	NA	0.6	4.0	0.13	0.18	52.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

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 is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY



Site: 201 [ONR - Francis - Existing AM]

Old Northern Road - Francis Street
Existing AM Peak

Stop (Two-Way)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows 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: Old Northern Road											
2	T1	1349	2.0	0.626	3.1	LOS A	5.5	39.5	0.11	0.05	52.8
3	R2	113	2.0	0.626	35.3	LOS C	5.5	39.5	1.00	0.51	24.1
Approach		1462	2.0	0.626	5.5	NA	5.5	39.5	0.18	0.09	48.5
East: Francis Street											
4	L2	194	2.0	0.404	15.9	LOS B	1.9	13.7	0.71	1.09	33.0
6	R2	3	2.0	1.000	1808.4	LOS F	2.4	17.2	1.00	1.04	1.1
Approach		197	2.0	1.000	43.2	LOS D	2.4	17.2	0.72	1.09	20.3
North: Old Northern Road											
7	L2	47	2.0	0.389	5.6	LOS A	0.0	0.0	0.00	0.04	55.9
8	T1	1449	2.0	0.389	0.0	LOS A	0.0	0.0	0.00	0.02	59.5
Approach		1496	2.0	0.389	0.2	NA	0.0	0.0	0.00	0.02	59.3
All Vehicles		3155	2.0	1.000	5.4	NA	5.5	39.5	0.13	0.12	48.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

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 is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY



Site: 201 [ONR - Francis - Existing PM]

Old Northern Road - Francis Street
Existing PM Peak

Stop (Two-Way)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows 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: Old Northern Road											
2	T1	1379	2.0	0.716	0.1	LOS A	0.0	0.0	0.00	0.00	59.6
3	R2	146	2.0	0.783	48.7	LOS D	3.7	26.5	0.97	1.22	18.7
Approach		1525	2.0	0.783	4.7	NA	3.7	26.5	0.09	0.12	49.6
East: Francis Street											
4	L2	86	2.0	0.182	13.8	LOS A	0.6	4.6	0.65	1.00	34.5
6	R2	1	2.0	1.000	4530.8	LOS F	2.2	15.8	1.00	1.02	0.4
Approach		87	2.0	1.000	65.7	LOS E	2.2	15.8	0.65	1.00	15.3
North: Old Northern Road											
7	L2	55	2.0	0.398	5.6	LOS A	0.0	0.0	0.00	0.04	55.9
8	T1	1476	2.0	0.398	0.0	LOS A	0.0	0.0	0.00	0.02	59.4
Approach		1531	2.0	0.398	0.2	NA	0.0	0.0	0.00	0.02	59.3
All Vehicles		3143	2.0	1.000	4.2	NA	3.7	26.5	0.06	0.09	50.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

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 is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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