

V Site: 101 [Existing AM - Wallgrove/Kosovich]

Site Category: (None) Giveway / Yield (Two-Way)

Mov	ement	Perform	ance ·	- Vehi	cles									
Mov ID	Turn	Demand Total veh/h	HV	Arrival Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	98% Ba Queu Vehicles D veh	ıe	Prop. Queued	Effective Stop Rate	Aver. A No. Cycles S	Averag e Speed km/h
South	n: Wallo	grove Roa		VC11/11	70	V/C	360		VCII	- '''				KIII/II
1	L2	1	0.0	1	0.0	0.487	5.6	LOS A	0.0	0.0	0.00	0.00	0.00	58.2
2	T1	914	5.9	914	5.9	0.487	0.1	LOSA	0.0	0.0	0.00	0.00	0.00	59.8
Appro	oach	915	5.9	915	5.9	0.487	0.1	NA	0.0	0.0	0.00	0.00	0.00	59.8
North	ı: Wallg	rove Road	(N) b											
8	T1	341	11.7	341	11.7	0.190	0.1	LOSA	0.0	0.2	0.01	0.00	0.01	59.8
9	R2	1	0.0	1	0.0	0.190	13.3	LOSA	0.0	0.2	0.01	0.00	0.01	56.2
Appro	oach	342	11.7	342	11.7	0.190	0.1	NA	0.0	0.2	0.01	0.00	0.01	59.8
West	: Kosov	ich Place	(E)											
10	L2	1	0.0	1	0.0	0.006	10.2	LOSA	0.0	0.1	0.77	0.81	0.77	36.5
12	R2	1	0.0	1	0.0	0.006	17.3	LOS B	0.0	0.1	0.77	0.81	0.77	41.4
Appro	oach	2	0.0	2	0.0	0.006	13.7	LOSA	0.0	0.1	0.77	0.81	0.77	39.6
All Ve	hicles	1259	7.5	1259	7.5	0.487	0.1	NA	0.0	0.2	0.00	0.00	0.00	59.8

中 Network: N101 [AM

Existing]

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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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Organisation: MCLAREN TRAFFIC ENGINEERING | Processed: Friday, 7 February 2020 11:31:41 AM



Site: 101 [Existing AM- Wallgrove/ Villiers]

New Site

Site Category: (None)

Roundabout

Move	ement	Perform	ance	- Vehi	cles									
Mov ID	Turn	Demand	Flows	Arrival	Flows	Deg. Satn	Average Delay	Level of Service	98% Bad Queu		Prop. Queued	Effective Stop	Aver. A No.	Averag e
		Total veh/h		Total veh/h	HV %	v/c	sec		Vehicles D veh	istance m		Rate	Cycles S	Speed km/h
South	ո։ Wallo	grove Road	d (S)											
2	T1	641	0.0	641	0.0	0.367	4.1	LOSA	0.0	0.0	0.00	0.41	0.00	55.2
3u	U	1	0.0	1	0.0	0.367	10.8	LOSA	0.0	0.0	0.00	0.41	0.00	39.7
Appro	oach	642	0.0	642	0.0	0.367	4.1	LOS A	0.0	0.0	0.00	0.41	0.00	55.2
North	: Wallg	rove Road	d (N)											
8	T1	481	0.0	481	0.0	0.275	4.1	LOSA	1.7	12.2	0.02	0.40	0.02	53.0
Appro	oach	481	0.0	481	0.0	0.275	4.1	LOSA	1.7	12.2	0.02	0.40	0.02	53.0
All Ve	hicles	1123	0.0	1123	0.0	0.367	4.1	LOSA	1.7	12.2	0.01	0.41	0.01	54.3

中 Network: N101 [AM

Existing]

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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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V Site: 101 [Existing PM - Wallgrove/Kosovich]

+ Network: N101 [PM Existing]

Site Category: (None) Giveway / Yield (Two-Way)

Mov	ement	Perform	ance	- Vehi	cles									
Mov ID	Turn	Demand Total veh/h	HV	Arrival Total veh/h	Flows HV %	Deg. Satn	Average Delay	Level of Service	98% Bad Queu Vehicles Di	e istance	Prop. Queued	Effective Stop Rate	Aver. A No. Cycles S	
South	n: Wallo	grove Roa		ven/n	70	v/c	sec		veh	m				km/h
1	L2	2	50.0	2	50.0	0.200	6.1	LOSA	0.0	0.0	0.00	0.00	0.00	55.9
2	T1	366	9.0	366	9.0	0.200	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
Appro	oach	368	9.2	368	9.2	0.200	0.1	NA	0.0	0.0	0.00	0.00	0.00	59.9
North	: Wallg	rove Road	(N) b											
8	T1	946	7.0	946	7.0	0.509	0.0	LOSA	0.0	0.3	0.00	0.00	0.01	59.9
9	R2	2	0.0	2	0.0	0.509	8.4	LOSA	0.0	0.3	0.00	0.00	0.01	56.3
Appro	oach	948	7.0	948	7.0	0.509	0.0	NA	0.0	0.3	0.00	0.00	0.01	59.9
West	: Kosov	ich Place	(E)											
10	L2	2	50.0	2	50.0	0.012	7.0	LOS A	0.0	0.3	0.64	0.76	0.64	37.0
12	R2	2	0.0	2	0.0	0.012	19.4	LOS B	0.0	0.3	0.64	0.76	0.64	41.7
Appro	oach	4	25.0	4	25.0	0.012	13.2	LOSA	0.0	0.3	0.64	0.76	0.64	40.0
All Ve	ehicles	1320	7.7	1320	7.7	0.509	0.1	NA	0.0	0.3	0.00	0.00	0.01	59.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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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Site: 101 [Existing PM- Wallgrove/ Villiers]

♦♦ Network: N101 [PM Existing]

New Site

Site Category: (None)

Roundabout

Move	ement	: Performa	ance ·	- Vehi	cles									
Mov ID	Turn	Demand F	Flows .	Arrival	Flows	Deg. Satn	Average Delay	Level of Service	98% Bad Queu		Prop. Queued	Effective Stop	Aver. A No.	Averag e
		Total veh/h		Total veh/h	HV %	v/c	sec		Vehicles Diveh	istance m		Rate	Cycles S	Speed km/h
South	n: Wallo	grove Road	l (S)											
2	T1	386	0.0	386	0.0	0.221	4.1	LOSA	0.0	0.0	0.00	0.41	0.00	55.1
3u	U	11	0.0	1	0.0	0.221	10.8	LOSA	0.0	0.0	0.00	0.41	0.00	39.7
Appro	oach	387	0.0	387	0.0	0.221	4.1	LOSA	0.0	0.0	0.00	0.41	0.00	55.1
North	: Wallg	rove Road	(N)											
8	T1	773	0.0	773	0.0	0.442	4.1	LOS A	3.5	24.4	0.02	0.40	0.02	53.0
Appro	oach	773	0.0	773	0.0	0.442	4.1	LOSA	3.5	24.4	0.02	0.40	0.02	53.0
All Ve	hicles	1160	0.0	1160	0.0	0.442	4.1	LOSA	3.5	24.4	0.01	0.40	0.01	53.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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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V Site: 101 [Existing AM+ 10yr Gr - Wallgrove/Kosovich]

**申** Network: N101 [AM + 10Y Growth]

Site Category: (None) Giveway / Yield (Two-Way)

Mov	ement	: Perform	ance ·	- Vehi	cles									
Mov ID	Turn	Demand	Flows	Arrival		Deg. Satn	Average Delay	Level of Service	98% Bad Queu		Prop. Queued	Effective Stop	Aver. No.	Averag e
		Total veh/h		Total veh/h	HV %	v/c	sec		Vehicles D veh	istance m		Rate	Cycles	Speed km/h
South	า: Wallo	grove Road	d (S)											
1	L2	1	0.0	1	0.0	0.481	5.6	LOSA	0.0	0.0	0.00	0.00	0.00	58.2
2	T1	903	5.9	903	5.9	0.481	0.1	LOSA	0.0	0.0	0.00	0.00	0.00	59.8
Appro	oach	904	5.9	904	5.9	0.481	0.1	NA	0.0	0.0	0.00	0.00	0.00	59.8
North	: Wallg	rove Road	(N)											
8	T1	352	11.7	352	11.7	0.196	0.1	LOSA	0.0	0.2	0.01	0.00	0.01	59.8
9	R2	1	0.0	1	0.0	0.196	13.1	LOSA	0.0	0.2	0.01	0.00	0.01	56.2
Appro	oach	353	11.7	353	11.7	0.196	0.1	NA	0.0	0.2	0.01	0.00	0.01	59.8
West	: Kosov	vich Place	(E)											
10	L2	1	0.0	1	0.0	0.006	10.0	LOSA	0.0	0.1	0.77	0.80	0.77	36.5
12	R2	1	0.0	1	0.0	0.006	17.2	LOS B	0.0	0.1	0.77	0.80	0.77	41.4
Appro	oach	2	0.0	2	0.0	0.006	13.6	LOSA	0.0	0.1	0.77	0.80	0.77	39.7
All Ve	ehicles	1259	7.5	1259	7.5	0.481	0.1	NA	0.0	0.2	0.00	0.00	0.00	59.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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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Site: 101 [FU AM- Wallgrove/ Villiers - 10Y Growth]

中 Network: N101 [AM + 10Y Growth]

New Site

Site Category: (None)

Roundabout

Move	ement	Perform	ance	- Vehi	cles									
Mov ID	Turn	Demand	Flows	Arrival	Flows	Deg. Satn	Average Delay	Level of Service	98% Bac Queue		Prop. Queued	Effective Stop	Aver. A No.	Averag e
		Total veh/h		Total veh/h	HV %	v/c	sec		Vehicles Dis	stance m		Rate	Cycles S	Speed km/h
South	ո։ Wallo	grove Roa	d (S)											
2	T1	904	5.9	904	5.9	0.532	4.1	LOSA	0.0	0.0	0.00	0.41	0.00	54.9
3u	U	1	0.0	1	0.0	0.532	10.8	LOSA	0.0	0.0	0.00	0.41	0.00	39.7
Appro	oach	905	5.9	905	5.9	0.532	4.1	LOS A	0.0	0.0	0.00	0.41	0.00	54.9
North	: Wallg	rove Road	(N) b											
8	T1	352	11.7	352	11.7	0.213	4.2	LOSA	1.3	9.8	0.02	0.40	0.02	53.0
Appro	oach	352	11.7	352	11.7	0.213	4.2	LOSA	1.3	9.8	0.02	0.40	0.02	53.0
All Ve	hicles	1257	7.5	1257	7.5	0.532	4.1	LOSA	1.3	9.8	0.00	0.41	0.00	54.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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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V Site: 101 [Existing PM+ 10yr Gr- Wallgrove/Kosovich]

++ Network: N101 [PM + 10Y Growth]

Site Category: (None) Giveway / Yield (Two-Way)

Mov	ement	Perform	ance	- Vehi	cles									
Mov ID	Turn	Demand Total veh/h	HV	Arrival Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay	Level of Service	98% Bac Queue Vehicles Dis	e stance	Prop. Queued	Effective Stop Rate	Aver. A No. Cycles S	_
South	n: Wallo	grove Roa		ven/n	70	V/C	sec		veh	m				km/h
1	L2	2	2.0	2	2.0	0.208	5.6	LOSA	0.0	0.0	0.00	0.00	0.00	58.2
2	T1	382	9.0	382	9.0	0.208	0.0	LOSA	0.0	0.0	0.00	0.00	0.00	59.9
Appro	oach	384	9.0	384	9.0	0.208	0.1	NA	0.0	0.0	0.00	0.00	0.00	59.9
North	: Wallg	rove Road	(N) b											
8	T1	966	7.0	966	7.0	0.519	0.0	LOSA	0.0	0.4	0.00	0.00	0.01	59.9
9	R2	2	0.0	2	0.0	0.519	8.6	LOSA	0.0	0.4	0.00	0.00	0.01	56.3
Appro	oach	968	7.0	968	7.0	0.519	0.0	NA	0.0	0.4	0.00	0.00	0.01	59.9
West	: Kosov	ich Place	(E)											
10	L2	2	2.0	2	2.0	0.012	5.9	LOSA	0.0	0.3	0.65	0.72	0.65	36.8
12	R2	2	0.0	2	0.0	0.012	20.7	LOS B	0.0	0.3	0.65	0.72	0.65	41.6
Appro	oach	4	1.0	4	1.0	0.012	13.3	LOSA	0.0	0.3	0.65	0.72	0.65	39.8
All Ve	hicles	1356	7.5	1356	7.5	0.519	0.1	NA	0.0	0.4	0.00	0.00	0.01	59.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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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Site: 101 [FU PM- Wallgrove/ Villiers - 10Y Growth]

**‡** Network: N101 [PM + 10Y Growth]

New Site

Site Category: (None)

Roundabout

Move	ement	Perform	ance	- Vehi	cles									
Mov ID	Turn	Demand	Flows	Arrival	Flows	Deg. Satn	Average Delay	Level of Service	98% Ba Quet		Prop. Queued	Effective Stop	Aver. / No.	Averag e
		Total veh/h		Total veh/h	HV %	v/c	sec		Vehicles D veh	istance m		Rate	Cycles S	Speed km/h
South	ո։ Wallo	grove Road	d (S)											
2	T1	382	9.0	382	9.0	0.229	4.1	LOSA	0.0	0.0	0.00	0.41	0.00	54.8
3u	U	1	0.0	1	0.0	0.229	10.8	LOS A	0.0	0.0	0.00	0.41	0.00	39.7
Appro	oach	383	9.0	383	9.0	0.229	4.1	LOSA	0.0	0.0	0.00	0.41	0.00	54.8
North	: Wallg	rove Road	(N)											
8	T1	966	7.0	966	7.0	0.572	4.2	LOSA	5.6	41.7	0.03	0.40	0.03	53.0
Appro	oach	966	7.0	966	7.0	0.572	4.2	LOSA	5.6	41.7	0.03	0.40	0.03	53.0
All Ve	hicles	1349	7.5	1349	7.5	0.572	4.2	LOSA	5.6	41.7	0.02	0.40	0.02	53.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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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V Site: 101 [Existing AM+ S1 - Wallgrove/Kosovich]

Site Category: (None) Giveway / Yield (Two-Way)

Mov	ement	t Perform	ance	- Vehi	cles									
Mov ID	Turn	Demand				Deg. Satn	Average Delay	Level of Service	98% Bad Queu	е	Prop. Queued	Effective Stop	Aver. A No.	Averag e
		Total veh/h		Total veh/h	HV %	v/c	sec		Vehicles D veh	istance m		Rate	Cycles S	Speed km/h
Sout	h: Wall	grove Roa		VCII/II	70	V/C	360		Ven		_			KIII/II
1	L2	88	5.0	88	5.0	0.049	5.6	LOSA	0.0	0.0	0.00	0.58	0.00	50.2
2	T1	914	5.9	914	5.9	0.487	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	59.8
Appr	oach	1002	5.8	1002	5.8	0.487	0.5	NA	0.0	0.0	0.00	0.05	0.00	56.5
North	า: Wallo	grove Road	(N)											
8	T1	446	11.7	446	11.7	0.248	0.0	LOSA	0.0	0.0	0.00	0.00	0.00	59.9
9	R2	41	5.0	41	5.0	0.125	15.8	LOS B	0.5	3.4	0.79	0.92	0.79	39.9
Appr	oach	487	11.2	487	11.2	0.248	1.3	NA	0.5	3.4	0.07	0.08	0.07	54.7
West	t: Koso	vich Place	(E)											
10	L2	114	5.0	114	5.0	0.341	16.3	LOS B	1.4	10.1	0.81	0.97	1.00	34.8
Appr	oach	114	5.0	114	5.0	0.341	16.3	LOS B	1.4	10.1	0.81	0.97	1.00	34.8
All Ve	ehicles	1603	7.4	1603	7.4	0.487	1.9	NA	1.4	10.1	0.08	0.12	0.09	51.0

**♦** Network: N101 [AM + S1]

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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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Organisation: MCLAREN TRAFFIC ENGINEERING | Processed: Friday, 7 February 2020 11:31:57 AM

Site: 101 [FU AM- Wallgrove/ Villiers + S1]

Site Category: (None)

Roundabout

Move	ement	: Perform	ance	- Vehi	cles									
Mov	Turn	Demand	Flows	Arrival	Flows	Deg.	Average		98% B			Effective	Aver. A	Averag
ID						Satn	Delay	Service	Que		Queued	Stop	No.	е
		Total	HV		HV				Vehicles	Distance		Rate	Cycles S	
		veh/h		veh/h	%	v/c	sec		veh	m				km/h
South	า: Wallo	grove Road	d (S)											
2	T1	959	5.9	959	5.9	0.603	4.1	LOSA	0.0	0.0	0.00	0.44	0.00	54.3
3u	U	68	0.0	68	0.0	0.603	10.8	LOS A	0.0	0.0	0.00	0.44	0.00	38.5
Appro	oach	1027	5.5	1027	5.5	0.603	4.6	LOSA	0.0	0.0	0.00	0.44	0.00	54.0
North	ı: Wallg	rove Road	(N)											
8	T1	378	11.7	378	11.7	0.279	4.6	LOSA	1.8	13.7	0.23	0.41	0.23	51.3
Appro	oach	378	11.7	378	11.7	0.279	4.6	LOSA	1.8	13.7	0.23	0.41	0.23	51.3
All Ve	hicles	1405	7.2	1405	7.2	0.603	4.6	LOSA	1.8	13.7	0.06	0.43	0.06	53.3

**♦** Network: N101 [AM + S1]

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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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V Site: 101 [Existing PM+ S1 + Wallgrove/Kosovich]

Site Category: (None) Giveway / Yield (Two-Way)

Mov	ement	t Perform	ance	- Vehi	cles									
Mov ID	Turn	Demand	Flows	Arrival	Flows	Deg. Satn	Average Delay	Level of Service	98% Bacl Queue		Prop. Queued	Effective Stop	Aver. A No.	verag e
		Total veh/h		Total veh/h	HV %	v/c	sec		Vehicles Dis	stance m		Rate	Cycles S	peed km/h
Sout	h: Wall	grove Road				.,,								
1	L2	82	5.0	82	5.0	0.046	5.6	LOS A	0.0	0.0	0.00	0.58	0.00	50.2
2	T1	366	9.0	366	9.0	0.199	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	60.0
Appr	oach	448	8.3	448	8.3	0.199	1.0	NA	0.0	0.0	0.00	0.11	0.00	54.6
North	า: Wallo	grove Road	l (N)											
8	T1	1054	7.0	1054	7.0	0.568	0.0	LOSA	0.0	0.0	0.00	0.00	0.00	59.8
9	R2	37	5.0	37	5.0	0.043	7.8	LOS A	0.2	1.3	0.48	0.68	0.48	46.7
Appr	oach	1091	6.9	1091	6.9	0.568	0.3	NA	0.2	1.3	0.02	0.02	0.02	58.4
West	t: Koso	vich Place	(E)											
10	L2	127	5.0	127	5.0	0.146	6.6	LOS A	0.6	4.4	0.44	0.66	0.44	42.5
Appr	oach	127	5.0	127	5.0	0.146	6.6	LOSA	0.6	4.4	0.44	0.66	0.44	42.5
All Ve	ehicles	1666	7.1	1666	7.1	0.568	1.0	NA	0.6	4.4	0.04	0.09	0.04	54.5

**++** Network: N101 [PM + S1]

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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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Site: 101 [FU PM- Wallgrove/ Villiers + S1]

Site Category: (None)

Roundabout

Move	ement	: Perform	ance	- Vehi	cles									
Mov ID	Turn	Demand	Flows	Arrival	Flows	Deg. Satn	Average Delay	Level of Service	98% Ba Quet		Prop. Queued	Effective Stop	Aver. A No.	Averag e
		Total veh/h		Total veh/h	HV %	v/c	sec		Vehicles D veh	istance m		Rate	Cycles S	Speed km/h
South	ո։ Wallo	grove Road	d (S)											
2	T1	416	9.0	416	9.0	0.291	4.1	LOSA	0.0	0.0	0.00	0.48	0.00	53.5
3u	U	75	0.0	75	0.0	0.291	10.8	LOSA	0.0	0.0	0.00	0.48	0.00	37.0
Appro	oach	491	7.6	491	7.6	0.291	5.1	LOS A	0.0	0.0	0.00	0.48	0.00	52.6
North	: Wallg	rove Road	l (N)											
8	T1	980	7.0	980	7.0	0.679	4.9	LOSA	7.9	58.7	0.41	0.44	0.41	49.8
Appro	oach	980	7.0	980	7.0	0.679	4.9	LOSA	7.9	58.7	0.41	0.44	0.41	49.8
All Ve	hicles	1471	7.2	1471	7.2	0.679	5.0	LOSA	7.9	58.7	0.28	0.45	0.28	50.7

**♦** Network: N101 [PM + S1]

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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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V Site: 101 [Existing AM+ 10yr Gr+ S2 - Wallgrove/Kosovich]

中 Network: N101 [AM + 10Y Growth + S21

Site Category: (None) Giveway / Yield (Two-Way)

Move	Movement Performance - Vehicles													
Mov ID			nd Flows Arriva			Deg. Satn	Average Delay	Level of Service	98% Back of Queue		Prop. Effective Queued Stop		Aver. Averag No. e	
		Total veh/h		Total veh/h	HV %	v/c	sec		Vehicles [ veh	Distance m		Rate	Cycles S	Speed km/h
South	า։ Wallo	grove Road	(S) b											
1	L2	215	5.0	215	5.0	0.120	6.3	LOSA	0.0	0.0	0.00	0.62	0.00	57.9
2	T1	903	5.9	903	5.9	0.481	1.8	LOSA	0.0	0.0	0.00	0.34	0.00	62.1
Appro	oach	1118	5.7	1118	5.7	0.481	2.7	NA	0.0	0.0	0.00	0.39	0.00	59.8
North	ı: Wallg	grove Road	l (N)											
8	T1	607	11.7	607	11.7	0.342	0.0	LOSA	0.0	0.0	0.00	0.00	0.00	53.9
9	R2	98	5.0	98	5.0	0.244	15.0	LOS B	1.1	7.7	0.82	0.95	0.90	36.7
Appro	oach	705	10.8	705	10.8	0.342	2.1	NA	1.1	7.7	0.11	0.13	0.12	47.4
West	: Kosov	vich Place	(E)											
10	L2	273	5.0	273	5.0	0.794	27.1	LOS B	5.7	41.3	0.93	1.37	2.24	28.9
Appro	oach	273	5.0	273	5.0	0.794	27.1	LOS B	5.7	41.3	0.93	1.37	2.24	28.9
All Ve	hicles	2096	7.3	2096	7.3	0.794	5.7	NA	5.7	41.3	0.16	0.43	0.33	44.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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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Site: 101 [FU AM- Wallgrove/ Villiers - 10Y Growth + S2]

中 Network: N101 [AM + 10Y Growth + S21

New Site

Site Category: (None)

Roundabout

Move	ement	Perform	ance	- Vehi	cles									
Mov ID	Turn	n Demand Flows Arrival Flows		Deg. Satn	Average Delay	Level of Service	98% Bad Queu		Prop. Queued	Effective Stop	Aver. A No.	Averag e		
		Total veh/h		Total veh/h	HV %	v/c	sec		Vehicles D veh	istance m		Rate	Cycles S	Speed km/h
South	ո։ Wallo	grove Road	d (S)											
2	T1	1012	5.9	1012	5.9	0.688	4.1	LOSA	0.0	0.0	0.00	0.47	0.00	53.7
3u	U	163	0.0	163	0.0	0.688	10.8	LOSA	0.0	0.0	0.00	0.47	0.00	37.3
Appro	oach	1175	5.1	1175	5.1	0.688	5.0	LOS A	0.0	0.0	0.00	0.47	0.00	52.9
North	: Wallg	rove Road	d (N)											
8	T1	444	11.7	444	11.7	0.368	5.3	LOSA	2.5	19.6	0.40	0.49	0.40	49.9
Appro	oach	444	11.7	444	11.7	0.368	5.3	LOSA	2.5	19.6	0.40	0.49	0.40	49.9
All Ve	hicles	1619	6.9	1619	6.9	0.688	5.1	LOSA	2.5	19.6	0.11	0.48	0.11	52.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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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V Site: 101 [Existing PM+ 10yr Gr+ S2- Wallgrove/Kosovich]

++ Network: N101 [PM + 10Y Growth + S21

Site Category: (None) Giveway / Yield (Two-Way)

Mov	Movement Performance - Vehicles													
Mov ID	Turn	Furn Demand Flows Arrival Flows		Deg. Satn	Average Delay	Level of Service	98% Back of Queue		Prop. Effectiv Queued Sto					
		Total veh/h		Total veh/h	HV %	v/c	sec		Vehicles D veh	istance m		Rate	Cycles S	Speed km/h
South	า: Wallo	grove Road												
1	L2	193	5.0	193	5.0	0.108	6.3	LOS A	0.0	0.0	0.00	0.62	0.00	57.9
2	T1	382	9.0	382	9.0	0.207	1.9	LOSA	0.0	0.0	0.00	0.35	0.00	61.5
Appro	oach	575	7.7	575	7.7	0.207	3.4	NA	0.0	0.0	0.00	0.44	0.00	58.9
North	ı: Wallg	rove Road	(N)											
8	T1	1233	7.0	1233	7.0	0.674	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	52.7
9	R2	86	0.0	86	0.0	0.086	7.3	LOSA	0.4	2.8	0.54	0.71	0.54	42.1
Appro	oach	1319	6.5	1319	6.5	0.674	0.5	NA	0.4	2.8	0.04	0.05	0.04	50.8
West	: Kosov	vich Place (	(E)											
10	L2	309	5.0	309	5.0	0.364	7.6	LOSA	2.0	14.7	0.53	0.78	0.62	41.5
Appro	oach	309	5.0	309	5.0	0.364	7.6	LOSA	2.0	14.7	0.53	0.78	0.62	41.5
All Ve	ehicles	2203	6.6	2203	6.6	0.674	2.3	NA	2.0	14.7	0.10	0.25	0.11	50.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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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Site: 101 [FU PM- Wallgrove/ Villiers - 10Y Growth + S2]

++ Network: N101 [PM + 10Y Growth + S21

New Site

Site Category: (None)

Roundabout

Move	Movement Performance - Vehicles													
Mov ID	Turn	ırn Demand Flows Arrival Flows		Deg. Satn	Average Delay	Level of Service	98% Ba Que		Prop. Queued	Effective Stop	Aver. A No.	Averag e		
		Total veh/h		Total veh/h	HV %	v/c	sec		Vehicles [ veh	Distance m		Rate	Cycles S	Speed km/h
South	ո։ Wallo	grove Road	d (S)											
2	T1	504	9.0	504	9.0	0.406	4.1	LOSA	0.0	0.0	0.00	0.52	0.00	52.5
3u	U	184	0.0	184	0.0	0.406	10.8	LOS A	0.0	0.0	0.00	0.52	0.00	35.4
Appro	oach	688	6.6	688	6.6	0.406	5.9	LOSA	0.0	0.0	0.00	0.52	0.00	50.7
North	: Wallg	rove Road	l (N)											
8	T1	1048	7.0	1048	7.0	0.829	8.4	LOSA	14.7	109.4	0.83	0.69	0.91	46.8
Appro	oach	1048	7.0	1048	7.0	0.829	8.4	LOSA	14.7	109.4	0.83	0.69	0.91	46.8
All Ve	hicles	1736	6.8	1736	6.8	0.829	7.4	LOSA	14.7	109.4	0.50	0.62	0.55	48.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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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V Site: 101 [Existing AM+ 10yr Gr+ S2 - Wallgrove/Kosovich -中 Network: N101 [AM + 10Y Growth + S2 - Sensitivity]

Site Category: (None) Giveway / Yield (Two-Way)

Mov	Movement Performance - Vehicles													
Mov ID	Turn	rn Demand Flows Arrival Flows			Deg. Satn	Average Delay	Level of Service	98% Back of Queue		Prop. Queued	Effective Stop	Aver. A No.	Averag e	
		Total veh/h		Total veh/h	HV %	v/c	sec		Vehicles Di veh	stance m		Rate	Cycles S	Speed km/h
Sout	h: Wallo	grove Road		7 0 1 1 1 1	,,	., -								
1	L2	92	5.0	92	5.0	0.051	6.3	LOSA	0.0	0.0	0.00	0.62	0.00	57.9
2	T1	903	5.9	903	5.9	0.481	1.8	LOSA	0.0	0.0	0.00	0.34	0.00	62.1
Appr	oach	995	5.8	995	5.8	0.481	2.2	NA	0.0	0.0	0.00	0.36	0.00	60.7
North	n: Wallg	grove Road	l (N)											
8	T1	607	11.7	607	11.7	0.341	0.0	LOSA	0.0	0.0	0.00	0.00	0.00	53.9
9	R2	227	5.0	227	5.0	0.471	15.8	LOS B	2.7	19.5	0.83	1.05	1.21	36.2
Appr	oach	834	9.9	834	9.9	0.471	4.3	NA	2.7	19.5	0.23	0.29	0.33	43.5
West	: Kosov	vich Place	(E)											
10	L2	273	5.0	273	5.0	0.794	27.1	LOS B	5.7	41.3	0.93	1.37	2.24	28.9
Appr	oach	273	5.0	273	5.0	0.794	27.1	LOS B	5.7	41.3	0.93	1.37	2.24	28.9
All Ve	ehicles	2102	7.3	2102	7.3	0.794	6.3	NA	5.7	41.3	0.21	0.46	0.42	42.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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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Site: 101 [FU AM- Wallgrove/ Villiers - 10Y Growth + S2 -

New Site

Site Category: (None)

Roundabout

Movement Performance - Vehicles														
Mov ID	Turn	Demand	Flows	Arrival	Flows	Deg. Satn	Average Delay	Level of Service	98% Back of Queue		Prop. Queued	Effective Stop	Aver. Averaç No.	
		Total veh/h		Total veh/h	HV %	v/c	sec		Vehicles I veh	Distance m		Rate	Cycles S	Speed km/h
South	ı: Wallo	grove Road	d (S)											
2	T1	1012	5.9	1012	5.9	0.688	4.1	LOSA	0.0	0.0	0.00	0.47	0.00	53.7
3u	U	163	0.0	163	0.0	0.688	10.8	LOS A	0.0	0.0	0.00	0.47	0.00	37.3
Appro	oach	1175	5.1	1175	5.1	0.688	5.0	LOSA	0.0	0.0	0.00	0.47	0.00	52.9
North	: Wallg	rove Road	l (N)											
8	T1	567	11.7	567	11.7	0.464	5.4	LOS A	3.6	27.7	0.44	0.51	0.44	49.5
Appro	oach	567	11.7	567	11.7	0.464	5.4	LOSA	3.6	27.7	0.44	0.51	0.44	49.5
All Ve	hicles	1742	7.3	1742	7.3	0.688	5.2	LOSA	3.6	27.7	0.14	0.48	0.14	51.8

中 Network: N101 [AM + 10Y Growth + S2 - Sensitivity]

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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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