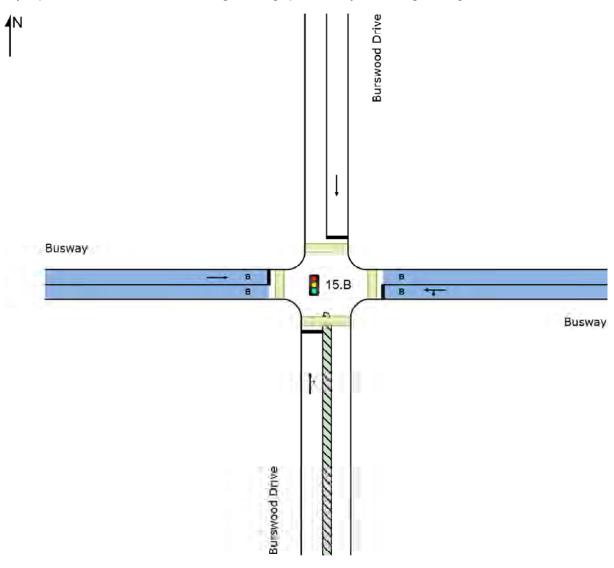
Site: 15.B [15.B Burwood Dr (West) / New Offline Busway Rd

(Site Folder: AM)]

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



Site: 15.B [15.B Burwood Dr (West) / New Offline Busway Rd (Site Folder: AM)]

Network: N101 [AM_Town centre drive four lanes (Network Folder: General)]

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 41 seconds (Site Practical Cycle Time)

Lane Use	and P	erforn	nance												
	DEM FLC [Total veh/h)WS	ARR FLC [Total veh/h	WS	Cap.	Deg. Satn v/c	Lane Util. %		Level of Service	85% BA QUE [Veh		Lane Config	Lane Length m	Cap. Adj. %	Prob. Block. %
South: Burs	swood	Drive													
Lane 1	298	15.1	292	15.0	596	0.489	100	12.8	LOS B	4.4	34.9	Full	36	0.0	<mark>12.3</mark>
Approach	298	15.1	292 ^{N1}	15.0		0.489		12.8	LOS B	4.4	34.9				
East: Busw	ay														
Lane 1 (B)	33	100.0	33	100.0	437	0.076	100	4.5	LOS A	0.1	1.9	Full	571	0.0	0.0
Approach	33	100.0	33	100.0		0.076		4.5	LOSA	0.1	1.9				
North: Burs	l boows	Orive													
Lane 1	270	10.0	270	10.0	632	0.427	100	12.4	LOS B	4.0	30.3	Full	1859	0.0	0.0
Approach	270	10.0	270	10.0		0.427		12.4	LOS B	4.0	30.3				
West: Busy	vay														
Lane 1 (B)	13	100.0	13	100.0	466	0.028	100	3.1	LOSA	0.1	0.7	Full	963	0.0	0.0
Approach	13	100.0	13	100.0		0.028		3.1	LOSA	0.1	0.7				
Intersectio n	614	19.2	608 ^{N1}	19.4		0.489		12.0	LOS B	4.4	34.9				

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab). Lane LOS values are based on average delay per lane.

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

Delay Model: SIDRA Standard (Geometric Delay is included).

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

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

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

Approach	Lane FI	ows (v	/eh/h)						
South: Bursy	wood Dri	ve							
Mov. From S To Exit:	T1 N	R2 E	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.
Lane 1	284	8	292	15.0	596	0.489	100	NA	NA
Approach	284	8	292	15.0		0.489			
East: Buswa	ıy								
Mov. From E To Exit:	L2 S	T1 W	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.
Lane 1	8	25	33	100.0	437	0.076	100	NA	NA
Approach	8	25	33	100.0		0.076			
North: Bursv	vood Driv	/e							
Mov. From N To Exit:	T1 S	Total	%HV		Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.
Lane 1	270	270	10.0		632	0.427	100	NA	NA

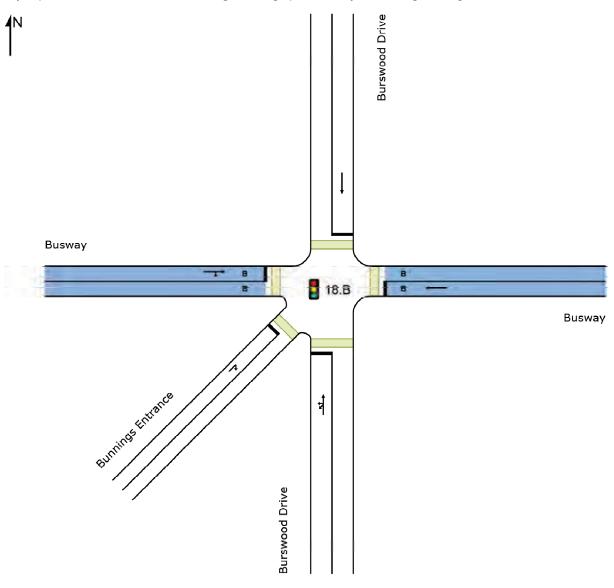
Approach	270	270	10.0		0.427					
West: Busway	y									
Mov. From W To Exit:	T1 E	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. 9 %	Prob. SL Ov. %			
Lane 1	13	13	100.0	466	0.028	100	NA	NA		
Approach	13	13	100.0		0.028					
	Total	%HVI	Deg.Satn (v/c)							
Intersection	608	19.4	0.489							

Merge Analysis					
Exit Lane Number	Short Percent Opposing Lane Opng in Flow Rate Length Lane m %veh/h pcu/h	Critical Gap sec	Follow-up Lane Capacity Headway Flow Rate sec veh/h veh/h	Deg. Min. Satn Delay	Merge De l ay sec
South Exit: Burswood Drive Merge Type: Not Applied					
Full Length Lane 1	Merge Analysis not applied.				
East Exit: Busway Merge Type: Not Applied					
Full Length Lane 1	Merge Analysis not applied.				
North Exit: Burswood Drive Merge Type: Not Applied					
Full Length Lane 1	Merge Analysis not applied.				
West Exit: Busway Merge Type: Not Applied					
Full Length Lane 1	Merge Analysis not applied.				

Site: 18.B [18.B Burswood Dr (East) / New Offline Busway Rd - V2 - Import (Site Folder: AM)]

Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



Site: 18.B [18.B Burswood Dr (East) / New Offline Busway Rd - Network: N101 [AM_Town V2 - Import (Site Folder: AM)] centre drive four lanes (Network Folder: General)]

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 49 seconds (Site Practical Cycle Time)

Lane Use	Lane Use and Performance DEMAND ARRIVAL Deg. Lane Aver. Level of 85% BACK OF Lane Lane Cap. Prob. FLOWS FLOWS Cap. Satn Util. Delay Service QUEUE Config Length Adj. Block.														
)WS)WS	Сар.		Lane Util.						Lane Length	Cap. Adj.	Prob. Block.
	veh/h	%	veh/h	%	veh/h	v/c	%	sec			m -		m	%	%
South: Bur	swood	Drive													
Lane 1	180	16.6	175	16.7	487	0.360	100	17.8	LOS B	3.2	25.4	Full	199	0.0	0.0
Approach	180	16.6	175 ^{N1}	16.7		0.360		17.8	LOS B	3.2	25.4				
East: Busy	<i>ı</i> ay														
Lane 1 (B)	28	100.0	28	100.0	146	0.191	100	19.9	LOS B	0.5	6.9	Full	263	0.0	0.0
Approach	28	100.0	28	100.0		0.191		19.9	LOS B	0.5	6.9				
North: Burs	swood [Orive													
Lane 1	218	16.1	218	16.1	510	0.428	100	16.7	LOS B	4.0	32.1	Full	1859	0.0	0.0
Approach	218	16.1	218	16.1		0.428		16.7	LOS B	4.0	32.1				
West: Busy	way														
Lane 1 (B)	21	100.0	21	100.0	140	0.152	100	21.4	LOS C	0.4	5.2	Full	571	0.0	0.0
Approach	21	100.0	21	100.0		0.152		21.4	LOS C	0.4	5.2				
SouthWest	:: Bunni	ngs En	trance												
Lane 1	32	33.3	32	33.3	327	0.097	100	22.8	LOS C	0.5	4.9	Full	250	0.0	0.0
Approach	32	33.3	32	33.3		0.097		22.8	LOS C	0.5	4.9				
Intersectio n	479	26.0	474 ^{N1}	26.3		0.428		17.9	LOS B	4.0	32.1				

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab). Lane LOS values are based on average delay per lane.

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

Delay Model: SIDRA Standard (Geometric Delay is included).

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

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

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

Approach l	Lane Flo	ows (v	veh/h)								
South: Bursy			,								
Mov. From S To Exit:	L3 SW	L2 W	T1 N	Total	%HV	Cap. veh/h	Deg. Satn v/c		Prob. SL Ov. %	Ov. Lane No.	
Lane 1	31	5	139	175	16.7	487	0.360	100	NA	NA	
Approach	31	5	139	175	16.7		0.360				
East: Buswa	y										
Mov. From E To Exit:	T1 W	Total	%HV			Cap. veh/h	Deg. Satn v/c		Prob. SL Ov. %	Ov. Lane No.	
Lane 1	28	28	100.0			146	0.191	100	NA	NA	
Approach	28	28	100.0				0.191				
North: Bursw	vood Driv	⁄e									

Mov. From N To Exit:	T1 S	Total	%HV		Cap. veh/h	Deg. Satn v/c		Prob. SL Ov. %	Ov. Lane No.	
Lane 1	218	218	16.1		510	0.428	100	NA	NA	
Approach	218	218	16.1			0.428				
West: Busway	,									
Mov. From W To Exit:	T1 E	R2 S	Total	%HV	Cap. veh/h	Deg. Satn v/c		Prob. SL Ov. %	Ov. Lane No.	
Lane 1	16	5	21	100.0	140	0.152	100	NA	NA	
Approach	16	5	21	100.0		0.152				
SouthWest: B	unning	s Entra	nce							
Mov. From SW To Exit:	R3 S	Total	%HV		Cap. veh/h	Deg. Satn v/c		Prob. SL Ov. %	Ov. Lane No.	
Lane 1	32	32	33.3		327	0.097	100	NA	NA	
Approach	32	32	33.3			0.097				
	Total	%HV[Deg.Sat	in (v/c)						
Intersection	474	26.3		0.428						

Merge Analysis					
Exit Lane Number	Short Percent Opposing Lane Opng in Flow Rate Length Lane m %veh/h pcu/l	Gap	Follow-up Lane Capacity Headway Flow Rate sec veh/h veh/h	Satn Delay	Merge Delay sec
South Exit: Burswood Drive Merge Type: Not Applied					
Full Length Lane 1	Merge Analysis not applied	l.			
East Exit: Busway Merge Type: Not Applied					
Full Length Lane 1	Merge Analysis not applied				
North Exit: Burswood Drive Merge Type: Not Applied					
Full Length Lane 1	Merge Analysis not applied	.			
West Exit: Busway Merge Type: Not Applied					
Full Length Lane 1	Merge Analysis not applied	l.			
SouthWest Exit: Bunnings E Merge Type: Not Applied	Entrance				
Full Length Lane 1	Merge Analysis not applied	l			

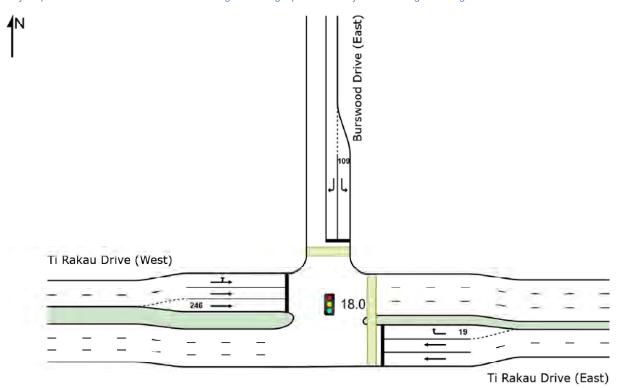
Site: 18.0 [18.0 Burswood Dr (East) / Ti Rakau Dr (Site Folder:

AM)

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.

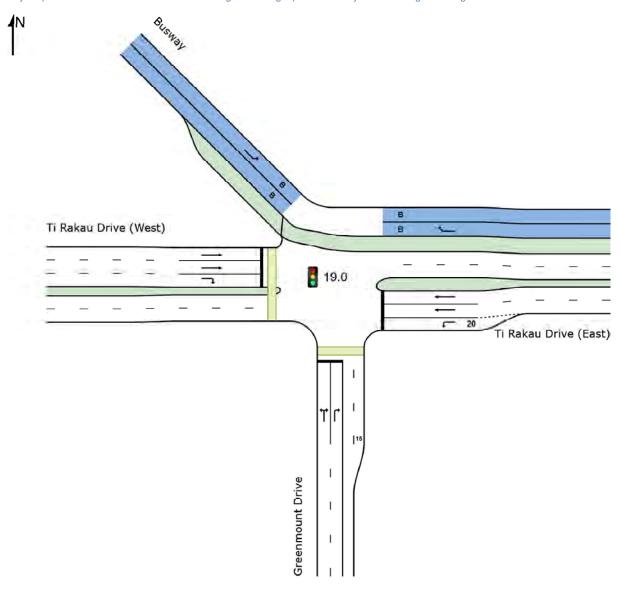


Site: 19.0 [19.0 Greenmount Dr / Ti Rakau Dr (Site Folder: AM)]

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



CCG LANE SUMMARY

□□ Common Control Group: CCG1 [Burswood E/ Greenmount]

Network: N101 [AM_Town centre drive four lanes (Network

Folder: General)]

EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 150 seconds (Network User-Given Cycle Time)

Lane Use and Performance (CCG)															
	DEM	AND	ARR	RIVAL			Lane		Level of		ACK OF	Lane	Lane	Сар.	Prob.
	FLC [Total		FLC Total	DWS LHV1	Cap.	Satn	Util.	Delay	Service	QU [Veh	EUE Dist]	Config	Length	Adj.	Block.
	veh/h	%	veh/h		veh/h	v/c	%	sec		[m		m	%	%
Site: 18.0 [18 . 0 Bu	ırswoo	d Dr (E	ast) / Ti	Raka	u Dr]									
East: Ti Ra	kau Dri	ve (Ea	st)												
Lane 1	679	7.2	679	7.2	1409	0.482	100	2.7	LOS A	6.2	45.9	Full	45	0.0	<mark>16.7</mark>
Lane 2	593	7.2	593	7.2		0.482	100	0.7	LOS A	1.4	10.7	Full	45	-12.6 ^{N3}	0.0
Lane 3	10	0.0	10	0.0	74	0.135	100	82.5	LOS F	0.7	4.8	Short	19	0.0	NA
Approach	1282	7.1	1282	7.1		0.482		2.4	LOS A	6.2	45.9				
North: Burs	wood E	Orive (E	East)												
Lane 1	181	15.5	181	15.5	175	1.036	100	153.4	LOS F	19.2	151.8	Short	109	-50.0 ^{N3}	NA
Lane 2	41	29.7	41	29.7	209	0.198	100	64.7	LOS E	2.4	21.0	Full	199	-11.6 ^{N3}	0.0
Approach	222	18.1	222	18.1		1.036		136.9	LOS F	19.2	151.8				
West: Ti Ra	ıkau Dr	ive (We	est)												
Lane 1	191	13.4	184	13.5	910	0.202	100	11.9	LOS B	4.2	32.9	Full	267	<mark>-23.4</mark> N3	0.0
Lane 2	252	10.7	243	10.7	1201	0.202	100	9.3	LOS A	5.7	43.8	Full	267	0.0	0.0
Lane 3	196	10.7	189	10.7	935	0.202	100	9.4	LOS A	4.5	34.3	Short	246	-23.0 ^{N3}	NA
Approach	638	11.5	616 ^{N1}	11.5		0.202		10.1	LOS B	5.7	43.8				
Intersectio n	2143	9.5	2120 ^N	9.6		1.036		18.7	LOS B	19.2	151.8				
Site: 19.0 [19.0 Gr	eenmo	unt Dr	/ Ti Ral	kau Dr]									
South: Gree	enmour	nt Drive)												
Lane 1	82	15.0	82	15.0	277	0.296	100	61.0	LOS E	4.6	36.6	Full	1200	<mark>-11.5</mark> N3	0.0
Lane 2	81	8.3	81	8.3	275	0.296	100	65.0	LOS E	4.7	35.5	Full	1200	0.0	0.0
Approach	163	11.7	163	11.7		0.296		63.0	LOS E	4.7	36.6				
East: Ti Ra	kau Dri	ve (Ea	st)												
Lane 1	359	5.8	359	5.8	1466	0.245	100	5.8	LOS A	1.9	13.8	Short	20	0.0	NA
Lane 2	533	6.5	533	6.5		0.601	100	3.3	LOS A	4.5	32.9	Full	72	-16.5 ^{N3}	
Lane 3	701	6.5	701	6.5	1166	0.601	100	6.4	LOS A	11.2	82.6	Full	72	0.0	<mark>27.5</mark>
Lane 4 (B)	28	100.0	28	100.0	1137	0.025	100	3.5	LOS A	0.0	0.0	Full	72	0.0	0.0
Approach	1621	8.0	1621	8.0		0.601		5.2	LOSA	11.2	82.6				
NorthWest:	Buswa	ıy													
Lane 1 (B)	15	100.0	15	100.0	1137	0.013	100	3.9	LOS A	0.0	0.0	Full	263	0.0	0.0
Approach	15	100.0	15	100.0		0.013		3.9	LOSA	0.0	0.0				
West: Ti Ra	ıkau Dr	ive (We	est)												
Lane 1	295	11.4	287	11.4	1372	0.209	100	9.3	LOS A	8.6 ^{N4}	65.8 ^{N4}	Full	45	0.0	<mark>50.0</mark>
Lane 2	295	11.4	287	11.4		0.209	100	0.9	LOSA	0.8	6.5	Full	45	0.0	0.0
Lane 3	97	15.5	94	15.5		0.608	100	77.0	LOS E	6.2	49.1	Full	45	0.0	23.0
Approach	686	12.0	668 ^{N1}	12.0		0.608		15.3	LOS B	8.6	65.8				
Intersection	2485	9.9	2467 ^N	9.9		0.608		11.7	LOS B	11.2	82.6				

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab). Lane LOS values are based on average delay per lane.

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

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

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

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

- 1 Reduced capacity due to a short lane effect. Short lane queues may extend into the full-length lanes. Some upstream delays at entry to short lanes are not included.
- N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.
- N3 Capacity Adjustment due to downstream Jane blockage determined by the program.
- N4 Average back of queue has been restricted to the available queue storage space.

Approac	:h L <u>ane</u>	Flows	(CCG) (veh <u>/</u>	h)						
Site: 18.0	[18.0 B	urswood	d Dr (Ea	ast) / Ti	Rakau Dr]						
East: Ti R		•									
Mov.	T1	R2	Total	%HV	Cap.	Deg. Satn	Lane	Prob. SL Ov.	Ov.		
From E To Exit:	W	N			veh/h	v/c	% %	%	Lane No.		
Lane 1	679	-	679	7.2	1409	0.482	100	NA	NA		
Lane 2	593	-	593	7.2	1231	0.482	100	NA	NA		
Lane 3	_	10	10	0.0	74	0.135	100	0.0	2		
Approac h	1272	10	1282	7.1		0.482					
North: Bu	rswood l	Orive (E	ast)								
Mov.	L2	R2	Total	%HV		Deg.	Lane	Prob.	Ov.		
From N					Cap. veh/h	Satn v/c	Util. %	SL Ov.	Lane No.		
To Exit:	E 404	W	404	45.5							
Lane 1 Lane 2	181 -	- 41	181 41	15.5 29.7	175 209	1.036 0.198	100 100	<mark>45.5</mark> NA	2 NA		
Approac	 181	41	222	18.1	209	1.036	100	INA	NA		
h	101	41	222	10.1		1.030					
West: Ti F	Rakau Di	•	est)								
Mov.	L2	T1	Total	%HV	Con	Deg.	Lane	Prob.	Ov.		
From W To Exit:	N	Е			Cap. veh/h	Satn v/c	Util. %	SL Ov. %	Lane No.		
Lane 1	128	56	184	13.5	910	0.202	100	NA	NA		
Lane 2	-	243	243	10.7	1201	0.202	100	NA	NA		
Lane 3	_	189	189	10.7	935	0.202	100	0.0	2		
Approac h	128	488	616	11.5		0.202					
	Total	%HV [Deg.Sat	tn (v/c)							
Intersec tion	2120	9.6		1.036							
Site: 19.0	[19.0 G	reenmo	unt Dr	/ Ti Rak	au Drl						
South: Gr	-										
Mov.	L2	R2	Total	%HV			Deg.	Lane	Prob.	Ov.	
From S To Exit:	W	Е				Cap. veh/h	Satn v/c	Util. %	SL Ov. %	Lane No.	
Lane 1	54	28	82	15.0		277	0.296	100	NA	NA	
Lane 2	- -	81	81	8.3		275		100	NA	NA	
Approac	54	109	163	11.7			0.296		1 47 1		
h											
East: Ti R			-								
Mov. From E	L2	T1	R1	Total	%HV	Cap.	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.	
To Exit:	S	W	NW								
Lane 1	359	- 533	-	359 533	5.8 6.5	1466 888 ¹	0.245 0.601	100	0.0	2 NA	
Lane 2	-	533	-	533	6.5	ogg	0.001	100	NA	NA	

Lane 3	_	701	-	701	6.5	1166	0.601	100	NA	NA	
Lane 4	_	_	28	28	100.0	1137	0.025	100	NA	NA	
Approac	359	1234	28	1621	8.0		0.601				
h											
NorthWes	t: Busw	ay									
Mov.	L1	Total	%HV				Deg.		Prob.	Ov.	
From						Cap. veh/h	Satn		SL Ov.	Lane	
NVV To Exit:	E					venin	v/c	%	%	No.	
Lane 1	15	15	100.0			1137	0.013	100	NA	NA	
Approac	15	15	100.0				0.013				
h											
West: Ti R	Rakau D	rive (W	est)								
Mov.	T1	R2	Total	%HV			Deg.		Prob.	Ov.	
From W						Cap. veh/h	Satn		SL Ov.	Lane	
To Exit:	Е	S				ven/m	v/c	%	70	No.	
Lane 1	287	-	287	11.4		1372	0.209	100	NA	NA	
Lane 2	287	-	287	11.4		1372	0.209	100	NA	NA	
Lane 3	-	94	94	15.5		155	0.608	100	NA	NA	
Approac	573	94	668	12.0			0.608				
h											
	Total	%HV	Deg.Sat	n (v/c)							
Intersec tion	2467	9.9		0.608							

1 Reduced capacity due to a short lane effect. Short lane queues may extend into the full-length lanes. Some upstream delays at entry to short lanes are not included.

					_			_		_	_	
Merge Analysis (CC	G)											
	Exit ane ober	Lane Length	Percent Opng in Lane	Flow		Critica l Gap sec	Follow-up Headway		Capacity veh/h	Deg. Satn I	Min. De l ay	Delay
Site: 18.0 [18.0 Burswo	od D	m r (East) / i			pcu/II	Sec	Sec	ven/m	ven/m	V/C	Sec	sec
-		` ′	II Nakat	נוט ג								
East Exit: Ti Rakau Dri Merge Type: Not Appl	,	ast)										
Full Length Lane Full Length Lane Full Length Lane	1 2 3	Merge A	Analysis Analysis Analysis	not ap	plied.							
North Exit: Burswood I Merge Type: Not Appl		(East)										
Full Length Lane	1	Merge A	Ana l ysis	not ap	plied.							
West Exit: Ti Rakau Dr Merge Type: Not Appl	,	Vest)										
Full Length Lane Full Length Lane Full Length Lane	1 2 3	Merge A	Analysis Analysis Analysis	not ap	plied.							
Site: 19.0 [19.0 Greenr	nount	: Dr / Ti Ra	akau Dr]									
South Exit: Greenmour Merge Type: Zipper	nt Driv	/e										
Exit Short Lane	1	15	50.0	47	51	2.50	2.00	359	1743	0.206	0.0	0.0
Merge Lane	2	-	50.0	180	185	2.50	2.00	94	1583	0.060	0.0	0.1
East Exit: Ti Rakau Dri Merge Type: Not Appl	•	ast)										

Full Length Lane Merge Analysis not applied. Full Length Lane Merge Analysis not applied. Full Length Lane Merge Analysis not applied.

NorthWest Exit: Busway Merge Type: Not Applied

Full Length Lane Merge Analysis not applied.

West Exit: Ti Rakau Drive (West)

Merge Type: Not Applied

Full Length Lane Merge Analysis not applied. Full Length Lane Merge Analysis not applied.

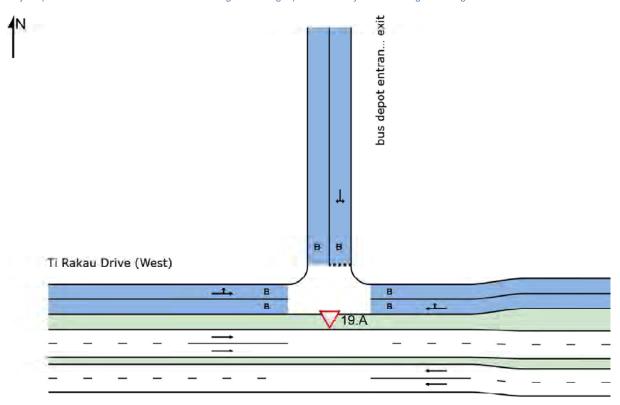
SIDRA INTERSECTION 9.0 | Copyright © 2000-2020 Akcelik and Associates Pty Ltd | sidrasolutions.com Organisation: AECOM AUSTRALIA PTY LTD | Licence: NETWORK / Enterprise | Processed: Friday, 18 August 2023 2:01:55 PM Project: C:\Users\jacques.vandenheever\Eastern Busway Alliance\PAA - 12 Transport\3-3. Integrated Transport Assessment\ITA 3 -

EB2,3R,3C,4i\Version A1\SIDRA and AIMSUN\EB2,3R,3C,4i,4L Final\EB2,3R,3C,4i,4L Final AM 2028_JV Edits_Updates.sip9

V Site: 19.A [19.A Bus entrance to depot (Site Folder: AM)]

Site Category: (None) Give-Way (Two-Way)

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



Ti Rakau Drive (East)

V Site: 19.A [19.A Bus entrance to depot (Site Folder: AM)]

Network: N101 [AM_Town centre drive four lanes (Network

Folder: General)]

Site Category: (None) Give-Way (Two-Way)

Lane Use	and P	erforn	nance												
	DEM FLC	WS	ARR FLC)WS	Сар.	Deg. Satn	Lane Util.		Level of Service	85% BA QUE	UE	Lane Config	Lane Length	Cap. Adj.	Prob. B l ock.
	[Total veh/h	HV] %	[Total veh/h	HV] %	veh/h	v/c	%	sec		[Veh	Dist] m		m	%	%
East: Ti Ra	kau Dri	ve (Ea	st)												
Lane 1	948	6.3	948	6.3	1863	0.509	100	0.1	LOS A	0.0	0.0	Full	128	0.0	0.0
Lane 2	645	6.3	645	6.3	1268	0.509	100	0.1	LOS A	0.0	0.0	Full	128	-31.9 ^{N7}	0.0
Lane 3 (B)	38	100.0	38	100.0	1170	0.032	100	1.5	LOS A	0.1	8.0	Full	128	0.0	0.0
Approach	1631	8.5	1631	8.5		0.509		0.1	NA	0.1	8.0				
North: bus	depot e	entranc	e exit												
Lane 1 (B)	20	100.0	20	100.0	737	0.027	100	0.4	LOS A	0.1	1.2	Full	40	0.0	0.0
Approach	20	100.0	20	100.0		0.027		0.4	LOSA	0.1	1.2				
West: Ti Ra	akau Dr	ive (We	est)												
Lane 1 (B)	26	100.0	26	100.0	1154	0.023	100	1.9	LOS A	0.0	0.0	Full	72	0.0	0.0
Lane 2	349	10.9	341	10.9	1811	0.188	100	0.0	LOS A	0.0	0.0	Full	72	0.0	0.0
Lane 3	349	10.9	341	10.9	1811	0.188	100	0.0	LOS A	0.0	0.0	Full	72	0.0	0.0
Approach	724	14.1	708 ^{N1}	14.2		0.188		0.1	NA	0.0	0.0				
Intersectio n	2375	11.0	2359 ^N	11.1		0.509		0.1	NA	0.1	1.2				

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

Lane LOS values are based on average delay per lane.

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

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 lanes.

Delay Model: SIDRA Standard (Geometric Delay is included).

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

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

- N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.
- N7 The capacity reduction has been determined from the queue blockage probability of a Site further downstream due to intermediate continuous lanes.

Approach	Lane Flo	ows (v	eh/h)						
East: Ti Rak	au Drive (East)							
Mov. From E To Exit:	T1 W	R2 N	Total	%HV	Cap. veh/h	Deg. Satn v/c		Prob. SL Ov. %	Ov. Lane No.
Lane 1 Lane 2	948 645	-	948 645	6.3 6.3	1863 1268	0.509 0.509	100 100	NA NA	NA NA
Lane 3	28	10	38	100.0		0.032	100	NA	NA
Approach	1621	10	1631	8.5		0.509			
North: bus d	epot entra	ance e	xit						
Mov. From N To Exit:	L2 E	R2 W	Total	%HV	Cap. veh/h	Deg. Satn v/c		Prob. SL Ov. %	Ov. Lane No.
Lane 1	10	10	20	100.0	737	0.027	100	NA	NA

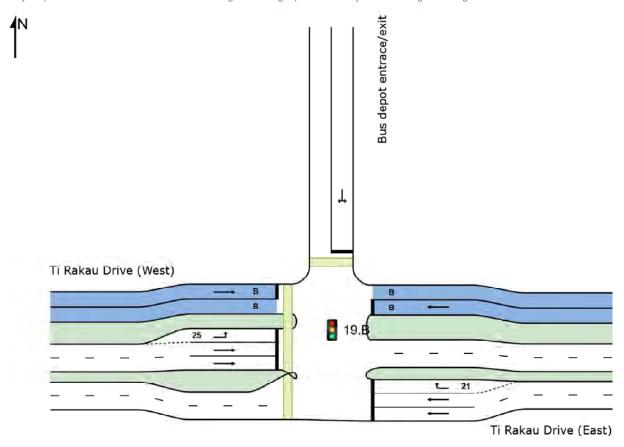
Approach	10	10	20	100.0		0.027			
West: Ti Rak	au Drive	e (West))						
Mov. From W To Exit:	L2 N	T1 E	Total	%HV	Cap. veh/h	Deg. Satn v/c		Prob. SL Ov. %	Ov. Lane No.
Lane 1	10	16	26	100.0	1154	0.023	100	NA	NA
Lane 2	-	341	341	10.9	1811	0.188	100	NA	NA
Lane 3	-	341	341	10.9	1811	0.188	100	NA	NA
Approach	10	698	708	14.2		0.188			
	Total	%HV[Deg.Sa	tn (v/c)					
Intersection	2359	11.1		0.509					

Merge Analysis						
L	Exit ane nber	Short Percent Opposing Lane Opng in Flow Rate Length Lane m %veh/h pcu/h	Critica l Gap sec	Follow-up Lane Headway Flow Rate sec veh/h	Deg. Satn [Merge Delay sec
East Exit: Ti Rakau Driv Merge Type: Not Appli	•	ast)				
Full Length Lane Full Length Lane Full Length Lane	1 2 3	Merge Analysis not applied. Merge Analysis not applied. Merge Analysis not applied.				
North Exit: bus depot e Merge Type: Not Appli		ce exit				
Full Length Lane	1	Merge Analysis not applied.				
West Exit: Ti Rakau Dri Merge Type: Not Appli	•	Vest)				
Full Length Lane	1	Merge Analysis not applied.				
Full Length Lane	2	Merge Analysis not applied.				
Full Length Lane	3	Merge Analysis not applied.				

Site: 19.B [19.B Bus Depot Entrance (Site Folder: AM)]

Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



Site: 19.B [19.B Bus Depot Entrance (Site Folder: AM)]

■■ Network: N101 [AM_Town centre drive four lanes (Network

Folder: General)]

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 150 seconds (Network Site User-Given Phase Times)

Lane Use	and P	erforn	nance												
	DEM FLC [Total veh/h)WS		IVAL WS HV] %	Cap.	Deg. Satn	Lane Util.		Level of Service		ACK OF EUE Dist]	Lane Config	Lane Length	Cap. Adj. %	Prob. B l ock. %
East: Ti Ra				/0	veii/ii	V/C	/0	Sec			m	_	m	/0	. /0
Lane 1	797	6.3	797	6.3	1292	0.617	100	11.3	LOS B	7.9 ^{N4}	58.4 ^{N4}	Full	40	0.0	<mark>50.0</mark>
Lane 2	797	6.3	797	6.3	1292	0.617	100	1.0	LOS A	2.6	19.0	Full	40	0.0	0.0
Lane 3	10	0.0	10	0.0	296	0.034	100	50.5	LOS D	0.5	3.2	Short	21	0.0	NA
Lane 4 (B)	28	100.0	28	100.0	693	0.040	100	0.4	LOS A	0.0	0.3	Full	40	0.0	0.0
Approach	1631	7.9	1631	7.9		0.617		6.3	LOS A	7.9	58.4				
North: Bus	depot 6	entrace	/exit												
Lane 1	20	0.0	20	0.0	202	0.099	100	66.7	LOS E	1.2	8.4	Full	40	0.0	0.0
Approach	20	0.0	20	0.0		0.099		66.7	LOS E	1.2	8.4				
West: Ti Ra	akau Dr	ive (We	est)												
Lane 1 (B)	16	100.0	16	100.0	693	0.023	100	0.4	LOS A	0.0	0.2	Full	128	0.0	0.0
Lane 2	10	0.0	10	0.0	185	0.053	100	75.3	LOS E	0.6	4.3	Short	25	0.0	NA
Lane 3	349	10.9	341	10.9	1051	0.325	100	4.5	LOS A	3.1	23.7	Full	128	0.0	0.0
Lane 4	349	10.9	341	10.9	1051	0.325	100	9.0	LOS A	6.1	46.5	Full	128	0.0	0.0
Approach	724	12.7	708 ^{N1}	12.8		0.325		7.5	LOS A	6.1	46.5				
Intersectio n	2375	9.3	2359 ^N	9.4		0.617		7.2	LOSA	7.9	58.4				

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab). Lane LOS values are based on average delay per lane.

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

Delay Model: SIDRA Standard (Geometric Delay is included).

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

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

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

N4 Average back of queue has been restricted to the available queue storage space.

Approach	Lane Flo	ws (v	eh/h)											
East: Ti Ral	Cap. Exit: Cap. Veh/h Sath V/c Util. SL Ov. W Lane No. ne 1 797 - 797 6.3 1292 0.617 100 NA NA ne 2 797 - 797 6.3 1292 0.617 100 NA NA ne 3 - 10 10 0.0 296 0.034 100 0.0 2													
Mov. From E To Exit:			Total	%HV		Satn	Util.	SL Ov.	Lane					
Lane 1	797	-	797	6.3	1292	0.617	100	NA	NA					
Lane 2	797	-	797	6.3	1292	0.617	100	NA	NA					
Lane 3	-	10	10	0.0	296	0.034	100	0.0	2					
Lane 4	28	-	28	100.0	693	0.040	100	NA	NA					
Approach	1621	10	1631	7.9		0.617								
North: Bus	depot entra	ace/ex	it											
Mov. From N To Exit:	L2 E	R2 W	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %		Ov. Lane No.					

Lane 1	10	10	20	0.0	202	0.099	100	NA	NA
Approach	10	10	20	0.0		0.099			
West: Ti Rak	au Drive	e (West)	l						
Mov. From W To Exit:	L2 N	T1 E	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.
Lane 1	-	16	16	100.0	693	0.023	100	NA	NA
Lane 2	10	-	10	0.0	185	0.053	100	0.0	3
Lane 3	-	341	341	10.9	1051	0.325	100	NA	NA
Lane 4	-	341	341	10.9	1051	0.325	100	NA	NA
Approach	10	699	708	12.8		0.325			
	Total	%HVE	eg.Sat	in (v/c)					
Intersection	2359	9.4		0.617					

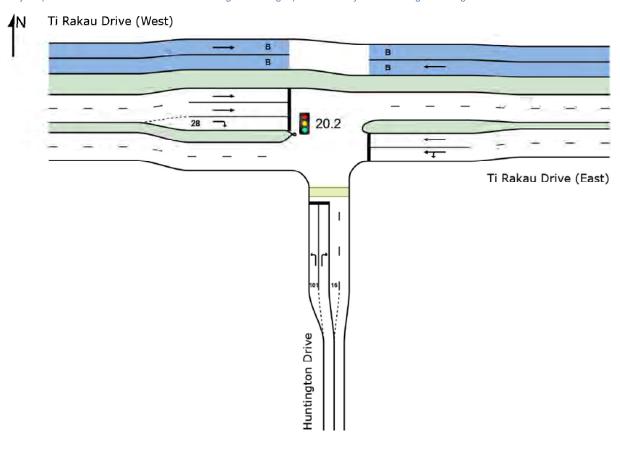
Merge Analysis							
Ex Lan Numbe	ne	Short Percent Opposing Lane Opng in Flow Rate Length Lane m % veh/h pcu/h	Critical Gap sec	F l ow Rate	oacity veh/h	Deg. Satn I v/c	Merge Delay sec
East Exit: Ti Rakau Drive Merge Type: Not Applied	•	ast)					
=3 =	1 2 3	Merge Analysis not applied. Merge Analysis not applied. Merge Analysis not applied.					
North Exit: Bus depot ent Merge Type: Not Applied		e/exit					
Full Length Lane	1	Merge Analysis not applied.					
West Exit: Ti Rakau Drive Merge Type: Not Applied	•	/est)					
Full Length Lane	1	Merge Analysis not applied.					
Full Length Lane	2	Merge Analysis not applied.					
Full Length Lane	3	Merge Analysis not applied.					

Site: 20.2 [20.2 Huntington Dr / Ti Rakau Dr (Site Folder: AM)]

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



Site: 20.2 [20.2 Huntington Dr / Ti Rakau Dr (Site Folder: AM)]

■■ Network: N101 [AM_Town centre drive four lanes (Network

Folder: General)]

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 150 seconds (Network Site User-Given Phase Times)

Lane Use	and P	erforn	nance												
	DEM FLC [Total veh/h	WS	ARR FLC [Total veh/h)WS	Cap.	Deg. Satn v/c	Lane Util. %		Level of Service		ACK OF EUE Dist] m	Lane Config	Lane Length m	Cap. Adj. %	Prob. Block.
South: Hun	itington	Drive													
Lane 1 Lane 2 Approach	181 28 209	6.6 7.1 6.7	181 28 209	6.6 7.1 6.7		0.918 0.131 0.918	100 100	95.7 68.0 92.0	LOS F LOS F	14.9 1.6 14.9	110.4 12.2 110.4	Short Full	101 575	-50.0 ^{N3}	NA 0.0
East: Ti Ra	kau Dri	ve (Ea	st)												
Lane 1 Lane 2 Lane 3 (B)	486 952 28	6.4 6.3 100.0	486 952 28	6.4 6.3 100.0	1280	0.744 0.744 0.023	100 100 100	15.9 15.8 0.0	LOS B LOS B	20.1 21.0 ^{N4} 0.0	148.3 154.9 ^{N4} 0.0	Full Full Full	106 106 106	-48.6 ^{N3}	45.9 50.0 0.0
Approach	1466	8.1	1466	8.1		0.744		15.5	LOS B	21.0	154.9				
West: Ti Ra	akau Dr	ive (We	est)												
Lane 1 (B) Lane 2 Lane 3 Lane 4 Approach	16 328 328 41 712	100.0 11.3 11.3 2.4 12.8	16 320 320 40 697 ^{N1}	100.0 11.3 11.3 2.4 12.9	1433 1433	0.013 0.224 0.224 0.350 0.350	100 100 100 100	0.0 1.3 1.3 74.2 5.4	LOS A LOS A LOS E LOS A	0.0 1.5 1.4 2.5 2.5	0.0 11.2 11.0 18.0	Full Full Full Short	40 40 40 28	0.0 0.0 0.0 0.0	0.0 0.0 0.0 NA
Intersectio n	2387	9.4	2372 ^N	9.4		0.918		19.3	LOS B	21.0	154.9				

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab). Lane LOS values are based on average delay per lane.

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

Delay Model: SIDRA Standard (Geometric Delay is included).

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

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

- N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.
- N3 Capacity Adjustment due to downstream lane blockage determined by the program.
- N4 Average back of queue has been restricted to the available queue storage space.

Approach l	th: Huntington Drive L													
South: Hunti	Cap. Sath Util. SL Ov. Lane Exit: W E Veh/h v/c % % No. ne 1 181 - 181 6.6 197 0.918 100 23.1 2 ne 2 - 28 28 7.1 213 0.131 100 NA NA proach 181 28 209 6.7 0.918 st: Ti Rakau Drive (East) v. L2 T1 Total %HV Deg. Lane Prob. Ov. Cap. Sath Util. SL Ov. Lane													
Mov. From S To Exit:			Total	%HV		Satn	Util.	SL Ov.	Lane					
Lane 1 Lane 2														
Approach	181	28	209	6.7		0.918								
East: Ti Raka	au Drive ((East)												
Mov. From E To Exit:			Total	%HV		Satn	Util.	SL Ov.	Lane					
Lane 1 Lane 2	26 <u>-</u>	460 952	486 952	6.4 6.3	65 4 1280	0.744 0.744	100 100	NA NA	NA NA					

Lane 3	-	28	28	100.0	1194	0.023	100	NA	NA
Approach	26	1440	1466	8.1		0.744			
West: Ti Rak	au Drive	(West))						
Mov. From W To Exit:	T1 E	R2 S	Total	%HV	Cap. veh/h	Deg. Satn v/c			Ov. Lane No.
Lane 1	16	-	16	100.0	1194	0.013	100	NA	NA
Lane 2	320	-	320	11.3	1433	0.224	100	NA	NA
Lane 3	320	-	320	11.3	1433	0.224	100	NA	NA
Lane 4	_	40	40	2.4	114	0.350	100	0.0	3
Approach	657	40	697	12.9		0.350			
	Total	%HV[Deg.Sat	tn (v/c)					
Intersection	2372	9.4		0.918					

Merge Analysis												
	Exit Lane Number		Percent Opng in Lane	Flow		Critical Gap sec	Follow-up Headway sec	Lane (F l ow Rate veh/h	Capacity veh/h	Deg. Satn I	Min. De l ay sec	Merge De l ay sec
South Exit: Hunting Merge Type: Zippe	_											
Exit Short Lane	2	16	50.0	27	28	2.50	2.00	12	1769	0.007	0.0	0.0
Merge Lane	1	-	50.0	6	6	2.50	2.00	54	1793	0.030	0.0	0.0
East Exit: Ti Rakat Merge Type: Not A	•	ast)										
Full Length Lane Full Length Lane Full Length Lane	1 2 3	Merge	Analysis Analysis Analysis	not a	pplied.							
West Exit: Ti Raka Merge Type: Not A	,	/est)										
Full Length Lane	1	Merge	Analysis	not a	pplied.							
Full Length Lane	2	Merge	Analysis	not a	pplied.							
Full Length Lane	3	Merge	Analysis	not a	pplied.							

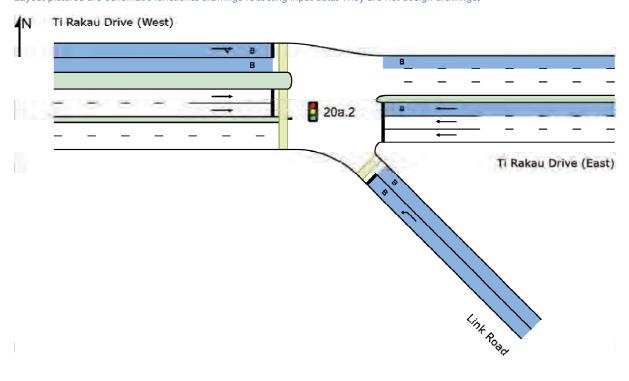
Site: 20a.2 [20a.2 Ti Rakau Dr Busway crossover - EB4i,EB4L

(Site Folder: AM)]

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



Site: 20a.2 [20a.2 Ti Rakau Dr Busway crossover - EB4i,EB4L (Site Folder: AM)]

Network: N101 [AM_Town centre drive four lanes (Network

Folder: General)]

Site Category: (None)

Lane Use	and P	erforn	nance												
	DEM FLC [Total veh/h	WS	ARR FLC [Tota l veh/h)WS	Cap.	Deg. Satn v/c	Lane Util. %		Level of Service		ACK OF EUE Dist] m	Lane Config	Lane Length m	Cap. Adj. %	Prob. Block. %
SouthEast:	Link R	oad													
Lane 1 (B)	21	100.0	21	100.0	171	0.123	100	33.2	LOS C	0.6	7.3	Full	450	0.0	0.0
Approach	21	100.0	21	100.0		0.123		33.2	LOS C	0.6	7.3				
East: Ti Ra	kau Dri	ve (Ea	st)												
Lane 1	715	6.3	715	6.3	711	1.005	100	83.2	LOS F		233.8 ^{N4}	Full	160	-49.6 ^{N7}	<mark>50.0</mark>
Lane 2	709	6.3	709	6.3	706	1.005	100	83.5	LOS F	31.7 ^{N4}	233.8 ^{N4}	Full	160	<mark>-50.0</mark> ^{N7}	50.0
Lane 3 (B)	8	100.0	8	100.0	36	0.236	100	40.7	LOS D	0.3	3.7	Full	160	0.0	0.0
Approach	1432	6.9	1432	6.9		1.005		83.1	LOS F	31.7	233.8				
West: Ti Ra	akau Dr	ive (W	est)												
Lane 1 (B)	17	100.0	17	100.0	172	0.098	100	32.5	LOS C	0.4	5.8	Full	106	0.0	0.0
Lane 2	341	11.1	334	11.2	1151	0.290	100	5.7	LOS A	4.3	32.8	Full	106	0.0	0.0
Lane 3	341	11.1	334	11.2	1151	0.290	100	5.7	LOS A	4.3	32.8	Full	106	0.0	0.0
Approach	699	13.3	685 ^{N1}	13.4		0.290		6.4	LOS A	4.3	32.8				
Intersectio n	2152	9.9	2138 ^N	9.9		1.005		58.0	LOSE	31.7	233.8				

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab). Lane LOS values are based on average delay per lane.

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

Delay Model: SIDRA Standard (Geometric Delay is included).

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

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

- N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.
- N4 Average back of queue has been restricted to the available queue storage space.
- N7 The capacity reduction has been determined from the queue blockage probability of a Site further downstream due to intermediate continuous lanes.

Approach	Lane Fl	ows (v	/eh/h)					
SouthEast: L	ink Roa	d						
Mov. From SE To Exit:	L1 W	Total	%HV	Cap. veh/h	Deg. Satn v/c		Prob. SL Ov. %	Ov. Lane No.
Lane 1	21	21	100.0	171	0.123	100	NA	NA
Approach	21	21	100.0		0.123			
East: Ti Rak	au Drive	(East)						
Mov. From E To Exit:	T1 W	Total	%HV	Cap. veh/h	Deg. Satn v/c		Prob. SL Ov. %	Ov. Lane No.
Lane 1	715	715	6.3	711	1.005	100	NA	NA
Lane 2	709	709	6.3	706	1.005	100	NA	NA
Lane 3	8	8	100.0	36	0.236	100	NA	NA
Approach	1432	1432	6.9		1.005			

West: Ti Rak	au Drive	e (West))							
Mov. From W To Exit:	T1 E	R1 SE	Total	%HV	Cap. veh/h	Deg. Satn v/c		Prob. SL Ov. %		
Lane 1	-	17	17	100.0	172	0.098	100	NA	NA	
Lane 2	334	_	334	11.2	1151	0.290	100	NA	NA	
Lane 3	334	-	334	11.2	1151	0.290	100	NA	NA	
Approach	668	17	685	13.4		0.290				
	Total	%HV[Deg.Sat	tn (v/c)						
Intersection	2138	9.9		1.005						

Merge Analysis										
E> Lar Numbe	ne		Percent Opng in Lane %	Flow F	Rate	Critical Gap sec	Follow-up Headway sec	apacity veh/h	Deg. Satn I	Merge De l ay sec
SouthEast Exit: Link Road Merge Type: Not Applied										
Full Length Lane	1	Merge	Analysis	not app	olied.					
East Exit: Ti Rakau Drive Merge Type: Not Applied	•	st)								
	1 2 3	Merge	Ana l ysis Ana l ysis Ana l ysis	not app	olied.					
West Exit: Ti Rakau Drive Merge Type: Not Applied	•	est)								
Full Length Lane	1	Merge	Ana l ysis	not app	olied.					
	2	Merge	Ana l ysis	not app	olied.					
Full Length Lane	3	Merge	Analysis	not app	olied.					

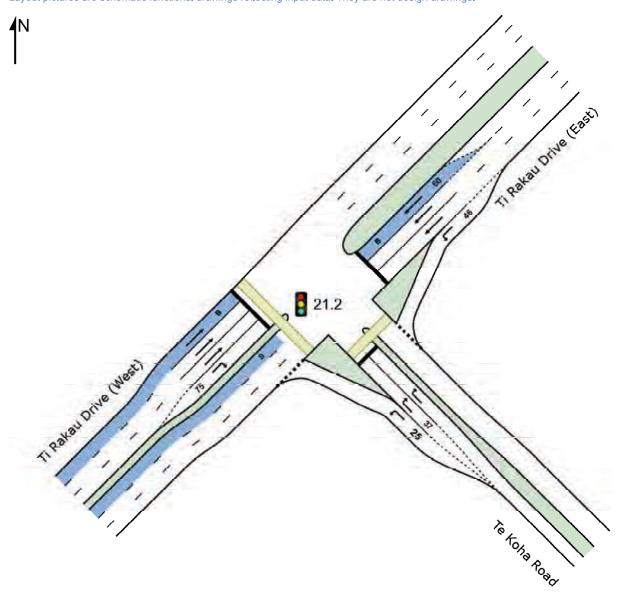
Site: 21.2 [21.2 Te Koha Rd/ Ti Rakau Dr - EB4i (Site Folder:

AM)

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



Site: 21.2 [21.2 Te Koha Rd/ Ti Rakau Dr - EB4i (Site Folder: AM)]

■■ Network: N101 [AM_Town centre drive four lanes (Network Folder: General)]

Site Category: (None)

Lane Use	and P	erforn	nance												
	DEM FLC [Total			NAL DWS HV 1	Сар.	Deg. Satn	Lane Util.		Level of Service		ACK OF EUE Dist 1	Lane Config	Lane Length	Cap. Adj.	Prob. Block.
	veh/h	%	veh/h		veh/h	v/c	%	sec		[•0	m		m	%	%
SouthEast:	Te Koł	na Road	d												
Lane 1	182	9.3	182	9.3	436	0.417	100	13.1	LOS B	5.1	38.2	Short	25	<mark>-21.2</mark> ^{N7}	NA
Lane 2	107	7.6	107	7.6	139 ¹	0.770	100	77.2	LOS E	7.1	52.7	Short	37	0.0	NA
Lane 3	143	7.6	143	7.6	185 ¹	0.770	100	78.0	LOS E	9.6	71.4	Full	70	0.0	<mark>16.8</mark>
Approach	432	8.3	432	8.3		0.770		50.5	LOS D	9.6	71.4				
NorthEast:	Ti Rak	au Drive	e (Eas	t)											
Lane 1	124	8.9	124	8.9	1495	0.083	100	5.2	LOS A	0.7	5.4	Short	46	0.0	NA
Lane 2	725	5.9	725	5.9	1201 ¹	0.603	100	10.6	LOS B	21.7	159.3	Full	303	0.0	0.0
Lane 3	514	5.9	514	5.9	853	0.603	100	11.5	LOS B	16.7	123.0	Full	303	<mark>-35.0</mark> ^{N7}	0.0
Lane 4 (B)	8	100.0	8	100.0	821	0.010	100	6.5	LOSA	0.1	1.9	Two Seg ⁹	303	0.0	0.0
Approach	1371	6.7	1371	6.7		0.603		10.4	LOS B	21.7	159.3				
SouthWest	: Ti Ral	kau Driv	ve (We	est)											
Lane 1 (B)	1	100.0	1	100.0	929	0.001	100	2.9	LOS A	0.0	0.2	Full	160	0.0	0.0
Lane 2	302	10.4	302	10.4	1356	0.223	100	5.1	LOS A	5.4	41.3	Full	160	0.0	0.0
Lane 3	301	10.4	301	10.4	1349	0.223	100	5.1	LOS A	5.4	41.1	Full	160	0.0	0.0
Lane 4	76	17.1	76	17.1	86	0.879	100	94.0	LOS F	5.6	45.3	Short	75	0.0	NA
Approach	680	11.3	680	11.3		0.879		15.1	LOS B	5.6	45.3				
Intersectio n	2483	8.3	2483	8.3		0.879		18.7	LOS B	21.7	159.3				

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

Lane LOS values are based on average delay per lane.

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

Delay Model: SIDRA Standard (Geometric Delay is included).

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

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

- 1 Reduced capacity due to a short lane effect. Short lane queues may extend into the full-length lanes. Some upstream delays at entry to short lanes are not included.
- All Movement Classes allocated to Segment 1 are also allocated to Segment 2. This Two-Segment Lane has been modelled as a full-length lane.
- N7 The capacity reduction has been determined from the queue blockage probability of a Site further downstream due to intermediate continuous lanes.

SouthEast: T	SouthEast: Te Koha Road														
Mov. From SE	om SE Cap. Satn Util. SL Ov. Lane														
To Exit:	SW	NE			veh/h	v/c	%	%	No.						
Lane 1	182	-	182	9.3	436	0.417	100	<mark>54.3</mark>	2						
Lane 2	-	107	107	7.6	139 ¹	0.770	100	<mark>47.7</mark>	3						
Lane 3	-	143	143	7.6	185 ¹	0.770	100	NA	NA						
Approach	182	250	432	8.3		0.770									

NorthEast: Ti	Rakau	Drive (I	East)							
Mov. From NE	L2	T1	Total	%HV	Cap.	Deg. Satn	Util.	Prob. SL Ov.	Ov. Lane	
To Exit:	SE	SW			veh/h	v/c	%	%	No.	
Lane 1	124	-	124	8.9	1495	0.083	100	0.0	2	
Lane 2	-	725	725	5.9	1201 ¹	0.603	100	NA	NA	
Lane 3	-	514	514	5.9	853	0.603	100	NA	NA	
Lane 4	-	8	8	100.0	821	0.010	100	0.0	3	
Approach	124	1247	1371	6.7		0.603				
SouthWest: T	Γi Rakaι	ı Drive	(West)							
Mov.	T1	R2	Total	%HV		Deg.	Lane		Ov.	
From SW					Cap. veh/h	Satn v/c	Util. %	SL Ov. %	Lane No.	
To Exit:	NE	SE								
Lane 1	1	-	1	100.0	929	0.001	100	NA	NA	
Lane 2	302	-	302	10.4		0.223	100	NA	NA	
Lane 3	301	-	301	10.4		0.223	100	NA	NA	
Lane 4	_	76	76	17.1	86	0.879	100	0.0	3	
Approach	604	76	680	11.3		0.879				
	Tota l	%HV[Deg.Sat	in (v/c)						
Intersection	2483	8.3		0.879						

1 Reduced capacity due to a short lane effect. Short lane queues may extend into the full-length lanes. Some upstream delays at entry to short lanes are not included.

Merge Analysis									
	xit ne oer	Lane Opng	cent Opposing g in Flow Rate ane % veh/h pcu/l	Gap	Follow-up Headway sec	Lane Ca F l ow Rate veh/h	pacity veh/h	Deg. Satn I v/c	Merge Delay sec
SouthEast Exit: Te Koha Merge Type: Not Applie		ad							
Full Length Lane	1	Merge Analys	sis not applied	l.					
NorthEast Exit: Ti Rakau Merge Type: Not Applie		ve (East)							
Full Length Lane Full Length Lane Full Length Lane	1 2 3	Merge Analys	ysis not applied ysis not applied ysis not applied	l.					
SouthWest Exit: Ti Raka Merge Type: Not Applie		ive (West)							
Full Length Lane Full Length Lane Full Length Lane	1 2 3	Merge Analys	ysis not applied ysis not applied ysis not applied	l.					

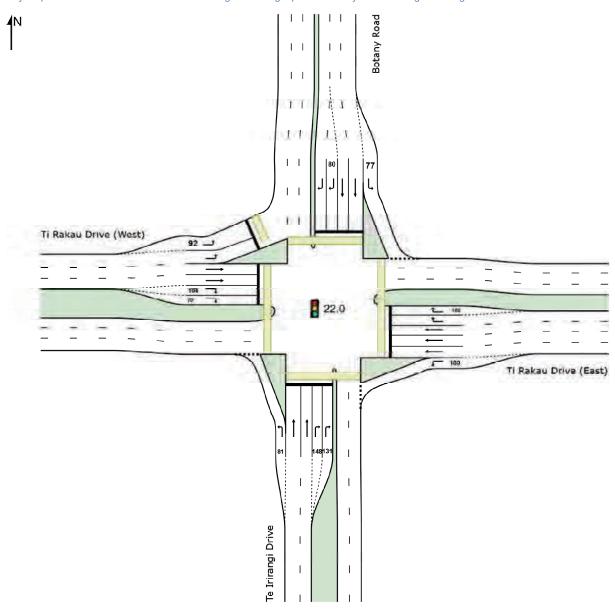
Site: 22.0 [22.0 Te Irirangi Dr / Ti Rakau Dr - EB4i (Site Folder:

AM)]

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



Site: 22.0 [22.0 Te Irirangi Dr / Ti Rakau Dr - EB4i (Site Folder: N101 [AM_Town centre drive four lanes (Network

Folder: General)]

Site Category: (None)

Lane Use	and P	erforr	nance												
	DEM FLC		ARR FLO		Сар.	Deg. Satn	Lane Util.		Level of Service	85% BA QUE	CK OF	Lane	Lane Length	Cap. Adi.	Prob. Block.
	[Total	HV]	[Total			Jaiii		Delay	Service	[Veh	Dist]	Corning	Lengin		
	veh/h	%	veh/h	%	veh/h	v/c	%	sec			m		m	%	%
South: Te I	rirangi [Orive													
Lane 1	106	7.5	106	7.5	962	0.110	100	11.1	LOS B	1.6	11.8	Short	81	0.0	NA
Lane 2	248	11.0	248	11.0	365	0.679	100	39.7	LOS D	9.8	75.4	Full	289	0.0	0.0
Lane 3	234	11.0	234	11.0	345	0.679	100	39.9	LOS D	9.3	71.6	Full	289	0.0	0.0
Lane 4	118	8.1	118	8.1	237	0.497	100	46.6	LOS D	4.7	34.9	Short	148	0.0	NA
Lane 5	118	8.1	118	8.1	238	0.497	100	46.6	LOS D	4.7	35.1	Short	131	0.0	NA
Approach	824	9.7	824	9.7		0.679		38.0	LOS D	9.8	75.4				
East: Ti Ra	kau Dri	ve (Ea	st)												
Lane 1	247	12.1	247	12.1	830	0.298	100	12.9	LOS B	4.2	32.5	Short	100	<mark>-7.2</mark> N3	NA NA
Lane 2	177	11.0	177	11.0	345	0.512	100	39.0	LOS D	6.7	51.2	Full	123	0.0	0.0
Lane 3	177	11.0	177	11.0	345	0.512	100	39.0	LOS D	6.7	51.2	Full	123	0.0	0.0
Lane 4	174	11.0	174	11.0	339	0.512	100	39.0	LOS D	6.6	50.4	Full	123	0.0	0.0
Lane 5	97	5.8	97	5.8	111	0.866	100	62.7	LOS E	4.6	33.7	Full	123	0.0	0.0
Lane 6	94	5.8	94	5.8	109	0.866	100	62.8	LOS E	4.5	33.1	Short	102	0.0	NA
Approach	965	10.3	965	10.3		0.866		37.0	LOS D	6.7	51.2				
North: Bota	any Roa	ıd													
Lane 1	189	5.8	189	5.8	1231	0.154	100	7.5	LOS A	2.0	14.4	Short	77	0.0	NA
Lane 2	472	7.3	472	7.3	616 ¹	0.766	100	31.2	LOS C	18.0	133.6	Full	265	<mark>-7.2</mark> N3	0.0
Lane 3	465	7.3	465	7.3	607	0.766	100	31.2	LOS C	17.7	131.7	Full	265	<mark>-2.9</mark> N3	0.0
Lane 4	367	3.4	367	3.4	420	0.873	100	34.4	LOS C	11.2	80.6	Short	80	0.0	NA
Lane 5	367	3.4	367	3.4	420	0.873	100	34.4	LOS C	11.2	80.6	Full	265	0.0	0.0
Approach	1859	5.6	1859	5.6		0.873		30.0	LOS C	18.0	133.6				
West: Ti Ra	akau Dr	ive (W	est)												
Lane 1	191	7.7	191	7.7	524	0.364	100	23.0	LOS C	4.9	36.4	Short	92	0.0	NA
Lane 2	188	7.7	188	7.7	516	0.364	100	23.0	LOS C	4.8	35.9	Full	303	0.0	0.0
Lane 3	188	8.6	188	8.6	350	0.536	100	37.8	LOS D	7.1	53.5	Full	303	0.0	0.0
Lane 4	186	8.6	186	8.6	346	0.536	100	37.9	LOS D	7.1	53.0	Full	303	0.0	0.0
Lane 5	49	22.0	49	22.0	92	0.532	100	55.3	LOS E	2.2	17.9	Short	104	<mark>-7.2</mark> N3	NA
Lane 6	51	22.0	51	22.0	96	0.532	100	55.1	LOS E	2.2	18.6	Short	70	<mark>-2.9</mark> N3	NA
Approach	852	9.8	852	9.8		0.536		33.3	LOS C	7.1	53.5				
Intersectio n	4501	8.1	4501	8.1		0.873		33.6	LOS C	18.0	133.6				

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab). Lane LOS values are based on average delay per lane.

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

Delay Model: SIDRA Standard (Geometric Delay is included).

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

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

¹ Reduced capacity due to a short lane effect. Short lane queues may extend into the full-length lanes. Some upstream delays at entry to short lanes are not included.

N3 Capacity Adjustment due to downstream lane blockage determined by the program.

Approach I	Lane FI	ows (v	eh/h)								
South: Te Irin	angi Dri	ve									
Mov.	L2	T1	R2	Total	%HV		Deg.	Lane	Prob.	Ov.	
From S						Cap.	Satn		SL Ov.	Lane	
To Exit:	W	N	Е			veh/h	v/c	%	%	No.	
Lane 1	106	-	-	106	7.5	962	0.110	100	0.0	2	
Lane 2	_	248	_	248	11.0	365	0.679	100	NA	NA	
Lane 3	-	234	_	234	11.0	345	0.679	100	NA	NA	
Lane 4	_	_	118	118	8.1	237	0.497	100	0.0	3	
Lane 5	_	_	118	118	8.1	238	0.497	100	0.0	4	
Approach	106	482	236	824	9.7		0.679				
Foot: Ti Dok	au Driva	(Foot)									
East: Ti Raka	L2	, ,	D2	Total	%HV		Dog	Lono	Drob	Ov.	
Mov. From E	L2	T1	R2	Total	%⊓V	Cap.	Deg. Satn		Prob. SL Ov.	Lane	
To Exit:	S	W	N			veh/h	v/c	%	%	No.	
	247	-		247	12.1	920	0.298	100	0.0	2	
Lane 1	24 <i>1</i> _	- 177	-	247 177	11.0	830	0.296		NA	NA	
Lane 2		177	-	177	11.0		0.512	100		NA NA	
Lane 3	-		-					100	NA		
Lane 4	_	174	-	174	11.0		0.512	100	NA	NA	
Lane 5	-	-	97	97	5.8	111	0.866	100	NA	NA	
Lane 6			94	94	5.8	109	0.866	100	0.0	5	
Approach	247	527	191	965	10.3		0.866				
North: Botan	y Road										
Mov.	L2	T1	R2	Total	%HV		Deg.	Lane	Prob.	Ov.	
From N						Cap.	Satn		SL Ov.	Lane	
To Exit:	Е	S	W			veh/h	v/c	%	%	No.	
Lane 1	189	-	-	189	5.8	1231	0.154	100	0.0	2	
Lane 2	-	472	-	472	7.3	616 ¹	0.766	100	NA	NA	
Lane 3	-	465	-	465	7.3	607	0.766	100	NA	NA	
Lane 4	-	-	367	367	3.4	420	0.873	100	15.7	3	
Lane 5	-	-	367	367	3.4	420	0.873	100	NA	NA	
Approach	189	937	733	1859	5.6		0.873				
West: Ti Rak	au Drive	(Most)									
Mov.	L2	T1	R2	Total	%HV		Deg.	Lane	Prob.	Ov.	
From W	- LZ		- 1\Z	Total	701 TV	Cap.	Satn		SL Ov.	Lane	
To Exit:	N	Е	S			veh/h	v/c	%	%	No.	
Lane 1	191	_	_	191	7.7	524	0.364	100	0.0	2	
Lane 2	188	_	_	188	7.7		0.364	100	NA	NA	
Lane 3	-	188	_	188	8.6		0.536	100	NA	NA	
Lane 4	_	186	_	186	8.6		0.536	100	NA	NA	
Lane 5	_	-	4 9	49	22.0		0.532	100	0.0	3	
Lane 6	_	_	51	51	22.0		0.532	100	0.0	3	
Approach	379	373	100	852	9.8	30	0.536	100	0.0	<u> </u>	
другоасп	J18				9.0		0.550				
	Total	%HVD	eg.Sat	n (v/c)							
Intersection	4501	8.1		0.873							

1 Reduced capacity due to a short lane effect. Short lane queues may extend into the full-length lanes. Some upstream delays at entry to short lanes are not included.

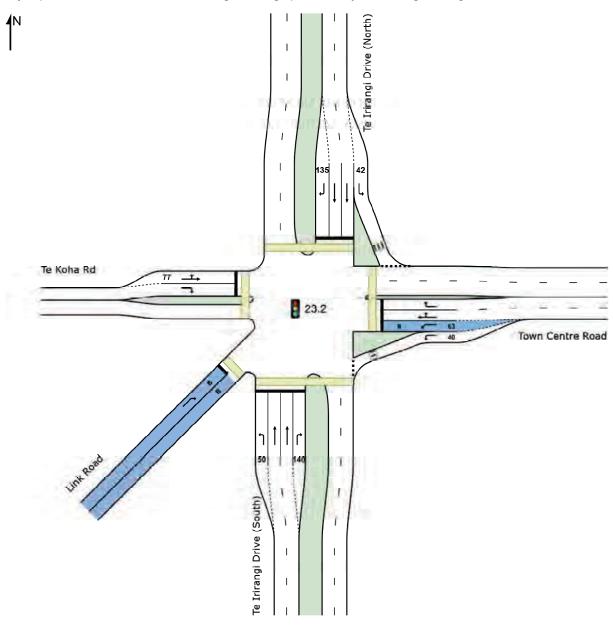
Merge Analysis								
La		Percent Opposing Opng in Flow Rate Lane		Follow-up Lane C Headway Flow Rate				Merge De l ay
IVAIII	m Ecrigan	% veh/h pcu/h	sec	sec veh/h	veh/h	v/c	sec	sec

South Exit: Te Irirangi Drive Merge Type: Not Applied Full Length Lane Merge Analysis not applied. Full Length Lane 2 Merge Analysis not applied. East Exit: Ti Rakau Drive (East) Merge Type: Not Applied Full Length Lane Merge Analysis not applied. Full Length Lane Merge Analysis not applied. Full Length Lane Merge Analysis not applied. North Exit: Botany Road Merge Type: Not Applied Full Length Lane Merge Analysis not applied. Full Length Lane Merge Analysis not applied. Full Length Lane Merge Analysis not applied. West Exit: Ti Rakau Drive (West) Merge Type: Not Applied Full Length Lane Merge Analysis not applied. 1 Full Length Lane Merge Analysis not applied. Full Length Lane Merge Analysis not applied.

Site: 23.2 [23.2a Te Irirangi Dr / Te Koha Rd / Town Centre Dr - EB4i,EB4L 2 (Site Folder: AM)]

Site Category: (None) Signals - EQUISAT (Fixed-Time/SCATS) Isolated

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



Site: 23.2 [23.2a Te Irirangi Dr / Te Koha Rd / Town Centre Dr - Network: N101 [AM_Town centre drive four lanes (Network Folder: General)]

Site Category: (None)

Lane Use	and P	erforn	nance	!											
	DEM FLC			NAL DWS	Сар.	Deg. Satn	Lane Util.		Level of Service		ACK OF		Lane Length	Cap. Adi.	Prob. Block.
	[Total				oup.	Salii	Otili.	Delay	Service	[Veh	Dist]	Corning	Lengui	Auj.	DIUCK.
	veh/h	%	veh/h	%	veh/h	v/c	%	sec			m ¯		m	%	%
South: Te I	rirangi l	Drive (S	South)												
Lane 1	375	7.0	375	7.0		0.631	100	26.8	LOS C	11.4	84.9	Short	50	0.0	NA
Lane 2	308	6.7	308	6.7	458	0.674	100	36.9	LOS D	14.4	106.4	Full	294	0.0	0.0
Lane 3	450	6.7	450	6.7	667	0.674	100	40.7	LOS D	23.1	171.1	Full	294	0.0	0.0
Lane 4	124	22.6	124	22.6	137	0.905	100	89.3	LOS F	8.8	73.5	Short	140	0.0	NA
Approach	1257	8.4	1257	8.4		0.905		40.4	LOS D	23.1	171.1				
East: Town	Centre	Road													
Lane 1	83	38.6	83	38.6	733	0.113	100	17.0	LOS B	2.1	19.5	Short	40	0.0	NA
Lane 2 (B)	21	100.0	21	100.0	299	0.070	100	26.9	LOS C	0.6	7.7	Short	63	0.0	NA
Lane 3	57	19.7	57	19.7	95	0.595	100	75 .4	LOS E	3.6	29.6	Full	153	0.0	0.0
Lane 4	45	52.1	45	52.1	76	0.595	100	81.1	LOS F	2.9	29.7	Full	153	0.0	0.0
Approach	206	42.6	206	42.6		0.595		48.1	LOS D	3.6	29.7				
North: Te In	irangi [Orive (N	lorth)												
Lane 1	67	38.7	67	38.7	820	0.082	100	11.8	LOS B	1.1	10.3	Short	42	0.0	NA
Lane 2	575	7.4	575	7.4	664	0.865	100	52.1	LOS D	35.6	265.2	Full	289	0.0	7.2
Lane 3	553	7.4	553	7.4	640	0.865	100	51.8	LOS D	33.9	252.7	Full	289	0.0	<mark>2.9</mark>
Lane 4	73	14.5	73	14.5	305	0.238	100	36.0	LOS D	2.6	20.5	Short	135	0.0	NA
Approach	1268	9.5	1268	9.5		0.865		48.9	LOS D	35.6	265.2				
West: Te K	oha Rd														
Lane 1	79	14.7	79	14.7	190	0.415	100	64.6	LOS E	4.6	36.3	Short	77	0.0	NA
Lane 2	119	13.3	119	13.3	133	0.892	100	88.4	LOS F	8.3	64.6	Full	200	0.0	0.0
Approach	198	13.8	198	13.8		0.892		78.9	LOS E	8.3	64.6				
SouthWest	: Link F	Road													
Lane 1 (B)	17	100.0	17	100.0	201	0.084	100	34.7	LOS C	0.6	7.7	Full	450	0.0	0.0
Approach	17	100.0	17	100.0		0.084		34.7	LOS C	0.6	7.7				
Intersectio n	2945	12.1	2945	12.1		0.905		47.2	LOS D	35.6	265.2				

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab). Lane LOS values are based on average delay per lane.

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

Delay Model: SIDRA Standard (Geometric Delay is included).

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

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

1 Reduced capacity due to a short lane effect. Short lane queues may extend into the full-length lanes. Some upstream delays at entry to short lanes are not included.

Approach	Lane Flo	ows (v	eh/h)							
South: Te Iri	rangi Driv	e (Sou	th)							
Mov.	L2	T1	R2	Total	%HV		Deg.	Lane Prob.	Ov.	
From S						Cap.	Satn	Util. SL Ov.	Lane	
To Exit:						veh/h	v/c	% %	No.	

	W	N	Е									
Lane 1	375	-	-	375	7.0		594 ¹	0.631	100	<mark>64.3</mark>	2	
Lane 2	-	308	_	308	6.7		458 ¹	0.674	100	NA	NA	
Lane 3	-	450	-	450	6.7		667	0.674	100	NA	NA	
Lane 4	-	-	124	124	22.6		137	0.905	100	0.0	3	
Approach	375	758	124	1257	8.4			0.905				
East: Town C	entre R	oad.										
Mov.	L2	L1	T1	R2	Total	%HV	_	Deg.	Lane	Prob.	Ov.	
From E						,,,,,	Cap.	Satn	Util. S	SL Ov.	Lane	
To Exit:	S	SW	W	Ν			veh/h	v/c	%	%	No.	
Lane 1	83	-	-	-	83	38.6	733	0.113	100	0.0	2	
Lane 2	-	21	-	-	21	100.0	299	0.070	100	0.0	3	
Lane 3	-	-	45	11	57	19.7	95	0.595	100	NA	NA	
Lane 4	_	-	-	45	45	52.1	76	0.595	100	NA	NA	
Approach	83	21	45	56	206	42.6		0.595				
North: Te Irira	angi Dri	ve (Nor	th)									
Mov.	L2	T1	R2	Total	%HV			Deg.	Lane	Prob.	Ov.	
From N	L2		1\2	Total	701 I V		Cap.	Satn		SL Ov.	Lane	
To Exit:	Е	S	W				veh/h	v/c	%	%	No.	
Lane 1	67	-	-	67	38.7		820	0.082	100	0.0	3	
Lane 2	_	575	_	575	7.4				100	NA	NA	
Lane 3	_	553	_	553	7.4		640 ¹	0.865	100	NA	NA	
Lane 4	_	_	73	73	14.5		305	0.238	100	0.0	3	
Approach	67	1128	73	1268	9.5			0.865				
West: Te Koh	o Dd											
Mov.	L2	T1	R2	Total	%HV	_		Deg.	Lane	Prob.	Ov.	
From W	LZ	''	ΓZ	TOtal	/0 □ V		Cap.	Satn		SL Ov.	Lane	
To Exit:	N	Е	S				veh/h	v/c	%	%	No.	
Lane 1	20	59	_	79	14.7		190	0.415	100	0.0	2	
Lane 2	_	-	119	119	13.3			0.892	100	NA	NA	
Approach	20	59	119	198	13.8			0.892				
SouthWest: L	ink Day	ad										
Mov.	I nk Ro a R1	ad Total	%HV					Deg	Lane	Prob.	Ov.	
From SW	- RI	าบเลเ	70∏∀				Cap.	Deg. Satn		SL Ov.	Lane	
To Exit:	Е						veh/h	v/c	%	%	No.	
Lane 1	17	17	100.0				201	0.084	100	NA	NA	
Approach	17		100.0					0.084				
- 12 le . 2 2 2								,,				
	Total	-%HVI	Deg . Sat	in (v/c)								
Intersection	2945	12 1		0.905								
I REI SECTION	2070	14.1		0.303								

1 Reduced capacity due to a short lane effect. Short lane queues may extend into the full-length lanes. Some upstream delays at entry to short lanes are not included.

Merge Analysis									
N	Exit Lane lumber		Opng in Lane	Opposing Flow Rate veh/h pcu/h	Critical Gap sec	Follow-up Headway sec	Capacity veh/h	Min. De l ay sec	Merge Delay sec
South Exit: Te Irirang Merge Type: Not Ap		(South)							
Full Length Lane Full Length Lane	1 2	Ū	,	not applied. not applied.					
East Exit: Town Cent Merge Type: Not Ap		d							

Full Length Lane 1 Merge Analysis not applied.
Full Length Lane 2 Merge Analysis not applied.

North Exit: Te Irirangi Drive (North)
Merge Type: Not Applied

Full Length Lane 1 Merge Analysis not applied.
Full Length Lane 2 Merge Analysis not applied.

West Exit: Te Koha Rd Merge Type: **Not Applied**

Full Length Lane 1 Merge Analysis not applied.

SouthWest Exit: Link Road Merge Type: **Not Applied**

Full Length Lane 1 Merge Analysis not applied.

Site: 1.0 [1.0 Pakuranga Rd / Ti Rakau Dr - Import (Site Folder: PM)]

■■ Network: N101 [PM - Town Centre Drive four lanes (Network Folder: General)]

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 96 seconds (Site Practical Cycle Time)

Lane Use	and F	erforn	nance												
		IAND DWS HV 1		IVAL DWS HV 1	Сар.	Deg. Satn	Lane Util.		Level of Service		ACK OF EUE Dist]	Lane Config	Lane Length	Cap. Adj.	Prob. Block.
	veh/h	% -	veh/h	% -	veh/h	v/c	%	sec		•	m ⁻		m	%	%
South: Ti R	akau D	rive													
Lane 1	957	7.3	957	7.3	1075	0.890	100	25.6	LOS C	34.2 ^{N4}	254.3 ^{N4}	Full	174	0.0	50.0
Lane 2	175	4.6	175	4.6	503	0.348	100	34.4	LOS C	5.9	42.9	Full	174	0.0	0.0
Lane 3 (B)	23	100.0	23	100.0	290	0.079	100	24.9	LOS C	0.5	6.7	Full	174	0.0	0.0
Approach	1155	8.7	1155	8.7		0.890		26.9	LOS C	34.2	254.3				
East: Paku	ranga F	Road (E	ast)												
Lane 1	51	3.9	51	3.9	505	0.100	100	32.1	LOS C	1.6	11.3	Short	21	0.0	NA
Lane 2	279	4.1	276	4.1	481 ¹	0.574	100	31.6	LOS C	9.9	71.4	Full	98	0.0	0.0
Lane 3	307	4.1	305	4.1	531	0.574	100	32.2	LOS C	11.1	80.3	Full	98	0.0	0.0
Approach	637	4.1	632 ^{N1}	4.1		0.574		31.9	LOS C	11.1	80.3				
West: Paku	ıranga	Road (\	(Vest)												
Lane 1 (B)	53	100.0	53	100.0	274	0.194	100	26.2	LOS C	1.3	16.5	Full	380	0.0	0.0
Lane 2	458	5.1	458	5.1	528	0.867	100	44.6	LOS D	21.3	155.4	Full	380	0.0	0.0
Lane 3	458	5.1	458	5.1	528	0.867	100	44.6	LOS D	21.3	155.4	Full	380	0.0	0.0
Lane 4	376	8.2	376	8.2	436	0.862	100	51.2	LOS D	17.6	131.8	Short	178	0.0	NA
Lane 5	376	8.2	376	8.2	436	0.862	100	51.2	LOS D	17.6	131.8	Short	105	0.0	NA
Approach	1721	9.4	1721	9.4		0.867		46.9	LOS D	21.3	155.4				
Intersectio n	3513	8.2	3508 ^N	8.2		0.890		37.6	LOS D	34.2	254.3				

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab). Lane LOS values are based on average delay per lane.

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

Delay Model: SIDRA Standard (Geometric Delay is included).

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

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

- 1 Reduced capacity due to a short lane effect. Short lane queues may extend into the full-length lanes. Some upstream delays at entry to short lanes are not included.
- N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.
- N4 Average back of queue has been restricted to the available queue storage space.

Approach	Lane Flo	ows (v	/eh/h)						
South: Ti R	akau Drive	;							
Mov. From S To Exit:	L2 W	R2 E	Total	%HV	Cap. veh/h	Deg. Satn v/c		Prob. SL Ov. %	Ov. Lane No.
Lane 1	957	-	957	7.3	1075	0.890	100	NA	NA
Lane 2	-	175	175	4.6	503	0.348	100	NA	NA
Lane 3	23	-	23	100.0	290	0.079	100	NA	NA
Approach	980	175	1155	8.7		0.890			
East: Paku	ranga Roa	d (Eas	t)						
Mov. From E	L2	T1	Total	%HV	Cap.	Deg. Satn		Prob. SL Ov.	Ov. Lane

To Exit:	S	W			veh/h	v/c	%	%	No.	
Lane 1	51	-	51	3.9	505	0.100	100	0.0	2	
Lane 2	_	276	276	4.1	481 ¹	0.574	100	NA	NA	
Lane 3	-	305	305	4.1	531	0.574	100	NA	NA	
Approach	51	581	632	4.1		0.574				
West: Pakura	anga Ro	ad (We	st)							
Mov. From W To Exit:	T1 E	R2 S	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.	
Lane 1	_	53	53	100.0	274	0.194	100	NA	NA	
Lane 2	458	_	458	5.1	528	0.867	100	NA	NA	
Lane 3	458	-	458	5.1	528	0.867	100	NA	NA	
Lane 4	-	376	376	8.2	436	0.862	100	0.0	3	
Lane 5	-	376	376	8.2	436	0.862	100	<mark>35.8</mark>	4	
Approach	916	805	1721	9.4		0.867				
	Total	%HV[Deg.Sat	in (v/c)						
Intersection	3508	8.2		0.890						

1 Reduced capacity due to a short lane effect. Short lane queues may extend into the full-length lanes. Some upstream delays at entry to short lanes are not included.

Merge Analysis									
	Exit ane ber		Opng in Lane	Opposing Flow Rate veh/h pcu/h	Critica l Gap sec	Follow-up Headway sec		Deg. Satn I v/c	Merge Delay sec
South Exit: Ti Rakau Dr Merge Type: Not Appli									
Full Length Lane Full Length Lane Full Length Lane East Exit: Pakuranga R		Merge Merge	Ana l ysis	not applied. not applied. not applied.					
Merge Type: Not Applie Full Length Lane Full Length Lane	2 2	•	•	not applied.					
West Exit: Pakuranga R Merge Type: Not Appli		(West)							
Full Length Lane Full Length Lane Full Length Lane	1 2 3	Merge	Ana l ysis	not applied. not applied. not applied.					

V Site: 2.1 [2.1 Pakuranga Plaza / Pakuranga Rd - Import (Site

Folder: PM)]

■■ Network: N101 [PM - Town Centre Drive four lanes (Network Folder: General)]

Site Category: (None) Give-Way (Two-Way)

Lane Use	Lane Use and Performance														
		WS HV]		WS HV]	Сар.		Lane Util.		Level of Service	85% B <i>F</i> QUE [Veh		Lane Config	Lane Length	Cap. Adj.	Prob. Block.
	veh/h	%	veh/h	%	veh/h	v/c	%	sec			m		m	%	%
East: Paku	ranga R	Road (E	East)												
Lane 1	319	4.1	319	4.1	1816	0.175	100	0.5	LOS A	0.2	1.1	Full	121	0.0	0.0
Lane 2	331	4.2	331	4.2	1888	0.175	100	0.0	LOS A	0.0	0.0	Full	121	0.0	0.0
Approach	650	4.2	650	4.2		0.175		0.3	NA	0.2	1.1				
West: Pakı	uranga F	Road (West)												
Lane 1	551	5.1	551	5.1	1633	0.338	100	0.0	LOS A	0.0	0.0	Full	108	<mark>-13.0</mark> ^{N3}	
Lane 2	542	5.1	542	5.1	1605	0.338	100	0.0	LOS A	0.0	0.0	Full	108	-13.0 ^{N3}	0.0
Lane 3	24	0.0	24	0.0	847	0.029	100	9.4	LOS A	0.1	0.6	Short	30	0.0	NA
Approach	1117	5.0	1117	5.0		0.338		0.2	NA	0.1	0.6				
SouthWest	t: Pakura	anga F	Plaza												
Lane 1	95	5.3	95	5.3	75	1.273	100	359.4	LOS F	13.3	97.4	Full	196	<mark>-9.4</mark> N3	0.0
Approach	95	5.3	95	5.3		1.273		359.4	LOS F	13.3	97.4				
Intersectio n	1862	4.7	1862	4.7		1.273		18.6	NA	13.3	97.4				

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab). Lane LOS values are based on average delay per lane.

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

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 lanes.

Delay Model: SIDRA Standard (Geometric Delay is included).

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

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

N3 Capacity Adjustment due to downstream lane blockage determined by the program.

		_							
Approach	Lane Flo	ows (v	eh/h)						
East: Pakur	anga Roa	id (Eas	t)						
Mov. From E To Exit:	L1 SW	T1 W	Tota l	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.
Lane 1 Lane 2	31 -	288 331	319 331	4.1 4.2	1816 1888		100 100	NA NA	NA NA
Approach	31	619	650	4.2		0.175			
West: Paku	ranga Roa	ad (We	st)						
Mov. From W To Exit:	T1 E	R3 SW	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.
Lane 1	551	-	551	5.1	1633	0.338	100	NA	NA
Lane 2	542	_	542	5.1	1605		100	NA	NA
Lane 3	-	24	24	0.0	847	0.029	100	0.0	2
Approach	1093	24	1117	5.0		0.338			
SouthWest:	Pakurang	ga Plaz	а						

Mov. From SW To Exit:	L3 W	R1 E	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. S %	Prob. SL Ov. %		
Lane 1	29	66	95	5.3	75	1.273	100	NA	NA	
Approach	29	66	95	5.3		1.273				
	Total	%HVE	Deg.Sat	n (v/c)						
Intersection	1862	4.7		1.273						

Merge Analysis					
Ex Lan Numbe	e Lane Opng in Flow Rate	Critical Gap sec	Follow-up Lane Capacity Headway Flow Rate sec veh/h veh/h	Satn De l ay	Merge De l ay sec
East Exit: Pakuranga Roa Merge Type: Not Applied	ad (East)				
Full Length Lane Full Length Lane	 Merge Analysis not applied. Merge Analysis not applied. 				
West Exit: Pakuranga Roa Merge Type: Not Applied					
3	 Merge Analysis not applied. Merge Analysis not applied. 				
SouthWest Exit: Pakurang Merge Type: Not Applied	_				
Full Length Lane	1 Merge Analysis not applied.				

Site: 3.0 [3.0 Pakuranga Highway / Pakuranga Rd - Import (Site Folder: PM)]

■■ Network: N101 [PM - Town Centre Drive four lanes (Network Folder: General)]

Site Category: (None)

Lane Use and Performance															
		IAND DWS HV 1	ARR FLC [Tota l)WS	Сар.	Deg. Satn	Lane Util.		Level of Service		ACK OF EUE Dist]	Lane Config	Lane Length	Cap. Adj.	Prob. Block.
	veh/h	%	veh/h		veh/h	v/c	%	sec			m		m	%	%
East: Paku	ranga F	Road (E	ast)												
Lane 1 (B)	9	100.0	9	100.0	614	0.015	100	12.2	LOS B	0.1	1.5	Short	24	0.0	NA
Lane 2	483	5.5	483	5.5	1015 ¹	0.476	100	12.8	LOS B	8.3	61.1	Full	183	0.0	0.0
Lane 3	488	5.5	488	5.5	1027	0.476	100	12.8	LOS B	8.5	62.1	Full	183	0.0	0.0
Lane 4	262	3.3	262	3.3	310	0.844	100	39.4	LOS D	8.6	62.2	Full	183	0.0	0.0
Lane 5	262	3.3	262	3.3	310	0.844	100	39.4	LOS D	8.6	62.2	Short	60	0.0	NA
Approach	1503	5.3	1503	5.3		0.844		22.1	LOS C	8.6	62.2				
NorthWest:	Pakur	anga R	oad (V	Vest)											
Lane 1	536	4.7	529	4.7	642	0.825	100	30.2	LOS C	16.3	118.4	Full	121	0.0	13.0
Lane 2	536	4.7	529	4.7	642	0.825	100	30.2	LOS C	16.3	118.4	Full	121	0.0	13.0
Lane 3	99	11.1	98	11.1	156	0.629	100	39.3	LOS D	3.0	23.1	Short	98	0.0	NA
Approach	1170	5.2	1157 ^N	5.2		0.825		31.0	LOS C	16.3	118.4				
West: Pakı	ıranga	Road B	usway	Link (l	Northbo	ound)									
Lane 1 (B)	28	100.0	28	100.0	561	0.050	100	10.3	LOS B	0.4	5.7	Full	215	0.0	0.0
Approach	28	100.0	28	100.0		0.050		10.3	LOS B	0.4	5.7				
SouthWest	: Flyov	er													
Lane 1	122	7.4	122	7.4	165	0.741	100	41.7	LOS D	3.9	28.9	Short	70	0.0	NA
Lane 2	762	3.9	762	3.9	843	0.904	100	35.9	LOS D	26.8	194.0	Full	1162	0.0	0.0
Lane 3	811	3.9	811	3.9	897	0.904	100	35.9	LOS D	29.1	210.8	Full	1162	0.0	0.0
Approach	1695	4.2	1695	4.2		0.904		36.3	LOS D	29.1	210.8				
Intersectio n	4396	5.4	4383 ^N	5.5		0.904		29.9	LOS C	29.1	210.8				

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab). Lane LOS values are based on average delay per lane.

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

Delay Model: SIDRA Standard (Geometric Delay is included).

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

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

1 Reduced capacity due to a short lane effect. Short lane queues may extend into the full-length lanes. Some upstream delays at entry to short lanes are not included.

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

Approach L	Approach Lane Flows (veh/h)												
East: Pakurar	East: Pakuranga Road (East)												
Mov. From E To Exit:	L2 S	L1 SW	R1 NW	Total	%HV	Cap. veh/h	Deg. Satn v/c		Prob. SL Ov. %				
Lane 1	9	-	-	9	100.0	614	0.015	100	0.0	2			
Lane 2	-	483	-	483	5.5	1015 ¹	0.476	100	NA	NA			
Lane 3	-	488	-	488	5.5	1027	0.476	100	NA	NA			
Lane 4	-	-	262	262	3.3	310	0.844	100	NA	NA			

Lane 5	_	_	262	262	3.3	310	0.844	100	<mark>18.2</mark>	4	
Approach	9	971	523	1503	5.3		0.844				
NorthWest: P	akuran	ga Roa	d (West	t)							
Mov. From NW To Exit:	L1 E	R2 SW	Total	%HV		Cap. veh/h	Deg. Satn v/c		Prob. SL Ov. %	Ov. Lane No.	
Lane 1 Lane 2	529 529	-	529 529	4.7 4.7		642	0.825 0.825	100 100	NA NA	NA NA	
Lane 3	4050	98 98	98 1157	11.1 5.2		156	0.629	100	0.0	2	
Approach	1059						0.825				
West: Pakura	inga Ro	ad Bus	way Lin	ık (North	nbound)						
Mov. From W To Exit:	T1 E	Total	%HV			Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.	
Lane 1	28	28	100.0			561	0.050	100	NA	NA	
Approach	28	28	100.0				0.050				
SouthWest: F	lyover										
Mov. From SW To Exit:	L2 NW	R1 E	Total	%HV		Cap. veh/h	Deg. Satn v/c		Prob. SL Ov. %	Ov. Lane No.	
Lane 1	122	_	122	7.4		165	0.741	100	0.0	2	
Lane 2	-	762	762	3.9		843 ¹	0.904	100	NA	NA	
Lane 3	_	811	811	3.9		897	0.904	100	NA	NA	
Approach	122	1573	1695	4.2			0.904				
	Total	%HVI	Deg.Sat	tn (v/c)							
Intersection	4383	5.5		0.904							

1 Reduced capacity due to a short lane effect. Short lane queues may extend into the full-length lanes. Some upstream delays at entry to short lanes are not included.

Merge Analysis					
E: Lar Numb		Critical Gap sec	Follow-up Lane Capacity Headway Flow Rate sec veh/h veh/h	Satn Delay	Merge De l ay sec
South Exit: Pakuranga R Merge Type: Not Applie	Road Busway Link (Southbound)				
Full Length Lane	1 Merge Analysis not applied.				
East Exit: Pakuranga Ro Merge Type: Not Applie					
Full Length Lane	1 Merge Analysis not applied.				
Full Length Lane	2 Merge Analysis not applied.				
Full Length Lane	3 Merge Analysis not applied.				
NorthWest Exit: Pakuran Merge Type: Not Applie					
Full Length Lane	1 Merge Analysis not applied.				
Full Length Lane	2 Merge Analysis not applied.				
SouthWest Exit: Flyover Merge Type: Not Applied					
Full Length Lane	1 Merge Analysis not applied.				
Full Length Lane	2 Merge Analysis not applied.				

Organisation: AECOM AUSTRALIA PTY LTD | Licence: NETWORK / Enterprise | Processed: Friday, 18 August 2023 2:28:33 PM Project: C:\Users\jacques.vandenheever\Eastern Busway Alliance\PAA - 12 Transport\3-3. Integrated Transport Assessment\ITA 3 - EB2,3R,3C,4i\Users\jacques.vandenheever\Eastern Busway Alliance\PAA - 12 Transport\3-3. Integrated Transport Assessment\ITA 3 - EB2,3R,3C,4i\Users\jacques.vandenheever\Eastern Busway Alliance\PAA - 12 Transport\3-3. Integrated Transport Assessment\ITA 3 - EB2,3R,3C,4i\Users\jacques.vandenheever\Eastern Busway Alliance\PAA - 12 Transport\3-3. Integrated Transport Assessment\ITA 3 - EB2,3R,3C,4i\Users\jacques.vandenheever\Eastern Busway Alliance\PAA - 12 Transport\3-3. Integrated Transport Assessment\ITA 3 - EB2,3R,3C,4i\Users\jacques.vandenheever\Eastern Busway Alliance\PAA - 12 Transport\3-3. Integrated Transport Assessment\ITA 3 - EB2,3R,3C,4i\Users\jacques.vandenheever\Eastern Busway Alliance\PAA - 12 Transport\3-3. Integrated Transport Assessment\ITA 3 - EB2,3R,3C,4i\Users\jacques.vandenheever\Eastern Busway Alliance\PAA - 12 Transport\3-3. Integrated Transport Assessment\ITA 3 - EB2,3R,3C,4i\Users\jacques B2,3R,3C,4i\Users\jacques B2,3R,3C,4i\Users\jac

CCG LANE SUMMARY

□□ Common Control Group: CCG3 [Aylesbury/WR/Reeves Rd]

■■ Network: N101 [PM - Town Centre Drive four lanes (Network Folder: General)]

EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 118 seconds (Network User-Given Cycle Time)

Lane Use	Lane Use and Performance (CCG) DEMAND ARRIVAL Deg. Lane Aver, Level of 85% BACK OF Lane Lane Cap. Prob.														
		IAND DWS		NVAL DWS	Сар.		Lane Util.		Level of Service		ACK OF		Lane Length	Cap. Adj.	Prob. B l ock.
	[Total veh/h		[Total veh/h		veh/h	v/c	%	sec		[Veh	Dist]		m	%	%
Site: 5,2v [Import]		m			70	76
SouthEast:	Reeve	s Road	(East)	,											
Lane 1	76	5.3	76	5.3	1791	0.042	100	1.9	LOS A	0.0	0.0	Full	27	0.0	0.0
Approach	76	5.3	76	5.3		0.042		1.9	LOS A	0.0	0.0				
East: Paku	ranga F	Rd Busv	way Lir	nk (Sou	thbour	nd)									
Lane 1 (B)	9	100.0	9	100.0	135	0.067	100	56.0	LOS E	0.4	5.6	Full	203	0.0	0.0
Approach	9	100.0	9	100.0		0.067		56.0	LOS E	0.4	5.6				
NorthWest	Aylest	oury Str	eet												
Lane 1	108	3.7	108	3.7	124	0.869	100	69.3	LOS E	6.3	45.5	Full	284	0.0	0.0
Approach	108	3.7	108	3.7		0.869		69.3	LOS E	6.3	45.5				
SouthWest	: Reeve	es Road	d (Sout	:h)											
Lane 1	153	26.2	152	26.2	165	0.923	100	76.9	LOS E	9.5	81.4	Full	180	0.0	0.0
Approach	153	26.2	152	26.2		0.923		76.9	LOS E	9.5	81.4				
Intersectio	346	16.5	345 ^{N1}	16.5		0.923		57.5	LOS E	9.5	81.4				
n	040	10.0	040	10.0		0.020		01.0	LOOL	3.3	01.4				
Site: 7.3v [7.3 Will	iam Ro	berts F	Rd / Red	eves R	d signa	lised -	Import]							
SouthEast:	Reeve	s Rd (E	ast)												
Lane 1	119	4.2	119	4.2	140	0.847	100	70.7	LOS E	6.8	49.4	Full	810	0.0	0.0
Approach	119	4.2	119	4.2		0.847		70.7	LOS E	6.8	49.4				
NorthWest	Reeve	s Rd (V	Vest)												
Lane 1	211	7.6	211	7.6	699	0.302	100	12.6	LOS B	3.7	27.9	Full	27	0.0	<mark>18.1</mark>
Approach	211	7.6	211	7.6		0.302		12.6	LOS B	3.7	27.9				
SouthWest	: Willia	m Robe	rts Ro	ad (Sou	uth)										
Lane 1	364	6.3	354	6.3	392	0.904	100	65.8	LOS E	21.3	156.9	Full	223	0.0	0.0
Approach	364	6.3	354 ^{N1}	6.3		0.904		65.8	LOS E	21.3	156.9				
Intersectio	694	6.3	684 ^{N1}	6.4		0.904		50.2	LOS D	21.3	156.9				
n															

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab). Lane LOS values are based on average delay per lane.

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

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

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

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

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

Approac	h Lane	Flows	(CCG) (veh/h)							
Site: 5.2v	[5.2 Ay l e	sbury	St/ Ree	ves Road/	Busway Link	signalised - In	nport]				
SouthEas	t: Reeves	Roac	l (East)								
Mov.	L2	T1	Total	%HV		Deg.	Lane	Prob.	Ov.		

From SE	SW	NW				Cap.	Satn v/c	Util. %	SL Ov. %	Lane No.	
To Exit:	300	INVV				veh/h	V / C	70	70	110.	
Lane 1 Approac	58 58	18 18	76 76	5.3 5.3		1791	0.042	100	NA	NA	
h											
East: Paku				k (South	nbound)						
Mov. From E	L1	Tota l	%HV			Cap.	Deg. Satn	Lane	Prob. SL Ov.	Ov. Lane	
To Exit:	SW					veh/h	v/c	%	%	No.	
Lane 1	9	9	100.0			135	0.067	100	NA	NA	
Approac h	9	9	100.0				0.067				
NorthWest	: Aylesl	bury Str	reet								
Mov.	T1	R2	Total	%HV			Deg.	Lane		Ov.	
From NW To Exit:	SE	SW				Cap. veh/h	Satn v/c	Util. %	SL Ov. %	Lane No.	
Lane 1	98	10	108	3.7		124	0.869	100	NA	NA	
Approac h	98	10	108	3.7			0.869				
SouthWest	t: Reev	es Roa	d (South	h)							
Mov.	L2	T1	R2	Total	%HV		Deg.	Lane		Ov.	
From SW To Exit:	NW	NE	SE			Cap. veh/h	Satn v/c	Util. %	SL Ov. %	Lane No.	
Lane 1	11	28	114	152	26.2	165	0.923	100	NA	NA	
Approac	11	28	114	152	26.2		0.923				
h											
	Tota l	%HV I	Deg.Sat	tn (v/c)							
Intersec tion	345	16.5		0.923							
Site: 7.3v [7.3 Wil	liam Ro	berts R	d / Reev	ves Rd signa l is	sed - Im	port]				
SouthEast				0/1.01							
Mov. From	L2	T1	Tota l	%HV	Сар.	Deg. Satn	Lane Util.	Prob. SL Ov.	Ov. Lane		
SE	SW	NW			veh/h	v/c	%	%	No.		
To Exit:	72	47	119	4.2	140	0.847	100	NA	NA		
Approac	72	47	119	4.2		0.847					
h											
NorthWest				0/1-12-/							
Mov.	T1										
From		R2	Total	%HV	Сар.	Deg. Satn	Lane Util.	Prob. SL Ov.	Ov. Lane		
NW	SE	SW	lotal	%HV 	Cap. veh/h	Satn v/c					
NW To Exit:		SW			veh/h	Satn v/c	Util. %	SL Ov. %	Lane No.		
NW To Exit: Lane 1 Approac	SE 165 165		211 211	7.6 7.6		Satn v/c	Util.	SL Ov.	Lane		
NW To Exit: Lane 1	165	SW 46	211	7.6	veh/h	Satn v/c 0.302	Util. %	SL Ov. %	Lane No.		
NW To Exit: Lane 1 Approac h SouthWest	165 165 t: Willia	SW 46 46 m Robe	211 211 erts Roa	7.6 7.6 ad (Soutl	veh/h 699	Satn v/c 0.302 0.302	Util. % 100	SL Ov. % NA	Lane No.		
NW To Exit: Lane 1 Approac h	165 165	SW 46 46	211 211	7.6 7.6 ad (Soutl	veh/h 699 h) Cap.	Satn v/c 0.302 0.302 Deg. Satn	Util. % 100 Lane Util.	SL Ov. % NA Prob. SL Ov.	NA Ov. Lane		
NW To Exit: Lane 1 Approac h SouthWest Mov.	165 165 t: Willia	SW 46 46 m Robe	211 211 erts Roa	7.6 7.6 ad (Soutl	veh/h 699 h)	Satn v/c 0.302 0.302	Util. % 100 Lane	SL Ov. % NA Prob.	NA Ov.		
NW To Exit: Lane 1 Approac h SouthWest Mov. From SW To Exit: Lane 1	165 165 t: Willia L2 NW 29	SW 46 46 m Rober R2 SE 325	211 211 erts Roa Total	7.6 7.6 ad (Sout) %HV	veh/h 699 h) Cap.	0.302 0.302 Deg. Satn v/c	Util. % 100 Lane Util.	SL Ov. % NA Prob. SL Ov.	NA Ov. Lane		
NW To Exit: Lane 1 Approac h SouthWest Mov. From SW To Exit:	165 165 :: Willia L2 NW	SW 46 46 m Rober R2 SE	211 211 erts Roa Total	7.6 7.6 ad (Soutl	veh/h 699 h) Cap. veh/h	0.302 0.302 Deg. Satn v/c	Util. % 100 Lane Util. %	SL Ov. % NA Prob. SL Ov. %	NA Ov. Lane No.		

Intersec 684 6.4 0.904 tion

Lane flow rates given in this report are based on the arrival flow rates subject to upstream capacity constraint where applicable.

Merge Analysis (CCG) Short Percent Opposing Critical Follow-up Lane Capacity Deg. Min. Merge Headway F**l**ow Rate Lane Opng in Flow Rate Satn Delay Delay Lane % veh/h pcu/h sec veh/h veh/h v/c sec Site: 5.2v [5.2 Aylesbury St/ Reeves Road/ Busway Link signalised - Import] SouthEast Exit: Reeves Road (East) Merge Type: Not Applied Full Length Lane 1 Merge Analysis not applied. NorthEast Exit: Pakuranga Rd Busway Link (Northbound) Merge Type: Not Applied Full Length Lane 1 Merge Analysis not applied. NorthWest Exit: Aylesbury Street Merge Type: Not Applied Full Length Lane Merge Analysis not applied. SouthWest Exit: Reeves Road (South) Merge Type: Not Applied Full Length Lane 1 Merge Analysis not applied. Site: 7.3v [7.3 William Roberts Rd / Reeves Rd signalised - Import] SouthEast Exit: Reeves Rd (East) Merge Type: Not Applied Full Length Lane Merge Analysis not applied. NorthWest Exit: Reeves Rd (West) Merge Type: Not Applied Full Length Lane Merge Analysis not applied. SouthWest Exit: William Roberts Road (South) Merge Type: Not Applied Full Length Lane 1 Merge Analysis not applied.

V Site: 7.1 [7.1 William Roberts Rd / Cortina PI - Import (Site

Folder: PM)]

■■ Network: N101 [PM - Town Centre Drive four lanes (Network Folder: General)]

Site Category: (None) Give-Way (Two-Way)

Lane Use	and P	erforr	nance												
		WS HV]	ARRI FLO' [Total	WS HV]	Cap.		Lane Util.	Delay	Level of Service		ACK OF EUE Dist]	Lane Config	Lane Length	Cap. Adj.	Prob. Block.
NorthEast:	veh/h	% Rohe	veh/h rts Road	% 1 (Nor	veh/h	v/c	%	sec			m		m	%	%
Lane 1	130	6.9	130	6.9	,	0.081	100	1.6	LOS A	0.2	1.5	Full	223	0.0	0.0
Approach	130	6.9	130	6.9	1003	0.081	100	1.6	NA	0.2	1.5	ruii	223	0.0	0.0
NorthWest	Cortina	a Place	9												
Lane 1	271	9.2	271	9.2	965	0.281	100	2.9	LOS A	1.0	7.4	Full	177	0.0	0.0
Approach	271	9.2	271	9.2		0.281		2.9	LOSA	1.0	7.4				
SouthWest	: Willian	n Robe	erts Roa	d (So	uth)										
Lane 1	356	6.5	335	6.4	1596	0.210	100	0.9	LOS A	0.4	2.9	Full	110	0.0	0.0
Approach	356	6.5	335 ^{N1}	6.4		0.210		0.9	NA	0.4	2.9				
Intersectio n	757	7.5	736 ^{N1}	7.7		0.281		1.8	NA	1.0	7.4				

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab). Lane LOS values are based on average delay per lane.

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

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 lanes.

Delay Model: SIDRA Standard (Geometric Delay is included).

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

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

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

Approach I	Lane Fl	ows (v	/eh/h)							
NorthEast: V	Villiam R	oberts l	Road (I	North)						
Mov. From NE To Exit:	T1 SW	R2 NW	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.	
Lane 1	98	32	130	6.9	1603	0.081	100	NA	NA	
Approach	98	32	130	6.9		0.081				
NorthWest: 0	Cortina P	lace								
Mov. From NW To Exit:	L2 NE	R2 SW	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.	
Lane 1	122	149	271	9.2	965	0.281	100	NA	NA	
Approach	122	149	271	9.2		0.281				
SouthWest: \	William F	Roberts	Road	(South)						
Mov. From SW To Exit:	L2 NW	T1 NE	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.	
Lane 1	84	251	335	6.4	1596	0.210	100	NA	NA	
Approach	84	251	335	6.4		0.210				

Merge Analysis								
Ex Lar Numbe	e Lane	Opng in Lane	Opposing Flow Rate veh/h pcu/h	Critical Gap sec	Follow-up Headway	Capacity veh/h	Deg. Satn	Merge Delay sec
NorthEast Exit: William R Merge Type: Not Applied	oberts Roa		remm peam			 7011111	•,,,	 000
Full Length Lane	1 Merge	Ana l ysis	not applied.					
NorthWest Exit: Cortina F Merge Type: Not Applied								
Full Length Lane	1 Merge	Ana l ysis	not applied.					
SouthWest Exit: William F Merge Type: Not Applied		ad (South)					
Full Length Lane Full Length Lane	•	•	not applied. not applied.					

Site: 4.0 [4.0 Palm Ave / Aylesbury St - Import (Site Folder: PM)]

■■ Network: N101 [PM - Town Centre Drive four lanes (Network Folder: General)]

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 150 seconds (Site User-Given Phase Times)

Lane Use	and P	erform	nance												
	DEM FLC [Total	AND WS	ARR	IVAL DWS	Сар.	Deg. Satn	Lane Util.		Level of Service		ACK OF EUE Dist]	Lane Config	Lane Length	Cap. Adj.	Prob. Block.
	veh/h	%	veh/h		veh/h	v/c	%	sec			m -		m	%	%
South: Ti R	akau D	rive (Ea	ast)												
Lane 1	389	7.8	389	7.8		0.986	100	116.1	LOS F	21.5 ^{N4}	160.7 ^{N4}	Full	110	<mark>-43.1</mark> N3	<mark>50.0</mark>
Lane 2	715	6.8	715	6.8	725 ¹	0.986	100	91.3	LOS F	21.7 ^{N4}	160.7 ^{N4}	Full	110	0.0	<mark>50.0</mark>
Lane 3	59	6.8	59	6.8	67	0.877	100	94.3	LOS F	4.4	32.6	Short	30	0.0	NA
Lane 4 (B)	23	100.0	23	100.0	613	0.038	100	4.4	LOS A	0.0	0.2	Full	110	0.0	0.0
Approach	1186	8.9	1186	8.9		0.986		97.9	LOS F	21.7	160.7				
East: Ayles	bury St	reet													
Lane 1	27	11.1	27	11.1	79	0.343	100	43.6	LOS D	1.2	9.3	Short	30	<mark>-42.8</mark> N7	NA
Lane 2	114	8.8	114	8.8	184 ¹	0.621	100	70.3	LOS E	7.3	54.7	Full	40	0.0	<mark>43.8</mark>
Approach	141	9.2	141	9.2		0.621		65.2	LOS E	7.3	54.7				
North: Ti Ra	akau D	rive (W	est)												
Lane 1 (B)	53	100.0	53	100.0	613	0.086	100	4.4	LOS A	0.0	0.6	Full	174	0.0	0.0
Lane 2	260	8.8	260	8.8	862	0.301	100	25.3	LOS C	9.5	71.6	Short	50	0.0	NA
Lane 3	252	7.8	252	7.8	393 ¹	0.641	100	37.3	LOS D	12.4	92.6	Full	174	-42.8 ^{N7}	0.0
Lane 4	249	7.8	249	7.8	387	0.641	100	39.0	LOS D	12.8	95.9	Full	174	<mark>-50.0</mark> N7	0.0
Lane 5	39	7.7	39	7.7	67	0.583	100	86.5	LOS F	2.7	20.3	Short	64	0.0	NA
Approach	853	13.8	853	13.8		0.641		34.4	LOS C	12.8	95.9				
West: Palm	Avenu	ie													
Lane 1	86	4.7	86	4.7	142	0.606	100	72.1	LOS E	5.6	40.5	Full	87	<mark>-42.7</mark> N7	0.0
Approach	86	4.7	86	4.7		0.606		72.1	LOS E	5.6	40.5				
Intersectio n	2266	10.6	2266	10.6		0.986		71.0	LOS E	21.7	160.7				

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab). Lane LOS values are based on average delay per lane.

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

Delay Model: SIDRA Standard (Geometric Delay is included).

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

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

- 1 Reduced capacity due to a short lane effect. Short lane queues may extend into the full-length lanes. Some upstream delays at entry to short lanes are not included.
- N3 Capacity Adjustment due to downstream lane blockage determined by the program.
- N4 Average back of queue has been restricted to the available queue storage space.
- N7 The capacity reduction has been determined from the queue blockage probability of a Site further downstream due to intermediate continuous lanes.

Approach L	_ane Flo	ows (ve	eh/h)								
South: Ti Rak	kau Drive	e (East)									
Mov. From S To Exit:	L2 W	T1 N	R2 E	Total	%HV	Cap. veh/h	Deg. Satn v/c		Prob. SL Ov. %		
Lane 1 Lane 2	94 -	295 715	-	389 715	7.8 6.8	395 725 ¹	0.986 0.986	100 100	NA NA	NA NA	

Lane 3	_	_	59	59	6.8	67	0.877	100	22.4	2	
Lane 4	_	23	_	23	100.0		0.038	100	NA	NA	
Approach	94	1033	59	1186	8.9		0.986				
East: Aylesbu	ıry Stre	et									
Mov. From E	L2	T1	R2	Total	%HV	Cap.	Deg. Satn		Prob. SL Ov.	Ov. Lane	
To Exit:	S	W	N			veh/h	v/c	%	%	No.	
Lane 1	27	-	-	27	11.1	79	0.343	100	0.0	2	
Lane 2	_	21	93	114	8.8	184 ¹	0.621	100	NA	NA	
Approach	27	21	93	141	9.2		0.621				
North: Ti Rak	au Driv	e (West)								
Mov. From N	L2	T1	R2	Total	%HV	Cap.	Deg. Satn		Prob. SL Ov.	Ov. Lane	
To Exit:	Е	S	W			veh/h	v/c	%	%	No.	
Lane 1	_	53	_	53	100.0	613	0.086	100	NA	NA	
Lane 2	260	-	-	260	8.8		0.301	100	<mark>48.1</mark>	3	
Lane 3	-	252	-	252	7.8	393 ¹	0.641	100	NA	NA	
Lane 4	-	249	-	249	7.8	387	0.641	100	NA	NA	
Lane 5	-	-	39	39	7.7	67	0.583	100	0.0	4	
Approach	260	554	39	853	13.8		0.641				
West: Palm A	venue										
Mov.	L2	T1	R2	Total	%HV		Deg.		Prob.	Ov.	
From W						Cap.	Satn		SL Ov.	Lane	
To Exit:	N	Е	S			veh/h	v/c	%	%	No.	
Lane 1	31	22	33	86	4.7	142	0.606	100	NA	NA	
Approach	31	22	33	86	4.7		0.606				
	Total	%HV [Deg.Sat	n (v/c)							
Intersection	2266	10.6		0.986							

1 Reduced capacity due to a short lane effect. Short lane queues may extend into the full-length lanes. Some upstream delays at entry to short lanes are not included.

Merge Analysis					
Exi Lane Numbe	e Lane Opng in F l ow Rate	Critical Gap sec	Follow-up Lane Capacity Headway Flow Rate sec veh/h veh/h	Satn Delay	Merge De l ay sec
South Exit: Ti Rakau Drive Merge Type: Not Applied					
Full Length Lane	 Merge Analysis not applied. Merge Analysis not applied. Merge Analysis not applied. 				
East Exit: Aylesbury Stree Merge Type: Not Applied					
Full Length Lane	1 Merge Analysis not applied.				
North Exit: Ti Rakau Drive Merge Type: Not Applied	,				
Full Length Lane	 Merge Analysis not applied. Merge Analysis not applied. Merge Analysis not applied. 				
West Exit: Palm Avenue Merge Type: Not Applied					
Full Length Lane	1 Merge Analysis not applied.				

Site: 5.0 [5.0 Pakuranga Highway / Reeves Rd - Import (Site

Folder: PM)]

■■ Network: N101 [PM - Town Centre Drive four lanes (Network Folder: General)]

Site Category: (None)

Single Point Interchange (Signals) - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 150 seconds (Site User-Given Phase Times)

Lane Use	and P	erforn	nance												
	DEM FLC [Total veh/h)WS			Cap.	Deg. Satn	Lane Util.		Level of Service		ACK OF EUE Dist] m	Lane Config	Lane Length m	Cap. Adj. %	Prob. Block.
SouthEast:					VC11//11	•// 0									
Lane 1	778	8.6	778	8.6	1416	0.550	100	9.5	LOS A	16.8	126.0	Full	90	0.0	<mark>46.0</mark>
Lane 2	425	8.0	425	8.0	486	0.875	100	51.7	LOS D	17.6 ^{N4}	131.5 ^{N4}	Full	90	<mark>-50.0</mark> ^{N7}	<mark>50.0</mark>
Lane 3	425	8.0	425	8.0	486	0.875	100	51.7	LOS D	17.6 ^{N6}	131.5 ^{N6}	Full	90	<mark>-50.0</mark> N3	50.0
Lane 4 (B)	13	100.0	13	100.0	287	0.045	100	32.4	LOS C	0.5	6.2	Full	90	0.0	0.0
Approach	1641	9.0	1641	9.0		0.875		31.6	LOS C	17.6	131.5				
NorthEast:	Reeve	s Road													
Lane 1 (B)	9	100.0	9	100.0	190	0.047	100	42.8	LOS D	0.4	5.1	Full	50	0.0	0.0
Approach	9	100.0	9	100.0		0.047		42.8	LOS D	0.4	5.1				
NorthWest:	Ti Rak	au Driv	e (We	st)											
Lane 1 (B)	53	100.0	53	100.0	326	0.162	100	33.1	LOS C	1.9	24.6	Full	110	0.0	0.0
Lane 2	247	6.9	246	6.9	285	0.865	100	52.2	LOS D	12.7	94.3	Full	110	0.0	<mark>1.0</mark>
Lane 3	247	6.9	246	6.9	285	0.865	100	52.2	LOS D	12.7	94.3	Full	110	0.0	1.0
Lane 4	83	12.0	83	12.1	136	0.610	100	80.3	LOS F	5.5	42.6	Short	70	0.0	NA
Approach	629	15.4	629	15.4		0.865		54.3	LOS D	12.7	94.3				
SouthWest	: Pakur	anga H	lighwa	у											
Lane 1	320	4.7	320	4.7	345	0.928	100	89.6	LOS F	26.7	194.4	Short	125	<mark>-50.0</mark> N7	NA
Lane 2	389	7.9	389	7.9	438	888.0	100	78.4	LOS E	27.9	208.3	Short	220	0.0	NA
Lane 3	389	7.9	389	7.9	438	0.888	100	78.4	LOS E	27.9	208.3	Full	623	0.0	0.0
Lane 4	389	7.9	389	7.9	438	0.888	100	78.4	LOS E	27.9	208.3	Short	195	0.0	NA
Approach	1488	7.2	1488	7.2		0.928		80.8	LOS F	27.9	208.3				
Intersectio n	3767	9.6	3767	9.6		0.928		54.8	LOS D	27.9	208.3				

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab). Lane LOS values are based on average delay per lane.

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

Delay Model: SIDRA Standard (Geometric Delay is included).

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

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

- N3 Capacity Adjustment due to downstream lane blockage determined by the program.
- N4 Average back of queue has been restricted to the available queue storage space.
- N6 Continuous Lane results determined by Back of Queue values of downstream lanes (proportional to lane movement flows) but average back of queue has been restricted to the available queue storage space.
- N7 The capacity reduction has been determined from the queue blockage probability of a Site further downstream due to intermediate continuous lanes.

Approach L	ane Fl	ows (v	/eh/h)		
SouthEast: Ti	Rakau	Drive (East)		
Mov.	L2	T1	Total	%HV	Deg. Lane Prob. Ov.
From SE					Cap. Satn Util. SL Ov. Lane
To Exit:	SW	NW			veh/h v/c % No.

Lane 1	778	-	778	8.6		1416	0.550	100	NA	NA	
Lane 2	-	425	425	8.0		486	0.875	100	NA	NA	
Lane 3	-	425	425	8.0		486	0.875	100	NA	NA	
Lane 4	-	13	13	100.0		287	0.045	100	NA	NA	
Approach	778	863	1641	9.0			0.875				
NorthEast: R	eeves F	Road									
Mov.	R2	Total	%HV				Deg.	Lane	Prob.	Ov.	
From NE						Cap. veh/h	Satn v/c	Util. %	SL Ov. %	Lane No.	
To Exit:	NW										
Lane 1	9	9	100.0			190	0.047	100	NA	NA	
Approach	9	9	100.0				0.047				
NorthWest: T	ï Rakau	Drive	(\N/est)								
Mov.	L2	T1	R2	Total	%HV		Deg.	Lane	Prob.	Ov.	
From NW	LZ		114	Total	70117	Cap.	Satn		SL Ov.	Lane	
To Exit:	NE	SE	SW			veh/h	v/c	%	%	No.	
Lane 1	28	25	_	53	100.0	326	0.162	100	NA	NA	
Lane 2	_	246	_	246	6.9	285	0.865	100	NA	NA	
Lane 3	_	246	_	246	6.9		0.865	100	NA	NA	
Lane 4	_	_	83	83	12.1	136	0.610	100	0.0	3	
Approach	28	518	83	629	15.4		0.865				
SouthWest: F	Pakuran	ga Higl	hway								
Mov.	L2		Total	%HV			Deg.	Lane	Prob.	Ov.	
From SW						Cap.	Satn		SL Ov.	Lane	
To Exit:	NW	SE				veh/h	v/c	%	%	No.	
Lane 1	320	_	320	4.7		345	0.928	100	<mark>55.9</mark>	2	
Lane 2	_	389	389	7.9		438	0.888	100	10.1	3	
Lane 3	_	389	389	7.9		438	0.888	100	NA	NA	
Lane 4	-	389	389	7.9		438	0.888	100	<mark>21.0</mark>	3	
Approach	320	1168	1488	7.2			0.928				
	Total	%HVI	Deg.Sat	tn (v/c)							
Intersection	3767	9.6		0.928							
ITICISCUIUII	3707	9.0		0.520							

Merge Analysis		
Exi Land Numbe	e Lane Opng in Flow Rate r Length Lane	Gap Headway Flow Satn Delay Delay Rate
SouthEast Exit: Ti Rakau I Merge Type: Not Applied	m %veh/h pcu/h Orive (East)	n sec sec veh/h veh/h v/c sec sec
Full Length Lane Full Length Lane	 Merge Analysis not applied. Merge Analysis not applied. Merge Analysis not applied. Merge Analysis not applied. 	
NorthEast Exit: Reeves Ro Merge Type: Not Applied	oad	
Full Length Lane	1 Merge Analysis not applied.	
NorthWest Exit: Ti Rakau Merge Type: Not Applied	Drive (West)	
Full Length Lane	 Merge Analysis not applied. Merge Analysis not applied. Merge Analysis not applied. 	
SouthWest Exit: Pakurang	ıa Highway	

Merge Type: Zipper										
Exit Short Lane	1	280	50.0 41	44	2.50	2.00	778	1751 0.444	0.0	0.0
Merge Lane	2	-	50.0 389	406	2.50	2.00	83	1278 0.065	0.4	0.4

Site: 7.0 [7.0 William Roberts Rd/ Mattson Rd/ Ti Rakau Drive - Import (Site Folder: PM)]

Centre Drive four lanes (Network Folder: General)

Scheme Design Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 120 seconds (Site User-Given Phase Times)

Lane Use and Performance															
Luno Goo	DEM FLC	IAND DWS	ARR	IVAL WS	Сар.	Deg. Satn	Lane Util.		Level of Service		ACK OF EUE Dist 1	Lane Config	Lane Length	Cap. Adj.	Prob. Block.
	veh/h	% -	veh/h	%	veh/h	v/c	%	sec		-	m ·		m	%	%
SouthEast:	Ti Rak	au Driv	e (Eas	t)											
Lane 1	466	7.7	466	7.7		0.770	100	40.7	LOS D	22.5	167.7	Short	115	0.0	NA
Lane 2	590	8.2	590	8.2		0.770	100	28.7	LOS C	25.0	187.0	Full	207	0.0	<mark>5.8</mark>
Lane 3	570	8.2	570	8.2	740	0.770	100	28.5	LOS C	23.8	178.5	Full	207	0.0	1.6
Lane 4	83	3.7	83	3.7	170	0.487	100	62.5	LOS E	4.3	31.0	Short	45	0.0	NA
Lane 5 (B)	13	100.0	13	100.0	537	0.024	100	3.5	LOS A	0.1	0.9	Full	207	0.0	0.0
Approach	1722	8.5	1722	8.5		0.770		33.3	LOS C	25.0	187.0				
NorthEast:	William	n Robe	rts Roa	d Exte	ntion										
Lane 1	132	9.8	132	9.8	288	0.459	100	51.6	LOS D	6.4	48.4	Full	112	0.0	0.0
Lane 2	112	8.0	112	8.0	296	0.378	100	49.8	LOS D	5.3	39.8	Full	110	0.0	0.0
Approach	244	9.0	244	9.0		0.459		50.8	LOS D	6.4	48.4				
NorthWest:	Ti Rak	au Driv	ve (We:	st)											
Lane 1	267	7.9	241	7.9	423	0.570	100	48.1	LOS D	11.2	83.9	Full	107	0.0	0.0
Lane 2	721	7.8	651	7.8		0.783	100	30.2	LOS C	20.9 ^{N4}	156.4 ^{N4}	Full	107	0.0	50.0
Lane 3	672	7.8	607	7.8	775 ¹	0.783	100	29.7	LOS C	20.9 ^{N4}	156.4 ^{N4}	Full	107	0.0	50.0
Lane 4	52	5.8	47	5.8	177	0.265	100	60.2	LOS E	2.4	17.3	Short	20	0.0	NA
Lane 5 (B)	25	100.0	25	100.0	537	0.047	100	3.6	LOS A	0.1	1.8	Full	107	0.0	0.0
Approach	1737	9.0	1570 ^N	9.2		0.783		33.2	LOS C	20.9	156.4				
SouthWest	: Matts	on Roa	ıd												
Lane 1	17	5.9	17	5.9	89	0.191	100	67.3	LOS E	0.9	6.7	Short	20	0.0	NA
Lane 2	46	6.5	46	6.5	91	0.507	100	68.6	LOS E	2.5	18.7	Full	282	0.0	0.0
Approach	63	6.3	63	6.3		0.507		68.2	LOS E	2.5	18.7				
Intersectio n	3766	8.8	3599 ^N	9.2		0.783		35.1	LOS D	25.0	187.0				

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab). Lane LOS values are based on average delay per lane.

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

Delay Model: SIDRA Standard (Geometric Delay is included).

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

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

- 1 Reduced capacity due to a short lane effect. Short lane queues may extend into the full-length lanes. Some upstream delays at entry to short lanes are not included.
- N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.
- N4 Average back of queue has been restricted to the available queue storage space.

Approach	Lane FI	ows (v	eh/h)									
SouthEast: 7	Γi Rakau	Drive (E	East)									
Mov. From SE To Exit:	L2 SW	T1 NW	R2 NE	U SE		%HV	Cap. veh/h		Lane Util. S %			
Lane 1	63	403	-	-	466	7.7	605	0.770	100	<mark>49.8</mark>	2	

Lane 2	_	590	-	-	590	8.2	767 ¹	0.770	100	NA	NA	
Lane 3	_	570	-	-	570	8.2	740 ¹	0.770	100	NA	NA	
Lane 4	-	-	68	15	83	3.7	170	0.487	100	0.0	3	
Lane 5	-	13	-	-	13	100.0	537	0.024	100	NA	NA	
Approach	63	1576	68	15	1722	8.5		0.770				
NorthEast: W	/illiam R	oberts f	Road E	xtentior	ı							
Mov.	L2	T1	R2	Total	%HV		0	Deg.		Prob.	Ov.	
From NE To Exit:	0.5	0\4/	N IV A /				Cap. veh/h	Satn v/c	Util. %	SL Ov. %	Lane No.	
	SE	SW	NW									
Lane 1	132	-	-	132	9.8			0.459	100	NA	NA	
Lane 2	-	34	78	112	8.0		296	0.378	100	NA	NA	
Approach	132	34	78	244	9.0			0.459				
NorthWest: T	ï Rakau	Drive (West)									
Mov.	L2	T1	R2	Total	%HV			Deg.		Prob.	Ov.	
From NW							Cap. veh/h	Satn v/c	Util. %	SL Ov. %	Lane No.	
To Exit:	NE	SE	SW									
Lane 1	241	-	-	241	7.9			0.570	100	NA	NA	
Lane 2	-	651	-	651	7.8		831	0.783	100	NA	NA	
Lane 3	-	607	-	607	7.8		775 ¹	0.783	100	NA	NA	
Lane 4	-	-	47	47	5.8		177	0.265	100	<mark>1.9</mark>	3	
Lane 5	-	25	-	25	100.0		537	0.047	100	NA	NA	
Approach	241	1283	47	1570	9.2			0.783				
SouthWest: N	Mattson	Road										
Mov.	L2	T1	R2	Total	%HV			Deg.		Prob.	Ov.	
From SW							Cap.	Satn		SL Ov.	Lane	
To Exit:	NW	NE	SE				veh/h	v/c	%	%	No.	
Lane 1	17	-	-	17	5.9		89	0.191	100	0.0	2	
Lane 2	_	20	26	46	6.5		91	0.507	100	NA	NA	
Approach	17	20	26	63	6.3			0.507				
	Total	%HVE	eg.Sat	n (v/c)								
Intersection	3599	9.2		0.783								

1 Reduced capacity due to a short lane effect. Short lane queues may extend into the full-length lanes. Some upstream delays at entry to short lanes are not included.

Merge Analysis										
	Exit ane ber		Percent Opng in Lane %	Flow R	ate	Critical Gap sec	Follow-up Headway sec	Capacity veh/h	Deg. Satn I	Merge Delay sec
SouthEast Exit: Ti Raka Merge Type: Not Applic		ve (East)							
Full Length Lane Full Length Lane Full Length Lane	1 2 3	Merge	Ana l ysis Ana l ysis Ana l ysis	not appl	lied.					
NorthEast Exit: William Merge Type: Not Applie		erts Road	d Extention	on						
Full Length Lane	1	Merge	Analysis	not app	lied.					
NorthWest Exit: Ti Raka Merge Type: Not Applie		ive (Wes	t)							
Full Length Lane Full Length Lane Full Length Lane Full Length Lane	1 2 3 4	Merge Merge	Analysis Analysis Analysis Analysis	not appl	lied. lied.					

SouthWest Exit: Mattson Road Merge Type: **Not Applied**

Full Length Lane 1 Merge Analysis not applied.

Site: 8.1 [8.1 U-turn - West of Marriot Rd (Site Folder: PM)]

■ Network: N101 [PM - Town Centre Drive four lanes (Network Folder: General)]

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 29 seconds (Site Practical Cycle Time)

Lane Use	and P	erforn	nance												
	DEM FLC [Total	WS HV]	ARR FLC [Tota l	WS HV]	Cap.	Oddii	Lane Util.	Delay	Level of Service		ACK OF EUE Dist]	Lane Config		Cap. Adj.	Prob. Block.
SouthEast:	veh/h Ti Rak	% au Driv	veh/h e (Fas	% t)	veh/h	v/c	%	sec			m		m	%	%
			•	•											
Lane 1	847	7.8	847	7.8		0.459	100	0.1	LOS A	0.0	0.0	Full	147	0.0	0.0
Lane 2	847	7.8	847	7.8	1846	0.459	100	0.1	LOS A	0.0	0.0	Full	147	0.0	0.0
Lane 3	83	6.0	83	6.0	276	0.301	100	17.7	LOS B	1.0	7.3	Short	44	0.0	NA
Lane 4 (B)	13	100.0	13	100.0	535	0.024	100	0.9	LOS A	0.0	0.2	Full	147	0.0	0.0
Approach	1790	8.4	1790	8.4		0.459		0.9	LOSA	1.0	7.3				
NorthWest	: Ti Rak	au Driv	ve (Wes	st)											
Lane 1	759	7.9	722	7.9	827	0.873	100	16.5	LOS B	12.4	92.7	Full	73	0.0	<mark>36.9</mark>
Lane 2	759	7.9	722	7.9	827	0.873	100	16.5	LOS B	12.4	92.7	Full	73	0.0	<mark>36.9</mark>
Lane 3 (B)	25	100.0	25	100.0	535	0.047	100	1.0	LOS A	0.0	0.5	Full	73	0.0	0.0
Approach	1542	9.4	1469 ^N	9.5		0.873		16.3	LOS B	12.4	92.7				
Intersectio n	3332	8.9	3259 ^N	9.1		0.873		7.8	LOSA	12.4	92.7				

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab). Lane LOS values are based on average delay per lane.

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

Delay Model: SIDRA Standard (Geometric Delay is included).

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

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

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

Approach	Lane Fl	lows (v	veh/h)						
SouthEast:	Ti Rakau	Drive ((East)						
Mov. From SE To Exit:	T1 NW	U SE	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.
Lane 1 Lane 2	847 847	-	847 847	7.8 7.8	1846	0.459 0.459	100 100	NA	NA NA
Lane 3 Lane 4 Approach	13 1707	83 - 83	83 13 1790	6.0 100.0 8.4	276 535		100 100		2 NA
NorthWest:									
Mov. From NVV To Exit:	T1 SE	Tota l	%HV		Cap. veh/h	Deg. Satn v/c	Lane Util. %	SL Ov.	Ov. Lane No.
Lane 1 Lane 2 Lane 3	722 722 25	722 722 25	7.9 7.9 100.0		827 827 535	0.873 0.047	100 100 100	NA	NA NA NA
Approach	1469 Total	1469 %HVI	9.5 Deg.Sat	tn (v/c)	_	0.873			

Intersection 3259 9.1 0.873

Lane flow rates given in this report are based on the arrival flow rates subject to upstream capacity constraint where applicable.

Merge Analysis											
Nι	Exit Lane ımber		Opng in Lane	Opposing Flow Rate veh/h pcu/h	Critica l Gap sec	Follow-up Headway		Capacity veh/h	Deg. Satn	Min. De l ay sec	Merge Delay sec
SouthEast Exit: Ti Ra Merge Type: Not App					000		VO11/11	VOI II 1	•// 0	000	000
Full Length Lane Full Length Lane Full Length Lane	1 2 3	Merge /	Analysis	not applied. not applied. not applied.							
NorthWest Exit: Ti Ra Merge Type: Not App		ve (West	t)								
Full Length Lane Full Length Lane Full Length Lane	1 2 3	Merge /	Analysis	not applied. not applied. not applied.							

Site: 9.1 [9.1 Staggered Crossing - East of Marriot Rd - Import Network: N101 [PM - Town (Site Folder: PM)]

(Network Folder: General)]

Site Category: (None)

Pedestrian Crossing (Signalised) - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 42 seconds (Site Practical Cycle Time)

Lane Use	and P	erforn	nance	!											
	DEM FLC [Total	WS HV]	FLC [Total		Cap.	Oddii	Lane Util.	Delay	Level of Service		ACK OF EUE Dist]	Lane Config	Lane Length	Cap. Adj.	Prob. Block.
0 " 5 4	veh/h	%	veh/h		veh/h	v/c	%	sec			m		m	%	%
SouthEast: Ti Rakau Drive (East)															
Lane 1 (B)	13	100.0	13	100.0	434	0.030	100	3.5	LOS A	0.1	8.0	Full	45	0.0	0.0
Approach	13	100.0	13	100.0		0.030		3.5	LOS A	0.1	8.0				
NorthWest:	Ti Rak	au Driv	e (We	st)											
Lane 1	783	7.8	783	7.8	881	0.889	100	22.1	LOS C	2.3 ^{N4}	17.5 ^{N4}	Full	12	0.0	<mark>50.0</mark>
Lane 2	783	7.8	783	7.8	881	0.889	100	22.1	LOS C	2.3 ^{N4}	17.5 ^{N4}	Full	12	0.0	50.0
Lane 3 (B)	25	100.0	25	100.0	434	0.058	100	3.5	LOS A	0.1	1.5	Full	12	0.0	0.0
Approach	1590	9.2	1590	9.2		0.889		21.8	LOS C	2.3	17.5				
Intersectio n	1603	10.0	1603	10.0		0.889		21.7	LOS C	2.3	17.5				

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab). Lane LOS values are based on average delay per lane.

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

Delay Model: SIDRA Standard (Geometric Delay is included).

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

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

N4 Average back of queue has been restricted to the available queue storage space.

Approach I	_ane F	lows (v	veh/h)						l
SouthEast: T	ï Rakau	Drive ((East)						
Mov. From SE To Exit:	T1 NW	Total	%HV	Cap. veh/h	Deg. Satn v/c		Prob. SL Ov. %	Ov. Lane No.	
Lane 1	13	13	100.0	434	0.030	100	NA	NA	
Approach	13	13	100.0		0.030				
NorthWest: 7	ī Rakau	Drive	(West)						
Mov. From NW To Exit:	T1 SE	Total	%HV	Cap. veh/h	Deg. Satn v/c		Prob. SL Ov. %	Ov. Lane No.	
Lane 1	783	783	7.8	881	0.889	100	NA	NA	
Lane 2	783	783	7.8	881	0.889	100	NA	NA	
Lane 3	25	25	100.0	434	0.058	100	NA	NA	
Approach	1590	1590	9.2		0.889				
	Total	%HVI	Deg.Satn (v/c)					
Intersection	1603	10.0	0.0	389					

Lane flow rates given in this report are based on the arrival flow rates subject to upstream capacity constraint where applicable.

Merge Analysis								
	ne La		Flow Rate	Critical Gap sec	Follow-up Headway sec	Capacity veh/h	Deg. Satn I	Merge De l ay sec
SouthEast Exit: Ti Rakat Merge Type: Not Applie	•	ast)						
Full Length Lane Full Length Lane Full Length Lane	2 Me	ge Analysis	not applied. not applied. not applied.					
NorthWest Exit: Ti Raka Merge Type: Not Applie		Vest)						
Full Length Lane	1 Me	ge Analysis	not applied.					

Site: 9.2 [9.2 Staggered Crossing - East of Marriot Rd - Import Network: N101 [PM - Town (Site Folder: PM)]

(Network Folder: General)]

Site Category: (None)

Lane Use	Lane Use and Performance														
	DEM FLO		ARRI FLO		Cap.	Deg. Satn	Lane Util.		Level of Service		ACK OF EUE	Lane Config	Lane Length	Cap. Adj.	Prob. B l ock.
	[Tota l veh/h	HV] %	[Tota l veh/h		veh/h	v/c	%	sec		[Veh	Dist] m		m	%	%
SouthEast	SouthEast: Ti Rakau Drive (East)														
Lane 1	886	7.7	886	7.7	1007	0.879	100	23.1	LOS C	8.8 ^{N4}	65.8 ^{N4}	Full	45	0.0	<mark>50.0</mark>
Lane 2	886	7.7	886	7.7	1007	0.879	100	23.1	LOS C	8.8 ^{N4}	65.8 ^{N4}	Full	45	0.0	<mark>50.0</mark>
Approach	1771	7.7	1771	7.7		0.879		23.1	LOS C	8.8	65.8				
Intersectio n	1771	7.7	1771	7.7		0.879		23.1	LOS C	8.8	65.8				

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

Lane LOS values are based on average delay per lane.

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

Delay Model: SIDRA Standard (Geometric Delay is included).

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

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

N4 Average back of queue has been restricted to the available queue storage space.

Approach l	_ane Fl	lows (v	/eh/h)					
SouthEast: T	ï Rakau	Drive (East)					
Mov. From SE To Exit:	T1 NW	Total	%HV	Cap. veh/h	Deg. Satn v/c		Prob. SL Ov. %	Ov. Lane No.
Lane 1	886	886	7.7	1007	0.879	100	NA	NA
Lane 2	886	886	7.7	1007	0.879	100	NA	NA
Approach	1771	1771	7.7		0.879			
	Total	%HV[Deg.Satn (v/c)					
Intersection	1771	7.7	0.879					

Lane flow rates given in this report are based on the arrival flow rates subject to upstream capacity constraint where applicable.

Merge Analysis								
	Exit Lane Number		Percent Opposing Opng in Flow Rate Lane % veh/h pcu/h	Critical Gap sec	Follow-up Headway sec	Capacity veh/h	Deg. Satn I	Merge Delay sec
NorthWest Exit: Ti Merge Type: Not A		ive (Wes	t)					
Full Length Lane Full Length Lane	1 2	Ū	Analysis not applied. Analysis not applied.					

 $EB2, 3R, 3C, 4i \\ Version A1 \\ SIDRA and AIMSUN \\ EB2, 3R, 3C, 4i, 4L Final \\ PM 2028_EC - Copy. sip9 \\ EB2, 3R, 3C, 4L Final \\ PM 2028_EC - Copy. sip9 \\ EB2, 3R, 3C, 4L Final \\ PM 2028_EC - Copy. sip9 \\ EB2, 3R, 3C, 4L Final \\ PM 2028_EC - Copy. sip9 \\ EB2, 3R, 3C, 4L Final \\ PM 2028_EC - Copy. sip9 \\ EB2, 3R, 3C, 4L Final \\ PM 2028_EC - Copy. sip9 \\ EB2, 3R, 3C, 4L Final \\ PM 2028_EC - Copy. sip9 \\ EB2, 3R, 3C, 4L Final \\ PM 2028_EC - Copy. sip9 \\ EB2, 3R, 3C, 4L Final \\ PM 2028_EC - Copy. sip9 \\ EB2, 3R, 3C, 4L Final \\ PM 2028_EC - Copy. sip9 \\ EB2, 3R, 3C, 4L Final \\ PM 2028_EC - Copy. sip9 \\ EB2, 3R, 3C, 4L Final \\ PM 2028_EC - Copy. sip9 \\ EB2, 3R, 3C, 4L Final \\ PM 2028_EC - Cop$

Site: 101 [12.0 Edgewater Dr (East) / Ti Rakau Dr -Signalised - Import - Import - Import (Site Folder: PM)]

■■ Network: N101 [PM - Town Centre Drive four lanes (Network Folder: General)]

New Site

Site Category: (None)

Lane Use	Lane Use and Performance														
	DEM FLC [Total veh/h		FLC		Cap.	Deg. Satn v/c	Lane Util.		Level of Service		ACK OF EUE Dist] m	Lane Config	Lane Length m	Cap. Adj. %	Prob. Block.
SouthEast:	Ti Rak	au Driv	e (Eas	t)											
Lane 1	863	7.6	863	7.6	1316	0.656	100	12.4	LOS B	29.7	221.7	Full	445	0.0	0.0
Lane 2	865	7.7	865	7.7	1318	0.656	100	12.2	LOS B	29.8	222.2	Full	445	0.0	0.0
Lane 3 (B)	13	100.0	13	100.0	852	0.015	100	6.5	LOS A	0.2	3.1	Full	445	0.0	0.0
Approach	1741	8.3	1741	8.3		0.656		12.2	LOS B	29.8	222.2				
NorthWest:	Ti Rak	au Driv	e (We	st)											
Lane 1	823	6.1	823	6.1	879	0.937	100	47.3	LOS D		159.3 ^{N4}	Full	109	-34.0 ^{N7}	50.0
Lane 2	660	6.1	660	6.1	704 ¹	0.937	100	51.2	LOS D	21.6 ^{N4}	159.3 ^{N4}	Full	109	<mark>-40.4</mark> N7	50.0
Lane 3	137	5.4	137	5.4	150	0.915	100	98.1	LOS F	10.6	77.4	Short	50	0.0	NA
Lane 4 (B)	26	100.0	26	100.0	852	0.031	100	6.6	LOS A	0.5	6.4	Full	109	0.0	0.0
Approach	1646	7.5	1646	7.5		0.937		52.4	LOS D	21.6	159.3				
SouthWest	: Edgev	water D	rive (E	ast)											
Lane 1	28	3.7	28	3.7	73	0.389	100	86.4	LOS F	1.9	14.0	Full	789	0.0	0.0
Approach	28	3.7	28	3.7		0.389		86.4	LOS F	1.9	14.0				
Intersectio n	3416	7.9	3416	7.9		0.937		32.2	LOS C	29.8	222.2				

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

Lane LOS values are based on average delay per lane.

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

Delay Model: SIDRA Standard (Geometric Delay is included).

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

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

- 1 Reduced capacity due to a short lane effect. Short lane queues may extend into the full-length lanes. Some upstream delays at entry to short lanes are not included.
- N4 Average back of queue has been restricted to the available queue storage space.
- N7 The capacity reduction has been determined from the queue blockage probability of a Site further downstream due to intermediate continuous lanes.

Approach L	Approach Lane Flows (veh/h)												
SouthEast: T	i Rakau	Drive (East)										
Mov. From SE To Exit:	L2 SW	T1 NW	Total	%HV		Cap. veh/h	Deg. Satn v/c		Prob. SL Ov. %	Ov. Lane No.			
Lane 1	35	828	863	7.6		1316	0.656	100	NA	NA			
Lane 2	-	865	865	7.7		1318	0.656	100	NA	NA			
Lane 3	_	13	13	100.0		852	0.015	100	NA	NA			
Approach	35	1706	1741	8.3			0.656						
NorthWest: T	ï Rakau	Drive ((West)										
Mov. From NW To Exit:	T1 SE	R2 SW	U NW	Total	%HV	Cap. veh/h	Deg. Satn v/c		Prob. SL Ov. %	Ov. Lane No.			
Lane 1	823	-	-	823	6.1	879	0.937	100	NA	NA			

Lane 2	660	-	-	660	6.1	704 ¹	0.937	100	NA	NA	
Lane 3	-	25	112	137	5.4	150	0.915	100	55.4	2	
Lane 4	26		-	26	100.0	852	0.031	100	NA	NA	
Approach	1509	25	112	1646	7.5		0.937				
SouthWest: E	Edgewa	ter Drive	e (East)	1							
Mov. From SW To Exit:	L2 NW	R2 SE	Total	%HV		Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.	
Lane 1	11	18	28	3.7		73	0.389	100	NA	NA	
Approach	11	18	28	3.7			0.389				
	Total	%HVE	eg.Sat	n (v/c)							
Intersection	3416	7.9		0.937							

1 Reduced capacity due to a short lane effect. Short lane queues may extend into the full-length lanes. Some upstream delays at entry to short lanes are not included.

Merge Analysis										
E La Numb			Percent Opng in Lane %		ate	Critical Gap sec	Follow-up Headway sec	Capacity veh/h	De l ay	Merge Delay sec
SouthEast Exit: Ti Rakau Merge Type: Not Applie		ve (East))							
Full Length Lane Full Length Lane Full Length Lane	1 2 3	Merge /	Ana l ysis Ana l ysis Ana l ysis	not appl	lied.					
NorthWest Exit: Ti Rakau Merge Type: Not Applie		ve (West	t)							
Full Length Lane Full Length Lane Full Length Lane	1 2 3	Merge /	Ana l ysis Ana l ysis Ana l ysis	not appl	lied.					
SouthWest Exit: Edgewa Merge Type: Not Applie		Orive (Ea	ıst)							
Full Length Lane	1	Merge /	Analysis	not app	lied.					

Site: 13.0 [13.0 Gossamer Dr / Ti Rakau Dr (Site Folder: PM)]

■■ Network: N101 [PM - Town Centre Drive four lanes (Network Folder: General)]

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 152 seconds (Site User-Given Phase Times)

Lane Use	and P	erforn	nance												
	DEM FLC		ARR FLC		Cap.	Deg. Satn	Lane Util.		Level of Service		ACK OF		Lane Length	Cap. Adi.	Prob. Block.
	[Total		[Total	HV]		Salli		Delay	Service	[Veh	Dist]	Corning	Lengin		
	veh/h	%	veh/h	%	veh/h	v/c	%	sec			m		m	%	%
South: Fre	mantle	Place													
Lane 1	12	8.3	12	8.3		0.155	100	82.7	LOS F	8.0	6.1	Short	9	0.0	NA
Lane 2	27	11.1	27	11.1	78	0.348	100	84.9	LOS F	1.9	14.2	Full	285	0.0	0.0
Approach	39	10.3	39	10.3		0.348		84.2	LOS F	1.9	14.2				
East: Ti Ra	kau Dri	ve (Eas	st)												
Lane 1	883	7.6	883	7.6		0.966	100	76.8	LOS E	72.9	543.4	Full	636	0.0	<mark>0.8</mark>
Lane 2	808	7.7	808	7.7	837 ¹	0.966	100	73.7	LOS E	63.7	474.9	Full	636	0.0	0.0
Lane 3	168	7.2	168	7.2	198	0.849	82 ⁶	84.0	LOS F	12.1	90.0	Short	150	0.0	NA
Lane 4	206	7.2	206	7.2	198	1.036	100	142.3	LOS F	20.1	149.4	Short	103	0.0	NA
Approach	2065	7.6	2065	7.6		1.036		82.7	LOS F	72.9	543.4				
NorthEast:	Buswa	у													
Lane 1 (B)	13	100.0	13	100.0	195	0.067	100	33.5	LOS C	0.5	6.0	Full	963	0.0	0.0
Approach	13	100.0	13	100.0		0.067		33.5	LOS C	0.5	6.0				
North: Gos	samer	Drive													
Lane 1	136	9.5	136	9.5	269	0.507	100	55.7	LOS E	7.2	54.1	Short	150	0.0	NA
Lane 2	138	9.5	138	9.5	271	0.507	100	55.6	LOS E	7.2	54.7	Full	1010	0.0	0.0
Lane 3	39	2.6	39	2.6	81	0.482	100	85.5	LOS F	2.7	19.3	Short	28	0.0	NA
Approach	313	8.6	313	8.6		0.507		59.4	LOS E	7.2	54.7				
West: Ti Ra	akau Dr	ive (We	est)												
Lane 1	102	2.0	102	2.0	995	0.103	100	11.7	LOS B	1.6	11.5	Short	28	0.0	NA
Lane 2	652	8.6	652	8.6	610 ¹	1.070	100	154.3	LOS F	72.9	547.4	Full	445	0.0	<mark>34.0</mark>
Lane 3	704	8.6	704	8.6	657 ¹	1.070	100	152.7	LOS F	78.1	586.8	Full	445	0.0	<mark>40.4</mark>
Lane 4	36	5.6	36	5.6	180	0.200	100	70.5	LOS E	2.2	16.2	Short	23	0.0	NA
Lane 5 (B)	25	100.0	25	100.0	195	0.129	100	34.3	LOS C	0.9	11.9	Full	445	0.0	0.0
Approach	1519	9.5	1519	9.5		1.070		140.0	LOS F	78.1	586.8				
Intersectio n	3949	8.7	3949	8.7		1.070		102.7	LOS F	78.1	586.8				

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

Lane LOS values are based on average delay per lane.

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

Delay Model: SIDRA Standard (Geometric Delay is included).

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

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

- 1 Reduced capacity due to a short lane effect. Short lane queues may extend into the full-length lanes. Some upstream delays at entry to short lanes are not included.
- 6 Lane under-utilisation due to downstream effects

Approach	Approach Lane Flows (veh/h)											
South: Frem	nant i e Plad	се										
Mov.	L2	T1	R2	Total	%HV	Deg.	Lane	Prob.	Ov.			

From S To Exit:	W	N	E					Cap. veh/h	Satn v/c	Util. %	SL Ov. %	Lane No.	
Lane 1	12	-	-	12	8.3				0.155	100	0.0	2	
Lane 2	-	11	16	27	11.1			78	0.348	100	NA	NA	
Approach	12	11	16	39	10.3				0.348				
East: Ti Raka		(East)											
Mov. From E To Exit:	L2 S	T1 W	R2 N	Tota l	%HV			Cap. veh/h	Deg. Satn v/c		Prob. SL Ov. %	Ov. Lane No.	
Lane 1	19	864	_	883	7.6			914	0.966	100	NA	NA	
Lane 2	_	808	_	808	7.7			837 ¹	0.966	100	NA	NA	
Lane 3	_	-	168	168	7.2			198	0.849	82 ⁶	<mark>14.6</mark>	2	
Lane 4	-	-	206	206	7.2			198	1.036	100	<mark>49.3</mark>	3	
Approach	19	1672	374	2065	7.6				1.036				
NorthEast: B	Busway												
Mov.	R1	Total	%HV						Deg.	Lane	Prob.	Ov.	
From NE To Exit:	W							Cap. veh/h	Satn v/c	Util. %	SL Ov. %	Lane No.	
Lane 1	13	13	100.0					195	0.067	100	NA	NA	
Approach	13	13	100.0						0.067				
North: Gossa	amer Dri	ve											
Mov.	L2	T1	R2	Total	%HV				Deg.		Prob.	Ov.	
From N To Exit:	Е	S	W					Cap. veh/h	Satn v/c	Util. %	SL Ov. %	Lane No.	
Lane 1	136	-	-	136	9.5			269	0.507	100	0.0	2	
Lane 2	138	_	_	138	9.5			271	0.507	100	NA	NA	
Lane 3	_	11	28	39	2.6			81	0.482	100	0.0	2	
Approach	274	11	28	313	8.6				0.507				
West: Ti Rak	au Drive	(West	:)										
Mov.	L2	L1	T1	R2	U	Total	%HV		Deg.		Prob.	Ov.	
From W								Cap. veh/h	Satn v/c	Util. %	SL Ov. %	Lane No.	
To Exit:	N	NE	E	S	W	400							
Lane 1	102	-	-	-	-	102	2.0		0.103	100	0.0	2	
Lane 2						652	8.6	610 ¹	1.070	100	NA	NA	
Lana 2	-	-	652	-				657 ¹		100	NΙΛ	NIA	
Lane 3	-	-	704	- - 24	-	704	8.6	657 ¹	1.070	100	NA 0.0	NA	
Lane 4	-	- - 25	704 -	24	- 12	704 36	8.6 5.6	180	1.070 0.200	100	0.0	3	
Lane 4 Lane 5	- - - - 102	- - 25	704 - -	24 -	- 12 -	704 36 25	8.6 5.6 100.0	180	1.070 0.200 0.129			3	
Lane 4	102	25	704 - - 1356	24 - 24	- 12 -	704 36	8.6 5.6	180	1.070 0.200	100	0.0	3	
Lane 4 Lane 5	102	25	704 - -	24 - 24	- 12 -	704 36 25	8.6 5.6 100.0	180	1.070 0.200 0.129	100	0.0	3	

- 1 Reduced capacity due to a short lane effect. Short lane queues may extend into the full-length lanes. Some upstream delays at entry to short lanes are not included.
- 6 Lane under-utilisation due to downstream effects

Merge Analysis					
Exit Lane Number	Short Percent Opposing Lane Opng in Flow Rate Length Lane	Critica l Gap	Follow-up Lane Capacity Headway Flow Rate	Deg. Min. Satn De l ay	Merge De l ay
	m % veh/h pcu/h	sec	sec veh/h veh/h	v/c sec	sec
South Exit: Fremantle Place Merge Type: Not Applied					
Full Length Lane 1	Merge Analysis not applied.				

East Exit: Ti Rakau Drive (East) Merge Type: Not Applied													
Full Length Lane Full Length Lane	1 2	Merge Ar Merge Ar	•										
NorthEast Exit: Busway Merge Type: Not Applie	d												
Full Length Lane	1	Merge Ar	ıa l ysis not	applie	d.								
North Exit: Gossamer D Merge Type: Zipper	rive												
Exit Short Lane	1	150	50.0 9	103	2.50	2.00	281	1683 0.167	0.0	0.0			
Merge Lane	2	-	50.0 14	1 145	2.50	2.00	198	1633 0.122	0.0	0.1			
West Exit: Ti Rakau Driv Merge Type: Not Applie		Vest)											
Full Length Lane	1	Merge Ar	a l ysis not	applie	d.								
Full Length Lane	2	Merge Ar	ıa l ysis not	applie	d.								
Full Length Lane	3	Merge Ar	ıa l ysis not	applie	d.								

Site: 15.B [15.B Burwood Dr (West) / New Offline Busway Rd (Site Folder: PM)]

■■ Network: N101 [PM - Town Centre Drive four lanes (Network Folder: General)]

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 41 seconds (Site Practical Cycle Time)

Lane Use	and P	erforn	nance												
		IAND DWS HV] %		IVAL DWS HV] %	Cap.	Deg. Satn v/c	Lane Util. %		Level of Service		ACK OF EUE Dist] m	Lane Config	Lane Length m	Cap. Adj. %	Prob. Block. %
South: Burs	swood	Drive													
Lane 1	511	9.2	502	9.2	623	0.805	100	18.3	LOS B	7.0 ^{N4}	52.6 ^{N4}	Full	36	0.0	<mark>50.0</mark>
Approach	511	9.2	502 ^{N1}	9.2		0.805		18.3	LOS B	7.0	52.6				
East: Busw	ay														
Lane 1 (B)	21	100.0	21	100.0	420	0.050	100	6.0	LOS A	0.1	1.4	Full	571	0.0	0.0
Approach	21	100.0	21	100.0		0.050		6.0	LOS A	0.1	1.4				
North: Burs	l boowa	Orive													
Lane 1	304	7.6	304	7.6	641	0.474	100	12.6	LOS B	4.6	34.0	Full	1859	0.0	0.0
Approach	304	7.6	304	7.6		0.474		12.6	LOS B	4.6	34.0				
West: Busy	vay														
Lane 1 (B)	25	100.0	25	100.0	466	0.054	100	3.1	LOS A	0.1	1.4	Full	963	0.0	0.0
Approach	25	100.0	25	100.0		0.054		3.1	LOSA	0.1	1.4				
Intersectio n	861	13.5	852 ^{N1}	13.6		0.805		15.5	LOS B	7.0	52.6				

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab). Lane LOS values are based on average delay per lane.

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

Delay Model: SIDRA Standard (Geometric Delay is included).

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

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

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

N4 Average back of queue has been restricted to the available queue storage space.

Approach L	_ane FI	ows (v	/eh/h)						
South: Bursw	ood Dri	ve							
Mov. From S To Exit:	T1 N	R2 E	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. : %	Prob. SL Ov. %	Ov. Lane No.
Lane 1	494	8	502	9.2	623	0.805	100	NA	NA
Approach	494	8	502	9.2		0.805			
East: Busway	y								
Mov. From E To Exit:	L2 S	T1 W	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. : %	Prob. SL Ov. %	Ov. Lane No.
Lane 1	8	13	21	100.0	420	0.050	100	NA	NA
Approach	8	13	21	100.0		0.050			
North: Bursw	ood Driv	/e							
Mov. From N To Exit:	T1 S	Total	%HV		Cap. veh/h	Deg. Satn v/c	Lane Util. : %	Prob. SL Ov. %	Ov. Lane No.

Lane 1	304	304	7.6	641	0.474	100	NA	NA	
Approach	304	304	7.6		0.474				
West: Busway	y								
Mov. From W To Exit:	T1 E	Total	%HV	Cap. veh/h	Deg. Satn v/c		Prob. SL Ov. %	Ov. Lane No.	
Lane 1	25	25	100.0	466	0.054	100	NA	NA	
Approach	25	25	100.0		0.054				
	Total	%HVI	Deg.Satn (v/c)						
Intersection	852	13.6	0.805						

Merge Analysis								
Exit Lane Number		Percent Opposing Opng in Flow Rate Lane % veh/h pcu/h	Critica l Gap sec	Headway	Lane Capacit Flow Rate veh/h veh/	Satn	Min. De l ay sec	Merge Delay sec
South Exit: Burswood Drive Merge Type: Not Applied								
Full Length Lane 1	Merge	Analysis not applied.	•					
East Exit: Busway Merge Type: Not Applied								
Full Length Lane 1	Merge	Analysis not applied.	•					
North Exit: Burswood Drive Merge Type: Not Applied								
Full Length Lane 1	Merge	Analysis not applied.	•					
West Exit: Busway Merge Type: Not Applied								
Full Length Lane 1	Merge	Analysis not applied.						

Site: 18.B [18.B Burswood Dr (East) / New Offline Busway Rd - V2 - Import (Site Folder: PM)]

■ Network: N101 [PM - Town Centre Drive four lanes (Network Folder: General)]

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 52 seconds (Site Practical Cycle Time)

Lane Use	and P	erforn	nance												
	DEM FLC [Total			IVAL DWS HV 1	Сар.	Deg. Satn	Lane Util.		Level of Service	85% BA QUE I Veh		Lane Config	Lane Length	Cap. Adj.	Prob. Block.
	veh/h	% -	veh/h	% 1	veh/h	v/c	%	sec			m ¹		m	%	%
South: Bur	swood	Drive													
Lane 1	157	15.8	153	16.0	564	0.272	100	16.7	LOS B	2.7	21.6	Full	199	0.0	0.0
Approach	157	15.8	153 ^{N1}	16.0		0.272		16.7	LOS B	2.7	21.6				
East: Busy	vay														
Lane 1 (B)	16	100.0	16	100.0	138	0.116	100	21.2	LOS C	0.3	4.1	Full	263	0.0	0.0
Approach	16	100.0	16	100.0		0.116		21.2	LOS C	0.3	4.1				
North: Burs	swood [Orive													
Lane 1	258	11.6	258	11.6	304	0.850	100	29.7	LOS C	7.5	57.5	Full	1859	<mark>-50.0</mark> ^{N7}	0.0
Approach	258	11.6	258	11.6		0.850		29.7	LOS C	7.5	57.5				
West: Busy	way														
Lane 1 (B)	33	100.0	33	100.0	116	0.286	100	23.3	LOS C	0.7	9.2	Full	571	-13.7 ^{N7}	0.0
Approach	33	100.0	33	100.0		0.286		23.3	LOS C	0.7	9.2				
SouthWest	t: Bunni	ngs En	trance												
Lane 1	32	33.3	32	33.3	154	0.205	100	26.0	LOS C	0.6	5.8	Full	250	<mark>-50.0</mark> ^{N7}	0.0
Approach	32	33.3	32	33.3		0.205		26.0	LOS C	0.6	5.8				
Intersectio n	496	23.1	492 ^{N1}	23.3		0.850		24.7	LOS C	7.5	57.5				

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab). Lane LOS values are based on average delay per lane.

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

Delay Model: SIDRA Standard (Geometric Delay is included).

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

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

- N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.
- N7 The capacity reduction has been determined from the queue blockage probability of a Site further downstream due to intermediate continuous lanes.

Approach I	Approach Lane Flows (veh/h)												
South: Bursv	South: Burswood Drive												
Mov. From S To Exit:	L3 SW	L2 W	T1 N	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane P Util. SL %		Ov. Lane No.			
Lane 1	31	5	117	153	16.0	564	0.272	100	NA	NA			
Approach	31	5	117	153	16.0		0.272						
East: Buswa	у												
Mov. From E To Exit:	T1 W	Total	%HV			Cap. veh/h	Deg. Satn v/c	Lane P Util. SL %		Ov. Lane No.			
Lane 1	16	16	100.0			138	0.116	100	NA	NA			

Approach	16	16	100.0			0.116				
North: Burswo	od Dri	ve								
Mov. From N To Exit:	T1 S	Total	%HV		Cap. veh/h	Deg. Satn v/c		Prob. SL Ov. %	Ov. Lane No.	
Lane 1	258	258	11.6		304	0.850	100	NA	NA	
Approach	258	258	11.6			0.850				
West: Busway	′									
Mov. From W To Exit:	T1 E	R2 S	Total	%HV	Cap. veh/h	Deg. Satn v/c		Prob. SL Ov. %	Ov. Lane No.	
Lane 1	28	5	33	100.0	116	0.286	100	NA	NA	
Approach	28	5	33	100.0		0.286				
SouthWest: B	unning	s Entra	nce							
Mov. From SW To Exit:	R3 S	Total	%HV		Cap. veh/h	Deg. Satn v/c		Prob. SL Ov. %	Ov. Lane No.	
Lane 1	32	32	33.3		154	0.205	100	NA	NA	
Approach	32	32	33.3			0.205				
	Tota l	%HV[Deg.Sat	tn (v/c)						
Intersection	492	23.3		0.850						

Merge Analysis					
Exit Lane Number	Short Percent Opposing Lane Opng in Flow Rate Length Lane m %veh/h pcu/h	Critical Gap sec	Follow-up Lane Capacity Headway Flow Rate sec veh/h veh/h	Satn De l ay	Merge Delay sec
South Exit: Burswood Drive Merge Type: Not Applied					
Full Length Lane 1	Merge Analysis not applied.				
East Exit: Busway Merge Type: Not Applied					
Full Length Lane 1	Merge Analysis not applied.				
North Exit: Burswood Drive Merge Type: Not Applied					
Full Length Lane 1	Merge Analysis not applied.				
West Exit: Busway Merge Type: Not Applied					
Full Length Lane 1	Merge Analysis not applied.				
SouthWest Exit: Bunnings E Merge Type: Not Applied	intrance				
Full Length Lane 1	Merge Analysis not applied.				

CCG LANE SUMMARY

□□ Common Control Group: CCG1 [Burswood E/ Greenmount]

Network: N101 [PM - Town Centre Drive four lanes (Network Folder: General)]

EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 150 seconds (Network User-Given Cycle Time)

Lane Use	and P	erforn	nance	(CCG)										
	DEM		ARR		_	Deg.	Lane	Aver.	Level of	85% B	ACK OF	Lane	Lane	Сар.	Prob.
	FLC)WS	Сар.	Satn	Util.	Delay	Service		EUE	Config	Length	Adj.	Block.
	[Total veh/h	нv ј %	[Tota l veh/h	нv ј %	veh/h	v/c	%	sec		[Veh	Dist] m		m	%	%
Site: 18.0 [ı Dr]									
East: Ti Ra	kau Dri	ve (Ea	st)												
Lane 1	497	7.8	471	7.9	1255	0.376	100	10.8	LOS B	8.8 ^{N4}	65.8 ^{N4}	Full	45	0.0	50.0
Lane 2	440	7.8	417	7.9	1110	0.376	100	0.8	LOSA	8.0	6.3	Full	45	-11.5 ^{N3}	0.0
Lane 3	16	0.0	15	0.0	123	0.123	100	80.4	LOS F	1.0	7.0	Short	19	0.0	NA
Approach	953	7.7	904 ^{N1}	7.8		0.376		7.3	LOS A	8.8	65.8				
North: Burswood Drive (East)															
Lane 1	203	10.8	203	10.8	270	0.752	100	59.4	LOS E	38.0 ^{N6}	290.8 ^{N6}	Short	109	-50.0 ^{N7}	NA
Lane 2	61	21.6	61	21.6		0.184	100	53.6	LOS D	3.2	26.5	Full	199	-10.4 ^{N3}	50.0 ⁸
Approach	264	13.3	264	13.3		0.752		58.1	LOS E	38.0	290.8				
West: Ti Ra	skau Dr	ivo (\A/	oct)												
		•	,	7.0	E04	0.000	100	E0.4	1000	52.2 ^{N6}	390.1 ^{N6}	E	007	<mark>-44.3</mark> N7	E0 0
Lane 1	534	7.8	521	7.8		0.896	100	52.1	LOS D	52.2 52.8 ^{N6}	390.1 N6	Full	267	-44.3 -50.0	50.0
Lane 2	477	6.5	466	6.5		0.896	100	53.9	LOS D			Full	267	-50.0 -36.2 ^{N3}	50.0
Lane 3	616	6.5	601 1588 ^N	6.5	6/1	0.896	100	47.6	LOS D	41.7	307.8	Short	246	-30. 2	NA
Approach	1627	6.9	1	6.9		0.896		51.0	LOS D	52.8	390.1				
Intersectio	2845	7.8	2756 ^N	8.0		0.896		37.3	LOS D	52.8	390.1				
n	2040	7.0	1	0.0		0.000		07.0	LOOD	32.0	330.1				
Site: 19.0 [19.0 Gr	eenmo	unt Dr	/ Ti Ral	kau Dr]										
South: Gre	enmour	nt Drive)												
Lane 1	290	5.9	290	5.9	281	1.033	100	144.9	LOS F	30.3	223.1	Full	1200	<mark>-41.5</mark> ^{N7}	0.0
Lane 2	432	6.2	432	6.2	418	1.033	100	135.4	LOS F	42.7	314.5	Full	1200	0.0	0.0
Approach	722	6.1	722	6.1		1.033		139.2	LOS F	42.7	314.5				
East: Ti Ra	kau Dri	ve (Ea	st)												
Lane 1	67	9.0	67	9.0	1436	0.047	100	4.9	LOSA	0.1	0.7	Short	20	0.0	NA
Lane 2	235	8.2	235	8.2	486 ¹	0.484	100	21.2	LOS C	9.8	73.6	Full	72	-50.0 ^{N3}	17.0
Lane 3	512	8.2	512	8.2	1056	0.484	100	22.8	LOS C	14.0 ^{N4}	105.2 ^{N4}	Full	72	0.0	50.0
Lane 4 (B)	16	100.0	16	100.0	1137	0.014	100	3.5	LOS A	0.0	0.0	Full	72	0.0	0.0
Approach	830	10.0	830	10.0		0.484		20.5	LOS C	14.0	105.2				
NorthWest:	Buswa	ıγ													
Lane 1 (B)	28	100.0	28	100.0	1137	0.025	100	3.9	LOSA	0.0	0.0	Full	263	0.0	0.0
Approach	28	100.0		100.0		0.025	. 30	3.9	LOSA	0.0	0.0				
West: Ti Ra	akau Dr	ive (\/\/	est)												
Lane 1	809	6.7	791	6.7	1264	0.626	100	12.5	LOS B	8.9 ^{N4}	65.8 ^{N4}	Full	45	0.0	<mark>50.0</mark>
Lane 1	809	6.7	791 791	6.7		0.626	100	1.0	LOS A	2.6	19.4	Full	45 45	0.0	0.0
Lane 3	109	11.0	107	11.0		0.934		95.9	LOS F	7.9	60.5	Full	45	0.0	42.2
Approach	1726	7.0	1689 ^N		114	0.934	100	12.4	LOS B	8.9	65.8	i uli	+3	0.0	74.4
Арргоаст	1120	1.0	1	1.0		0.334		14.4	LOGD	0.8	03.0				
Intersectio	3306	8.3	3269 ^N	8.4		1.033		42 4	LOS D	42.7	314.5				
n	5500	0.0	1	0.4		1,000		72,7	2000	74,1	017.0				

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

Lane LOS values are based on average delay per lane.

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

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

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

- 1 Reduced capacity due to a short lane effect. Short lane queues may extend into the full-length lanes. Some upstream delays at entry to short lanes are not included.
- 8 Probability of Blockage has been set on the basis of a queue that overflows from a short lane.
- N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.
- N3 Capacity Adjustment due to downstream lane blockage determined by the program.
- N4 Average back of queue has been restricted to the available queue storage space.
- N6 Continuous Lane results determined by Back of Queue values of downstream lanes (proportional to lane movement flows) but average back of queue has been restricted to the available queue storage space.
- N7 The capacity reduction has been determined from the queue blockage probability of a Site further downstream due to intermediate continuous lanes.

Approac	h Lane	Flows	(CCG	i) (veh/	h)								
	_			ast) / Ti	Rakau Dr]								
East: Ti Ra		•	,										
Mov.	T1	R2	Total	%HV		Deg.		Prob.	Ov.				
From E					Cap. veh/h	Satn v/c	Util. %	SL Ov.	Lane No.				
To Exit:	W	N			Venin	V/C	/0	/0	INU.				
Lane 1	471	-	471	7.9	1255	0.376	100	NA	NA				
Lane 2	417	-	417	7.9	1110	0.376	100	NA	NA				
Lane 3	_	15	15	0.0	123	0.123	100	0.0	2				
Approac	889	15	904	7.8		0.376							
h													
North: Bur	swood	Drive (E	ast)										
Mov.	L2	R2	Total	%HV		Deg.	Lane	Prob.	Ov.				
From N					Cap.	Satn		SL Ov.	Lane				
To Exit:	Ε	W			veh/h	v/c	%	%	No.				
Lane 1	203	-	203	10.8	270	0.752	100	100.0	2				
Lane 2	_	61	61	21.6	333	0.184	100	NA	NA				
Approac	203	61	264	13.3		0.752							
h													
West: Ti R	akau D	rive (We	est)										
Mov.	L2	T1	Total	%HV		Deg.		Prob.	Ov.				
From W					Cap.	Satn		SL Ov.	Lane				
To Exit:	N	Е			veh/h	v/c	%	%	No.				
Lane 1	107	414	521	7.8	581	0.896	100	NA	NA				
Lane 2	-	466	466	6.5	520	0.896	100	NA	NA				
Lane 3	-	601	601	6.5	671	0.896	100	<mark>35.5</mark>	2				
Approac	107	1481	1588	6.9		0.896							
h													
	Total	%HV [Deg . Sa	tn (v/c)									
Intersec	2756	8.0		0.896									
tion													
Site: 19.0	[19.0 G	reenmo	unt Dr	/ Ti Raka	au Dr]								
South: Gre	enmou	nt Drive	;										
Mov.	L2	R2	Total	%HV			Deg.	Lane	Prob.	Ov.			
From S						Cap.	Satn		SL Ov.	Lane			
To Exit:	W	Е				veh/h	v/c	%	%	No.			
Lane 1	206	84	290	5.9		281	1.033	100	NA	NA			
Lane 2	-	432	432	6.2		418	1.033	100	NA	NA			
Approac	206	516	722	6.1			1.033						
h													
East: Ti Ra	akau Dr	ive (Eas	st)										
	,,	- (,										

Mov.	L2	T1	R1	Total	%HV	0-1	Deg.	Lane	Prob.	Ov.	
From E To Exit:	S	W	NW			Cap. veh/h	Satn v/c	Util. %	SL Ov.	Lane No.	
Lane 1	67	_	_	67	9.0	1436	0.047	100	0.0	2	
Lane 2	_	235	_	235	8.2	486 ¹	0.484	100	NA	NA	
Lane 3	_	512	_	512	8.2	1056	0.484	100	NA	NA	
Lane 4	_	_	16	16	100.0	1137	0.014	100	NA	NA	
Approac	67	747	16	830	10.0		0.484				
h											
NorthWes	t: Busw	ay									
Mov.	L1	Tota l	%HV				Deg.		Prob.	Ov.	
From NVV						Cap. veh/h	Satn v/c	Util. %	SL Ov.	Lane No.	
To Exit:	Е					¥31,711	V /C	70	/0	110.	
Lane 1	28	28	100.0			1137	0.025	100	NA	NA	
Approac	28	28	100.0				0.025				
h											
West: Ti F	Rakau D	rive (W	est)								
Mov.	T1	R2	Tota l	%HV			Deg.		Prob.	Ov.	
From W						Cap. veh/h	Satn v/c	Util. %	SL Ov.	Lane No.	
To Exit:	Е	S									
Lane 1	791	-	791	6.7		1264	0.626	100	NA	NA	
Lane 2	791	-	791	6.7		1264	0.626	100	NA	NA	
Lane 3	-	107	107	11.0		114	0.934	100	NA	NA	
Approac h	1582	107	1689	7.0			0.934				
"											
	Total	%HV	Deg.Sat	in (v/c)							
Intersec	3269	8.4		1,033							
tion	3 =03	.		.,							

1 Reduced capacity due to a short lane effect. Short lane queues may extend into the full-length lanes. Some upstream delays at entry to short lanes are not included.

Merge Analysis (CCC	3)							
	ne La		Flow Rate	Critical Gap sec	Follow-up Headway sec	Capacity veh/h	Deg. Satn I	Merge Delay sec
Site: 18.0 [18.0 Burswood	od Dr (Eas	st) / Ti Rakaı	u Dr]					
East Exit: Ti Rakau Drive Merge Type: Not Applie	, ,							
Full Length Lane Full Length Lane Full Length Lane	2 Mei	ge Ana l ysis	not applied. not applied. not applied.					
North Exit: Burswood Dr Merge Type: Not Applie	` ′							
Full Length Lane	1 Mei	ge Ana l ysis	not applied.					
West Exit: Ti Rakau Driv Merge Type: Not Applie	` '							
Full Length Lane Full Length Lane Full Length Lane	2 Mei	ge Analysis	not applied. not applied. not applied.					
Site: 19.0 [19.0 Greenm	ount Dr /	Ti Rakau Dr]					
South Exit: Greenmount Merge Type: Zipper	Drive							

Exit Short Lane Merge Lane	1 2	15 -	50.0 50.0		56 35	2.50 2.50	2.00 2.00	67 107	1737 0.039 1761 0.061	0.0 0.0	0.0
East Exit: Ti Rakau Dri Merge Type: Not Appl		ast)									
Full Length Lane Full Length Lane Full Length Lane	1 2 3	Merge Ar Merge Ar Merge Ar	na l ysis ı	not a _l	oplied.						
NorthWest Exit: Buswa Merge Type: Not Appl	,										
Full Length Lane	1	Merge Ar	na l ysis ı	not a _l	oplied.						
West Exit: Ti Rakau Dr Merge Type: Not Appl	•	/est)									
Full Length Lane Full Length Lane	1 2	Merge Ar Merge Ar	•		•						

▼ Site: 19.A [19.A Bus entrance to depot (Site Folder: PM)]

■■ Network: N101 [PM - Town Centre Drive four lanes (Network Folder: General)]

Site Category: (None) Give-Way (Two-Way)

Lane Use	and P	erforn	nance												
	DEM FLC [Total	WS HV]	ARR FLC [Total	WS HV]	Сар.		Lane Util.	Delay	Level of Service	85% BA QUE [Veh		Lane Config	Lane Length	Cap. Adj.	Prob. Block.
East: Ti Ra	veh/h	% vo (Fo	veh/h	%	veh/h	v/c	%	sec			m		m	%	%
			,												
Lane 1	407	8.2	407	8.2		0.221	100	0.0	LOS A	0.0	0.0	Full	128	0.0	0.0
Lane 2	407	8.2	407	8.2	1841	0.221	100	0.0	LOS A	0.0	0.0	Full	128	0.0	0.0
Lane 3 (B)	26	100.0	26	100.0	1165	0.022	100	2.2	LOS A	0.1	8.0	Full	128	0.0	0.0
Approach	840	11.1	840	11.1		0.221		0.1	NA	0.1	8.0				
North: bus	depot e	entranc	e exit												
Lane 1 (B)	20	100.0	20	100.0	738	0.027	100	0.3	LOS A	0.1	1.2	Full	40	0.0	0.0
Approach	20	100.0	20	100.0		0.027		0.3	LOSA	0.1	1.2				
West: Ti Ra	akau Dr	ive (W	est)												
Lane 1 (B)	38	100.0	38	100.0	1166	0.033	100	1.3	LOS A	0.0	0.0	Full	72	0.0	0.0
Lane 2	1066	6.6	987	6.6	1860	0.531	100	0.0	LOS A	0.0	0.0	Full	72	0.0	0.0
Lane 3	1066	6.6	987	6.6	1860	0.531	100	0.0	LOS A	0.0	0.0	Full	72	0.0	0.0
Approach	2170	8.2	2012 ^N	8.4		0.531		0.1	NA	0.0	0.0				
Intersectio n	3030	9.6	2872 ^N	10.1		0.531		0.1	NA	0.1	1.2				

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab). Lane LOS values are based on average delay per lane.

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

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 lanes.

Delay Model: SIDRA Standard (Geometric Delay is included).

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

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

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

Approach l	Lane Flo	ws (v	eh/h)							
East: Ti Raka	au Drive (East)								
Mov. From E To Exit:	T1 W	R2 N	Tota l	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.	
Lane 1 Lane 2 Lane 3	407 407 16	- - 10	407 407 26	8.2 8.2 100.0	1841 1841 1165	0.221 0.221 0.022	100 100 100	NA NA NA	NA NA NA	
Approach	830	10	840	11.1		0.221				
North: bus de	epot entra	ance e	xit							
Mov. From N To Exit:	L2 E	R2 W	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.	
Lane 1 Approach	10 10	10 10	20 20	100.0 100.0	738	0.027 0.027	100	NA	NA	

West: Ti Rak	au Drive	e (West)							
Mov. From W To Exit:	L2 N	T1 E	Total	%HV	Cap. veh/h	Deg. Satn v/c		Prob. SL Ov. %	Ov. Lane No.	
Lane 1	10	28	38	100.0	1166	0.033	100	NA	NA	
Lane 2	-	987	987	6.6	1860	0.531	100	NA	NA	
Lane 3	_	987	987	6.6	1860	0.531	100	NA	NA	
Approach	10	2002	2012	8.4		0.531				
	Total	%HV[Deg.Sat	tn (v/c)						
Intersection	2872	10.1		0.531						

Merge Analysis									
Exi Lane Numbe	e Lane	Opng in Lane	Opposing Flow Rate veh/h pcu/h	Critica l Gap sec	Follow-up Headway sec	apacity veh/h	Deg. Satn	Min. De l ay sec	Merge De l ay sec
East Exit: Ti Rakau Drive (Merge Type: Not Applied	East)								
3	2 Merge	Ana l ysis	not applied. not applied. not applied.						
North Exit: bus depot entra Merge Type: Not Applied	ance exit								
Full Length Lane	Merge	Ana l ysis	not applied.						
West Exit: Ti Rakau Drive Merge Type: Not Applied	(West)								
Full Length Lane	Merge	Ana l ysis	not applied.						
Full Length Lane	2 Merge	Ana l ysis	not applied.						
Full Length Lane	B Merge	Ana l ysis	not applied.						

Site: 19.B [19.B Bus Depot Entrance - Copy (Site Folder: PM)]

■■ Network: N101 [PM - Town Centre Drive four lanes (Network Folder: General)]

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 150 seconds (Network Site User-Given Phase Times)

Lane Use	and F	erforn	nance												
		IAND DWS HV] %		IVAL DWS HV] %	Cap.	Deg. Satn v/c	Lane Util.		Level of Service		ACK OF EUE Dist] m	Lane Config	Lane Length m	Cap. Adj. %	Prob. Block.
East: Ti Ra	kau Dri	ive (Ea	st)												
Lane 1 Lane 2	421 411	8.1 8.1	421 411	8.1 8.1		0.314 0.314	100 100	5.8 6.2	LOS A LOS A	6.6 6.8	49.4 50.9	Full Full	40 40	0.0	34.2 37.2
Lane 3	10	0.0	10	0.0	222	0.045	100	73.9	LOS E	0.6	4.5	Short	21	0.0	NA
Lane 4 (B) Approach	16 858	100.0 9.7	16 858	100.0 9.7		0.023	100	0.7 6.7	LOS A	0.0 6.8	0.3 50.9	Full	40	0.0	0.0
North: Bus	depot (entrace	/exit												
Lane 1	20	0.0	20	0.0	189	0.106	100	67.9	LOS E	1.2	8.5	Full	40	0.0	0.0
Approach	20	0.0	20	0.0		0.106		67.9	LOS E	1.2	8.5				
West: Ti Ra	akau Di	rive (We	est)												
Lane 1 (B)	28	100.0	28	100.0	685	0.041	100	0.7	LOS A	0.0	0.5	Full	128	0.0	0.0
Lane 2	10	0.0	9	0.0	357	0.025	100	58.4	LOS E	0.5	3.7	Short	25	0.0	NA
Lane 3	1061	6.6	965	6.6	1254 ¹	0.770	100	15.6	LOS B	25.3 ^{N4}	187.0 ^{N4}		128	0.0	50.0
Lane 4	1071	6.6	974	6.6	1265	0.770	100	9.1	LOS A	25.3 ^{N4}	187.0 ^{N4}	Full	128	0.0	<mark>50.0</mark>
Approach	2170	7.7	1977 ^N	7.9		0.770		12.4	LOS B	25.3	187.0				
Intersectio n	3048	8.2	2855 ^N	8.8		0.770		11.0	LOS B	25.3	187.0				

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab). Lane LOS values are based on average delay per lane.

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

Delay Model: SIDRA Standard (Geometric Delay is included).

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

- 1 Reduced capacity due to a short lane effect. Short lane queues may extend into the full-length lanes. Some upstream delays at entry to short lanes are not included.
- N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.
- N4 Average back of queue has been restricted to the available queue storage space.

Approac	h Lane Flo	ows (v	eh/h)						
East: Ti R	akau Drive ((East)							
Mov. From E To Exit:	T1 W	R2 N	Total	%HV	Cap. veh/h	Deg. Satn v/c		Prob. SL Ov. %	Ov. Lane No.
Lane 1	421	-	421	8.1	1340	0.314	100	NA	NA
Lane 2	411	-	411	8.1	1309 ¹	0.314	100	NA	NA
Lane 3	-	10	10	0.0	222	0.045	100	0.0	2
Lane 4	16	-	16	100.0	685	0.023	100	NA	NA
Approach	848	10	858	9.7		0.314			
North: Bu	s depot entra	ace/ex	it						
Mov.	L2	R2	Total	%HV		Deg.	Lane	Prob.	Ov.

From N To Exit:	Е	W			Cap. veh/h	Satn v/c	Util. %	SL Ov. %	Lane No.	
Lane 1	10	10	20	0.0	189	0.106	100	NA	NA	
Approach	10	10	20	0.0		0.106				
West: Ti Raka	au Drive	(West)							
Mov. From W To Exit:	L2 N	T1 E	Total	%HV	Cap. veh/h	Deg. Satn v/c		Prob. SL Ov. %	Ov. Lane No.	
Lane 1	_	28	28	100.0	685	0.041	100	NA	NA	
Lane 2	9	_	9	0.0	357	0.025	100	0.0	3	
Lane 3	-	965	965	6.6	1254 ¹	0.770	100	NA	NA	
Lane 4		974	974	6.6	1265	0.770	100	NA	NA	
Approach	9	1968	1977	7.9		0.770				
	Total	%HV[Deg.Sa	tn (v/c)						
Intersection	2855	8.8		0.770						

1 Reduced capacity due to a short lane effect. Short lane queues may extend into the full-length lanes. Some upstream delays at entry to short lanes are not included.

Merge Analysis										
Ex Lan Numbe	ie		Opng in Lane	Opposing Flow Rate veh/h pcu/	ė	Critica l Gap sec	Follow-up Headway sec	Capacity veh/h	Min. De l ay sec	Merge Delay sec
East Exit: Ti Rakau Drive Merge Type: Not Applied		ıst)								
Full Length Lane	1 2 3	Merge	Ana l ysis	not applie not applie not applie	d.					
North Exit: Bus depot ent Merge Type: Not Applied		e/exit								
Full Length Lane	1	Merge	Analysis	not applie	d.					
West Exit: Ti Rakau Drive Merge Type: Not Applied	•	lest)								
Full Length Lane	1	Merge.	Analysis	not applie	d.					
Full Length Lane	2	Merge	Analysis	not applie	d.					
Full Length Lane	3	Merge	Analysis	not applie	d.					

Site: 20.2 [20.2 Huntington Dr / Ti Rakau Dr (Site Folder: PM)]

■■ Network: N101 [PM - Town Centre Drive four lanes (Network Folder: General)]

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 150 seconds (Network User-Given Cycle Time)

Lane Use	and P	erforn	nance												
	DEM FLC [Total veh/h	AND	ARR	IVAL DWS	Cap.	Deg. Satn v/c	Lane Util. %		Level of Service	85% BA QUE [Veh		Lane Config	Lane Length m	Cap. Adj. %	Prob. Block.
South: Hun	tington	Drive													
Lane 1 Lane 2 Approach	29 33 62	20.7 6.1 12.9	29 33 62	20.7 6.1 12.9		0.179 0.864 0.864	100 100	65.1 99.9 83.6	LOS E LOS F	1.7 2.6 2.6	13.9 19.0 19.0	Short Full	101 575	-34.4 ^{N7} -43.7 ^{N3}	
East: Ti Ra	kau Dri	ve (Ea	st)												
Lane 1 Lane 2 Lane 3 (B) Approach	423 401 16 840	9.3 7.7 100.0 10.2	423 401 16 840	9.3 7.7 100.0 10.2	883	0.454 0.454 0.013 0.454	100 100 100	6.8 6.7 0.0 6.7	LOS A LOS A LOS A	8.3 8.1 0.0 8.3	62.5 60.8 0.0 62.5	Full Full Full	106 106 106	-32.7 ^{N7} -37.1 ^{N7} 0.0	0.0 0.0 0.0
West: Ti Ra	akau Dr	ive (W	est)												
Lane 1 (B) Lane 2 Lane 3 Lane 4 Approach	28 1297 773 90 2188	100.0 6.6 6.6 6.7 7.8	28 881 525 61 1496 ^N	100.0 6.6 6.6 6.7 8.3	1546 922	0.023 0.570 0.570 0.463 0.570	100 100 100 100	0.0 0.4 0.4 82.3 3.8	LOS A LOS A LOS F LOS A	0.0 2.5 1.5 4.1 4.1	0.0 18.8 11.4 30.6 30.6	Full Full Full Short	40 40 40 28	0.0 -5.6 ^{N3} -43.7 ^{N3} 0.0	
Intersectio n	3090	8.5	2397 ^N	11.0		0.864		6.8	LOSA	8.3	62.5				

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab). Lane LOS values are based on average delay per lane.

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

Delay Model: SIDRA Standard (Geometric Delay is included).

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

- N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.
- N3 Capacity Adjustment due to downstream lane blockage determined by the program.
- N7 The capacity reduction has been determined from the queue blockage probability of a Site further downstream due to intermediate continuous lanes.

Approach L	Approach Lane Flows (veh/h)													
South: Huntin	ngton Dri	ve												
Mov. From S	L2	R2	Total	%HV	Cap.	Deg. Satn	Util.	Prob. SL Ov.	Ov. Lane					
To Exit:	W	Ε			veh/h	v/c	%	%	No.					
Lane 1	29	-	29	20.7	162	0.179	100	0.0	2					
Lane 2	-	33	33	6.1	38	0.864	100	NA	NA					
Approach	29	33	62	12.9		0.864								
East: Ti Raka	ıu Drive ((East)												
Mov. From E	L2	T1	Total	%HV	Cap.	Deg. Satn	Util.	Prob. SL Ov.	Ov. Lane					
To Exit:	S	W			veh/h	v/c	%	%	No.					
Lane 1	31	392	423	9.3	931	0.454	100	NA	NA					

Lane 2	_	401	401	7.7	883	0.454	100	NA	NA
Lane 3	_	16	16	100.0	1194	0.013	100	NA	NA
Approach	31	809	840	10.2		0.454			
West: Ti Rak	au Drive	e (West))						
Mov. From W To Exit:	T1 E	R2 S	Total	%HV	Cap. veh/h	Deg. Satn v/c		Prob. SL Ov. %	Ov. Lane No.
Lane 1	28	-	28	100.0	1194	0.023	100	NA	NA
Lane 2	881	-	881	6.6	1546	0.570	100	NA	NA
Lane 3	525	_	525	6.6	922	0.570	100	NA	NA
Lane 4	-	61	61	6.7	132	0.463	100	<mark>23.1</mark>	3
Approach	1435	61	1496	8.3		0.570			
	Total	%HV[Deg.Sat	tn (v/c)					
Intersection	2397	11.0		0.864					

Merge Analysis												
	Exit Lane Number		Percent Opng in Lane	Flow		Critical Gap sec	Follow-up Headway sec	Lane (Flow Rate veh/h	Capacity veh/h	Deg. Satn I		Merge De l ay sec
South Exit: Hunting Merge Type: Zippe	•											
Exit Short Lane	2	16	50.0	37	40	2.50	2.00	18	1756	0.010	0.0	0.0
Merge Lane	1	-	50.0	9	9	2.50	2.00	74	1790	0.041	0.0	0.0
East Exit: Ti Rakau Merge Type: Not A	•	ast)										
Full Length Lane	1	Merge	Analysis	not a	pplied.							
Full Length Lane	2	Merge	Ana l ysis	not a	pplied.							
Full Length Lane	3	Merge	Analysis	not a	pplied.							
West Exit: Ti Raka Merge Type: Not A	•	/est)										
Full Length Lane	1	Merge	Ana l ysis	not a	pplied.							
Full Length Lane	2	Merge	Analysis	not a	pplied.							
Full Length Lane	3	Merge	Ana l ysis	not a	pplied.							

Site: 20a.2 [20a.2 Ti Rakau Dr Busway crossover - EB4i,EB4L

■■ Network: N101 [PM - Town (Site Folder: PM)] Centre Drive four lanes (Network Folder: General)]

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 150 seconds (Network Site User-Given Phase

Lane Use	and P	erforr	nance												
	DEM FLC [Total veh/h)WS	ARR FLC [Total veh/h	WS HV]	Cap.	Deg. Satn v/c	Lane Util. %		Level of Service	85% BA QUE [Veh	ACK OF EUE Dist] m	Lane Config	Lane Length m	Cap. Adj. %	Prob. Block. %
SouthEast:	Link R	oad													
Lane 1 (B)	17	100.0	17	100.0	210	0.080	100	41.2	LOS D	0.7	9.3	Full	450	0.0	0.0
Approach	17	100.0	17	100.0		0.080		41.2	LOS D	0.7	9.3				
East: Ti Ra	kau Dri	ve (Ea	st)												
Lane 1	412	8.5	411	8.5	1225	0.336	100	4.1	LOS A	4.4	32.8	Full	160	0.0	0.0
Lane 2	412	8.5	411	8.5	1225	0.336	100	4.1	LOS A	4.4	32.9	Full	160	0.0	0.0
Lane 3 (B)	1	100.0	1	100.0	219	0.005	100	35.2	LOS D	0.0	0.6	Full	160	0.0	0.0
Approach	824	8.6	824	8.6		0.336		4.1	LOSA	4.4	32.9				
West: Ti Ra	akau Dr	ive (W	est)												
Lane 1 (B)	29	100.0	29	100.0	218	0.135	100	25.9	LOS C	8.0	10.1	Full	106	0.0	0.0
Lane 2	1058	6.6	748	6.6	1240	0.603	100	6.3	LOS A	11.2	83.0	Full	106	0.0	0.0
Lane 3	1058	6.6	748	6.6	1240	0.603	100	8.8	LOS A	14.5	107.4	Full	106	0.0	<mark>16.2</mark>
Approach	2145	7.9	1525 ^N	8.4		0.603		7.9	LOSA	14.5	107.4				
Intersectio n	2986	8.6	2365 ^N	10.8		0.603		6.8	LOSA	14.5	107.4				

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab). Lane LOS values are based on average delay per lane.

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

Delay Model: SIDRA Standard (Geometric Delay is included).

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

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

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

Approach I	Lane Fl	ows (v	veh/h)					
SouthEast: L	ink Road	t						
Mov. From SE To Exit:	L1 W	Total	%HV	Cap. veh/h	Deg. Satn v/c		Prob. SL Ov. %	Ov. Lane No.
Lane 1	17	17	100.0	210	0.080	100	NA	NA
Approach	17	17	100.0		0.080			
East: Ti Raka	au Drive	(East)						
Mov. From E To Exit:	T1 W	Total	%HV	Cap. veh/h	Deg. Satn v/c		Prob. SL Ov. %	Ov. Lane No.
Lane 1	411	411	8.5	1225	0.336	100	NA	NA
Lane 2	411	411	8.5	1225	0.336	100	NA	NA
Lane 3	1	1	100.0	219	0.005	100	NA	NA
Approach	824	824	8.6		0.336			
West: Ti Rak	au Drive	(West)					

Mov. From W To Exit:	T1 E	R1 SE	Total	%HV	Cap. veh/h	Deg. Satn v/c		Prob. SL Ov. %	Ov. Lane No.	
Lane 1	-	29	29	100.0	218	0.135	100	NA	NA	
Lane 2	74 8	-	74 8	6.6	1240	0.603	100	NA	NA	
Lane 3	748	_	74 8	6.6	1240	0.603	100	NA	NA	
Approach	1495	29	1525	8.4		0.603				
	Total	%HV[Deg.Sa	tn (v/c)						
Intersection	2365	10.8		0.603						

Merge Analysis										
E: Lar Numb			Opng in Lane	Opposing Flow Rate veh/h pcu/	: G	ca l ap ec	Follow-up Headway sec	Capacity veh/h	Deg. Satn I v/c	Merge De l ay sec
SouthEast Exit: Link Roa Merge Type: Not Applie										
Full Length Lane	1	Merge	Ana l ysis	not applied	i.					
East Exit: Ti Rakau Drive Merge Type: Not Applied	•	ast)								
Full Length Lane Full Length Lane Full Length Lane	1 2 3	Merge .	Ana l ysis	not applied not applied not applied	i.					
West Exit: Ti Rakau Drive Merge Type: Not Applie	•	/est)								
Full Length Lane Full Length Lane Full Length Lane	1 2 3	Merge .	Ana l ysis	not applied not applied not applied	i.					

Site: 21.2 [21.2 Te Koha Rd/ Ti Rakau Dr - EB4i (Site Folder: PM)]

■■ Network: N101 [PM - Town Centre Drive four lanes (Network Folder: General)]

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 150 seconds (Network Site User-Given Phase Times)

Lane Use	Lane Use and Performance														
	DEM FLC [Total)WS	ARR FLC [Total	WS	Сар.	Deg. Satn	Lane Util.		Level of Service	85% BA QUE [Veh		Lane Config	Lane Length	Cap. Adj.	Prob. B l ock.
	veh/h	% _	veh/h	%	veh/h	v/c	%	sec			m ¹		m	%	%
SouthEast:	Te Kol	na Road	t												
Lane 1	241	9.5	241	9.5	978	0.246	100	5.8	LOS A	2.2	16.4	Short	25	0.0	NA
Lane 2	105	8.2	105	8.2	1 4 9	0.703	100	73.6	LOS E	6.7	50.0	Short	37	0.0	NA
Lane 3	139	8.2	139	8.2	198 ¹	0.703	100	74.7	LOS E	9.1	67.9	Full	70	0.0	12.3
Approach	485	8.9	485	8.9		0.703		40.3	LOS D	9.1	67.9				
NorthEast:	Ti Rak	au Driv	e (East	:)											
Lane 1	41	9.8	41	9.8	1405	0.029	100	5.6	LOS A	0.3	2.2	Short	46	0.0	NA
Lane 2	295	8.0	295	8.0	1069	0.276	100	16.5	LOS B	9.4	70.5	Full	303	0.0	0.0
Lane 3	290	8.0	290	8.0	1053	0.276	100	16.5	LOS B	9.3	69.4	Full	303	0.0	0.0
Lane 4 (B)	1	100.0	1	100.0	668	0.001	100	13.7	LOS B	0.0	0.3	Two Seg ⁹	303	0.0	0.0
Approach	627	8.3	627	8.3		0.276		15.8	LOS B	9.4	70.5				
SouthWest	: Ti Ral	kau Driv	ve (We	st)											
Lane 1 (B)	8	100.0	8	100.0	921	0.009	100	3.1	LOS A	0.1	1.3	Full	160	0.0	0.0
Lane 2	1024	6.3	750	6.3	1379	0.544	100	7.4	LOS A	17.0	125.5	Full	160	0.0	0.0
Lane 3	934	6.3	683	6.3	1257 ¹	0.544	100	6.8	LOS A	15.8	116.9	Full	160	0.0	0.0
Lane 4	159	9.4	116	9.4	307	0.379	100	74.8	LOS E	7.6	57.5	Short	75	0.0	NA
Approach	2125	6.9	1558 ^N	7.0		0.544		12.2	LOS B	17.0	125.5				
Intersectio n	3237	7.4	2670 ^N	9.0		0.703		18.1	LOS B	17.0	125.5				

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab). Lane LOS values are based on average delay per lane.

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

Delay Model: SIDRA Standard (Geometric Delay is included).

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

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

- 1 Reduced capacity due to a short lane effect. Short lane queues may extend into the full-length lanes. Some upstream delays at entry to short lanes are not included.
- 9 All Movement Classes allocated to Segment 1 are also allocated to Segment 2. This Two-Segment Lane has been modelled as a full-length lane.

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

SouthEast:	Te Koha l	Road							
Mov. From SE	L2	R2	Total	%HV	Cap.	Deg. Satn	Util.	Prob. SL Ov.	
To Exit:	SW	NE			veh/h	v/c	%	%	No.
Lane 1	241	-	241	9.5	978	0.246	100	0.0	2
Lane 2	-	105	105	8.2	149 ¹	0.703	100	<mark>42.7</mark>	3
Lane 3	-	139	139	8.2	198 ¹	0.703	100	NA	NA
Approach	241	244	485	8.9		0.703			

NorthEast: Ti	i Rakau	Drive (I	East)							
Mov. From NE	L2	T1	Total	%HV	Cap.	Deg. Satn	Util.	Prob. SL Ov.	Ov. Lane	
To Exit:	SE	SW			veh/h	v/c	%	%	No.	
Lane 1	41	-	41	9.8	1405	0.029	100	0.0	2	
Lane 2	-	295	295	8.0	1069	0.276	100	NA	NA	
Lane 3	-	290	290	8.0	1053	0.276	100	NA	NA	
Lane 4		1	1	100.0	668	0.001	100	0.0	3	
Approach	41	586	627	8.3		0.276				
SouthWest: 7	Γi Rakaι	ı Drive	(West)							
Mov.	T1	R2	Total	%HV		Deg.	Lane		Ov.	
From SW		0=			Cap. veh/h	Satn v/c	Util. %	SL Ov. %	Lane No.	
To Exit:	NE	SE								
Lane 1	8	-	8	100.0	921	0.009	100	NA	NA	
Lane 2	750	-	750	6.3	1379		100	NA	NA	
Lane 3	683	-	683	6.3		0.544	100	NA	NA	
Lane 4	_	116	116	9.4	307	0.379	100	0.0	3	
Approach	1441	116	1558	7.0		0.544				
	Total	%HV[Deg.Sa	tn (v/c)						

1 Reduced capacity due to a short lane effect. Short lane queues may extend into the full-length lanes. Some upstream delays at entry to short lanes are not included.

Merge Analysis									
	xit ne oer	Lane Opng	cent Opposing g in Flow Rate ane % veh/h pcu/l	Gap	Follow-up Headway sec	Lane Ca F l ow Rate veh/h	pacity veh/h	Deg. Satn I v/c	Merge Delay sec
SouthEast Exit: Te Koha Merge Type: Not Applie		ad							
Full Length Lane	1	Merge Analys	sis not applied	l.					
NorthEast Exit: Ti Rakau Merge Type: Not Applie		ve (East)							
Full Length Lane Full Length Lane Full Length Lane	1 2 3	Merge Analys	ysis not applied ysis not applied ysis not applied	l.					
SouthWest Exit: Ti Raka Merge Type: Not Applie		ive (West)							
Full Length Lane Full Length Lane Full Length Lane	1 2 3	Merge Analys	ysis not applied ysis not applied ysis not applied	l.					

Site: 22.0 [22.0 Te Irirangi Dr / Ti Rakau Dr - EB4i (Site Folder: PM)]

■■ Network: N101 [PM - Town Centre Drive four lanes (Network Folder: General)]

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 109 seconds (Site Practical Cycle Time)

Lane Use	and P	erfori	nance												
	DEM. FLO		ARRI FLO			eg. atn	Lane Util.		Level of Service		ACK OF	Lane	Lane Length	Cap. Adi.	Prob. Block.
	Total				oup. 3	alli	Otil.	Delay	Service	[Veh	Dist]	Corning	Lengin	Auj.	DIUCK.
	veh/h	%	veh/h	%	veh/h	v/c	%	sec		•	m -		m	%	%
South: Te I	rirangi [Orive													
Lane 1	85	7.1	85	7.1	1260 0.0		100	6.2	LOS A	0.7	4.9	Short	81	0.0	NA
Lane 2	404	8.8	404	8.8	397 ¹ 1.0)17	100	102.0	LOS F	30.1	226.8	Full	289	0.0	0.0
Lane 3	392	8.8	392	8.8	385 1.0)17	100	102.5	LOS F	29.3	220.7	Full	289	0.0	0.0
Lane 4	104	7.2	104	7.2	110 0.9	939	100	78.5	LOS E	6.1	45.3	Short	148	0.0	NA
Lane 5	104	7.2	104	7.2	111 0.9		100	78.4	LOS E	6.1	45.5	Short	131	0.0	NA
Approach	1089	8.4	1089	8.4	1.0)17		90.2	LOS F	30.1	226.8				
East: Ti Ra	kau Dri	ve (Ea	ıst)												
Lane 1	222	8.6	222	8.6	683 0.3	325	100	13.5	LOS B	4.4	32.8	Short	100	<mark>-15.0</mark> N3	NA
Lane 2	117	8.9	117	8.9	285 0.4	411	100	47.1	LOS D	5.1	38.8	Full	123	0.0	0.0
Lane 3	117	8.9	117	8.9	285 0.4	411	100	47.1	LOS D	5.1	38.8	Full	123	0.0	0.0
Lane 4	115	8.9	115	8.9	280 0.4	411	100	47.2	LOS D	5.1	38.2	Full	123	0.0	0.0
Lane 5	235	5.2	235	5.2	274 0.8	359	100	63.5	LOS E	12.5	91.1	Full	123	0.0	0.0
Lane 6	230	5.2	230	5.2	268 0.8	359	100	63.6	LOS E	12.2	89.3	Short	102	0.0	NA
Approach	1036	7.1	1036	7.1	3.0	359		47.3	LOS D	12.5	91.1				
North: Bota	any Roa	d													
Lane 1	361	5.0	361	5.0	1238 0.2	292	100	10.9	LOS B	6.4	46.4	Short	77	0.0	NA
Lane 2	343	9.5	343	9.5	611 0.5	561	100	29.0	LOS C	13.0	98.2	Full	265	<mark>-15.0</mark> N3	0.0
Lane 3	382	9.5	382	9.5	680 0.5	561	100	28.9	LOS C	14.4	108.8	Full	265	0.0	0.0
Lane 4	99	8.1	99	8.1	303 0.3	325	100	28.3	LOS C	2.7	20.3	Short	80	0.0	NA
Lane 5	99	8.1	99	8.1	303 0.3	325	100	28.3	LOS C	2.7	20.3	Full	265	0.0	0.0
Approach	1283	8.0	1283	8.0	0.5	561		23.8	LOS C	14.4	108.8				
West: Ti Ra	akau Dr	ive (W	est)												
Lane 1	522	6.5	413	6.7	539 0.7	766	100	29.9	LOS C	12.1	89.6	Short	92	0.0	NA
Lane 2	514	6.5	407	6.7	531 0.7	766	100	30.0	LOS C	12.0	88.4	Full	303	0.0	0.0
Lane 3	401	7.5	318	7.7	334 ¹ 0.9	953	100	73.6	LOS E	19.7	147.1	Full	303	0.0	0.0
Lane 4	401	7.5	318	7.7	334 0.9	953	100	73.7	LOS E	19.7	147.3	Full	303	0.0	0.0
Lane 5	183	6.8	145	6.9	267 0.5	543	100	49.4	LOS D	6.5	48.0	Short	104	-15.0 ^{N3}	NA
Lane 6	215	6.8	170	6.9	313 0.5	543	100	49.1	LOS D	7.5	55.8	Short	70	0.0	NA
Approach	2235	6.9	1772 ^N	7.1	0.9	953		49.1	LOS D	19.7	147.3				
Intersectio n	5643	7.5	5180 ^N	8.2	1 <u>.</u> ()17		51.1	LOS D	30.1	226.8				

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab). Lane LOS values are based on average delay per lane.

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

Delay Model: SIDRA Standard (Geometric Delay is included).

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

¹ Reduced capacity due to a short lane effect. Short lane queues may extend into the full-length lanes. Some upstream delays at entry to short lanes are not included.

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

N3 Capacity Adjustment due to downstream lane blockage determined by the program.

Approach L	₋ane FI	ows (v	eh/h)								
South: Te Irira											
Mov.	L2	T1	R2	Total	%HV		Deg.	Lane	Prob.	Ov.	
From S						Cap.	Satn	Util.	SL Ov.	Lane	
To Exit:	W	Ν	Е			veh/h	v/c	%	%	No.	
Lane 1	85	_	_	85	7.1	1260	0.067	100	0.0	2	
Lane 2	_	404	_	404	8.8	397 ¹	1.017	100	NA	NA	
Lane 3	_	392	_	392	8.8	385	1.017	100	NA	NA	
Lane 4	_	-	104	104	7.2		0.939	100	0.0	3	
Lane 5	_	_	104	104	7.2		0.939	100	0.0	4	
Approach	- 85	- 796	208	1089	8.4		1,017	100	0.0		
East: Ti Raka											
Mov.	L2	T1	R2	Total	%HV		Deg.	Lane	Prob.	Ov.	
From E	LZ		- 1\Z	Total	701 1 V	Cap.	Satn		SL Ov.	Lane	
To Exit:	S	W	N			veh/h	v/c	%	%	No.	
Lane 1	222	-	_	222	8.6	683	0.325	100	0.0	2	
Lane 2		- 117	_	117	8.9	285	0.323	100	NA	NA	
Lane 3	_	117	-	117	8.9	285	0.411	100	NA	NA	
Lane 4	_	117	-	117	8.9	280	0.411	100	NA	NA	
Lane 5	-	-	235	235	5.2		0.859	100	NA	NA	
	_		230	230	5.2		0.859	100	3.0	5	
Lane 6		- 240				200		100	3.0	3	
Approach	222	349	465	1036	7.1		0.859				
North: Botany											
Mov.	L2	T1	R2	Total	%HV	0	Deg.		Prob.	Ov.	
From N	_					Cap. veh/h	Satn v/c	Util. %	SL Ov. %	Lane No.	
To Exit:	Е	S	W								
Lane 1	361	-	-	361	5.0	1238	0.292	100	0.0	2	
Lane 2	-	343	-	343	9.5	611	0.561	100	NA	NA	
Lane 3	-	382	-	382	9.5		0.561	100	NA	NA	
Lane 4	-	-	99	99	8.1		0.325	100	0.0	3	
Lane 5		-	99	99	8.1	303	0.325	100	NA	NA	
Approach	361	725	197	1283	8.0		0.561				
West: Ti Raka	au Drive	(West)									
Mov.	L2	T1	R2	Total	%HV		Deg.		Prob.	Ov.	
From W						Cap.	Satn		SL Ov.	Lane	
To Exit:	N	Е	S			veh/h	v/c	%	%	No.	
Lane 1	413	-	-	413	6.7	539	0.766	100	<mark>12.6</mark>	2	
Lane 2	407	-	-	407	6.7	531	0.766	100	NA	NA	
Lane 3	-	318	_	318	7.7	334 ¹	0.953	100	NA	NA	
Lane 4	-	318	_	318	7.7	334	0.953	100	NA	NA	
Lane 5	_	-	145	145	6.9	267	0.543	100	0.0	3	
Lane 6	_	-	170	170	6.9		0.543	100	0.0	3	
Approach	821	636	315	1772	7.1		0.953				
	Total	%HVC	eg.Sat	n (v/c)							
1	E400	0.0		4.04=							
Intersection	5180	8.2		1.017							

Lane flow rates given in this report are based on the arrival flow rates subject to upstream capacity constraint where applicable.

1 Reduced capacity due to a short lane effect. Short lane queues may extend into the full-length lanes. Some upstream delays at entry to short lanes are not included.

Merge Analysis									
	Exit	Short Perce	ent Opposing	Critical	Follow-up	Lane Capacity	Deg.	Min.	Merge
	Lane	Lane Opng	in Flow Rate	e Gap	Headway	Flow	Satn	Delay	Delay

Num	ber	Length m	Lane % veh/h pcu/h	ı sec	Rate sec veh/h	veh/h	v/c	sec	sec
South Exit: Te Irirangi D Merge Type: Not Applie									
Full Length Lane Full Length Lane	1 2	•	nalysis not applied nalysis not applied						
East Exit: Ti Rakau Driv Merge Type: Not Appli	•	ast)							
Full Length Lane Full Length Lane Full Length Lane	1 2 3	Merge A	nalysis not applied nalysis not applied nalysis not applied						
North Exit: Botany Road Merge Type: Not Applie									
Full Length Lane Full Length Lane Full Length Lane	1 2 3	Merge A	nalysis not applied nalysis not applied nalysis not applied						
West Exit: Ti Rakau Driv Merge Type: Not Appli	•	Vest)							
Full Length Lane Full Length Lane Full Length Lane	1 2 3	Merge A	nalysis not applied nalysis not applied nalysis not applied						

Site: 23.2 [23.2a Te Irirangi Dr / Te Koha Rd / Town Centre Dr - EB4i,EB4L 2 (Site Folder: PM)]

■■ Network: N101 [PM - Town Centre Drive four lanes (Network Folder: General)]

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 165 seconds (Site User-Given Phase Times)

Lane Use	and P	erforn	nance												
	DEM			IVAL	Сар.	Deg.			Level of		ACK OF		Lane	Cap.	Prob.
	FLC [Total		FLC Total	WS HV1	Oap.	Satn	Util.	Delay	Service	(Veh	EUE Dist]	Config	Length	Adj.	Block.
	veh/h	%	veh/h		veh/h	v/c	%	sec			m		m	%	%
South: Te I	rirangi I	Drive (S	South)												
Lane 1	317	8.0	317	8.0		0.561	100	31.9	LOS C	10.5	78.2	Short	50	0.0	NA
Lane 2	369	6.5	369	6.5		0.919	100	73.6	LOS E	27.5	203.5	Full	294	0.0	0.0
Lane 3	532	6.5	532	6.5		0.919	100	72.6	LOS E	41.7	308.3	Full	294	0.0	<mark>19.3</mark>
Lane 4	122	21.3	122	21.3	127	0.961	100	116.0	LOS F	10.8	89.3	Short	140	0.0	NA
Approach	1340	8.2	1340	8.2		0.961		67.2	LOS E	41.7	308.3				
East: Town	Centre	Road													
Lane 1	98	25.6	98	25.6	848	0.116	100	16.9	LOS B	2.7	23.0	Short	40	0.0	NA
Lane 2 (B)	17	100.0	17	100.0	407	0.041	100	24.2	LOS C	0.5	6.4	Short	63	0.0	NA
Lane 3	100	12.6	100	12.6	125	0.797	100	90.6	LOS F	7.6	59.3	Full	153	0.0	0.0
Lane 4	92	20.1	92	20.1	116	0.797	100	93.9	LOS F	7.1	58.4	Full	153	0.0	0.0
Approach	307	23.8	307	23.8		0.797		64.4	LOS E	7.6	59.3				
North: Te Ir	irangi [Orive (N	lorth)												
Lane 1	321	14.1	306	14.5	961	0.319	100	12.1	LOS B	5.7	44.8	Short	42	0.0	NA
Lane 2	572	6.3	542	6.3		0.869	100	62.1	LOS E	39.2	289.1	Full	289	0.0	15.0
Lane 3	352	6.3	335	6.3		0.869	100	61.3	LOS E	22.5	166.0	Full	289	0.0	0.0
Lane 4	138	12.2	131	12.3	652	0.201	100	32.3	LOS C	5.3	40.9	Short	135	0.0	NA
Approach	1383	8.7	1314 ^N	8.8		0.869		47.2	LOS D	39.2	289.1				
West: Te K	oha Rd														
Lane 1	143	9.6	143	9.6	213	0.671	100	78.5	LOS E	10.1	76.7	Short	77	0.0	NA
Lane 2	106	7.9	106	7.9	117	0.907	100	104.0	LOS F	8.7	65.0	Full	200	0.0	0.0
Approach	249	8.9	249	8.9		0.907		89.3	LOS F	10.1	76.7				
SouthWest	: Link F	Road													
Lane 1 (B)	21	100.0	21	100.0	293	0.072	100	33.8	LOS C	0.8	10.5	Full	450	0.0	0.0
Approach	21	100.0	21	100.0		0.072		33.8	LOS C	0.8	10.5				
Intersectio n	3300	10.5	3231 ^N	10.7		0.961		60.3	LOS E	41.7	308.3				

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab). Lane LOS values are based on average delay per lane.

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

Delay Model: SIDRA Standard (Geometric Delay is included).

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

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

Approach	Lane Flo	ows (v	eh/h)			
South: Te I	rirangi Driv	e (Sou	th)			
Mov.	L2	T1	R2	Total ^c	6HV	Deg. Lane Prob. Ov.

¹ Reduced capacity due to a short lane effect. Short lane queues may extend into the full-length lanes. Some upstream delays at entry to short lanes are not included.

From S								Satn	Util.	SL Ov.	Lane	
To Exit:	W	N	Е				Cap		%	%	No.	
Lane 1	217	_		317	8.0		veh/	1 0.561	100	<mark>56.3</mark>	2	
Lane 2	317	369	_	369	6.5		401		100 100	NA	NA	
Lane 3	_	532	_	532	6.5		579		100	NA	NA	
Lane 4	_	552	122	122	21.3			7 0.961	100	0.0	3	
Approach	317	901	122	1340	8.2		12	0.961	100	0.0		
East: Town C	entre R	load										
Mov.	L2	L1	T1	R2	Total	%HV		Deg.	Lane	Prob.	Ov.	
From E							Cap			SL Ov.	Lane	
To Exit:	S	SW	W	N			veh/	ı v/c	%	%	No.	
Lane 1	98	-	-	-	98	25.6	84	0.116	100	0.0	2	
Lane 2	-	17	-	-	17	100.0	40	0.041	100	0.0	3	
Lane 3	-	-	58	42	100	12.6	12	0.797	100	NA	NA	
Lane 4	-	-	-	92	92	20.1	110	0.797	100	NA	NA	
Approach	98	17	58	134	307	23.8		0.797				
North: Te Irira	angi Dri	ve (Nor	th)									
Mov.	L2	T1	R2	Total	%HV			Deg.		Prob.	Ov.	
From N							Cap veh/l			SL Ov.	Lane	
To Exit:	Е	S	W				veii/i	ı v/c	%	%	No.	
Lane 1	306	-	-	306	14.5		96		100	<mark>20.9</mark>	3	
Lane 2	-	542	-	542	6.3			0.869	100	NA	NA	
Lane 3	-	335	-	335	6.3		385		100	NA	NA	
Lane 4	-	-	131	131	12.3		65	2 0.201	100	0.0	3	
Approach	306	877	131	1314	8.8			0.869				
West: Te Koh	na Rd											
Mov.	L2	T1	R2	Total	%HV			Deg.	Lane	Prob.	Ov.	
From W		_					Cap veh/l		Util. : %	SL Ov. %	Lane No.	
To Exit:	N	Е	S							_		
Lane 1	59	84	_	143	9.6			3 0.671	100	<mark>14.7</mark>	2	
Lane 2	-	-	106	106	7.9		11	0.907	100	NA	NA	
Approach	59	84	106	249	8.9			0.907				
SouthWest: I												
Mov.	R1	Total	%HV					Deg.		Prob.	Ov.	
From SW To Exit:	Е						Cap veh/l		Util. 3	SL Ov. %	Lane No.	
Lane 1	21	21	100.0				29	3 0,072	100	NA	NA	
Approach	21	21	100.0					0.072	100	14/-1	1 1/7	
pp. 6461				n (1.16)				0.0.2				
	Total	%HV	Deg.Sat	ir (v/c)								
Intersection	3231	10.7		0.961								

1 Reduced capacity due to a short lane effect. Short lane queues may extend into the full-length lanes. Some upstream delays at entry to short lanes are not included.

Merge Analysis								
N	Exit Lane umber		Percent Opposing Opng in Flow Rate Lane % veh/h pcu/h	Critica l Gap sec	Follow-up Headway sec	apacity veh/h	Satn I	Merge Delay sec
South Exit: Te Irirang Merge Type: Not Ap		(South)						
Full Length Lane Full Length Lane	1 2		Analysis not applied. Analysis not applied.					

East Exit: Town Centre Road Merge Type: Not Applied

Merge Analysis not applied. Full Length Lane Full Length Lane 2 Merge Analysis not applied.

North Exit: Te Irirangi Drive (North)

Merge Type: Not Applied

Full Length Lane Merge Analysis not applied. Full Length Lane Merge Analysis not applied.

West Exit: Te Koha Rd Merge Type: Not Applied

Full Length Lane Merge Analysis not applied.

SouthWest Exit: Link Road Merge Type: **Not Applied**

Full Length Lane Merge Analysis not applied.

