Appendix A

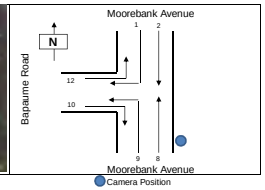
Traffic surveys

Intersection of Moorebank Avenue and Bapaume Road

Tuesday, 7 December 2010

Austraffic

Survey Start	**6:00 AM 16:00 PM**
Intersection Type	T Junction
Intersection No.	**10**
North Approach	**Moorebank Avenue**
East Approach	
South Approach	**Moorebank Avenue**
West Approach	**Bapaume Road**
Date	**7/12/10**
Classification	**Light Heavy**



Camera Position

TIME PERIOD	VEHICLE MOVEMENT																																				GRAND TOTAL		
	1			2			3			4			5			6			7			8			9			10			11			12					
	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ
6:00 - 6:15	13	0	13	56	3	59																185	4	189	0	0	0	1	0	1				1	0	1	256	7	263
6:15 - 6:30	3	1	4	73	6	79																190	12	202	3	0	3	0	1	1				0	0	0	269	20	289
6:30 - 6:45	17	1	18	97	8	105																233	11	244	3	0	3	0	0	0				0	0	0	350	20	370
6:45 - 7:00	33	0	33	161	8	169																219	8	227	6	0	6	0	0	0				1	0	1	420	16	436
7:00 - 7:15	15	0	15	209	15	224																209	11	220	4	0	4	0	0	0				1	0	1	438	26	464
7:15 - 7:30	11	0	11	185	10	195																264	15	279	5	0	5	0	0	0				0	0	0	465	25	490
7:30 - 7:45	13	1	14	138	6	144																225	17	242	2	0	2	0	0	0				0	1	1	378	25	403
7:45 - 8:00	21	0	21	127	11	138																262	11	273	3	0	3	2	0	2				3	0	3	418	22	440
8:00 - 8:15	17	0	17	118	8	126																264	17	281	8	0	8	1	0	1				3	0	3	411	25	436
8:15 - 8:30	22	2	24	111	8	119																262	12	274	8	0	8	0	0	0				4	1	5	407	23	430
8:30 - 8:45	31	0	31	109	10	119																212	12	224	7	1	8	1	0	1				2	1	3	362	24	386
8:45 - 9:00	20	0	20	86	8	94																152	9	161	2	0	2	0	0	0				3	1	4	263	18	281
Σ	216	5	221	1470	101	1571																2677	139	2816	51	1	52	5	1	6				18	4	22	4437	251	4688

TIME PERIOD	VEHICLE MOVEMENT																																				GRAND TOTAL		
	1			2			3			4			5			6			7			8			9			10			11			12					
	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ
16:00 - 16:15	5	0	5	219	9	228																264	13	277	0	0	0	3	1	4				19	0	19	510	23	533
16:15 - 16:30	4	0	4	212	11	223																145	4	149	1	1	2	6	0	6				18	0	18	386	16	402
16:30 - 16:45	3	0	3	252	4	256																127	4	131	0	0	0	10	0	10				27	0	27	419	8	427
16:45 - 17:00	3	0	3	236	6	242																122	2	124	0	0	0	2	0	2				15	1	16	378	9	387
17:00 - 17:15	2	0	2	303	13	316																133	7	140	0	0	0	5	0	5				31	0	31	474	20	494
17:15 - 17:30	4	1	5	306	5	311																112	6	118	0	0	0	3	0	3				20	1	21	445	13	458
17:30 - 17:45	3	0	3	313	7	320																102	4	106	0	0	0	3	0	3				14	0	14	435	11	446
17:45 - 18:00	6	1	7	325	11	336																90	3	93	0	0	0	1	0	1				13	2	15	435	17	452
18:00 - 18:15	5	1	6	306	11	317																87	1	88	0	0	0	1	0	1				16	1	17	415	14	429
18:15 - 18:30	5	0	5	228	6	234																111	3	114	1	0	1	2	0	2				5	0	5	352	9	361
18:30 - 18:45	2	0	2	264	5	269																81	2	83	1	0	1	3	0	3				4	0	4	355	7	362
18:45 - 19:00	0	0	0	166	1	167																68	2	70	1	0	1	0	0	0				3	0	3	238	3	241
Σ	42	3	45	3130	89	3219																1442	51	1493	4	1	5	39	1	40				185	5	190	4842	150	4992

TIME PERIOD	VEHICLE MOVEMENT																																				GRAND TOTAL			
	1			2			3			4			5			6			7			8			9			10			11			12						
	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	
6:00 - 7:00	66	2	68	387	25	412																827	35	862	12	0	12	1	1	2				2	0	2	1295	63	1358	
6:15 - 7:15	68	2	70	540	37	577																851	42	893	16	0	16	0	1	1				2	0	2	1477	82	1559	
6:30 - 7:30	76	1	77	652	41	693																925	45	970	18	0	18	0	0	0				2	0	2	1673	87	1760	
6:45 - 7:45	72	1	73	693	39	732																917	51	968	17	0	17	0	0	0				2	1	3	1701	92	1793	
7:00 - 8:00	**60**	**1**	**61**	**659**	**42**	**701**																**960**	**54**	**1014**	**14**	**0**	**14**	**2**	**0**	**2**				**4**	**1**	**5**	**1699**	**98**	**1797**	**Peak**
7:15 - 8:15	62	1	63	568	35	603																1015	60	1075	18	0	18	3	0	3				6	1	7	1672	97	1769	
7:30 - 8:30	73	3	76	494	33	527																1013	57	1070	21	0	21	3	0	3				10	2	12	1614	95	1709	
7:45 - 8:45	91	2	93	465	37	502																1000	52	1052	26	1	27	4	0	4				12	2	14	1598	94	1692	
8:00 - 9:00	90	2	92	424	34	458																890	50	940	25	1	26	2	0	2				12	3	15	1443	90	1533	

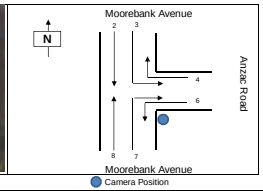
TIME PERIOD	VEHICLE MOVEMENT																																				GRAND TOTAL			
	1			2			3			4			5			6			7			8			9			10			11			12						
	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	
16:00 - 17:00	15	0	15	919	30	949																658	23	681	1	1	2	21	1	22				79	1	80	1693	56	1749	
16:15 - 17:15	12	0	12	1003	34	1037																527	17	544	1	1	2	23	0	23				91	1	92	1657	53	1710	
16:30 - 17:30	12	1	13	1097	28	1125																494	19	513	0	0	0	20	0	20				93	2	95	1716	50	1766	
16:45 - 17:45	12	1	13	1158	31	1189																469	19	488	0	0	0	13	0	13				80	2	82	1732	53	1785	
17:00 - 18:00	**15**	**2**	**17**	**1247**	**36**	**1283**																**437**	**20**	**457**	**0**	**0**	**0**	**12**	**0**	**12**				**78**	**3**	**81**	**1789**	**61**	**1850**	**Peak**
17:15 - 18:15	18	3	21	1250	34	1284																391	14	405	0	0	0	8	0	8				63	4	67	1730	55	1785	
17:30 - 18:30	19	2	21	1172	35	1207																390	11	401	1	0	1	7	0	7				48	3	51	1637	51	1688	
17:45 - 18:45	18	2	20	1123	33	1156																369	9	378	2	0	2	7	0	7				38	3	41	1557	47	1604	
18:00 - 19:00	12	1	13	964	23	987																347	8	355	3	0	3	6	0	6				28	1	29	1360	33	1393	

Intersection of Moorebank Avenue and Anzac Road

Tuesday, 7 December 2010

Austraffic

Survey Start	**6:00 AM 16:00 PM**
Intersection Type	T Junction
Intersection No.	**1**
North Approach	**Moorebank Avenue**
East Approach	**Anzac Road**
South Approach	**Moorebank Avenue**
West Approach	
Date	**7/12/10**
Classification	**Light Heavy**



Camera Position

TIME PERIOD	VEHICLE MOVEMENT																																				GRAND TOTAL		
	1			2			3			4			5			6			7			8			9			10			11			12					
	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ
6:00 - 6:15				36	0	36	21	3	24	17	0	17				11	0	11	79	5	84	169	4	173													333	12	345
6:15 - 6:30				51	4	55	22	3	25	14	2	16				18	0	18	83	2	85	176	10	186													364	21	385
6:30 - 6:45				69	3	72	28	5	33	33	3	36				36	0	36	74	3	77	200	8	208													440	22	462
6:45 - 7:00				118	4	122	43	4	47	35	0	35				54	1	55	82	1	83	185	8	193													517	18	535
7:00 - 7:15				163	7	170	46	8	54	23	6	29				46	1	47	51	2	53	187	5	192													516	29	545
7:15 - 7:30				129	5	134	56	5	61	50	7	57				53	0	53	53	3	56	214	8	222													555	28	583
7:30 - 7:45				84	1	85	54	5	59	47	12	59				44	5	49	69	3	72	178	6	184													476	32	508
7:45 - 8:00				73	5	78	56	6	62	53	7	60				37	2	39	58	4	62	212	4	216													489	28	517
8:00 - 8:15				60	2	62	59	6	65	74	10	84				41	1	42	66	2	68	193	7	200													493	28	521
8:15 - 8:30				55	4	59	56	4	60	59	9	68				30	3	33	49	1	50	207	4	211													456	25	481
8:30 - 8:45				55	5	60	55	5	60	49	4	53				32	1	33	54	2	56	165	9	174													410	26	436
8:45 - 9:00				39	4	43	47	4	51	27	3	30				23	1	24	49	1	50	128	7	135													313	20	333
Σ				932	44	976	543	58	601	481	63	544				425	15	440	767	29	796	2214	80	2294													5362	289	5651

TIME PERIOD	VEHICLE MOVEMENT																																				GRAND TOTAL		
	1			2			3			4			5			6			7			8			9			10			11			12					
	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ
16:00 - 16:15				179	3	182	43	7	50	73	9	82				87	1	88	83	1	84	180	4	184													645	25	670
16:15 - 16:30				177	7	184	41	4	45	43	2	45				72	4	76	51	0	51	110	2	112													494	19	513
16:30 - 16:45				209	2	211	53	2	55	49	4	53				88	1	89	31	0	31	85	0	85													515	9	524
16:45 - 17:00				180	3	183	58	3	61	49	2	51				93	3	96	28	1	29	78	1	79													486	13	499
17:00 - 17:15				247	7	254	61	6	67	81	5	86				88	3	91	35	0	35	73	2	75													585	23	608
17:15 - 17:30				234	3	237	75	2	77	54	5	59				82	3	85	41	1	42	58	2	60													544	16	560
17:30 - 17:45				253	7	260	63	0	63	42	2	44				76	1	77	38	1	39	64	2	66													536	13	549
17:45 - 18:00				266	8	274	60	3	63	39	1	40				99	1	100	42	0	42	54	4	58													560	17	577
18:00 - 18:15				254	11	265	53	0	53	37	0	37				97	5	102	29	1	30	56	2	58													526	19	545
18:15 - 18:30				186	5	191	44	1	45	43	0	43				132	1	133	27	0	27	73	3	76													505	10	515
18:30 - 18:45				225	4	229	42	1	43	39	2	41				100	3	103	16	0	16	46	0	46													468	10	478
18:45 - 19:00				122	1	123	44	0	44	31	1	32				53	1	54	19	0	19	40	1	41													309	4	313
Σ				2532	61	2593	637	29	666	580	33	613				1067	27	1094	440	5	445	917	23	940													6173	178	6351

TIME PERIOD	VEHICLE MOVEMENT																																				GRAND TOTAL			
	1			2			3			4			5			6			7			8			9			10			11			12						
	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	
6:00 - 7:00				274	11	285	114	15	129	99	5	104				119	1	120	318	11	329	730	30	760													1654	73	1727	
6:15 - 7:15				401	18	419	139	20	159	105	11	116				154	2	156	290	8	298	748	31	779													1837	90	1927	
6:30 - 7:30				479	19	498	173	22	195	141	16	157				189	2	191	260	9	269	786	29	815													2028	97	2125	
6:45 - 7:45				**494**	**17**	**511**	**199**	**22**	**221**	**155**	**25**	**180**				**197**	**7**	**204**	**255**	**9**	**264**	**764**	**27**	**791**													**2064**	**107**	**2171**	**Peak**
7:00 - 8:00				449	18	467	212	24	236	173	32	205				180	8	188	231	12	243	791	23	814													2036	117	2153	
7:15 - 8:15				346	13	359	225	22	247	224	36	260				175	8	183	246	12	258	797	25	822													2013	116	2129	
7:30 - 8:30				272	12	284	225	21	246	233	38	271				152	11	163	242	10	252	790	21	811													1914	113	2027	
7:45 - 8:45				243	16	259	226	21	247	235	30	265				140	7	147	227	9	236	777	24	801													1848	107	1955	
8:00 - 9:00				209	15	224	217	19	236	209	26	235				126	6	132	218	6	224	693	27	720													1672	99	1771	

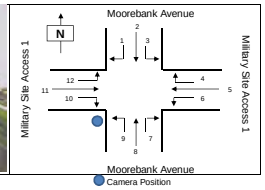
TIME PERIOD	VEHICLE MOVEMENT																																				GRAND TOTAL			
	1			2			3			4			5			6			7			8			9			10			11			12						
	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	
16:00 - 17:00				745	15	760	195	16	211	214	17	231				340	9	349	193	2	195	453	7	460													2140	66	2206	
16:15 - 17:15				813	19	832	213	15	228	222	13	235				341	11	352	145	1	146	346	5	351													2080	64	2144	
16:30 - 17:30				870	15	885	247	13	260	233	16	249				351	10	361	135	2	137	294	5	299													2130	61	2191	
16:45 - 17:45				914	20	934	257	11	268	226	14	240				339	10	349	142	3	145	273	7	280													2151	65	2216	
17:00 - 18:00				**1000**	**25**	**1025**	**259**	**11**	**270**	**216**	**13**	**229**				**345**	**8**	**353**	**156**	**2**	**158**	**249**	**10**	**259**													**2225**	**69**	**2294**	**Peak**
17:15 - 18:15				1007	29	1036	251	5	256	172	8	180				354	10	364	150	3	153	232	10	242													2166	65	2231	
17:30 - 18:30				969	31	990	220	4	224	161	3	164				404	8	412	136	2	138	247	11	258													2127	59	2186	
17:45 - 18:45				931	28	959	199	5	204	158	3	161				428	10	438	114	1	115	229	9	238													2059	56	2115	
18:00 - 19:00				787	21	808	183	2	185	150	3	153				382	10	392	91	1	92	215	6	221													1808	43	1851	

Intersection of Moorebank Avenue and Defence Support Access

Tuesday, 7 December 2010

Austraffic

Survey Start	**6:00 AM 16:00 PM**
Intersection Type	Cross Junction
Intersection No.	**11**
North Approach	**Moorebank Avenue**
East Approach	**Military Site Access 1**
South Approach	**Moorebank Avenue**
West Approach	**Military Site Access 1**
Date	**7/12/10**
Classification	**Light Heavy**



TIME PERIOD	VEHICLE MOVEMENT																														GRAND TOTAL		
	1			2			3			4			5			6			7			8			9			10			11			12					
	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ
6:00 - 6:15	1	0	1	44	0	44	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	260	9	269	1	0	1	0	0	0	0	0	0	1	0	1	307	9	316
6:15 - 6:30	0	0	0	71	2	73	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	264	13	277	1	0	1	1	0	1	0	0	0	0	0	0	337	15	352
6:30 - 6:45	0	0	0	115	6	121	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	277	10	287	2	0	2	0	0	0	0	0	0	0	0	0	394	16	410
6:45 - 7:00	0	0	0	157	4	161	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	266	9	275	2	0	2	0	0	0	0	0	0	0	0	0	425	13	438
7:00 - 7:15	3	0	3	174	7	181	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	261	5	266	3	0	3	0	0	0	0	0	0	0	0	0	441	12	453
7:15 - 7:30	6	0	6	178	7	185	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	265	10	275	3	0	3	1	0	1	0	0	0	1	0	1	454	17	471
7:30 - 7:45	5	0	5	137	7	144	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	255	9	264	6	0	6	0	0	0	0	0	0	1	0	1	404	16	420
7:45 - 8:00	2	0	2	110	8	118	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	268	8	276	2	0	2	5	0	5	0	0	0	2	0	2	389	16	405
8:00 - 8:15	6	0	6	103	5	108	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	261	8	269	2	0	2	0	0	0	0	0	0	3	0	3	375	13	388
8:15 - 8:30	4	0	4	77	7	84	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	257	7	264	2	0	2	2	0	2	0	0	0	1	0	1	343	14	357
8:30 - 8:45	1	0	1	95	6	101	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	213	12	225	2	0	2	1	0	1	0	0	0	0	0	0	312	18	330
8:45 - 9:00	1	0	1	62	5	67	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	171	9	180	0	0	0	1	0	1	0	0	0	0	0	0	235	14	249
Σ	29	0	29	1323	64	1387	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3018	109	3127	26	0	26	11	0	11	0	0	0	9	0	9	4416	173	4589

TIME PERIOD	VEHICLE MOVEMENT																														GRAND TOTAL		
	1			2			3			4			5			6			7			8			9			10			11			12					
	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ
16:00 - 16:15	0	0	0	251	2	253	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	227	3	230	0	0	0	21	0	21	0	0	0	8	0	8	507	5	512
16:15 - 16:30	1	0	1	264	12	276	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	142	2	144	1	0	1	5	0	5	0	0	0	6	0	6	419	14	433
16:30 - 16:45	2	0	2	286	4	290	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	113	1	114	1	0	1	1	0	1	0	0	0	3	0	3	406	5	411
16:45 - 17:00	1	0	1	285	6	291	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	98	2	100	0	0	0	2	0	2	0	0	0	1	0	1	387	8	395
17:00 - 17:15	0	0	0	325	13	338	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	105	2	107	0	0	0	0	0	0	0	0	0	6	0	6	436	15	451
17:15 - 17:30	0	0	0	314	6	320	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	98	3	101	0	0	0	1	0	1	0	0	0	1	0	1	414	9	423
17:30 - 17:45	0	0	0	316	8	324	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	104	3	107	0	0	0	2	0	2	0	0	0	2	0	2	424	11	435
17:45 - 18:00	0	0	0	372	7	379	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	90	2	92	1	0	1	1	0	1	0	0	0	0	0	0	464	9	473
18:00 - 18:15	0	0	0	324	15	339	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	91	3	94	1	0	1	2	0	2	0	0	0	3	0	3	421	18	439
18:15 - 18:30	0	0	0	327	10	337	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	84	1	85	1	0	1	0	0	0	0	0	0	3	0	3	415	11	426
18:30 - 18:45	0	0	0	321	6	327	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	64	1	65	0	0	0	0	0	0	0	0	0	0	0	0	385	7	392
18:45 - 19:00	0	0	0	183	3	186	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	58	1	59	0	0	0	1	0	1	0	0	0	0	0	0	242	4	246
Σ	4	0	4	3568	92	3660	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1274	24	1298	5	0	5	36	0	36	0	0	0	33	0	33	4920	116	5036

TIME PERIOD	VEHICLE MOVEMENT																														GRAND TOTAL			
	1			2			3			4			5			6			7			8			9			10			11			12						
	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	
6:00 - 7:00	1	0	1	387	12	399	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1067	41	1108	6	0	6	1	0	1	0	0	0	1	0	1	1463	53	1516	
6:15 - 7:15	3	0	3	517	19	536	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1068	37	1105	8	0	8	1	0	1	0	0	0	0	0	0	1597	56	1653	
6:30 - 7:30	9	0	9	624	24	648	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1069	34	1103	10	0	10	1	0	1	0	0	0	1	0	1	1714	58	1772	
6:45 - 7:45	**14**	**0**	**14**	**646**	**25**	**671**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1047**	**33**	**1080**	**14**	**0**	**14**	**1**	**0**	**1**	**0**	**0**	**0**	**2**	**0**	**2**	**1724**	**58**	**1782**	**Peak**
7:00 - 8:00	16	0	16	599	29	628	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1049	32	1081	14	0	14	5	0	5	0	0	0	4	0	4	1688	61	1749	
7:15 - 8:15	19	0	19	528	27	555	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1049	35	1084	13	0	13	6	0	6	0	0	0	7	0	7	1622	62	1684	
7:30 - 8:30	17	0	17	427	27	454	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1041	32	1073	12	0	12	7	0	7	0	0	0	7	0	7	1511	59	1570	
7:45 - 8:45	13	0	13	385	26	411	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	999	35	1034	8	0	8	9	0	9	0	0	0	6	0	6	1419	61	1480	
8:00 - 9:00	12	0	12	337	23	360	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	902	36	938	6	0	6	4	0	4	0	0	0	4	0	4	1265	59	1324	

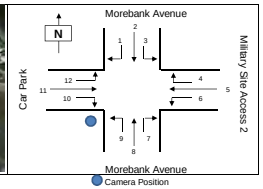
TIME PERIOD	VEHICLE MOVEMENT																														GRAND TOTAL			
	1			2			3			4			5			6			7			8			9			10			11			12						
	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	
16:00 - 17:00	4	0	4	1086	24	1110	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	580	8	588	2	0	2	29	0	29	0	0	0	18	0	18	1719	32	1751	
16:15 - 17:15	4	0	4	1160	35	1195	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	458	7	465	2	0	2	8	0	8	0	0	0	16	0	16	1648	42	1690	
16:30 - 17:30	3	0	3	1210	29	1239	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	414	8	422	1	0	1	4	0	4	0	0	0	11	0	11	1643	37	1680	
16:45 - 17:45	1	0	1	1240	33	1273	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	405	10	415	0	0	0	5	0	5	0	0	0	10	0	10	1661	43	1704	
17:00 - 18:00	**0**	**0**	**0**	**1327**	**34**	**1361**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**397**	**10**	**407**	**1**	**0**	**1**	**4**	**0**	**4**	**0**	**0**	**0**	**9**	**0**	**9**	**1738**	**44**	**1782**	**Peak**
17:15 - 18:15	0	0	0	1326	36	1362	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	383	11	394	2	0	2	6	0	6	0	0	0	6	0	6	1723	47	1770	
17:30 - 18:30	0	0	0	1339	40	1379	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	369	9	378	3	0	3	5	0	5	0	0	0	8	0	8	1724	49	1773	
17:45 - 18:45	0	0	0	1344	38	1382	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	329	7	336	3	0	3	3	0	3	0	0	0	6	0	6	1685	45	1730	
18:00 - 19:00	0	0	0	1155	34	1189	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	297	6	303	2	0	2	3	0	3	0	0	0	6	0	6	1463	40	1503	

Intersection of Morebank Avenue and Military Site Access 2

Tuesday, 7 December 2010

Austraffic

Survey Start	**6:00 AM 16:00 PM**
Intersection Type	Cross Junction
Intersection No.	**13**
North Approach	**Morebank Avenue**
East Approach	**Military Site Access 2**
South Approach	**Morebank Avenue**
West Approach	**Car Park**
Date	**7/12/10**
Classification	**Light Heavy**



TIME PERIOD	VEHICLE MOVEMENT																																	GRAND TOTAL		
	1			2			3			4			5			6			7			8			9			10			11			12					
	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ
6:00 - 6:15	0	0	0	36	0	36	6	0	6	2	0	2	0	0	0	1	0	1	4	0	4	265	9	274	0	0	0	0	0	0	0	0	0	0	0	0	314	9	323
6:15 - 6:30	0	0	0	65	1	66	10	1	11	1	0	1	0	0	0	0	0	0	5	0	5	266	12	278	0	0	0	0	0	0	0	0	0	0	0	0	347	14	361
6:30 - 6:45	0	0	0	98	4	102	13	1	14	0	0	0	0	0	0	0	0	0	2	0	2	297	12	309	0	0	0	0	0	0	0	0	0	0	0	0	410	17	427
6:45 - 7:00	0	0	0	130	4	134	21	0	21	1	0	1	0	0	0	0	0	0	5	0	5	271	8	279	0	0	0	0	0	0	0	0	0	0	0	0	428	12	440
7:00 - 7:15	0	0	0	144	5	149	22	1	23	1	1	2	0	0	0	0	0	0	6	0	6	271	4	275	0	0	0	0	0	0	0	0	0	0	0	0	444	11	455
7:15 - 7:30	0	0	0	146	5	151	23	3	26	4	0	4	0	0	0	2	0	2	7	0	7	285	8	293	0	0	0	0	0	0	0	0	0	0	0	0	467	16	483
7:30 - 7:45	0	0	0	112	5	117	13	2	15	0	0	0	0	0	0	2	1	3	2	0	2	263	9	272	0	0	0	0	0	0	0	0	0	1	0	1	393	17	410
7:45 - 8:00	0	0	0	95	7	102	12	1	13	2	1	3	0	0	0	1	0	1	4	0	4	277	5	282	0	0	0	0	0	0	0	0	0	0	0	0	391	14	405
8:00 - 8:15	0	0	0	86	4	90	9	0	9	4	1	5	0	0	0	2	0	2	5	0	5	251	7	258	0	0	0	0	0	0	0	0	0	0	0	0	357	12	369
8:15 - 8:30	0	0	0	71	6	77	10	1	11	7	2	9	0	0	0	3	0	3	5	0	5	253	6	259	0	0	0	0	0	0	0	0	0	0	0	0	348	15	364
8:30 - 8:45	0	0	0	93	2	95	4	4	8	2	1	3	0	0	0	4	0	4	4	1	5	223	10	233	0	0	0	0	0	0	0	0	0	1	0	1	331	18	349
8:45 - 9:00	0	0	0	59	1	60	1	3	4	0	3	3	0	0	0	3	0	3	3	1	4	170	4	174	0	0	0	0	0	0	0	0	0	0	0	0	236	12	248
Σ	0	0	0	1135	44	1179	144	17	161	24	9	33	0	0	0	18	1	19	52	2	54	3092	94	3186	0	0	0	0	0	0	0	0	0	2	0	2	4467	167	4634

TIME PERIOD	VEHICLE MOVEMENT																																	GRAND TOTAL		
	1			2			3			4			5			6			7			8			9			10			11			12					
	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ
16:00 - 16:15	0	0	0	243	3	246	3	0	3	16	1	17	0	0	0	7	0	7	1	0	1	161	2	163	0	0	0	35	0	35	0	0	0	49	0	49	515	6	521
16:15 - 16:30	0	0	0	281	12	293	2	0	2	9	0	9	0	0	0	5	1	6	0	0	0	124	2	126	0	0	0	4	0	4	0	0	0	7	0	7	432	15	447
16:30 - 16:45	0	0	0	290	4	294	1	0	1	11	0	11	0	0	0	1	0	1	0	1	1	95	1	96	0	0	0	4	0	4	0	0	0	6	0	6	408	6	414
16:45 - 17:00	0	0	0	295	4	299	2	1	3	4	0	4	0	0	0	5	0	5	1	0	1	86	3	89	0	0	0	2	0	2	0	0	0	5	0	5	400	8	408
17:00 - 17:15	0	0	0	312	10	322	1	0	1	5	0	5	0	0	0	0	0	0	0	0	0	96	2	98	0	0	0	0	0	0	0	0	0	3	0	3	417	12	429
17:15 - 17:30	0	0	0	324	6	330	1	1	2	5	0	5	0	0	0	1	0	1	0	0	0	93	3	96	0	0	0	1	0	1	0	0	0	0	0	0	425	10	435
17:30 - 17:45	0	0	0	313	6	319	3	0	3	3	2	5	0	0	0	1	0	1	0	0	0	96	1	97	0	0	0	1	0	1	0	0	0	2	0	2	419	9	428
17:45 - 18:00	0	0	0	357	8	365	0	0	0	5	0	5	0	0	0	2	0	2	0	0	0	84	2	86	0	0	0	1	0	1	0	0	0	1	0	1	450	10	460
18:00 - 18:15	0	0	0	332	16	348	0	0	0	1	0	1	0	0	0	1	0	1	1	0	1	84	3	87	0	0	0	2	0	2	0	0	0	6	0	6	427	19	446
18:15 - 18:30	0	0	0	341	9	350	0	0	0	1	1	2	0	0	0	0	0	0	0	0	0	79	0	79	0	0	0	1	0	1	1	0	1	3	0	3	426	10	436
18:30 - 18:45	1	0	1	319	4	323	2	0	2	1	0	1	0	0	0	1	0	1	0	0	0	61	1	62	0	0	0	0	0	0	1	0	1	0	0	0	386	5	391
18:45 - 19:00	0	0	0	192	5	197	1	0	1	1	0	1	0	0	0	0	0	0	0	0	0	61	1	62	0	0	0	0	0	0	0	0	0	0	0	0	255	6	261
Σ	1	0	1	3599	87	3686	16	2	18	62	4	66	0	0	0	24	1	25	3	1	4	1120	21	1141	0	0	0	51	0	51	2	0	2	82	0	82	4960	116	5076

TIME PERIOD	VEHICLE MOVEMENT																																	GRAND TOTAL			
	1			2			3			4			5			6			7			8			9			10			11			12					
	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	
6:00 - 7:00	0	0	0	329	9	338	50	2	52	4	0	4	0	0	0	1	0	1	16	0	16	1099	41	1140	0	0	0	0	0	0	0	0	0	0	0	0	1499	52	1551	
6:15 - 7:15	0	0	0	437	14	451	66	3	69	3	1	4	0	0	0	0	0	0	18	0	18	1105	36	1141	0	0	0	0	0	0	0	0	0	0	0	0	1629	54	1683	
6:30 - 7:30	**0**	**0**	**0**	**518**	**18**	**536**	**79**	**5**	**84**	**6**	**1**	**7**	**0**	**0**	**0**	**2**	**0**	**2**	**20**	**0**	**20**	**1124**	**32**	**1156**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1749**	**56**	**1805**	**Peak**
6:45 - 7:45	0	0	0	532	19	551	79	6	85	6	1	7	0	0	0	4	1	5	20	0	20	1090	29	1119	0	0	0	0	0	0	0	0	0	1	0	1	1732	56	1788	
7:00 - 8:00	0	0	0	497	22	519	70	7	77	7	2	9	0	0	0	5	1	6	19	0	19	1096	26	1122	0	0	0	0	0	0	0	0	0	1	0	1	1695	58	1753	
7:15 - 8:15	0	0	0	439	21	460	57	6	63	10	2	12	0	0	0	7	1	8	18	0	18	1076	29	1105	0	0	0	0	0	0	0	0	0	1	0	1	1608	59	1667	
7:30 - 8:30	0	0	0	364	22	386	44	4	48	13	4	17	0	0	0	8	1	9	16	0	16	1044	27	1071	0	0	0	0	0	0	0	0	0	1	0	1	1490	58	1548	
7:45 - 8:45	0	0	0	345	19	364	35	6	41	15	5	20	0	0	0	10	0	10	18	1	19	1004	28	1032	0	0	0	0	0	0	0	0	0	1	0	1	1428	59	1487	
8:00 - 9:00	0	0	0	309	13	322	24	8	32	13	7	20	0	0	0	12	0	12	17	2	19	897	27	924	0	0	0	0	0	0	0	0	0	1	0	1	1273	57	1330	

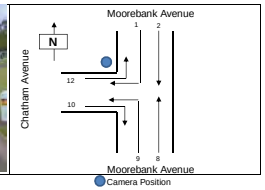
TIME PERIOD	VEHICLE MOVEMENT																																	GRAND TOTAL			
	1			2			3			4			5			6			7			8			9			10			11			12					
	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	
16:00 - 17:00	**0**	**0**	**0**	**1109**	**23**	**1132**	**8**	**1**	**9**	**40**	**1**	**41**	**0**	**0**	**0**	**18**	**1**	**19**	**2**	**1**	**3**	**466**	**8**	**474**	**0**	**0**	**0**	**45**	**0**	**45**	**0**	**0**	**0**	**67**	**0**	**67**	**1755**	**35**	**1790**	**Peak**
16:15 - 17:15	0	0	0	1178	30	1208	6	1	7	29	0	29	0	0	0	11	1	12	1	1	2	401	8	409	0	0	0	10	0	10	0	0	0	21	0	21	1657	41	1698	
16:30 - 17:30	0	0	0	1221	24	1245	5	2	7	25	0	25	0	0	0	7	0	7	1	1	2	370	9	379	0	0	0	7	0	7	0	0	0	14	0	14	1650	36	1686	
16:45 - 17:45	0	0	0	1244	26	1270	7	2	9	17	2	19	0	0	0	7	0	7	1	0	1	371	9	380	0	0	0	4	0	4	0	0	0	10	0	10	1661	39	1700	
17:00 - 18:00	0	0	0	1306	30	1336	5	1	6	18	2	20	0	0	0	4	0	4	0	0	0	369	8	377	0	0	0	3	0	3	0	0	0	6	0	6	1711	41	1752	
17:15 - 18:15	0	0	0	1326	36	1362	4	1	5	14	2	16	0	0	0	5	0	5	1	0	1	357	9	366	0	0	0	5	0	5	0	0	0	9	0	9	1721	48	1769	
17:30 - 18:30	0	0	0	1343	39	1382	3	0	3	10	3	13	0	0	0	4	0	4	1	0	1	343	6	349	0	0	0	5	0	5	1	0	1	12	0	12	1722	48	1770	
17:45 - 18:45	1	0	1	1349	37	1386	2	0	2	8	1	9	0	0	0	4	0	4	1	0	1	308	6	314	0	0	0	4	0	4	2	0	2	10	0	10	1689	44	1733	
18:00 - 19:00	1	0	1	1184	34	1218	3	0	3	4	1	5	0	0	0	2	0	2	1	0	1	285	5	290	0	0	0	3	0	3	2	0	2	9	0	9	1494	40	1534	

Intersection of Moorebank Avenue and Chatham Avenue

Tuesday, 7 December 2010

Austraffic

Survey Start	**6:00 AM 16:00 PM**
Intersection Type	T Junction
Intersection No.	**12**
North Approach	**Moorebank Avenue**
East Approach	
South Approach	**Moorebank Avenue**
West Approach	**Chatham Avenue**
Date	**7/12/10**
Classification	**Light Heavy**



TIME PERIOD	VEHICLE MOVEMENT																														GRAND TOTAL		
	1			2			3			4			5			6			7			8			9			10			11			12					
	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ
6:00 - 6:15	11	0	11	26	0	26																272	10	282	2	0	2	0	0	0				2	0	2	313	10	323
6:15 - 6:30	19	0	19	40	1	41																260	11	271	4	0	4	0	0	0				2	0	2	325	12	337
6:30 - 6:45	14	1	15	75	2	77																305	13	318	6	0	6	0	0	0				3	0	3	403	16	419
6:45 - 7:00	20	0	20	99	4	103																281	7	288	10	0	10	0	0	0				1	0	1	411	11	422
7:00 - 7:15	35	0	35	101	5	106																267	5	272	14	0	14	1	1	2				7	0	7	425	11	436
7:15 - 7:30	42	1	43	91	5	96																281	8	289	10	0	10	1	1	2				3	0	3	428	15	443
7:30 - 7:45	22	0	22	97	5	102																268	8	276	5	0	5	6	1	7				3	1	4	401	15	416
7:45 - 8:00	13	0	13	85	6	91																266	5	271	3	0	3	3	0	3				7	0	7	377	11	388
8:00 - 8:15	15	0	15	67	5	72																256	8	264	8	0	8	9	0	9				4	0	4	358	13	372
8:15 - 8:30	5	1	6	73	6	79																256	5	261	2	2	4	3	0	3				8	1	9	347	15	362
8:30 - 8:45	10	0	10	84	3	87																213	7	220	6	0	6	3	0	3				6	2	8	322	12	334
8:45 - 9:00	8	0	8	55	1	56																170	3	173	7	0	7	5	0	5				8	0	8	253	4	257
Σ	214	3	217	893	43	936																3095	90	3185	77	2	79	31	3	34				54	4	58	4364	145	4509

TIME PERIOD	VEHICLE MOVEMENT																														GRAND TOTAL		
	1			2			3			4			5			6			7			8			9			10			11			12					
	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ
16:00 - 16:15	7	0	7	280	4	284																112	2	114	2	0	2	18	0	18				49	0	49	468	6	474
16:15 - 16:30	3	0	3	300	13	313																106	2	108	2	0	2	4	0	4				17	0	17	432	15	447
16:30 - 16:45	3	0	3	290	4	294																81	2	83	1	0	1	7	0	7				13	0	13	395	6	401
16:45 - 17:00	4	0	4	297	5	302																73	3	76	2	0	2	4	0	4				12	0	12	392	8	400
17:00 - 17:15	8	0	8	302	7	309																82	3	85	0	0	0	3	0	3				14	1	15	409	11	420
17:15 - 17:30	3	0	3	328	8	336																87	1	88	5	0	5	2	0	2				12	0	12	437	9	446
17:30 - 17:45	7	0	7	306	6	312																83	1	84	4	0	4	0	0	0				6	0	6	406	7	413
17:45 - 18:00	6	0	6	349	8	357																79	2	81	0	0	0	4	0	4				4	0	4	442	10	452
18:00 - 18:15	9	0	9	324	15	339																85	3	88	1	0	1	2	0	2				3	0	3	424	18	442
18:15 - 18:30	8	0	8	339	10	349																72	0	72	1	0	1	0	0	0				5	0	5	425	10	435
18:30 - 18:45	2	0	2	321	4	325																55	1	56	1	0	1	0	0	0				3	0	3	382	5	387
18:45 - 19:00	1	0	1	194	5	199																54	1	55	1	0	1	2	0	2				7	0	7	259	6	265
Σ	61	0	61	3630	89	3719																969	21	990	20	0	20	46	0	46				145	1	146	4871	111	4982

TIME PERIOD	VEHICLE MOVEMENT																														GRAND TOTAL			
	1			2			3			4			5			6			7			8			9			10			11			12						
	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	
6:00 - 7:00	64	1	65	240	7	247																1118	41	1159	22	0	22	0	0	0				8	0	8	1452	49	1501	
6:15 - 7:15	88	1	89	315	12	327																1113	36	1149	34	0	34	2	1	2				13	0	13	1564	50	1614	
6:30 - 7:30	**111**	**2**	**113**	**366**	**16**	**382**																**1134**	**33**	**1167**	**40**	**0**	**40**	**2**	**2**	**4**				**14**	**0**	**14**	**1667**	**53**	**1720**	**Peak**
6:45 - 7:45	119	1	120	388	19	407																1097	28	1125	39	0	39	8	3	11				14	1	15	1665	52	1717	
7:00 - 8:00	112	1	113	374	21	395																1082	26	1108	32	0	32	11	3	14				20	1	21	1631	52	1683	
7:15 - 8:15	92	1	93	340	21	361																1071	29	1100	26	0	26	19	2	21				17	1	18	1565	54	1619	
7:30 - 8:30	55	1	56	322	22	344																1046	26	1072	18	2	20	21	1	22				22	2	24	1484	54	1538	
7:45 - 8:45	43	1	44	309	20	329																991	25	1016	19	2	21	18	0	18				25	3	28	1405	51	1456	
8:00 - 9:00	38	1	39	279	15	294																895	23	918	23	2	25	20	0	20				26	3	29	1281	44	1325	

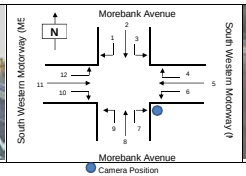
TIME PERIOD	VEHICLE MOVEMENT																														GRAND TOTAL			
	1			2			3			4			5			6			7			8			9			10			11			12						
	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	
16:00 - 17:00	17	0	17	1167	26	1193																372	9	381	7	0	7	33	0	33				91	0	91	1687	35	1722	
16:15 - 17:15	18	0	18	1189	29	1218																342	10	352	5	0	5	18	0	18				56	1	57	1628	40	1668	
16:30 - 17:30	18	0	18	1217	24	1241																323	9	332	8	0	8	16	0	16				51	1	52	1633	34	1667	
16:45 - 17:45	22	0	22	1233	26	1259																325	8	333	11	0	11	9	0	9				44	1	45	1644	35	1679	
17:00 - 18:00	24	0	24	1285	29	1314																331	7	338	9	0	9	22	0	22				25	1	26	1694	37	1731	
17:15 - 18:15	**25**	**0**	**25**	**1307**	**37**	**1344**																**334**	**7**	**341**	**10**	**0**	**10**	**8**	**0**	**8**				**25**	**0**	**25**	**1709**	**44**	**1753**	**Peak**
17:30 - 18:30	30	0	30	1318	39	1357																319	6	325	6	0	6	6	0	6				18	0	18	1697	45	1742	
17:45 - 18:45	25	0	25	1333	37	1370																291	6	297	3	0	3	6	0	6				15	0	15	1673	43	1716	
18:00 - 19:00	20	0	20	1178	34	1212																266	5	271	4	0	4	4	0	4				18	0	18	1490	39	1529	

Intersection of South Western Motorway (M5) and Morebank Avenue

Tuesday, 7 December 2010

Austraffic

Survey Start	6:00 AM 16:00 PM
Intersection Type	Cross Junction
Intersection No.	2
North Approach	Morebank Avenue
East Approach	South Western Motorway (M5)
South Approach	Morebank Avenue
West Approach	South Western Motorway (M5)
Date	7/12/10
Classification	Light Heavy



TIME PERIOD	VEHICLE MOVEMENT 1			2			3			4			5			6			VEHICLE MOVEMENT 7			8			9			10			11			12			GRAND TOTAL		
	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ
6:00 - 6:15	45	12	57	15	1	16	2	1	3	12	2	14	405	52	457	16	0	16	57	4	61	113	2	115	20	0	20	56	3	59	728	121	849	302	37	339	1771	235	2006
6:15 - 6:30	46	19	65	17	4	21	1	2	3	18	4	22	590	84	674	13	0	13	54	5	59	137	11	148	14	0	14	55	7	62	743	122	865	323	28	351	2011	286	2297
6:30 - 6:45	59	26	85	24	3	27	0	1	1	25	3	28	687	90	777	27	2	29	57	5	62	130	5	135	28	3	31	68	3	71	740	120	860	309	33	342	2154	294	2448
6:45 - 7:00	64	29	93	31	4	35	3	1	4	32	1	33	646	83	729	39	3	42	68	4	72	126	2	128	28	0	28	109	2	111	830	117	947	291	38	329	2267	284	2551
7:00 - 7:15	46	13	59	38	4	42	3	4	7	39	2	41	678	72	750	46	4	50	75	3	78	135	4	139	22	6	28	126	0	126	828	109	937	280	28	308	2316	249	2565
7:15 - 7:30	59	28	87	28	2	30	1	2	3	51	2	53	821	98	919	58	3	61	66	3	69	140	2	142	39	9	48	107	5	112	816	69	885	340	29	369	2526	252	2778
7:30 - 7:45	74	26	100	19	3	22	0	3	3	56	1	57	834	100	934	42	3	45	69	3	72	161	8	169	37	7	44	92	4	96	814	74	888	354	30	384	2552	262	2814
7:45 - 8:00	66	35	101	40	6	46	4	5	9	45	3	48	926	88	1014	52	3	55	58	1	59	141	6	147	57	5	62	72	4	76	763	79	842	390	34	414	2604	269	2873
8:00 - 8:15	71	25	96	22	3	25	5	7	12	51	3	54	970	91	1061	43	4	47	56	2	58	155	5	160	58	9	67	86	4	90	736	93	829	349	30	379	2811	277	3088
8:15 - 8:30	80	17	97	23	2	25	7	2	9	61	4	65	921	100	1021	49	4	53	56	3	59	120	5	125	55	9	64	61	2	63	740	96	836	316	27	343	2489	271	2760
8:30 - 8:45	70	25	95	34	6	40	10	6	16	43	3	46	826	121	947	49	4	53	51	1	52	108	6	114	45	4	49	76	3	79	702	114	816	230	23	253	2244	316	2560
8:45 - 9:00	81	23	104	21	2	23	6	6	12	53	2	55	800	89	889	39	2	41	43	3	46	85	3	88	31	5	36	41	2	43	647	113	760	299	36	335	2146	286	2432
Σ	761	278	1039	312	40	352	37	40	77	486	30	516	9104	1068	10172	473	32	505	726	37	763	1551	60	1611	434	57	491	949	39	988	9087	1227	10314	3773	373	4146	27693	3281	30974

U TURNS

TIME PERIOD	VEHICLE MOVEMENT NORTHBOUND			EASTBOUND			SOUTHBOUND			WESTBOUND		
	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ
6:00 - 6:15	0	0	0	0	0	0	0	0	0	4	0	4
6:15 - 6:30	0	0	0	0	0	0	0	0	0	0	0	0
6:30 - 6:45	0	0	0	0	0	0	0	0	0	2	0	2
6:45 - 7:00	0	0	0	0	0	0	0	0	0	2	0	2
7:00 - 7:15	0	0	0	0	0	0	0	0	0	2	2	4
7:15 - 7:30	0	0	0	0	0	0	0	0	0	1	0	1
7:30 - 7:45	0	0	0	0	0	0	0	0	0	0	0	0
7:45 - 8:00	0	0	0	0	0	0	0	0	0	2	2	4
8:00 - 8:15	0	0	0	0	0	0	0	0	0	3	0	3
8:15 - 8:30	0	0	0	0	0	0	0	0	0	4	1	5
8:30 - 8:45	0	0	0	0	0	0	0	0	0	3	0	3
8:45 - 9:00	0	0	0	0	0	0	0	0	0	5	0	5
Σ	0	0	0	0	0	0	0	0	0	28	5	33

TIME PERIOD	VEHICLE MOVEMENT 1			2			3			4			5			6			VEHICLE MOVEMENT 7			8			9			10			11			12			GRAND TOTAL		
	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ
16:00 - 16:15	290	29	319	103	4	107	13	3	16	18	1	19	904	121	1025	74	0	74	67	1	68	46	5	51	133	4	137	57	0	57	823	61	884	114	21	135	2642	250	2892
16:15 - 16:30	241	26	267	115	2	117	11	2	13	7	4	11	1000	98	1098	80	4	84	35	2	37	32	2	34	64	2	66	42	4	46	887	59	946	108	21	129	2622	226	2848
16:30 - 16:45	282	23	305	115	10	125	14	1	15	18	5	23	1027	82	1109	77	0	77	50	1	51	35	1	36	70	0	70	45	2	47	824	66	890	114	13	127	2671	204	2875
16:45 - 17:00	281	28	309	137	4	141	19	3	22	15	1	16	960	76	1036	74	5	79	54	0	54	30	4	34	44	4	48	52	2	54	863	41	904	105	26	131	2634	194	2828
17:00 - 17:15	277	24	301	154	3	157	36	1	37	11	6	17	967	93	1060	83	3	86	61	3	64	29	4	33	83	4	84	45	3	48	951	43	994	104	14	118	2801	198	2999
17:15 - 17:30	322	18	340	152	4	156	28	2	30	10	3	13	1023	65	1088	72	1	73	52	1	53	38	2	40	52	3	55	60	1	61	930	54	984	117	26	143	2856	180	3036
17:30 - 17:45	265	32	297	141	1	142	13	3	16	6	5	11	486	33	519	78	2	80	48	0	48	25	3	28	49	1	50	69	1	70	707	33	740	124	17	141	2011	131	2142
17:45 - 18:00	215	16	231	121	2	123	9	1	10	7	4	11	450	35	485	82	2	84	29	0	29	33	1	34	29	3	32	90	1	91	687	36	723	161	25	186	1913	126	2039
18:00 - 18:15	210	13	223	120	0	120	14	0	14	11	9	20	330	32	362	80	1	81	36	0	36	44	0	44	59	2	61	81	3	84	722	35	757	159	28	187	1866	123	1989
18:15 - 18:30	185	14	199	83	2	85	8	1	9	18	8	26	498	30	528	83	2	85	27	1	28	34	0	34	38	2	40	70	0	70	728	36	764	168	19	187	1940	115	2055
18:30 - 18:45	170	14	184	82	1	83	10	0	10	8	9	17	856	59	915	80	2	82	23	0	23	25	0	25	31	0	31	61	0	61	737	41	778	76	12	88	2159	138	2297
18:45 - 19:00	130	16	146	60	0	60	5	1	6	15	5	20	667	43	710	71	1	72	30	1	31	33	1	34	30	0	30	43	0	43	556	18	574	62	7	69	1702	93	1795
Σ	2868	253	3121	1383	33	1416	180	18	198	144	60	204	9168	767	9935	934	23	957	512	10	522	404	23	427	682	22	704	715	17	732	9415	523	9938	1412	229	1641	27817	1978	29795

TIME PERIOD	VEHICLE MOVEMENT NORTHBOUND			EASTBOUND			SOUTHBOUND			WESTBOUND		
	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ
16:00 - 16:15	0	0	0	0	0	0	0	0	0	5	0	5
16:15 - 16:30	0	0	0	0	0	0	0	0	0	6	0	6
16:30 - 16:45	0	0	0	0	1	1	0	0	0	11	1	12
16:45 - 17:00	0	0	0	1	0	1	0	0	0	2	0	2
17:00 - 17:15	0	0	0	0	0	0	0	0	0	6	3	9
17:15 - 17:30	0	0	0	1	0	1	0	0	0	5	0	5
17:30 - 17:45	0	0	0	0	1	1	0	0	0	4	0	4
17:45 - 18:00	0	0	0	0	0	0	0	0	0	1	0	1
18:00 - 18:15	0	0	0	0	0	0	0	0	0	1	0	1
18:15 - 18:30	0	0	0	0	0	0	0	0	0	4	0	4
18:30 - 18:45	0	0	0	0	0	0	0	0	0	3	0	3
18:45 - 19:00	0	0	0	0	0	0	0	0	0	1	0	1
Σ	0	0	0	2	2	4	0	0	0	49	4	53

TIME PERIOD	VEHICLE MOVEMENT 1			2			3			4			5			6			VEHICLE MOVEMENT 7			8			9			10			11			12			GRAND TOTAL		
	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ
6:00 - 7:00	214	86	300	87	12	99	6	5	11	87	10	97	2328	309	2637	95	5	100	236	18	254	506	20	526	90	3	93	288	15	303	3041	480	3521	1225	136	1361	8203	1099	9302
6:15 - 7:15	215	87	302	110	16	126	7	8	15	114	10	124	2801	329	2630	125	8	134	254	17	271	528	22	550	92	9	101	268	12	270	3141	468	3609	1203	127	1330	8748	1113	9861
6:30 - 7:30	228	96	324	121	16	134	7	8	15	141	8	165	2832	343	3175	170	12	182	266	15	281	531	13	544	117	18	135	416	10	426	3214	415	3629	1220	128	1348	9263	1079	10342
6:45 - 7:45	243	96	339	116	13	129	7	10	17	178	6	184	2979	353	3332	185	13	198	278	13	291	562	16	578	126	22	148	434	11	445	3288	369	3657	1265	125	1390	9661	1047	10708
7:00 - 8:00	245	102	347	125	16	140	8	14	22	191	8	199	3259	358	3617	198	13	211	268	10	278	577	20	597	155	27	182	397	13	410	3221	331	3552	1354	121	1475	9998	1032	11030
7:15 - 8:15	270	114	384	109	14	123	5	17	22	203	9	212	3551	377	3928	195	13	208	265	9	274	597	22	619	191	30	221	357	17	374	3129	315	3444	1423	123	1546	10296	1060	11356
7:30 - 8:30	291	103	394	104	14	118	11	17	28	213	11	224	3651	379	4030	186	14	200	255	9	264	577	25	602	207	30	237	311	14	325	3053	342	3395	1399	121	1520	10258	1079	11337
7:45 - 8:45	287	102	389	119	17	136	21	20	41	200	13	213	3643	400	4043	193	15	208	237	7	244	524	23	547	215	27	242	295	13	308	2941	382	3323	1275	114	1389	9950	1133	11083
8:00 - 9:00	302	90	392	100	13	113	23	21	44	208	12	220	3517	401	3918	180	14	194	222	9	231	468	20	488	189	27	216	264	11	275	2825	416	3241	1194	116	1310	9492	1150	10642

TIME PERIOD	VEHICLE MOVEMENT NORTHBOUND			EASTBOUND			SOUTHBOUND			WESTBOUND		
	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ
6:00 - 7:00	0	0	0	0	0	0	0	0	0	8	0	8
6:15 - 7:15	0	0	0	0	0	0	0	0	0	6	2	8
6:30 - 7:30	0	0	0	0	0	0	0	0	0	7	0	7
6:45 - 7:45	0	0	0	0	0	0	0	0	0	5	2	7
7:00 - 8:00	0	0	0	0	0	0	0	0	0	9	1	10
7:15 - 8:15	0	0	0	0	0	0	0	0	0	6	2	8
7:30 - 8:30	0	0	0	0	0	0	0	0	0	9	3	12
7:45 - 8:45	0	0	0	0	0	0	0	0	0	12	3	15
8:00 - 9:00	0	0	0	0	0	0	0	0	0	15	1	16

TIME PERIOD	VEHICLE MOVEMENT 1			2			3			4			5			6			VEHICLE MOVEMENT 7			8			9			10			11			12			GRAND TOTAL		
	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ
16:00 - 17:00	1094	106	1200	470	20	490	57	9	66	58	11	69	3891	377	4268	305	9	314	206	4	210	143	12	155	311	10	321	196	8	204	3397	227	3624	441	81	522	10569	874	11443
16:15 - 17:15	1081	101	1182	521	19	540	80	7	87	51	16	67	3954	349	4303	314	12	326	200	6	206	126	11	137	261	7	268	184	11	195	3525	209	3734	431	74	505	10728	922	11650
16:30 - 17:30	1162	93	1255	558	21	579	97	7	104	54	15	69	3977	316	4293	306	9	315	217	5	222	132	11	143	249	8	257	202	8	210	3566	204	3772	440	79	519	10962	776	11738
16:45 - 17:45	1145	102	1247	584	12	596	96	9	105	42	15	57	3436	267	3703	307	11	318	215	4	219	122	13	135	228	9	237	226	7	233	3451	171	3622	450	83	533	10302	703	11005
17:00 - 18:00	1079	90	1169	588	10	598	88	7	95	34	13	47	2926	226	3152	316	8	324	190	4	194	125	10	135	213	8	221	264	6	270	3275	166	3441	508	82	590	9581	628	10209
17:15 - 18:15	1012	79	1091	534	14	548	64	6	70	34	12	46	2289	165	2454	312	6	318	165	1	166	140	6	146	189	9	198	300	6	306	3048	156	3204	561	96	657	8646	560	9206
17:30 - 18:30	973	75	1048	463	5	470	44	5	49	42	8	50	1764	130	1894	323	7	330	140	1	141	136	4	140	175	8	183	310	5	315	2844	140	2984	512	89	701	7780	495	8275
17:45 - 18:45	789	57	837	406	5	411	41	2	43	44	30	74	2134	156	2290	325	7	332	115	1	116	136	1	137	157	7	164	302	4	306	2874	148	3022	564	84	648	7878	502	8380
18:00 - 19:00	695	57	752	345	3	348	37	2	39	52	31	83	2351	164	2515	314	6	320	116	2	118	136	1	137	158	4	162	255	3	258	2743	130	2873	465	66	531	7667	469	8136

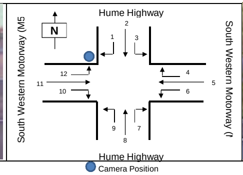
TIME PERIOD	VEHICLE MOVEMENT NORTHBOUND			EASTBOUND			SOUTHBOUND			WESTBOUND		
	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ
16:00 - 17:00	0	0	0	1	1	2	0	0	0	24	1	25
16:15 - 17:15	0	0	0	1	1	2	0	0	0	25	4	29
16:30 - 17:30	0	0	0	2	1	3	0	0	0	24	4	28
16:45 - 17:45	0	0	0	2	1	3	0	0	0	17	3	20
17:00 - 18:00	0	0	0	1	1	2	0	0	0	18	2	19
17:15 - 18:15	0	0	0	1	1	2	0	0	0	11	0	11
17:30 - 18:30	0	0	0	1	1	2	0	0	0	10	0	10
17:45 - 18:45	0	0	0	0	0	0	0	0	0	9	0	9
18:00 - 19:00	0	0	0	0	0	0	0	0	0	9	0	9

Intersection of South Western Motorway (M5) and Hume Highway

Tuesday, 7 December 2010

Austraffic

Survey Start	6:00	AM	16:00	PM
Intersection Type	Cross Junction			
Intersection No.	1			
North Approach	Hume Highway			
East Approach	South Western Motorway (M5)			
South Approach	Hume Highway			
West Approach	South Western Motorway (M5)			
Date	7/12/10			
Classification	Light	Heavy		



VEHICLE MOVEMENT (6:00 – 9:00)

TIME PERIOD	1 Light	1 Heavy	1 Σ	2 Light	2 Heavy	2 Σ	3 Light	3 Heavy	3 Σ	4 Light	4 Heavy	4 Σ	5 Light	5 Heavy	5 Σ	6 Light	6 Heavy	6 Σ
6:00 - 6:15	0	0	0	121	18	139	124	6	130	100	8	108	342	52	394	26	3	29
6:15 - 6:30	0	0	0	191	12	203	127	11	138	114	6	120	494	97	591	20	2	22
6:30 - 6:45	0	0	0	219	18	237	157	9	166	148	11	159	617	101	718	47	2	49
6:45 - 7:00	0	0	0	209	25	234	202	10	212	133	7	140	601	95	696	31	3	34
7:00 - 7:15	0	0	0	208	29	237	187	16	203	106	19	125	589	94	683	26	2	28
7:15 - 7:30	0	0	0	184	23	207	165	6	171	164	16	180	705	114	819	42	2	44
7:30 - 7:45	0	0	0	272	24	296	143	7	150	188	11	199	765	127	892	62	5	67
7:45 - 8:00	0	0	0	242	30	272	146	12	158	263	8	271	758	118	876	61	4	65
8:00 - 8:15	0	0	0	232	16	248	127	9	136	271	8	279	797	110	907	71	4	75
8:15 - 8:30	0	0	0	256	20	276	144	5	149	178	7	185	785	105	890	68	4	72
8:30 - 8:45	0	0	0	277	10	287	123	8	131	202	14	216	746	130	876	56	6	62
8:45 - 9:00	0	0	0	244	14	258	108	12	120	206	10	216	675	108	783	83	4	87
Σ	0	0	0	2655	239	2894	1753	111	1864	2073	125	2198	7874	1251	9125	593	41	634

TIME PERIOD	7 Light	7 Heavy	7 Σ	8 Light	8 Heavy	8 Σ	9 Light	9 Heavy	9 Σ	10 Light	10 Heavy	10 Σ	11 Light	11 Heavy	11 Σ	12 Light	12 Heavy	12 Σ	GRAND TOTAL Light	GRAND TOTAL Heavy	GRAND TOTAL Σ
6:00 - 6:15	163	7	170	639	37	676	0	0	0	0	0	0	740	128	868	0	0	0	2255	259	2514
6:15 - 6:30	134	11	145	808	53	861	0	0	0	0	0	0	802	134	936	0	0	0	2690	326	3016
6:30 - 6:45	150	7	157	757	43	800	0	0	0	0	0	0	780	140	920	0	0	0	2875	331	3206
6:45 - 7:00	165	5	170	744	33	777	0	0	0	0	0	0	891	127	1018	0	0	0	2976	305	3281
7:00 - 7:15	140	8	148	841	52	893	0	0	0	0	0	0	898	125	1023	0	0	0	2995	345	3340
7:15 - 7:30	161	4	165	841	44	885	0	0	0	0	0	0	885	85	970	0	0	0	3147	294	3441
7:30 - 7:45	146	4	150	886	37	923	0	0	0	0	0	0	966	94	1060	0	0	0	3428	309	3737
7:45 - 8:00	131	6	137	907	41	948	0	0	0	0	0	0	923	90	1013	0	0	0	3431	309	3740
8:00 - 8:15	124	4	128	875	39	914	0	0	0	0	0	0	868	122	990	0	0	0	3365	312	3677
8:15 - 8:30	130	6	136	847	39	886	0	0	0	0	0	0	838	114	952	0	0	0	3246	300	3546
8:30 - 8:45	118	6	124	704	38	742	0	0	0	0	0	0	792	131	923	0	0	0	3018	343	3361
8:45 - 9:00	102	6	108	728	33	761	0	0	0	0	0	0	768	133	901	0	0	0	2914	320	3234
Σ	1664	74	1738	9577	489	10066	0	0	0	0	0	0	10151	1423	11574	0	0	0	36340	3753	40093

U TURNS

TIME PERIOD	NORTHBOUND Light	NORTHBOUND Heavy	NORTHBOUND Σ	EASTBOUND Light	EASTBOUND Heavy	EASTBOUND Σ	SOUTHBOUND Light	SOUTHBOUND Heavy	SOUTHBOUND Σ	WESTBOUND Light	WESTBOUND Heavy	WESTBOUND Σ
6:00 - 6:15	0	0	0	0	0	0	0	0	0	0	0	0
6:15 - 6:30	0	0	0	0	0	0	0	0	0	0	0	0
6:30 - 6:45	0	0	0	0	0	0	0	0	0	0	0	0
6:45 - 7:00	0	0	0	1	0	1	0	0	0	0	0	0
7:00 - 7:15	0	0	0	0	0	0	0	0	0	0	0	0
7:15 - 7:30	0	0	0	0	0	0	0	0	0	0	0	0
7:30 - 7:45	0	0	0	3	0	3	0	0	0	0	0	0
7:45 - 8:00	0	0	0	2	1	3	0	0	0	0	0	0
8:00 - 8:15	0	0	0	1	0	1	0	0	0	0	0	0
8:15 - 8:30	0	0	0	0	0	0	0	0	0	0	0	0
8:30 - 8:45	0	0	0	0	0	0	0	0	0	0	0	0
8:45 - 9:00	0	0	0	0	0	0	0	0	0	0	0	0
Σ	0	0	0	7	1	8	0	0	0	0	0	0

VEHICLE MOVEMENT (16:00 – 19:00)

TIME PERIOD	1 Light	1 Heavy	1 Σ	2 Light	2 Heavy	2 Σ	3 Light	3 Heavy	3 Σ	4 Light	4 Heavy	4 Σ	5 Light	5 Heavy	5 Σ	6 Light	6 Heavy	6 Σ
16:00 - 16:15	0	0	0	636	22	658	186	12	198	247	10	257	880	131	1011	205	3	208
16:15 - 16:30	0	0	0	620	16	636	179	5	184	226	12	238	867	101	968	230	10	240
16:30 - 16:45	0	0	0	544	23	567	180	5	185	247	11	258	901	100	1001	266	11	277
16:45 - 17:00	0	0	0	618	16	634	168	3	171	178	5	183	926	85	1011	204	12	216
17:00 - 17:15	0	0	0	618	15	633	183	4	187	223	7	230	798	100	898	274	6	280
17:15 - 17:30	0	0	0	635	13	648	160	3	163	209	9	218	862	84	946	325	11	336
17:30 - 17:45	0	0	0	705	17	722	175	4	179	166	11	177	303	19	322	268	17	285
17:45 - 18:00	0	0	0	667	14	681	171	4	175	149	13	162	157	9	166	338	12	350
18:00 - 18:15	0	0	0	637	11	648	149	4	153	120	10	130	168	20	188	325	16	341
18:15 - 18:30	0	0	0	606	20	626	142	5	147	155	8	163	249	36	285	364	13	377
18:30 - 18:45	0	0	0	455	19	474	139	4	143	198	6	204	481	56	537	366	9	375
18:45 - 19:00	0	0	0	546	15	561	131	4	135	147	7	154	536	48	584	226	8	234
Σ	0	0	0	7287	201	7488	1963	57	2020	2265	109	2374	7128	789	7917	3391	128	3519

TIME PERIOD	7 Light	7 Heavy	7 Σ	8 Light	8 Heavy	8 Σ	9 Light	9 Heavy	9 Σ	10 Light	10 Heavy	10 Σ	11 Light	11 Heavy	11 Σ	12 Light	12 Heavy	12 Σ	GRAND TOTAL Light	GRAND TOTAL Heavy	GRAND TOTAL Σ
16:00 - 16:15	75	5	80	537	26	563	0	0	0	0	0	0	684	73	757	0	0	0	3450	282	3732
16:15 - 16:30	81	4	85	585	24	609	0	0	0	0	0	0	743	71	814	0	0	0	3531	243	3774
16:30 - 16:45	71	2	73	563	28	591	0	0	0	0	0	0	695	81	776	0	0	0	3467	261	3728
16:45 - 17:00	57	1	58	564	16	580	0	0	0	0	0	0	772	63	835	0	0	0	3487	201	3688
17:00 - 17:15	97	0	97	489	20	509	0	0	0	0	0	0	828	60	888	0	0	0	3510	212	3722
17:15 - 17:30	101	3	104	510	19	529	0	0	0	0	0	0	883	62	945	0	0	0	3685	204	3889
17:30 - 17:45	74	3	77	485	23	508	0	0	0	0	0	0	636	38	674	0	0	0	2812	132	2944
17:45 - 18:00	83	4	87	466	27	493	0	0	0	0	0	0	608	37	645	0	0	0	2639	120	2759
18:00 - 18:15	97	6	103	461	26	487	0	0	0	0	0	0	638	49	687	0	0	0	2595	142	2737
18:15 - 18:30	87	1	88	454	12	466	0	0	0	0	0	0	678	41	719	0	0	0	2735	136	2871
18:30 - 18:45	76	0	76	504	16	520	0	0	0	0	0	0	683	56	739	0	0	0	2902	166	3068
18:45 - 19:00	61	0	61	397	12	409	0	0	0	0	0	0	467	29	496	0	0	0	2511	123	2634
Σ	960	29	989	6015	249	6264	0	0	0	0	0	0	8315	660	8975	0	0	0	37324	2222	39546

TIME PERIOD	NORTHBOUND Light	NORTHBOUND Heavy	NORTHBOUND Σ	EASTBOUND Light	EASTBOUND Heavy	EASTBOUND Σ	SOUTHBOUND Light	SOUTHBOUND Heavy	SOUTHBOUND Σ	WESTBOUND Light	WESTBOUND Heavy	WESTBOUND Σ
16:00 - 16:15	0	0	0	1	0	1	0	0	0	0	0	0
16:15 - 16:30	0	0	0	0	0	0	0	0	0	0	0	0
16:30 - 16:45	0	0	0	0	0	0	0	0	0	0	0	0
16:45 - 17:00	0	0	0	0	0	0	0	0	0	0	0	0
17:00 - 17:15	0	0	0	1	0	1	0	0	0	0	0	0
17:15 - 17:30	0	0	0	0	0	0	0	0	0	0	0	0
17:30 - 17:45	0	0	0	1	0	1	0	0	0	0	0	0
17:45 - 18:00	0	0	0	2	0	2	0	0	0	0	0	0
18:00 - 18:15	0	0	0	0	0	0	0	0	0	0	0	0
18:15 - 18:30	0	0	0	1	0	1	0	0	0	0	0	0
18:30 - 18:45	0	0	0	0	0	0	0	0	0	0	0	0
18:45 - 19:00	0	0	0	0	0	0	0	0	0	0	0	0
Σ	0	0	0	6	0	6	0	0	0	0	0	0

VEHICLE MOVEMENT (hourly, AM)

TIME PERIOD	1 Light	1 Heavy	1 Σ	2 Light	2 Heavy	2 Σ	3 Light	3 Heavy	3 Σ	4 Light	4 Heavy	4 Σ	5 Light	5 Heavy	5 Σ	6 Light	6 Heavy	6 Σ
6:00 - 7:00	0	0	0	740	73	813	610	36	646	495	32	527	2054	345	2399	124	10	134
6:15 - 7:15	0	0	0	827	84	911	673	46	719	501	43	544	2301	387	2688	124	9	133
6:30 - 7:30	0	0	0	820	95	915	711	41	752	551	53	604	2512	404	2916	146	9	155
6:45 - 7:45	0	0	0	873	101	974	697	39	736	591	53	644	2660	430	3090	161	12	173
7:00 - 8:00	0	0	0	906	106	1012	641	41	682	721	54	775	2817	453	3270	191	13	204
7:15 - 8:15	0	0	0	930	93	1023	581	34	615	886	43	929	3025	469	3494	236	15	251
7:30 - 8:30	**0**	**0**	**0**	**1002**	**90**	**1092**	**560**	**33**	**593**	**900**	**34**	**934**	**3105**	**460**	**3565**	**262**	**17**	**279**
7:45 - 8:45	0	0	0	1007	76	1083	540	34	574	914	37	951	3086	463	3549	256	18	274
8:00 - 9:00	0	0	0	1009	60	1069	502	34	536	857	39	896	3003	453	3456	278	18	296

TIME PERIOD	7 Light	7 Heavy	7 Σ	8 Light	8 Heavy	8 Σ	9 Light	9 Heavy	9 Σ	10 Light	10 Heavy	10 Σ	11 Light	11 Heavy	11 Σ	12 Light	12 Heavy	12 Σ	GRAND TOTAL Light	GRAND TOTAL Heavy	GRAND TOTAL Σ	
6:00 - 7:00	612	30	642	2948	166	3114	0	0	0	0	0	0	3213	529	3742	0	0	0	10796	1221	12017	
6:15 - 7:15	589	31	620	3150	181	3331	0	0	0	0	0	0	3371	526	3897	0	0	0	11536	1307	12843	
6:30 - 7:30	616	24	640	3183	172	3355	0	0	0	0	0	0	3454	477	3931	0	0	0	11993	1275	13268	
6:45 - 7:45	612	21	633	3312	166	3478	0	0	0	0	0	0	3640	431	4071	0	0	0	12546	1253	13799	
7:00 - 8:00	578	22	600	3475	174	3649	0	0	0	0	0	0	3672	394	4066	0	0	0	13001	1257	14258	
7:15 - 8:15	562	18	580	3509	161	3670	0	0	0	0	0	0	3642	391	4033	0	0	0	13371	1224	14595	
7:30 - 8:30	**531**	**20**	**551**	**3515**	**156**	**3671**	**0**	**0**	**0**	**0**	**0**	**0**	**3595**	**420**	**4015**	**0**	**0**	**0**	**13470**	**1230**	**14700**	**Peak**
7:45 - 8:45	503	22	525	3333	157	3490	0	0	0	0	0	0	3421	457	3878	0	0	0	13060	1264	14324	
8:00 - 9:00	474	22	496	3154	149	3303	0	0	0	0	0	0	3266	500	3766	0	0	0	12543	1275	13818	

TIME PERIOD	NORTHBOUND Light	NORTHBOUND Heavy	NORTHBOUND Σ	EASTBOUND Light	EASTBOUND Heavy	EASTBOUND Σ	SOUTHBOUND Light	SOUTHBOUND Heavy	SOUTHBOUND Σ	WESTBOUND Light	WESTBOUND Heavy	WESTBOUND Σ
6:00 - 7:00	0	0	0	1	0	1	0	0	0	0	0	0
6:15 - 7:15	0	0	0	1	0	1	0	0	0	0	0	0
6:30 - 7:30	0	0	0	1	0	1	0	0	0	0	0	0
6:45 - 7:45	0	0	0	4	0	4	0	0	0	0	0	0
7:00 - 8:00	0	0	0	5	1	6	0	0	0	0	0	0
7:15 - 8:15	0	0	0	6	1	7	0	0	0	0	0	0
7:30 - 8:30	0	0	0	6	1	7	0	0	0	0	0	0
7:45 - 8:45	0	0	0	3	1	4	0	0	0	0	0	0
8:00 - 9:00	0	0	0	1	0	1	0	0	0	0	0	0

VEHICLE MOVEMENT (hourly, PM)

TIME PERIOD	1 Light	1 Heavy	1 Σ	2 Light	2 Heavy	2 Σ	3 Light	3 Heavy	3 Σ	4 Light	4 Heavy	4 Σ	5 Light	5 Heavy	5 Σ	6 Light	6 Heavy	6 Σ
16:00 - 17:00	0	0	0	2418	77	2495	713	25	738	898	38	936	3574	417	3991	905	36	941
16:15 - 17:15	0	0	0	2400	70	2470	710	17	727	874	35	909	3492	386	3878	974	39	1013
16:30 - 17:30	**0**	**0**	**0**	**2415**	**67**	**2482**	**691**	**15**	**706**	**857**	**32**	**889**	**3487**	**369**	**3856**	**1069**	**40**	**1109**
16:45 - 17:45	0	0	0	2576	61	2637	686	14	700	776	32	808	2889	288	3177	1071	46	1117
17:00 - 18:00	0	0	0	2625	59	2684	689	15	704	747	40	787	2120	212	2332	1205	46	1251
17:15 - 18:15	0	0	0	2644	55	2699	655	15	670	644	43	687	1490	132	1622	1256	56	1312
17:30 - 18:30	0	0	0	2615	62	2677	637	17	654	590	42	632	877	84	961	1295	58	1353
17:45 - 18:45	0	0	0	2365	64	2429	601	17	618	622	37	659	1055	121	1176	1393	50	1443
18:00 - 19:00	0	0	0	2244	65	2309	561	17	578	620	31	651	1434	160	1594	1281	46	1327

TIME PERIOD	7 Light	7 Heavy	7 Σ	8 Light	8 Heavy	8 Σ	9 Light	9 Heavy	9 Σ	10 Light	10 Heavy	10 Σ	11 Light	11 Heavy	11 Σ	12 Light	12 Heavy	12 Σ	GRAND TOTAL Light	GRAND TOTAL Heavy	GRAND TOTAL Σ	
16:00 - 17:00	284	12	296	2249	94	2343	0	0	0	0	0	0	2894	288	3182	0	0	0	13935	987	14922	
16:15 - 17:15	306	7	313	2201	88	2289	0	0	0	0	0	0	3038	275	3313	0	0	0	13995	917	14912	
16:30 - 17:30	**326**	**6**	**332**	**2126**	**83**	**2209**	**0**	**0**	**0**	**0**	**0**	**0**	**3178**	**266**	**3444**	**0**	**0**	**0**	**14149**	**878**	**15027**	**Peak**
16:45 - 17:45	329	7	336	2048	78	2126	0	0	0	0	0	0	3119	223	3342	0	0	0	13494	749	14243	
17:00 - 18:00	355	10	365	1950	89	2039	0	0	0	0	0	0	2955	197	3152	0	0	0	12646	668	13314	
17:15 - 18:15	355	16	371	1922	95	2017	0	0	0	0	0	0	2765	186	2951	0	0	0	11731	598	12329	
17:30 - 18:30	341	14	355	1866	88	1954	0	0	0	0	0	0	2560	165	2725	0	0	0	10781	530	11311	
17:45 - 18:45	343	11	354	1885	81	1966	0	0	0	0	0	0	2607	183	2790	0	0	0	10871	564	11435	
18:00 - 19:00	321	7	328	1816	66	1882	0	0	0	0	0	0	2466	175	2641	0	0	0	10743	567	11310	

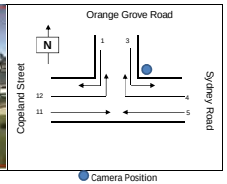
TIME PERIOD	NORTHBOUND Light	NORTHBOUND Heavy	NORTHBOUND Σ	EASTBOUND Light	EASTBOUND Heavy	EASTBOUND Σ	SOUTHBOUND Light	SOUTHBOUND Heavy	SOUTHBOUND Σ	WESTBOUND Light	WESTBOUND Heavy	WESTBOUND Σ
16:00 - 17:00	0	0	0	1	0	1	0	0	0	0	0	0
16:15 - 17:15	0	0	0	1	0	1	0	0	0	0	0	0
16:30 - 17:30	0	0	0	1	0	1	0	0	0	0	0	0
16:45 - 17:45	0	0	0	2	0	2	0	0	0	0	0	0
17:00 - 18:00	0	0	0	4	0	4	0	0	0	0	0	0
17:15 - 18:15	0	0	0	3	0	3	0	0	0	0	0	0
17:30 - 18:30	0	0	0	4	0	4	0	0	0	0	0	0
17:45 - 18:45	0	0	0	3	0	3	0	0	0	0	0	0
18:00 - 19:00	0	0	0	1	0	1	0	0	0	0	0	0

Intersection of Hume Highway and Orange Grove Road

Tuesday, 18 March 2014

Austraffic

Survey Start	**6:00 AM 16:00 PM**
Intersection Type	T Junction
Intersection No.	**1**
North Approach	**Orange Grove Road**
East Approach	**Sydney Road**
South Approach	
West Approach	**Copeland Street**
Date	**18/03/14**
Classification	**Light Heavy**



Camera Position

TIME PERIOD	VEHICLE MOVEMENT																																										GRAND TOTAL		
	1			2			3			4			5			6			7			8			9			10			11			12					
	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ
6:00 - 6:15	157	9	166				64	6	70	34	5	39	103	10	113																428	26	454	232	18	250	1018	74	1092
6:15 - 6:30	198	13	211				67	4	71	44	7	51	166	11	177																426	23	449	214	18	232	1115	76	1191
6:30 - 6:45	195	20	215				96	6	102	49	7	56	159	13	172																445	27	472	259	16	275	1203	89	1292
6:45 - 7:00	183	28	211				132	7	139	48	5	53	139	14	153																483	22	505	209	12	221	1194	88	1282
7:00 - 7:15	162	20	182				112	5	117	61	2	63	152	11	163																518	26	544	244	17	261	1249	81	1330
7:15 - 7:30	210	18	228				113	5	118	70	6	76	151	11	162																491	29	520	224	24	248	1259	93	1352
7:30 - 7:45	189	14	203				135	6	141	82	6	88	192	15	207																432	24	456	247	12	259	1377	77	1354
7:45 - 8:00	187	17	204				101	5	106	73	7	80	194	15	209																519	21	540	273	17	290	1347	82	1429
8:00 - 8:15	224	16	240				114	13	127	69	7	76	195	25	220																397	18	415	275	16	291	1274	95	1369
8:15 - 8:30	239	18	257				131	10	141	80	10	90	183	23	206																474	23	497	217	16	233	1324	100	1424
8:30 - 8:45	382	22	404				120	5	125	80	10	90	167	31	198																358	29	387	229	20	249	1336	117	1453
8:45 - 9:00	273	27	300				121	8	129	101	13	114	156	16	172																333	21	354	241	19	260	1225	104	1329
Σ	2599	222	2821				1306	80	1386	791	85	876	1957	195	2152																5304	289	5593	2864	205	3069	14821	1076	15897

TIME PERIOD	VEHICLE MOVEMENT																																										GRAND TOTAL		
	1			2			3			4			5			6			7			8			9			10			11			12					
	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ
16:00 - 16:15	288	12	300				73	6	79	183	8	191	354	19	373																212	12	224	245	17	262	1355	74	1429
16:15 - 16:30	318	9	327				95	5	100	160	6	166	364	16	380																222	16	238	273	14	287	1432	66	1498
16:30 - 16:45	292	15	307				85	1	86	176	7	183	393	16	409																244	11	255	263	13	276	1453	63	1516
16:45 - 17:00	321	5	326				83	5	88	154	4	158	360	16	376																253	16	269	289	7	296	1460	53	1513
17:00 - 17:15	254	9	263				70	6	76	197	2	199	384	12	396																173	12	185	246	5	251	1324	46	1370
17:15 - 17:30	285	8	293				94	3	97	169	7	176	338	6	344																256	13	269	316	9	325	1458	46	1504
17:30 - 17:45	277	13	290				71	4	75	161	2	163	321	6	327																211	8	219	300	9	309	1341	42	1383
17:45 - 18:00	229	9	238				88	4	92	114	7	121	363	10	373																226	16	242	251	5	256	1271	51	1322
18:00 - 18:15	258	4	262				67	8	75	129	5	134	355	10	365																171	8	179	257	7	264	1237	42	1279
18:15 - 18:30	244	4	248				79	3	82	123	2	125	384	11	395																208	8	216	252	7	259	1290	35	1325
18:30 - 18:45	211	13	224				56	4	60	110	2	112	318	9	327																176	6	182	210	6	216	1081	40	1121
18:45 - 19:00	238	6	244				54	1	55	81	0	81	251	5	256																163	3	166	169	7	176	956	22	978
Σ	3215	107	3322				915	50	965	1757	52	1809	4185	136	4321																2515	129	2644	3071	106	3177	15658	580	16238

TIME PERIOD	VEHICLE MOVEMENT																																										GRAND TOTAL			
	1			2			3			4			5			6			7			8			9			10			11			12											
	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ			
6:00 - 7:00	733	70	803				359	23	382	175	24	199	567	48	615																1782	98	1880	914	64	978	4530	327	4857			
6:15 - 7:15	738	81	819				407	22	429	202	21	223	616	49	665																1872	96	1970	926	63	989	4761	334	5095			
6:30 - 7:30	750	86	836				453	23	476	228	20	248	603	47	650																1937	104	2041	936	69	1005	4905	351	5256			
6:45 - 7:45	744	80	824				492	23	515	261	19	280	634	51	685																1924	101	2025	924	65	989	4979	339	5318			
7:00 - 8:00	748	69	817				461	21	482	286	21	307	689	52	741																1960	100	2060	988	70	1058	5132	333	5465			
7:15 - 8:15	810	65	875				463	29	492	294	26	320	732	66	798																1839	92	1931	1019	69	1088	5157	347	5504			
7:30 - 8:30	839	65	904				481	34	515	304	30	334	764	78	842																1822	86	1908	1012	61	1073	5222	354	5576			
7:45 - 8:45	**1032**	**73**	**1105**				**466**	**33**	**499**	**302**	**34**	**336**	**739**	**94**	**833**																**1748**	**91**	**1839**	**994**	**69**	**1063**	**5281**	**394**	**5675**	**Peak**		
8:00 - 9:00	1118	83	1201				486	36	522	330	40	370	701	95	796																1562	91	1653	962	71	1033	5159	416	5575			

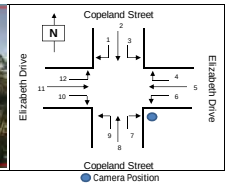
TIME PERIOD	VEHICLE MOVEMENT																																										GRAND TOTAL			
	1			2			3			4			5			6			7			8			9			10			11			12					
	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ			
16:00 - 17:00	**1219**	**41**	**1260**				**336**	**17**	**353**	**673**	**25**	**698**	**1471**	**67**	**1538**																**931**	**55**	**986**	**1070**	**51**	**1121**	**5700**	**256**	**5956**	**Peak**		
16:15 - 17:15	1185	38	1223				333	17	350	687	19	706	1501	60	1561																892	55	947	1071	39	1110	5669	228	5897			
16:30 - 17:30	1152	37	1189				332	15	347	696	20	716	1475	50	1525																926	52	978	1114	34	1148	5695	208	5903			
16:45 - 17:45	1137	35	1172				318	18	336	681	15	696	1403	40	1443																893	49	942	1151	30	1181	5583	187	5770			
17:00 - 18:00	1045	39	1084				323	17	340	641	18	659	1406	34	1440																866	49	915	1113	28	1141	5394	185	5579			
17:15 - 18:15	1049	34	1083				320	19	339	573	21	594	1377	32	1409																864	45	909	1124	30	1154	5307	181	5488			
17:30 - 18:30	1008	30	1038				305	19	324	527	16	543	1423	37	1460																816	40	856	1060	28	1088	5139	170	5309			
17:45 - 18:45	942	30	972				290	19	309	476	16	492	1420	40	1460																781	38	819	970	25	995	4879	168	5047			
18:00 - 19:00	951	27	978				256	16	272	443	9	452	1308	35	1343																718	25	743	888	27	915	4564	139	4703			

Intersection of Hume Highway and Elizabeth Drive

Tuesday, 18 March 2014

Austraffic

Survey Start	**6:00 AM 16:00 PM**
Intersection Type	Cross Junction
Intersection No.	**2**
North Approach	**Copeland Street**
East Approach	**Elizabeth Drive**
South Approach	**Copeland Street**
West Approach	**Elizabeth Drive**
Date	**18/03/14**
Classification	**Light Heavy**



Camera Position

TIME PERIOD	VEHICLE MOVEMENT 1			2			3			4			5			6			VEHICLE MOVEMENT 7			8			9			10			11			12			GRAND TOTAL		
	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ
6:00 - 6:15	26	4	30	225	13	238	1	0	1	11	1	12	26	3	29	1	0	1	0	0	0	475	38	513	30	1	31	91	4	95	74	2	76	93	5	98	1053	71	1124
6:15 - 6:30	37	5	42	336	26	362	3	0	3	21	1	22	19	5	24	0	1	1	0	0	0	512	34	546	38	0	38	105	6	111	90	7	97	103	8	111	1264	93	1357
6:30 - 6:45	45	4	49	335	27	362	6	3	9	16	0	16	27	3	30	0	2	2	0	0	0	557	35	592	29	2	31	86	3	89	112	2	114	96	7	103	1309	88	1397
6:45 - 7:00	39	4	43	276	32	308	9	1	10	15	1	16	35	4	39	3	1	4	0	0	0	513	21	534	28	3	31	107	7	114	182	3	185	145	10	155	1352	87	1439
7:00 - 7:15	38	2	40	278	29	307	9	0	9	19	0	19	36	7	43	4	0	4	0	0	0	597	36	633	23	6	29	91	7	98	144	3	147	122	9	131	1361	99	1460
7:15 - 7:30	59	7	66	305	27	332	11	0	11	16	5	21	63	9	72	1	1	2	0	0	0	525	39	564	14	3	17	70	6	76	175	7	182	127	10	137	1366	114	1480
7:30 - 7:45	58	7	65	327	26	353	12	0	12	24	3	27	73	5	78	1	1	2	1	0	1	559	21	580	27	1	28	79	7	86	167	4	171	99	10	109	1427	85	1512
7:45 - 8:00	54	6	60	297	23	320	13	0	13	29	2	31	83	10	93	6	0	6	0	0	0	512	24	536	27	1	28	72	5	77	210	8	218	127	10	137	1430	89	1519
8:00 - 8:15	79	6	85	350	34	384	15	1	16	34	0	34	87	5	92	5	2	7	0	0	0	508	30	538	29	1	30	101	5	106	175	5	180	106	5	111	1489	94	1583
8:15 - 8:30	60	7	67	322	35	357	15	1	16	24	0	24	102	5	107	10	0	10	0	0	0	454	33	487	31	1	32	105	7	112	224	5	229	127	5	132	1474	99	1573
8:30 - 8:45	69	9	78	399	39	438	27	0	27	36	1	37	96	3	99	9	0	9	0	0	0	366	36	402	17	3	20	109	10	119	247	9	256	129	8	137	1504	118	1622
8:45 - 9:00	82	7	89	373	43	416	34	0	34	29	1	30	107	6	113	9	0	9	0	0	0	368	33	401	24	6	30	140	3	143	237	7	244	138	9	147	1541	115	1656
Σ	646	68	714	3823	354	4177	155	6	161	274	15	289	754	65	819	49	8	57	1	0	1	5946	380	6326	317	28	345	1156	70	1226	2037	62	2099	1412	96	1508	16570	1152	17722

TIME PERIOD	VEHICLE MOVEMENT 1			2			3			4			5			6			VEHICLE MOVEMENT 7			8			9			10			11			12			GRAND TOTAL		
	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ
16:00 - 16:15	134	8	142	473	20	493	18	0	18	36	1	37	236	7	243	21	0	21	0	0	0	294	26	320	69	3	72	80	0	80	130	7	137	56	3	59	1547	75	1622
16:15 - 16:30	203	4	207	508	25	533	15	0	15	41	2	43	198	4	202	22	1	23	0	0	0	322	27	349	67	7	74	85	3	88	129	5	134	67	4	71	1657	82	1739
16:30 - 16:45	204	11	215	528	20	548	17	1	18	31	0	31	209	5	214	27	0	27	0	0	0	325	17	342	60	4	64	54	1	55	117	6	123	73	4	77	1645	69	1714
16:45 - 17:00	169	3	172	529	18	547	15	0	15	37	0	37	210	7	217	32	1	33	0	0	0	324	18	342	76	3	79	73	1	74	126	4	130	73	7	80	1664	62	1726
17:00 - 17:15	188	4	192	515	15	530	12	1	13	40	0	40	220	6	226	21	0	21	0	0	0	284	17	301	55	2	57	74	4	78	97	5	102	55	5	60	1561	59	1620
17:15 - 17:30	229	6	235	501	9	510	11	1	12	31	0	31	230	4	234	23	0	23	0	0	0	350	13	363	69	3	72	65	1	66	106	7	113	72	3	75	1687	47	1734
17:30 - 17:45	188	7	195	495	12	507	9	2	11	26	1	27	208	4	212	22	0	22	0	0	0	309	14	323	65	1	66	71	0	71	106	4	110	47	1	48	1546	46	1592
17:45 - 18:00	173	3	176	473	15	488	14	0	14	34	1	35	265	14	279	22	0	22	0	0	0	287	11	298	85	0	85	77	2	79	120	4	124	65	7	72	1615	57	1672
18:00 - 18:15	194	4	198	490	13	503	6	0	6	39	0	39	182	4	186	19	0	19	0	0	0	289	9	298	66	1	67	82	3	85	96	3	99	69	6	75	1532	43	1575
18:15 - 18:30	169	2	171	479	10	489	15	0	15	14	0	14	135	6	141	16	0	16	0	0	0	303	10	313	67	2	69	75	0	75	99	5	104	56	4	60	1448	39	1487
18:30 - 18:45	159	4	163	434	19	453	10	1	11	18	0	18	131	3	134	12	0	12	0	0	0	260	7	267	65	3	68	65	0	65	90	3	93	64	3	67	1308	43	1351
18:45 - 19:00	126	3	129	366	10	376	9	0	9	21	1	22	98	5	103	12	0	12	0	0	0	227	4	231	63	0	63	73	0	73	75	3	78	63	4	67	1133	30	1163
Σ	2136	59	2195	5791	186	5977	151	6	157	368	6	374	2322	69	2391	249	2	251	0	0	0	3574	173	3747	827	29	856	874	15	889	1291	56	1347	760	51	811	18343	652	18995

TIME PERIOD	VEHICLE MOVEMENT 1			2			3			4			5			6			VEHICLE MOVEMENT 7			8			9			10			11			12			GRAND TOTAL			
	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	
6:00 - 7:00	147	17	164	1172	98	1270	19	4	23	63	3	66	107	15	122	4	4	8	0	0	0	2057	128	2185	125	6	131	389	20	409	458	14	472	437	30	467	4978	339	5317	
6:15 - 7:15	159	15	174	1225	114	1339	27	4	31	71	2	73	117	19	136	7	4	11	0	0	0	2179	126	2305	118	11	129	389	23	412	528	15	543	466	34	500	5286	367	5653	
6:30 - 7:30	181	17	198	1194	115	1309	36	4	39	66	6	72	161	23	184	8	4	12	0	0	0	2192	131	2323	94	14	108	354	23	377	613	15	628	490	36	526	5388	388	5776	
6:45 - 7:45	194	20	214	1186	114	1300	41	1	42	74	9	83	207	25	232	9	3	12	1	0	1	2194	117	2311	92	13	105	347	27	374	668	17	685	493	39	532	5506	385	5891	
7:00 - 8:00	200	22	231	1207	105	1312	45	0	45	88	10	98	255	31	286	12	2	14	1	0	1	2192	120	2312	91	11	102	312	25	337	696	22	718	475	39	514	5594	397	5971	
7:15 - 8:15	250	26	276	1279	110	1389	51	1	52	103	10	113	306	29	335	13	4	17	1	0	1	2104	114	2218	97	6	103	322	23	345	727	24	751	459	35	494	5712	382	6094	
7:30 - 8:30	251	26	277	1296	118	1414	55	2	57	111	5	116	345	25	370	22	3	25	1	0	1	2031	108	2141	114	4	118	357	24	381	778	22	798	459	30	489	5800	357	6157	
7:45 - 8:45	262	28	290	1368	131	1499	70	2	72	123	3	126	368	23	391	30	2	32	0	0	0	1840	123	1963	104	6	110	387	27	414	856	27	883	489	28	517	5897	400	6297	
8:00 - 9:00	**290**	**29**	**319**	**1444**	**151**	**1595**	**91**	**2**	**93**	**123**	**2**	**125**	**392**	**19**	**411**	**33**	**2**	**35**	**0**	**0**	**0**	**1696**	**132**	**1828**	**101**	**11**	**112**	**455**	**25**	**480**	**883**	**26**	**909**	**500**	**27**	**527**	**6008**	**426**	**6434**	**Peak**

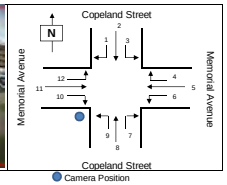
TIME PERIOD	VEHICLE MOVEMENT 1			2			3			4			5			6			VEHICLE MOVEMENT 7			8			9			10			11			12			GRAND TOTAL			
	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	
16:00 - 17:00	**710**	**26**	**736**	**2038**	**83**	**2121**	**65**	**1**	**66**	**145**	**3**	**148**	**853**	**23**	**876**	**102**	**2**	**104**	**0**	**0**	**0**	**1265**	**88**	**1353**	**272**	**17**	**289**	**292**	**5**	**297**	**502**	**22**	**524**	**269**	**18**	**287**	**6513**	**288**	**6801**	**Peak**
16:15 - 17:15	764	22	786	2080	78	2158	59	2	61	149	2	151	837	22	859	102	2	104	0	0	0	1255	79	1334	258	16	274	286	9	295	469	20	489	268	20	288	6527	272	6799	
16:30 - 17:30	790	24	814	2073	62	2135	55	3	58	139	0	139	869	22	891	103	1	104	0	0	0	1283	65	1348	260	12	272	266	7	273	446	22	468	273	19	292	6557	237	6794	
16:45 - 17:45	774	20	794	2040	54	2094	47	4	51	134	1	135	869	21	890	98	1	99	0	0	0	1267	62	1329	265	9	274	283	6	289	435	20	455	247	16	263	6458	214	6672	
17:00 - 18:00	778	20	798	1984	51	2035	46	4	50	131	2	133	923	28	951	88	0	88	0	0	0	1230	55	1285	274	6	280	287	7	294	429	20	449	239	16	255	6409	209	6618	
17:15 - 18:15	784	20	804	1959	49	2008	40	3	43	130	2	132	885	26	911	86	0	86	0	0	0	1235	47	1282	265	5	270	295	6	301	428	18	446	253	17	270	6380	193	6573	
17:30 - 18:30	724	16	740	1937	50	1987	44	2	46	113	2	115	790	28	818	79	0	79	0	0	0	1188	44	1232	303	4	307	305	5	310	421	16	437	237	18	255	6141	185	6326	
17:45 - 18:45	695	13	708	1876	57	1933	45	1	46	105	1	106	713	27	740	69	0	69	0	0	0	1128	37	1165	303	6	309	299	5	304	405	15	420	254	20	274	5903	182	6085	
18:00 - 19:00	648	13	661	1769	52	1821	40	1	41	92	1	93	546	18	564	59	0	59	0	0	0	1079	30	1109	281	6	287	295	3	298	360	14	374	252	17	269	5421	155	5576	

Intersection of Hume Highway and Memorial Avenue

Tuesday, 18 March 2014

Austraffic

Survey Start	**6:00 AM 16:00 PM**
Intersection Type	Cross Junction
Intersection No.	**3**
North Approach	**Copeland Street**
East Approach	**Memorial Avenue**
South Approach	**Copeland Street**
West Approach	**Memorial Avenue**
Date	**18/03/14**
Classification	**Light Heavy**



Camera Position

TIME PERIOD	VEHICLE MOVEMENT																																	GRAND TOTAL		
	1			2			3			4			5			6			7			8			9			10			11			12					
	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ
6:00 - 6:15	7	0	7	269	19	288	26	0	26	21	5	26	11	0	11	1	0	1	4	0	4	443	29	472	7	0	7	11	0	11	15	0	15	19	2	21	834	55	889
6:15 - 6:30	5	0	5	370	38	408	44	4	48	16	0	16	19	1	20	1	0	1	8	1	9	485	35	520	18	0	18	16	0	16	12	1	13	11	1	12	1005	81	1086
6:30 - 6:45	9	0	9	354	34	388	40	1	41	16	3	19	6	1	7	1	0	1	15	1	16	509	36	545	12	0	12	21	0	21	13	1	14	24	1	25	1020	78	1098
6:45 - 7:00	8	0	8	319	43	362	43	1	44	19	5	24	12	3	15	0	0	0	14	0	14	545	30	575	17	0	17	24	0	24	31	0	31	18	0	18	1060	82	1142
7:00 - 7:15	10	0	10	311	38	349	38	5	43	15	3	18	16	0	16	0	0	0	12	2	14	531	36	567	24	1	25	26	1	27	28	1	29	29	1	30	1040	88	1128
7:15 - 7:30	8	2	10	315	34	349	41	1	42	21	1	22	26	2	28	4	0	4	17	1	18	519	43	562	16	1	17	24	0	24	43	3	46	33	0	33	1067	88	1155
7:30 - 7:45	16	1	17	322	32	354	18	1	19	21	2	23	21	0	21	1	2	3	33	1	34	473	26	499	21	0	21	24	0	24	54	0	54	33	0	33	1037	65	1102
7:45 - 8:00	15	0	15	302	36	338	14	0	14	16	1	17	31	2	33	4	0	4	25	0	25	469	27	496	34	1	35	38	1	39	67	2	69	29	0	29	1044	70	1114
8:00 - 8:15	20	0	20	347	42	389	11	1	12	18	2	20	28	2	30	3	1	4	68	0	68	428	30	458	35	0	35	30	1	31	81	0	81	20	0	20	1089	79	1168
8:15 - 8:30	21	1	22	303	36	339	26	4	30	30	3	33	28	2	30	5	3	8	75	0	75	375	34	409	30	0	30	35	1	36	106	2	108	29	1	30	1053	97	1150
8:30 - 8:45	24	2	26	350	49	399	42	1	43	25	7	32	36	1	37	5	0	5	55	0	55	357	36	393	30	1	31	25	1	26	113	2	115	23	2	25	1085	102	1187
8:45 - 9:00	38	0	38	367	46	413	37	0	37	27	8	35	38	0	38	8	0	8	51	1	52	346	29	375	35	0	35	25	0	25	93	1	94	21	0	21	1086	85	1171
Σ	181	6	187	3929	447	4376	380	19	399	245	40	285	272	14	286	33	6	39	377	7	384	5480	391	5871	279	4	283	299	5	304	656	13	669	289	8	297	12420	960	13380

TIME PERIOD	VEHICLE MOVEMENT																																	GRAND TOTAL		
	1			2			3			4			5			6			7			8			9			10			11			12					
	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ
16:00 - 16:15	36	1	37	600	21	621	38	0	38	39	3	42	59	4	63	13	0	13	38	5	43	342	27	369	26	0	26	29	0	29	39	2	41	14	0	14	1273	63	1336
16:15 - 16:30	41	1	42	562	28	590	24	2	26	46	4	50	50	2	52	15	0	15	29	0	29	349	32	381	28	2	30	31	0	31	43	1	44	21	1	22	1239	73	1312
16:30 - 16:45	52	1	53	614	24	638	35	1	36	44	1	45	54	1	55	13	0	13	33	0	33	342	24	366	30	1	31	39	0	39	37	1	38	13	1	14	1306	55	1361
16:45 - 17:00	40	2	42	617	19	636	27	0	27	47	4	51	66	0	66	9	0	9	27	0	27	354	21	375	29	0	29	37	0	37	49	0	49	25	0	25	1327	46	1373
17:00 - 17:15	42	1	43	652	20	672	31	1	32	32	3	35	53	1	54	12	0	12	18	0	18	295	22	317	20	0	20	36	0	36	34	1	35	18	0	18	1243	49	1292
17:15 - 17:30	49	0	49	601	14	615	36	2	38	37	3	40	56	4	60	10	0	10	26	0	26	373	15	388	27	0	27	26	0	26	48	0	48	10	0	10	1299	38	1337
17:30 - 17:45	47	1	48	557	18	575	38	1	39	32	2	34	50	0	50	5	0	5	22	0	22	331	33	364	31	0	31	17	0	17	39	1	40	24	0	24	1185	38	1223
17:45 - 18:00	45	1	46	520	15	535	24	0	24	45	0	45	64	0	64	10	0	10	26	0	26	327	14	341	27	0	27	27	0	27	41	0	41	16	1	17	1172	31	1203
18:00 - 18:15	55	1	56	540	21	561	45	0	45	38	2	40	53	1	54	12	0	12	31	0	31	322	13	335	26	1	27	24	0	24	44	1	45	30	0	30	1220	40	1260
18:15 - 18:30	41	0	41	505	13	518	39	1	40	57	1	58	48	1	49	11	0	11	30	0	30	314	13	327	47	0	47	22	0	22	45	0	45	20	0	20	1179	29	1208
18:30 - 18:45	40	0	40	450	25	475	33	0	33	40	0	40	37	1	38	8	0	8	27	0	27	308	12	320	24	0	24	22	0	22	26	1	27	18	0	18	1033	39	1072
18:45 - 19:00	38	0	38	373	11	384	36	1	37	41	1	42	56	0	56	5	0	5	23	0	23	234	7	241	30	0	30	20	0	20	39	0	39	24	0	24	919	20	939
Σ	526	9	535	6591	229	6820	406	9	415	498	24	522	646	15	661	123	0	123	335	5	340	3878	215	4093	345	4	349	330	0	330	484	8	492	233	3	236	14395	521	14916

TIME PERIOD	VEHICLE MOVEMENT																																	GRAND TOTAL			
	1			2			3			4			5			6			7			8			9			10			11			12					
	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	
6:00 - 7:00	29	0	29	1312	134	1446	153	6	159	72	13	85	48	5	53	3	0	3	41	2	43	1982	130	2112	54	0	54	72	0	72	71	2	73	72	4	76	3909	296	4205	
6:15 - 7:15	32	0	32	1354	153	1507	165	11	176	66	11	77	53	5	58	2	0	2	49	4	53	2070	137	2207	71	1	72	87	1	88	84	3	87	82	3	85	4115	329	4444	
6:30 - 7:30	35	2	37	1299	149	1448	162	8	170	71	12	83	60	6	66	5	0	5	58	4	62	2104	145	2249	69	2	71	95	1	96	115	5	120	104	2	106	4177	336	4513	
6:45 - 7:45	42	3	45	1267	147	1414	140	8	148	76	11	87	75	5	80	6	2	7	76	4	80	2068	135	2203	78	2	80	98	1	99	156	4	160	113	1	114	4194	323	4517	
7:00 - 8:00	49	3	52	1250	140	1390	111	7	118	73	7	80	84	6	90	9	2	11	87	4	91	1992	132	2124	95	3	98	112	2	114	192	6	198	124	1	125	4188	311	4499	
7:15 - 8:15	59	3	62	1286	144	1430	84	3	87	76	6	82	106	6	112	12	2	15	143	2	145	1889	126	2015	106	2	108	116	2	118	245	5	250	115	0	115	4237	302	4539	
7:30 - 8:30	72	2	74	1274	146	1420	69	6	75	85	8	93	108	6	114	13	6	19	201	1	202	1745	117	1862	120	2	122	127	3	130	308	4	312	111	1	112	4233	301	4534	
7:45 - 8:45	80	3	83	1302	163	1465	93	6	99	89	13	102	123	7	130	17	4	21	223	0	223	1629	127	1756	129	2	131	128	4	132	367	6	373	101	3	104	4281	338	4619	
8:00 - 9:00	**103**	**3**	**106**	**1367**	**173**	**1540**	**116**	**6**	**122**	**100**	**20**	**120**	**130**	**5**	**135**	**21**	**4**	**25**	**240**	**1**	**250**	**1506**	**129**	**1635**	**130**	**1**	**131**	**115**	**3**	**118**	**393**	**5**	**398**	**93**	**3**	**96**	**4323**	**353**	**4676**	**Peak**

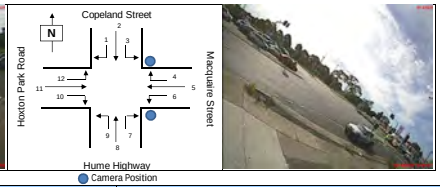
TIME PERIOD	VEHICLE MOVEMENT																																	GRAND TOTAL			
	1			2			3			4			5			6			7			8			9			10			11			12					
	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	
16:00 - 17:00	**169**	**5**	**174**	**2393**	**92**	**2485**	**124**	**3**	**127**	**176**	**12**	**188**	**229**	**7**	**236**	**50**	**0**	**50**	**127**	**5**	**132**	**1387**	**104**	**1491**	**113**	**3**	**116**	**136**	**0**	**136**	**168**	**4**	**172**	**73**	**2**	**75**	**5145**	**237**	**5382**	**Peak**
16:15 - 17:15	175	5	180	2445	91	2536	117	4	121	169	12	181	223	4	227	49	0	49	107	0	107	1340	99	1439	107	3	110	143	0	143	163	3	166	77	2	79	5115	223	5338	
16:30 - 17:30	183	4	187	2494	77	2571	129	4	133	160	11	171	229	6	235	44	0	44	104	0	104	1364	82	1446	106	1	107	138	0	138	168	2	170	66	1	67	5175	188	5363	
16:45 - 17:45	176	4	180	2422	71	2493	132	4	136	148	12	160	225	5	230	36	0	36	98	0	98	1340	73	1413	107	0	107	115	0	115	170	2	172	77	0	77	5054	171	5225	
17:00 - 18:00	183	3	186	2330	67	2397	129	4	133	146	8	154	223	5	228	37	0	37	97	0	97	1313	66	1379	105	0	105	106	0	106	162	2	164	68	1	69	4899	156	5055	
17:15 - 18:15	190	3	193	2218	68	2286	143	3	146	152	7	159	223	5	228	37	0	37	110	0	110	1340	57	1397	111	1	112	94	0	94	172	2	174	80	1	81	4976	147	5023	
17:30 - 18:30	188	3	191	2122	67	2189	146	2	148	172	5	177	215	2	217	38	0	38	114	0	114	1281	55	1336	131	1	132	90	0	90	169	2	171	90	1	91	4756	138	4894	
17:45 - 18:45	181	2	183	2015	74	2089	141	1	142	180	2	182	202	3	205	41	0	41	114	0	114	1271	52	1323	124	1	125	95	0	95	158	2	159	84	1	85	4604	139	4743	
18:00 - 19:00	174	1	175	1868	70	1938	153	2	155	176	4	180	194	3	197	36	0	36	111	0	111	1178	45	1223	127	1	128	88	0	88	154	2	156	92	0	92	4351	128	4479	

Intersection of Hume Highway and Hoxton Park Road

Tuesday, 18 March 2014

Austraffic

Survey Start	**6:00 AM 16:00 PM**
Intersection Type	Cross Junction
Intersection No.	**4**
North Approach	**Copeland Street**
East Approach	**Macquaire Street**
South Approach	**Hume Highway**
West Approach	**Hoxton Park Road**
Date	**18/03/14**
Classification	**Light Heavy**



Camera Position

TIME PERIOD	VEHICLE MOVEMENT																																				GRAND TOTAL		
	1			2			3			4			5			6			7			8			9			10			11			12					
	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ
6:00 - 6:15	17	2	19	238	13	251	30	5	35	0	0	0	44	2	46	36	1	37	105	17	122	369	19	388	8	0	8	69	3	72	162	11	173	44	5	49	1122	78	1200
6:15 - 6:30	33	6	39	279	20	299	41	3	44	0	0	0	49	4	53	30	1	31	142	6	148	450	29	479	14	0	14	46	5	51	152	11	163	39	7	46	1275	92	1367
6:30 - 6:45	41	5	46	315	32	347	29	8	37	0	0	0	69	7	76	36	1	37	141	10	151	471	19	490	15	2	17	76	6	82	215	9	224	42	10	52	1450	109	1559
6:45 - 7:00	47	10	57	268	25	293	27	4	31	0	0	0	61	8	69	45	0	45	191	5	196	489	30	519	13	3	16	60	1	61	195	16	211	60	6	66	1456	108	1564
7:00 - 7:15	38	6	44	255	32	287	33	3	36	0	0	0	62	9	71	39	4	43	215	8	223	525	27	552	12	4	16	47	1	48	179	12	191	62	10	72	1467	116	1583
7:15 - 7:30	35	8	43	259	20	279	28	2	30	0	0	0	78	10	88	39	0	39	192	6	198	506	35	541	12	2	14	67	2	69	198	13	211	58	13	71	1472	111	1583
7:30 - 7:45	38	8	46	245	19	264	38	6	44	0	0	0	84	7	91	54	8	62	216	5	221	463	18	481	18	0	18	68	2	70	244	10	254	53	7	60	1521	90	1611
7:45 - 8:00	37	7	44	278	18	296	34	10	44	0	0	0	92	3	95	42	4	46	224	3	227	467	18	485	22	0	22	69	4	73	235	6	241	49	11	60	1549	84	1633
8:00 - 8:15	36	7	43	276	26	302	38	8	46	0	0	0	105	4	109	53	3	56	236	5	241	461	19	480	16	1	17	73	4	77	214	9	223	50	10	60	1558	96	1654
8:15 - 8:30	30	13	43	323	27	350	33	3	36	0	0	0	76	5	81	70	5	75	256	7	263	402	27	429	17	2	19	81	1	82	216	15	231	65	12	77	1568	117	1685
8:30 - 8:45	38	7	45	281	31	312	37	5	42	0	0	0	80	5	85	91	4	95	259	4	263	398	29	427	12	2	14	75	1	76	242	10	252	49	8	57	1562	106	1668
8:45 - 9:00	41	8	49	283	30	313	35	9	44	0	0	0	75	7	82	70	3	73	243	6	249	401	26	427	31	3	34	73	3	76	191	10	201	53	7	60	1496	112	1608
Σ	431	87	518	3300	293	3593	403	66	469	0	0	0	875	71	946	605	34	639	2420	82	2502	5402	296	5698	190	19	209	804	33	837	2443	132	2575	624	106	730	17497	1219	18716

TIME PERIOD	VEHICLE MOVEMENT																																				GRAND TOTAL		
	1			2			3			4			5			6			7			8			9			10			11			12					
	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ
16:00 - 16:15	50	4	54	558	18	576	28	1	29	0	0	0	142	13	155	139	3	142	105	3	108	325	24	349	20	2	22	75	2	77	127	2	129	63	4	67	1632	76	1708
16:15 - 16:30	42	4	46	525	20	545	25	1	26	0	0	0	146	7	153	143	1	144	100	1	101	351	27	378	27	5	32	51	1	52	113	2	115	43	6	49	1566	75	1641
16:30 - 16:45	48	4	52	584	20	604	29	3	32	0	0	0	136	7	143	164	2	166	111	3	114	340	24	364	43	3	46	78	2	80	128	7	135	56	2	58	1717	77	1794
16:45 - 17:00	40	3	43	619	20	639	27	0	27	0	0	0	138	6	144	156	2	158	95	0	95	332	16	348	32	2	34	72	2	74	144	6	150	54	3	57	1709	60	1769
17:00 - 17:15	39	4	43	606	14	620	15	2	17	0	0	0	155	1	156	140	3	143	92	1	93	298	21	319	27	0	27	74	1	75	128	3	131	44	1	45	1618	51	1669
17:15 - 17:30	67	3	70	582	11	593	13	0	13	0	0	0	133	5	138	195	3	198	92	1	93	385	13	398	33	3	36	82	0	82	143	6	149	53	2	55	1779	47	1826
17:30 - 17:45	45	2	47	600	13	613	26	2	28	0	0	0	136	7	143	128	1	129	87	0	87	323	13	336	47	1	48	89	1	90	118	3	121	43	1	44	1642	44	1686
17:45 - 18:00	61	1	62	536	12	548	29	3	32	1	0	1	152	2	154	171	2	173	105	0	105	324	9	333	44	0	44	80	1	81	115	2	117	38	3	41	1656	35	1691
18:00 - 18:15	64	1	65	531	19	550	14	1	15	0	0	0	151	4	155	141	2	143	104	0	104	351	11	362	44	1	45	60	1	61	108	1	109	41	2	43	1609	43	1652
18:15 - 18:30	52	2	54	509	13	522	14	0	14	0	0	0	143	3	146	97	3	100	105	1	106	320	14	334	39	1	40	64	0	64	111	2	113	51	2	53	1505	41	1546
18:30 - 18:45	64	4	68	411	15	426	23	1	24	0	0	0	133	4	137	105	1	106	97	0	97	298	12	310	31	2	33	71	1	72	104	2	106	44	2	46	1381	44	1425
18:45 - 19:00	68	1	69	308	13	321	17	0	17	0	0	0	127	4	131	95	1	96	87	1	88	257	6	263	36	0	36	57	1	58	116	1	117	42	0	42	1210	28	1238
Σ	640	33	673	6369	188	6557	260	14	274	1	0	1	1692	63	1755	1674	24	1698	1180	11	1191	3904	190	4094	423	20	443	853	13	866	1455	37	1492	572	28	600	19023	621	19644

TIME PERIOD	VEHICLE MOVEMENT																																				GRAND TOTAL			
	1			2			3			4			5			6			7			8			9			10			11			12						
	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	
6:00 - 7:00	138	23	161	1100	90	1190	127	20	147	0	0	0	223	21	244	147	3	150	579	38	617	1775	97	1876	50	5	55	251	15	266	724	47	771	185	28	213	5303	387	5690	
6:15 - 7:15	159	27	186	1117	109	1226	130	18	148	0	0	0	241	28	269	150	6	156	689	29	718	1935	105	2040	54	9	63	229	13	242	741	48	789	203	33	236	5648	425	6073	
6:30 - 7:30	161	29	190	1097	109	1206	117	17	134	0	0	0	270	34	304	159	5	164	730	29	759	1951	111	2062	52	11	63	250	10	260	787	50	837	222	39	261	5845	444	6289	
6:45 - 7:45	158	32	190	1027	96	1123	126	15	141	0	0	0	285	34	319	177	12	189	814	24	838	1983	110	2093	55	9	64	242	6	248	816	51	867	233	36	269	5916	425	6341	
7:00 - 8:00	148	29	177	1037	89	1126	133	21	154	0	0	0	316	29	345	174	16	190	847	22	869	1960	98	2058	64	6	70	251	9	260	856	41	897	222	41	263	6009	401	6410	
7:15 - 8:15	146	30	176	1058	83	1141	138	26	164	0	0	0	359	24	383	188	15	203	868	19	887	1967	90	2057	68	3	71	277	12	289	891	38	929	210	41	251	6100	381	6481	
7:30 - 8:30	141	35	176	1122	90	1212	143	27	170	0	0	0	367	19	386	218	20	238	932	20	952	1793	82	1875	73	3	76	291	11	302	909	40	949	217	40	257	6097	387	6584	
7:45 - 8:45	**141**	**34**	**175**	**1158**	**102**	**1260**	**142**	**26**	**168**	**0**	**0**	**0**	**353**	**17**	**370**	**256**	**16**	**272**	**975**	**19**	**994**	**1728**	**93**	**1821**	**67**	**5**	**72**	**298**	**10**	**308**	**907**	**40**	**947**	**213**	**41**	**254**	**6238**	**403**	**6641**	**Peak**
8:00 - 9:00	145	35	180	1163	114	1277	143	25	168	0	0	0	336	21	357	284	15	299	994	22	1016	1662	101	1763	76	8	84	302	9	311	863	44	907	217	37	254	6185	431	6616	

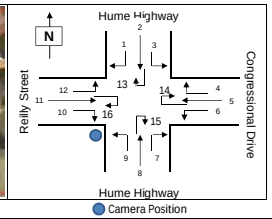
TIME PERIOD	VEHICLE MOVEMENT																																				GRAND TOTAL			
	1			2			3			4			5			6			7			8			9			10			11			12						
	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	
16:00 - 17:00	180	15	195	2286	78	2364	109	5	114	0	0	0	562	33	595	602	8	610	411	7	418	1348	91	1439	122	12	134	276	7	283	512	17	529	216	15	231	6624	288	6912	
16:15 - 17:15	169	15	184	2334	74	2408	96	6	102	0	0	0	575	21	596	603	8	611	398	5	403	1321	88	1409	129	10	139	275	6	281	513	18	531	197	12	209	6610	263	6873	
16:30 - 17:30	**194**	**14**	**208**	**2391**	**65**	**2456**	**84**	**5**	**89**	**0**	**0**	**0**	**562**	**19**	**581**	**655**	**10**	**665**	**390**	**5**	**395**	**1358**	**74**	**1429**	**135**	**8**	**143**	**306**	**5**	**311**	**543**	**22**	**565**	**207**	**8**	**215**	**6822**	**235**	**7057**	**Peak**
16:45 - 17:45	191	12	203	2407	58	2465	81	4	85	0	0	0	562	19	581	619	9	628	366	2	368	1336	63	1401	139	6	145	317	4	321	533	18	551	194	7	201	6747	202	6949	
17:00 - 18:00	212	10	222	2324	50	2374	83	7	90	1	0	1	576	15	591	634	9	643	376	2	378	1330	56	1386	151	4	155	325	3	328	504	14	518	178	7	185	6694	177	6871	
17:15 - 18:15	237	7	244	2249	55	2304	82	6	88	1	0	1	572	18	590	635	8	643	388	1	389	1361	46	1429	168	5	173	311	3	314	484	12	496	175	8	183	6685	169	6854	
17:30 - 18:30	222	6	228	2179	57	2233	83	6	89	1	0	1	582	16	598	537	8	545	401	1	402	1318	47	1365	174	3	177	293	3	296	452	8	460	173	8	181	6412	163	6575	
17:45 - 18:45	241	8	249	1987	59	2046	80	5	85	1	0	1	579	13	592	514	8	522	411	1	412	1293	46	1339	158	4	162	275	3	278	438	7	445	174	9	183	6151	163	6314	
18:00 - 19:00	248	8	256	1759	60	1819	68	2	70	0	0	0	554	15	569	438	7	445	393	2	395	1226	43	1269	150	4	154	252	3	255	439	6	445	178	6	184	5705	156	5861	

Intersection of Hume Highway and Reilly Street

Tuesday, 18 March 2014

Austraffic

Survey Start	**6:00 AM 16:00 PM**
Intersection Type	Cross Junction
Intersection No.	**5**
North Approach	**Hume Highway**
East Approach	**Congressional Drive**
South Approach	**Hume Highway**
West Approach	**Reilly Street**
Date	**18/03/14**
Classification	**Light Heavy**



Camera Position

TIME PERIOD	VEHICLE MOVEMENT																																										GRAND TOTAL		
	1			2			3			4			5			6			7			8			9			10			11			12			13			14			15			16					
	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ
6:00 - 6:15	4	0	4	282	12	294	2	0	2	12	0	12	1	0	1	2	0	2	3	0	3	476	19	495	11	0	11	37	0	37	1	0	1	12	0	12	0	0	0	0	0	0	0	0	0	0	0	0	843	31	874
6:15 - 6:30	6	0	6	354	28	382	0	0	0	9	0	9	2	0	2	7	0	7	2	0	2	642	36	678	12	0	12	31	1	32	0	0	0	9	1	10	0	0	0	0	0	0	0	0	0	0	0	0	1074	66	1140
6:30 - 6:45	8	1	9	405	37	442	1	1	2	16	0	16	1	0	1	4	1	5	0	0	0	653	27	680	9	0	9	57	3	60	0	0	0	9	0	9	0	0	0	0	0	0	0	0	0	0	0	0	1163	70	1233
6:45 - 7:00	12	0	12	367	27	394	2	1	3	11	0	11	2	0	2	5	0	5	1	0	1	716	32	748	15	1	16	34	4	38	1	0	1	14	0	14	0	0	0	0	0	0	0	0	0	0	0	0	1180	65	1245
7:00 - 7:15	2	0	2	314	38	352	2	0	2	19	0	19	1	0	1	5	1	6	1	0	1	745	40	785	12	1	13	50	0	50	0	0	0	10	1	11	0	0	0	0	0	0	1	0	1	0	0	0	1162	81	1243
7:15 - 7:30	7	0	7	353	21	374	2	0	2	15	0	15	1	0	1	8	1	9	1	0	1	745	30	775	15	1	16	51	1	52	1	0	1	15	2	17	0	0	0	0	0	0	1	0	1	0	0	0	1215	56	1271
7:30 - 7:45	14	0	14	345	28	373	0	0	0	10	0	10	3	0	3	6	1	7	4	0	4	677	22	699	13	0	13	49	1	50	1	0	1	16	0	16	0	0	0	0	0	0	2	0	2	0	0	0	1140	52	1192
7:45 - 8:00	10	0	10	325	25	350	6	0	6	18	2	20	7	0	7	7	1	8	1	1	2	622	11	633	12	0	12	50	0	50	3	0	3	20	1	21	0	0	0	0	0	0	0	0	0	0	0	0	1081	41	1122
8:00 - 8:15	15	1	16	354	28	382	4	0	4	15	1	16	13	1	14	14	0	14	2	0	2	697	27	724	19	1	20	43	1	44	1	1	2	18	1	19	0	0	0	0	0	0	0	0	0	0	0	0	1195	62	1257
8:15 - 8:30	32	0	32	393	30	423	7	0	7	17	0	17	8	0	8	11	0	11	3	0	3	628	30	658	10	1	11	56	3	59	4	0	4	31	2	33	0	0	0	0	0	0	0	0	0	0	0	0	1200	66	1266
8:30 - 8:45	26	0	26	380	30	410	9	1	10	20	0	20	8	1	9	7	0	7	5	0	5	646	30	676	26	0	26	47	0	47	2	0	2	21	0	21	0	0	0	0	0	0	0	0	0	0	0	0	1197	62	1259
8:45 - 9:00	28	0	28	370	29	399	12	3	15	10	1	11	6	2	8	6	0	6	7	0	7	627	36	663	15	0	15	54	3	57	6	0	6	23	0	23	0	0	0	0	0	0	0	0	0	0	0	0	1164	74	1238
Σ	164	2	166	4242	333	4575	47	6	53	172	4	176	53	4	57	82	5	87	30	1	31	7874	340	8214	169	5	174	559	17	576	20	1	21	198	8	206	0	0	0	0	0	0	4	0	4	0	0	0	13614	726	14340

TIME PERIOD	VEHICLE MOVEMENT																																										GRAND TOTAL		
	1			2			3			4			5			6			7			8			9			10			11			12			13			14			15			16					
	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ
16:00 - 16:15	42	0	42	766	16	782	13	1	14	13	0	13	3	0	3	11	1	12	5	1	6	428	28	456	59	1	60	55	0	55	4	0	4	7	1	8	0	0	0	0	0	0	0	0	0	0	0	0	1406	49	1455
16:15 - 16:30	44	1	45	720	22	742	18	0	18	8	0	8	7	0	7	12	0	12	7	0	7	473	28	501	47	4	51	50	1	51	9	1	10	8	0	8	0	0	0	0	0	0	0	0	0	0	0	0	1403	57	1460
16:30 - 16:45	43	1	44	743	21	764	11	0	11	11	0	11	3	0	3	3	0	3	6	0	6	462	29	491	42	1	43	60	2	62	7	0	7	10	0	10	0	0	0	0	0	0	0	0	0	0	0	0	1401	54	1455
16:45 - 17:00	36	1	37	795	21	816	14	0	14	9	0	9	6	0	6	8	0	8	3	0	3	424	14	438	53	0	53	55	2	57	4	0	4	12	0	12	0	0	0	0	0	0	0	0	0	0	0	0	1419	38	1457
17:00 - 17:15	42	0	42	774	18	792	14	0	14	14	0	14	6	0	6	14	1	15	6	0	6	380	21	401	54	0	54	46	0	46	8	0	8	15	0	15	1	0	1	0	0	0	0	0	0	0	0	0	1374	40	1414
17:15 - 17:30	32	0	32	815	12	827	20	0	20	8	0	8	5	0	5	8	0	8	4	1	5	507	20	527	58	0	58	55	0	55	7	0	7	16	0	16	0	0	0	0	0	0	1	0	1	0	0	0	1536	33	1569
17:30 - 17:45	36	0	36	774	11	785	11	0	11	9	0	9	5	1	6	9	0	9	9	0	9	450	17	467	50	0	50	60	0	60	2	0	2	8	0	8	0	0	0	0	0	0	1	0	1	0	0	0	1424	29	1453
17:45 - 18:00	53	2	55	777	12	789	22	0	22	11	0	11	7	0	7	8	0	8	5	0	5	438	7	445	47	1	48	48	0	48	6	0	6	10	0	10	1	0	1	0	0	0	0	0	0	0	0	0	1433	22	1455
18:00 - 18:15	34	0	34	668	20	688	16	0	16	15	0	15	4	0	4	13	0	13	4	0	4	433	13	446	57	0	57	38	1	39	10	0	10	14	0	14	0	0	0	0	0	0	0	0	0	0	0	0	1306	34	1340
18:15 - 18:30	36	2	38	612	11	623	14	0	14	10	0	10	5	0	5	3	0	3	5	0	5	464	11	475	47	1	48	35	0	35	8	0	8	23	0	23	1	0	1	0	0	0	0	0	0	0	0	0	1263	25	1288
18:30 - 18:45	27	0	27	507	21	528	9	0	9	10	0	10	7	0	7	4	0	4	5	0	5	407	11	418	28	0	28	37	1	38	2	0	2	5	0	5	0	0	0	0	0	0	0	0	0	0	0	0	1048	33	1081
18:45 - 19:00	23	1	24	442	10	452	7	0	7	9	0	9	6	0	6	6	0	6	6	0	6	358	10	368	23	0	23	29	0	29	4	0	4	5	0	5	1	0	1	0	0	0	0	0	0	0	0	0	919	21	940
Σ	448	8	456	8393	195	8588	169	1	170	127	0	127	64	1	65	99	2	101	65	2	67	5224	209	5433	565	8	573	568	7	575	71	1	72	133	1	134	4	0	4	0	0	0	2	0	2	0	0	0	15932	435	16367

TIME PERIOD	VEHICLE MOVEMENT																																										GRAND TOTAL			
	1			2			3			4			5			6			7			8			9			10			11			12			13			14			15			16						
	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ		
6:00 - 7:00	30	1	31	1408	104	1512	5	2	7	48	0	48	6	0	6	18	1	19	6	0	6	2487	114	2601	47	1	48	159	8	167	2	0	2	44	1	45	0	0	0	0	0	0	0	0	0	0	0	0	4260	232	4492	
6:15 - 7:15	28	1	29	1440	130	1570	5	2	7	55	0	55	6	0	6	21	2	23	4	0	4	2756	135	2891	48	2	50	172	8	180	1	0	1	42	2	44	0	0	0	0	0	0	1	0	1	0	0	0	4579	282	4861	
6:30 - 7:30	29	1	30	1439	123	1562	7	2	9	61	0	61	5	0	5	22	3	25	3	0	3	2859	129	2988	51	3	54	192	8	200	2	0	2	48	3	51	0	0	0	0	0	0	2	0	2	0	0	0	4720	272	4992	
6:45 - 7:45	35	0	35	1379	114	1493	6	1	7	55	0	55	7	0	7	24	3	27	7	0	7	2883	124	3007	55	3	58	184	6	190	3	0	3	55	3	58	0	0	0	0	0	0	4	0	4	0	0	0	4697	254	4951	
7:00 - 8:00	33	0	33	1337	112	1449	10	0	10	62	2	64	12	0	12	26	4	30	7	1	8	2789	103	2892	52	2	54	200	2	202	5	0	5	61	4	65	0	0	0	0	0	0	4	0	4	0	0	0	4598	230	4828	
7:15 - 8:15	46	1	47	1377	102	1479	12	0	12	58	3	61	24	1	25	35	3	38	8	1	9	2741	90	2831	59	2	61	193	3	196	6	1	7	69	4	73	0	0	0	0	0	0	3	0	3	0	0	0	4631	211	4842	
7:30 - 8:30	71	1	72	1417	111	1528	17	0	17	60	3	63	31	1	32	38	2	40	10	1	11	2624	90	2714	54	2	56	198	5	203	9	1	10	85	4	89	0	0	0	0	0	0	2	0	2	0	0	0	4616	221	4837	
7:45 - 8:45	83	1	84	1452	113	1565	26	1	27	70	3	73	36	2	38	39	1	40	11	1	12	2593	98	2691	67	2	69	196	4	200	10	1	11	90	4	94	0	0	0	0	0	0	0	0	0	0	0	0	4673	231	4904	
8:00 - 9:00	**101**	**1**	**102**	**1497**	**117**	**1614**	**32**	**4**	**36**	**62**	**2**	**64**	**35**	**4**	**39**	**38**	**0**	**38**	**17**	**0**	**17**	**2598**	**123**	**2721**	**70**	**2**	**72**	**200**	**7**	**207**	**13**	**1**	**14**	**93**	**3**	**96**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4756**	**264**	**5020**	**Peak**

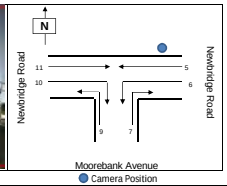
TIME PERIOD	VEHICLE MOVEMENT																																										GRAND TOTAL			
	1			2			3			4			5			6			7			8			9			10			11			12			13			14			15			16						
	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ		
16:00 - 17:00	165	3	168	3024	80	3104	56	1	57	41	0	41	19	0	19	34	1	35	21	1	22	1787	99	1886	201	6	207	220	5	225	24	1	25	37	1	38	0	0	0	0	0	0	0	0	0	0	0	0	5629	198	5827	
16:15 - 17:15	165	3	168	3032	82	3114	57	0	57	42	0	42	22	0	22	37	1	38	22	0	22	1739	92	1831	196	5	201	211	5	216	28	1	29	45	0	45	1	0	1	0	0	0	0	0	0	0	0	0	5597	189	5786	
16:30 - 17:30	**153**	**2**	**155**	**3127**	**72**	**3199**	**59**	**0**	**59**	**42**	**0**	**42**	**20**	**0**	**20**	**33**	**1**	**34**	**19**	**1**	**20**	**1773**	**84**	**1857**	**207**	**1**	**208**	**216**	**4**	**220**	**26**	**0**	**26**	**53**	**0**	**53**	**1**	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**1**	**0**	**0**	**0**	**5730**	**165**	**5895**	**Peak**
16:45 - 17:45	146	1	147	3158	62	3220	59	0	59	40	0	40	22	1	23	39	1	40	22	1	23	1761	72	1833	215	0	215	216	2	218	21	0	21	51	0	51	1	0	1	0	0	0	2	0	2	0	0	0	5753	140	5893	
17:00 - 18:00	163	2	165	3140	53	3193	67	0	67	42	0	42	23	1	24	39	1	40	24	1	25	1775	65	1840	209	1	210	209	0	209	23	0	23	49	0	49	2	0	2	0	0	0	2	0	2	0	0	0	5767	124	5891	
17:15 - 18:15	155	2	157	3034	55	3089	69	0	69	43	0	43	21	1	22	38	0	38	22	1	23	1828	57	1885	212	1	213	201	1	202	25	0	25	48	0	48	1	0	1	0	0	0	2	0	2	0	0	0	5699	118	5817	
17:30 - 18:30	159	4	163	2831	54	2885	63	0	63	45	0	45	21	1	22	33	0	33	23	0	23	1785	48	1833	201	2	203	181	1	182	26	0	26	55	0	55	2	0	2	0	0	0	1	0	1	0	0	0	5426	110	5536	
17:45 - 18:45	150	4	154	2564	64	2628	61	0	61	46	0	46	23	0	23	28	0	28	19	0	19	1742	42	1784	179	2	181	158	2	160	26	0	26	52	0	52	2	0	2	0	0	0	0	0	0	0	0	0	5050	114	5164	
18:00 - 19:00	120	3	123	2229	62	2291	46	0	46	44	0	44	22	0	22	26	0	26	20	0	20	1662	45	1707	155	1	156	139	2	141	24	0	24	47	0	47	2	0	2	0	0	0	0	0	0	0	0	0	4536	113	4649	

Intersection of Moorebank Avenue and Newbridge Road

Tuesday, 18 March 2014

Austraffic

Survey Start	**6:00 AM 16:00 PM**
Intersection Type	T Junction
Intersection No.	**6**
North Approach	
East Approach	**Newbridge Road**
South Approach	**Moorebank Avenue**
West Approach	**Newbridge Road**
Date	**18/03/14**
Classification	**Light Heavy**



Camera Position

TIME PERIOD	VEHICLE MOVEMENT 1			2			3			4			5			6			VEHICLE MOVEMENT 7			8			9			10			11			12			GRAND TOTAL		
	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ
6:00 - 6:15													54	8	62	49	18	67	215	19	234				75	10	85	115	12	127	253	16	269				761	83	844
6:15 - 6:30													73	7	80	87	14	101	204	18	222				112	4	116	89	5	94	280	20	300				845	68	913
6:30 - 6:45													102	13	115	88	12	100	231	15	246				131	9	140	109	11	120	263	21	284				934	81	1005
6:45 - 7:00													96	9	105	67	14	81	236	18	254				146	15	161	144	6	150	299	17	316				988	79	1067
7:00 - 7:15													90	9	99	68	14	82	250	27	277				147	11	158	125	10	135	297	17	314				977	88	1065
7:15 - 7:30													129	16	145	70	13	83	247	24	271				213	16	229	123	5	128	269	16	285				1051	90	1141
7:30 - 7:45													150	14	164	103	13	116	214	16	230				224	12	236	153	15	168	291	15	306				1135	85	1220
7:45 - 8:00													141	8	149	98	18	116	261	27	288				280	7	287	149	8	157	255	11	266				1184	79	1263
8:00 - 8:15													190	7	197	87	20	107	219	29	248				269	15	284	122	14	136	256	14	270				1143	99	1242
8:15 - 8:30													164	7	171	77	25	102	228	23	251				278	6	284	109	7	116	242	16	258				1098	84	1182
8:30 - 8:45													127	12	139	83	22	105	208	12	220				279	8	287	123	11	134	244	27	271				1064	92	1156
8:45 - 9:00													177	20	197	87	16	103	152	20	172				208	10	218	106	12	118	223	16	239				953	94	1047
Σ													1493	130	1623	964	199	1163	2665	248	2913				2362	123	2485	1467	116	1583	3172	206	3378				12123	1022	13145

TIME PERIOD	VEHICLE MOVEMENT 1			2			3			4			5			6			VEHICLE MOVEMENT 7			8			9			10			11			12			GRAND TOTAL		
	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ
16:00 - 16:15													236	18	254	251	12	263	129	18	147				205	11	216	174	3	177	194	8	202				1189	70	1259
16:15 - 16:30													260	9	269	234	22	256	120	17	137				154	5	159	180	6	186	175	7	182				1123	66	1189
16:30 - 16:45													281	22	303	216	18	234	113	25	138				189	7	196	211	5	216	191	8	199				1201	85	1286
16:45 - 17:00													246	7	253	245	13	258	141	13	154				132	8	140	203	6	209	196	11	207				1163	58	1221
17:00 - 17:15													227	12	239	238	8	246	153	16	169				172	3	175	230	4	234	225	7	232				1245	50	1295
17:15 - 17:30													271	9	280	246	12	258	184	17	201				150	4	154	232	9	241	227	7	234				1919	58	1977
17:30 - 17:45													237	16	253	233	6	239	166	14	180				147	2	149	239	4	243	212	4	216				1734	46	1780
17:45 - 18:00													148	11	159	192	22	214	115	9	124				134	3	137	220	6	226	184	4	188				993	55	1048
18:00 - 18:15													212	5	217	210	13	223	110	6	116				137	2	139	171	9	180	156	6	162				996	41	1037
18:15 - 18:30													189	12	201	168	11	179	85	12	97				122	3	125	110	6	116	152	8	160				826	52	878
18:30 - 18:45													186	7	193	147	10	157	55	8	63				109	4	113	118	7	125	120	2	122				735	38	773
18:45 - 19:00													173	9	182	111	2	113	78	9	87				108	5	113	98	4	102	108	2	110				676	31	707
Σ													2666	137	2803	2491	149	2640	1449	164	1613				1759	57	1816	2186	69	2255	2140	74	2214				12691	650	13341

TIME PERIOD	VEHICLE MOVEMENT 1			2			3			4			5			6			VEHICLE MOVEMENT 7			8			9			10			11			12			GRAND TOTAL			
	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	
6:00 - 7:00													325	37	362	291	58	349	886	70	956				464	38	502	457	34	491	1095	74	1169				3518	311	3829	
6:15 - 7:15													361	38	399	310	54	364	921	78	999				536	39	575	467	32	499	1139	75	1214				3734	316	4050	
6:30 - 7:30													417	47	464	293	53	346	964	84	1048				587	41	628	501	32	533	1128	71	1199				3940	338	4278	
6:45 - 7:45													465	48	513	308	54	362	947	85	1032				730	54	784	545	36	581	1156	65	1221				4151	342	4493	
7:00 - 8:00													510	47	557	339	58	397	972	94	1066				864	46	910	550	38	588	1112	59	1171				4347	342	4689	
7:15 - 8:15													610	45	655	358	64	422	941	96	1037				986	50	1036	547	42	589	1071	56	1127				4513	353	4866	
7:30 - 8:30													645	36	681	305	76	441	922	95	1017				1051	40	1091	533	44	577	1044	56	1100				4560	347	4907	Peak
7:45 - 8:45													622	34	656	345	85	430	916	91	1007				1106	36	1142	503	40	543	997	68	1065				4489	354	4843	
8:00 - 9:00													658	46	704	334	83	417	807	84	891				1034	39	1073	460	44	504	965	73	1038				4258	369	4627	

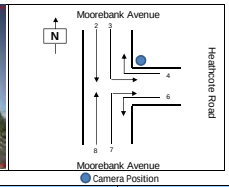
TIME PERIOD	VEHICLE MOVEMENT 1			2			3			4			5			6			VEHICLE MOVEMENT 7			8			9			10			11			12			GRAND TOTAL			
	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	
16:00 - 17:00													1023	56	1079	946	65	1011	503	73	576				680	31	711	768	20	788	756	34	790				4676	279	4955	
16:15 - 17:15													1014	50	1064	933	61	994	527	71	598				647	23	670	824	21	845	787	33	820				4732	259	4991	
16:30 - 17:30													1025	50	1075	945	51	996	591	71	662				643	22	665	876	24	900	839	33	872				4919	251	5170	Peak
16:45 - 17:45													981	44	1025	962	39	1001	644	60	704				601	17	618	904	23	927	860	29	889				4952	212	5164	
17:00 - 18:00													883	48	931	909	48	957	618	56	674				603	12	615	921	23	944	848	22	870				4782	209	4991	
17:15 - 18:15													868	41	909	881	53	934	575	46	621				568	11	579	862	28	890	779	21	800				4533	200	4733	
17:30 - 18:30													786	44	830	803	52	855	476	41	517				540	10	550	740	25	765	704	22	726				4049	194	4243	
17:45 - 18:45													725	35	760	717	56	773	365	35	400				592	12	604	619	28	647	612	20	632				3550	186	3736	
18:00 - 19:00													760	33	793	636	36	672	328	35	363				476	14	490	497	26	523	536	18	554				3233	162	3395	

Intersection of Moorebank Avenue and Heathcote Road

Tuesday, 18 March 2014

Austraffic

Survey Start	**6:00 AM 16:00 PM**
Intersection Type	T Junction
Intersection No.	**7**
North Approach	**Moorebank Avenue**
East Approach	**Heathcote Road**
South Approach	**Moorebank Avenue**
West Approach	
Date	**18/03/14**
Classification	**Light Heavy**



Camera Position

TIME PERIOD	VEHICLE MOVEMENT																																							GRAND TOTAL		
	1			2			3			4			5			6			7			8			9			10			11			12					
	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ
6:00 - 6:15				72	21	93	90	5	95	54	5	59				1	0	1	2	1	3	244	20	264													463	52	515
6:15 - 6:30				92	13	105	92	6	98	56	6	62				3	1	4	3	2	5	243	17	260													489	45	534
6:30 - 6:45				101	16	117	85	7	92	80	6	86				2	4	6	3	0	3	301	17	318													572	50	622
6:45 - 7:00				115	15	130	96	7	103	86	12	98				2	3	5	1	3	4	300	27	327													600	67	667
7:00 - 7:15				106	10	116	91	14	105	100	17	117				2	8	10	3	2	5	278	18	296													580	69	649
7:15 - 7:30				83	11	94	110	4	114	150	13	163				4	3	7	8	1	9	301	24	325													658	56	714
7:30 - 7:45				121	15	136	143	15	158	149	11	160				5	2	7	1	1	2	315	22	337													734	66	800
7:45 - 8:00				114	18	132	143	8	151	168	10	178				2	4	6	6	2	8	358	20	378													791	62	853
8:00 - 8:15				108	26	134	101	10	111	145	16	161				1	1	2	1	0	1	353	28	381													709	91	790
8:15 - 8:30				105	18	123	92	11	103	184	10	194				4	3	7	2	2	4	326	18	344													713	62	775
8:30 - 8:45				99	25	124	113	9	122	159	6	165				2	4	6	6	0	6	329	16	345													708	80	788
8:45 - 9:00				91	13	104	107	13	120	132	13	145				0	2	2	4	1	5	240	18	258													574	60	634
Σ				1207	201	1408	1263	109	1372	1463	125	1588				28	35	63	40	15	55	3588	245	3833													7589	730	8319

TIME PERIOD	VEHICLE MOVEMENT																																							GRAND TOTAL		
	1			2			3			4			5			6			7			8			9			10			11			12					
	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ
16:00 - 16:15				260	13	273	165	2	167	141	6	147				12	2	14	11	0	11	196	22	218													785	45	830
16:15 - 16:30				272	20	292	150	5	155	104	7	111				11	2	13	8	1	9	171	17	188													716	52	768
16:30 - 16:45				282	15	297	156	8	164	125	9	134				13	4	17	9	1	10	170	21	191													755	58	813
16:45 - 17:00				282	11	293	171	7	178	123	9	132				6	1	7	11	1	12	152	14	166													745	43	788
17:00 - 17:15				283	11	294	178	5	183	140	5	145				9	3	12	6	0	6	193	13	206													809	37	846
17:15 - 17:30				278	11	289	191	6	197	103	3	106				21	4	25	7	1	8	232	20	252													832	45	877
17:30 - 17:45				290	8	298	189	3	192	115	2	117				7	4	11	7	3	10	196	12	208													854	32	886
17:45 - 18:00				242	21	263	172	8	180	104	4	108				7	3	10	1	0	1	145	9	154													671	45	716
18:00 - 18:15				250	19	269	140	3	143	102	1	103				0	2	2	3	0	3	140	8	148													635	33	668
18:15 - 18:30				170	11	181	94	5	99	80	2	82				4	2	6	1	0	1	128	12	140													477	32	509
18:30 - 18:45				167	14	181	105	3	108	75	4	79				2	0	2	1	1	2	94	8	102													444	30	474
18:45 - 19:00				127	4	131	85	4	89	64	4	68				3	0	3	4	0	4	126	9	135													409	21	430
Σ				2903	158	3061	1796	59	1855	1276	56	1332				95	27	122	69	8	77	1943	165	2108													8082	473	8555

TIME PERIOD	VEHICLE MOVEMENT																																							GRAND TOTAL			
	1			2			3			4			5			6			7			8			9			10			11			12							
	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ		
6:00 - 7:00				380	65	445	363	25	388	276	29	305				8	8	16	9	6	15	1088	81	1169													2124	214	2338		
6:15 - 7:15				414	54	468	364	34	398	322	41	363				9	16	25	10	7	17	1122	79	1201													2241	231	2472		
6:30 - 7:30				405	52	457	382	32	414	416	48	464				10	18	28	15	6	21	1180	86	1266													2408	242	2650		
6:45 - 7:45				425	51	476	440	40	480	485	53	538				13	16	29	13	7	20	1194	91	1285													2570	258	2828		
7:00 - 8:00				424	54	478	487	41	528	567	51	618				13	17	30	18	6	24	1222	84	1306													2761	253	3014		
7:15 - 8:15				426	70	496	497	37	534	612	50	662				12	10	22	16	4	20	1327	94	1421													2890	265	3155		
7:30 - 8:30				448	77	525	479	44	523	646	47	693				12	10	22	10	5	15	1352	88	1440													2947	271	3218	Peak	
7:45 - 8:45				426	87	513	449	38	487	656	42	698				9	12	21	15	4	19	1366	82	1448													2921	265	3186		
8:00 - 9:00				403	82	485	413	43	456	620	45	665				7	10	17	13	3	16	1248	80	1328													2704	263	2967		

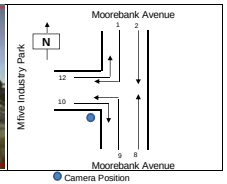
TIME PERIOD	VEHICLE MOVEMENT																																							GRAND TOTAL			
	1			2			3			4			5			6			7			8			9			10			11			12							
	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ		
16:00 - 17:00				1096	59	1155	642	22	664	493	31	524				42	9	51	39	3	42	689	74	763													3001	198	3199		
16:15 - 17:15				1119	57	1176	655	25	680	492	30	522				39	10	49	34	3	37	686	65	751													3025	190	3215		
16:30 - 17:30				1125	48	1173	696	26	722	491	26	517				49	12	61	33	3	36	747	68	815													3141	183	3324		
16:45 - 17:45				1133	41	1174	729	21	750	481	19	500				43	12	55	21	5	26	773	59	832													3180	157	3337	Peak	
17:00 - 18:00				1093	51	1144	730	22	752	462	14	476				44	14	58	21	4	25	766	54	820													3116	159	3275		
17:15 - 18:15				1060	59	1119	692	20	712	424	10	434				35	13	48	18	4	22	713	49	762													2942	155	3097		
17:30 - 18:30				952	59	1011	595	19	614	401	9	410				18	11	29	12	3	15	609	41	650													2587	142	2729		
17:45 - 18:45				829	65	894	511	19	530	361	11	372				13	7	20	5	2	7	507	37	544													2227	140	2367		
18:00 - 19:00				714	48	762	424	15	439	321	11	332				9	4	13	9	1	10	488	37	525													1965	116	2081		

Intersection of Moorebank Avenue and MFive Industry Park

Tuesday, 18 March 2014

Austraffic

Survey Start	**6:00 AM 16:00 PM**
Intersection Type	T Junction
Intersection No.	**15**
North Approach	**Moorebank Avenue**
East Approach	
South Approach	**Moorebank Avenue**
West Approach	**MFive Industry Park**
Date	**18/03/14**
Classification	**Light Heavy**



Camera Position

TIME PERIOD	VEHICLE MOVEMENT																																				GRAND TOTAL		
	1			2			3			4			5			6			7			8			9			10			11			12					
	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ
6:00 - 6:15	3	1	4	65	21	86																256	16	272	3	2	5	12	2	14				0	2	2	339	44	383
6:15 - 6:30	6	0	6	90	13	103																242	14	256	2	0	2	3	2	5				0	3	3	343	32	375
6:30 - 6:45	6	1	7	94	20	114																268	18	286	5	0	5	0	6	6				4	1	5	377	46	423
6:45 - 7:00	15	0	15	99	17	116																318	27	345	7	0	7	0	11	11				1	1	2	440	56	496
7:00 - 7:15	8	1	9	106	18	124																275	17	292	8	2	10	1	4	5				2	3	5	400	45	445
7:15 - 7:30	9	7	16	85	8	93																317	21	338	6	0	6	6	9	15				0	5	5	423	50	473
7:30 - 7:45	8	2	10	124	15	139																320	25	345	7	0	7	2	5	7				2	0	2	463	47	510
7:45 - 8:00	5	3	8	115	19	134																364	16	380	12	0	12	1	6	7				1	4	5	498	48	546
8:00 - 8:15	7	6	13	103	21	124																348	26	374	8	1	9	4	6	10				1	2	3	471	62	533
8:15 - 8:30	13	6	19	95	15	110																343	18	361	26	0	26	5	9	14				3	2	5	485	50	535
8:30 - 8:45	5	4	9	102	25	127																336	12	348	25	0	25	3	11	14				2	4	6	473	56	529
8:45 - 9:00	5	2	7	91	13	104																247	14	261	14	0	14	2	6	8				3	3	6	362	38	400
Σ	90	33	123	1169	205	1374																3634	224	3858	123	5	128	39	77	116				19	30	49	5074	574	5648

TIME PERIOD	VEHICLE MOVEMENT																																				GRAND TOTAL		
	1			2			3			4			5			6			7			8			9			10			11			12					
	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ
16:00 - 16:15	1	0	1	257	16	273																206	17	223	3	2	5	17	5	22				7	1	8	491	41	532
16:15 - 16:30	7	2	9	290	18	308																165	21	186	1	0	1	16	4	20				7	0	7	486	45	531
16:30 - 16:45	4	2	6	283	17	300																180	23	203	2	0	2	23	3	26				6	0	6	498	45	543
16:45 - 17:00	1	1	2	282	10	292																155	10	165	0	1	1	20	5	25				8	2	10	466	29	495
17:00 - 17:15	2	3	5	294	11	305																187	15	202	3	0	3	58	4	62				7	0	7	551	33	584
17:15 - 17:30	1	7	8	311	9	320																253	16	269	1	0	1	37	2	39				2	2	4	605	36	641
17:30 - 17:45	2	2	4	285	11	296																191	13	204	1	1	2	34	4	38				7	2	9	530	23	553
17:45 - 18:00	0	7	7	236	18	254																128	6	134	0	0	0	19	7	26				4	2	6	387	40	427
18:00 - 18:15	2	5	7	245	15	260																140	8	148	1	0	1	43	2	45				7	2	9	438	32	470
18:15 - 18:30	2	8	10	175	5	180																121	7	128	0	1	1	19	1	20				1	5	6	318	27	345
18:30 - 18:45	0	5	5	165	8	173																90	2	92	0	0	0	15	2	17				1	5	6	271	22	293
18:45 - 19:00	0	2	2	135	2	137																114	6	120	0	0	0	14	2	16				6	8	14	269	20	289
Σ	22	44	66	2958	140	3098																1930	144	2074	12	5	17	315	41	356				63	29	92	5300	403	5703

TIME PERIOD	VEHICLE MOVEMENT																																				GRAND TOTAL			
	1			2			3			4			5			6			7			8			9			10			11			12						
	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	
6:00 - 7:00	30	2	32	348	71	419																1084	75	1159	17	2	19	15	21	36				5	7	12	1498	179	1677	
6:15 - 7:15	35	2	37	389	68	457																1103	76	1179	22	2	24	4	23	27				7	8	15	1560	179	1739	
6:30 - 7:30	39	8	47	384	63	447																1176	83	1261	26	2	28	7	30	37				7	10	17	1640	197	1837	
6:45 - 7:45	40	10	50	414	58	472																1230	90	1320	28	2	30	9	29	38				5	9	14	1726	198	1924	
7:00 - 8:00	30	13	43	430	60	490																1276	79	1355	33	2	35	10	24	34				5	12	17	1784	190	1974	
7:15 - 8:15	29	18	47	427	63	490																1346	88	1437	33	1	34	13	26	39				4	11	15	1855	207	2062	
7:30 - 8:30	33	17	50	437	70	507																1375	85	1460	53	1	54	12	26	38				7	8	15	1917	207	2124	
7:45 - 8:45	**30**	**19**	**49**	**415**	**80**	**495**																**1391**	**72**	**1463**	**71**	**1**	**72**	**13**	**32**	**45**				**7**	**12**	**19**	**1927**	**216**	**2143**	**Peak**
8:00 - 9:00	30	18	48	391	74	465																1274	70	1344	73	1	74	14	32	46				9	11	20	1791	206	1997	

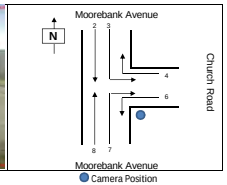
TIME PERIOD	VEHICLE MOVEMENT																																				GRAND TOTAL			
	1			2			3			4			5			6			7			8			9			10			11			12						
	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	
16:00 - 17:00	13	5	18	1112	61	1173																706	71	777	6	3	9	76	17	93				28	3	31	1941	160	2101	
16:15 - 17:15	14	8	22	1149	56	1205																687	69	756	6	1	7	117	16	133				28	2	30	2001	152	2153	
16:30 - 17:30	8	13	21	1170	47	1217																775	64	839	6	1	7	138	14	152				23	4	27	2120	143	2263	
16:45 - 17:45	**6**	**13**	**19**	**1172**	**41**	**1213**																**786**	**54**	**840**	**5**	**2**	**7**	**149**	**15**	**164**				**24**	**6**	**30**	**2142**	**131**	**2273**	**Peak**
17:00 - 18:00	5	19	24	1126	49	1175																759	50	809	5	1	6	148	17	165				20	6	26	2063	142	2205	
17:15 - 18:15	5	21	26	1077	53	1130																712	43	755	3	1	4	133	15	148				20	8	28	1950	141	2091	
17:30 - 18:30	6	22	28	941	49	990																580	34	614	2	2	4	115	14	129				19	11	30	1663	132	1795	
17:45 - 18:45	4	25	29	821	46	867																479	23	502	2	0	2	90	12	102				13	14	27	1414	121	1535	
18:00 - 19:00	4	20	24	720	30	750																465	23	488	1	1	2	91	7	98				15	20	35	1296	101	1397	

Intersection of Moorebank Avenue and Church Road

Tuesday, 18 March 2014

Austraffic

Survey Start	**6:00 AM 16:00 PM**
Intersection Type	T Junction
Intersection No.	**14**
North Approach	**Moorebank Avenue**
East Approach	**Church Road**
South Approach	**Moorebank Avenue**
West Approach	
Date	**18/03/14**
Classification	**Light Heavy**



Camera Position

TIME PERIOD	VEHICLE MOVEMENT 1			2			3			4			5			6			VEHICLE MOVEMENT 7			8			9			10			11			12			GRAND TOTAL		
	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ
6:00 - 6:15				68	24	92	2	0	2	1	0	1				31	2	33	28	3	31	264	22	286													394	51	445
6:15 - 6:30				96	12	108	3	0	3	0	0	0				25	5	30	40	2	42	268	20	288													432	39	471
6:30 - 6:45				106	24	130	1	0	1	1	0	1				17	6	23	38	3	41	284	19	303													447	52	499
6:45 - 7:00				93	27	120	3	1	4	0	0	0				10	1	11	42	4	46	337	31	368													485	64	549
7:00 - 7:15				105	22	127	0	0	0	0	1	1				15	4	19	48	0	48	299	22	321													467	49	516
7:15 - 7:30				100	15	115	2	0	2	1	0	1				10	3	13	39	2	41	343	24	367													495	44	539
7:30 - 7:45				111	23	134	2	0	2	0	0	0				16	2	18	35	2	37	355	27	382													519	54	573
7:45 - 8:00				112	24	136	2	0	2	0	0	0				37	3	40	64	1	65	387	29	416													602	57	659
8:00 - 8:15				100	27	127	10	0	10	2	0	2				31	4	35	50	6	56	371	34	405													564	71	635
8:15 - 8:30				94	24	118	6	0	6	0	0	0				44	5	49	39	3	42	373	21	394													556	53	609
8:30 - 8:45				97	33	130	8	0	8	4	0	4				27	11	38	47	7	54	384	20	404													567	71	638
8:45 - 9:00				94	21	115	2	1	3	2	0	2				30	4	34	43	2	45	272	17	289													443	45	488
Σ				1176	276	1452	41	2	43	11	1	12				293	50	343	513	35	548	3937	286	4223													5971	650	6621

TIME PERIOD	VEHICLE MOVEMENT 1			2			3			4			5			6			VEHICLE MOVEMENT 7			8			9			10			11			12			GRAND TOTAL		
	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ
16:00 - 16:15				284	21	305	2	0	2	2	0	2				100	6	106	18	2	20	203	28	231													609	57	666
16:15 - 16:30				320	25	345	2	0	2	0	0	0				55	5	60	13	0	13	165	21	186													555	51	606
16:30 - 16:45				281	18	299	3	0	3	1	0	1				94	4	98	19	2	21	175	26	201													573	50	623
16:45 - 17:00				328	19	347	5	1	6	0	0	0				71	3	74	14	2	16	160	20	180													578	45	623
17:00 - 17:15				301	11	312	1	0	1	0	0	0				101	4	105	14	5	19	193	27	220													610	47	657
17:15 - 17:30				373	13	386	1	0	1	0	0	0				62	4	66	24	0	24	240	31	271													700	48	748
17:30 - 17:45				320	12	332	2	0	2	0	0	0				76	4	80	13	1	14	197	34	231													608	51	659
17:45 - 18:00				257	22	279	2	1	3	0	0	0				57	5	62	11	1	12	133	25	158													460	54	514
18:00 - 18:15				285	19	304	1	0	1	0	0	0				51	2	53	9	0	9	132	31	163													478	52	530
18:15 - 18:30				212	5	217	2	0	2	0	0	0				26	0	26	17	0	17	127	18	145													384	23	407
18:30 - 18:45				186	11	197	1	0	1	2	0	2				26	0	26	4	0	4	92	15	107													311	26	337
18:45 - 19:00				137	4	141	3	0	3	1	0	1				29	0	29	6	0	6	113	14	127													289	18	307
Σ				3284	180	3464	25	2	27	6	0	6				748	37	785	162	13	175	1930	290	2220													6155	522	6677

TIME PERIOD	VEHICLE MOVEMENT 1			2			3			4			5			6			VEHICLE MOVEMENT 7			8			9			10			11			12			GRAND TOTAL			
	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	
6:00 - 7:00				363	87	450	9	1	10	2	0	2				83	14	97	148	12	160	1153	92	1245													1758	206	1964	
6:15 - 7:15				400	85	485	7	1	8	1	1	2				67	16	83	168	9	177	1118	92	1210													1831	204	2035	
6:30 - 7:30				404	88	492	6	1	7	2	1	3				52	14	66	167	9	176	1261	98	1359													1894	209	2103	
6:45 - 7:45				409	87	496	7	1	8	1	1	2				51	10	61	164	8	172	1334	104	1438													1966	211	2177	
7:00 - 8:00				428	84	512	5	0	5	3	1	4				78	12	90	186	5	191	1356	102	1458													2083	204	2287	
7:15 - 8:15				423	89	512	16	0	16	3	0	3				94	12	106	188	11	199	1456	114	1570													2180	226	2406	
7:30 - 8:30				417	98	515	20	0	20	2	0	2				128	14	142	188	12	200	1486	111	1597													2241	237	2478	
7:45 - 8:45				**403**	**108**	**511**	**26**	**0**	**26**	**6**	**0**	**6**				**139**	**23**	**162**	**200**	**17**	**217**	**1515**	**104**	**1619**													**2289**	**252**	**2541**	**Peak**
8:00 - 9:00				385	105	490	26	1	27	8	0	8				132	24	156	179	18	197	1400	92	1492													2130	240	2370	

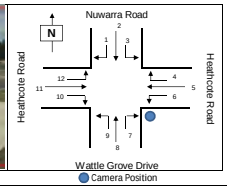
TIME PERIOD	VEHICLE MOVEMENT 1			2			3			4			5			6			VEHICLE MOVEMENT 7			8			9			10			11			12			GRAND TOTAL			
	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	
16:00 - 17:00				1213	83	1296	12	1	13	3	0	3				320	18	338	64	6	70	703	95	798													2315	203	2518	
16:15 - 17:15				1290	73	1363	11	1	12	1	0	1				321	16	337	60	9	69	693	94	787													2316	193	2509	
16:30 - 17:30				1293	61	1344	10	1	11	1	0	1				328	15	343	71	9	80	768	104	872													2461	190	2651	
16:45 - 17:45				**1322**	**55**	**1377**	**9**	**1**	**10**	**0**	**0**	**0**				**310**	**15**	**325**	**65**	**8**	**73**	**790**	**112**	**902**													**2496**	**191**	**2687**	**Peak**
17:00 - 18:00				1251	58	1309	6	1	7	0	0	0				296	17	313	62	7	69	763	117	880													2378	200	2578	
17:15 - 18:15				1235	66	1301	6	1	7	0	0	0				246	15	261	57	2	59	702	121	823													2246	205	2451	
17:30 - 18:30				1074	58	1132	7	1	8	2	0	2				210	11	221	50	2	52	589	108	697													1930	180	2110	
17:45 - 18:45				940	57	997	6	1	7	2	0	2				160	7	167	41	1	42	484	89	573													1633	155	1788	
18:00 - 19:00				820	39	859	7	0	7	3	0	3				132	2	134	36	0	36	464	78	542													1462	119	1581	

Intersection of Nuwarra Road and Heathcote Road

Tuesday, 18 March 2014

Austraffic

Survey Start	**6:00 AM 16:00 PM**
Intersection Type	Cross Junction
Intersection No.	**9**
North Approach	**Nuwarra Road**
East Approach	**Heathcote Road**
South Approach	**Wattle Grove Drive**
West Approach	**Heathcote Road**
Date	**18/03/14**
Classification	**Light Heavy**



Camera Position

TIME PERIOD	VEHICLE MOVEMENT 1			2			3			4			5			6			VEHICLE MOVEMENT 7			8			9			10			11			12			GRAND TOTAL		
	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ
6:00 - 6:15	41	7	48	22	0	22	77	4	81	70	1	71	171	16	187	15	0	15	35	2	37	70	3	73	36	3	39	11	0	11	223	18	241	36	3	39	807	57	864
6:15 - 6:30	42	19	61	28	1	29	87	4	91	52	4	56	215	10	225	27	2	29	41	4	45	108	1	109	63	1	64	27	0	27	294	30	324	57	12	69	1041	88	1129
6:30 - 6:45	59	11	70	51	2	53	64	5	69	79	1	80	208	8	216	28	0	28	27	0	27	99	3	102	61	2	63	28	1	29	263	19	282	45	7	52	1012	59	1071
6:45 - 7:00	42	11	53	54	2	56	67	4	71	66	4	70	177	15	192	38	1	39	30	3	33	100	2	102	74	2	76	35	1	36	160	21	181	53	12	65	896	78	974
7:00 - 7:15	68	16	84	42	2	44	63	7	70	74	5	79	208	13	221	39	0	39	38	2	40	121	7	128	65	1	66	31	1	32	156	19	175	47	9	56	952	82	1034
7:15 - 7:30	52	12	64	27	3	30	64	4	68	117	4	121	301	16	317	50	2	52	42	1	43	92	5	97	102	2	104	31	2	33	181	20	201	38	8	46	1097	79	1176
7:30 - 7:45	99	2	101	29	5	34	78	3	81	91	6	97	283	9	292	40	1	41	35	3	38	138	3	141	107	1	108	25	2	27	161	8	169	60	7	67	1146	50	1196
7:45 - 8:00	107	1	108	40	4	44	86	4	90	123	3	126	313	13	326	37	1	38	56	1	57	112	6	118	105	2	107	44	5	49	203	20	223	43	3	46	1269	53	1322
8:00 - 8:15	101	2	103	42	5	47	65	4	69	89	2	91	314	18	332	42	0	42	46	3	49	117	2	119	112	2	114	46	2	48	157	16	173	39	6	45	1170	62	1232
8:15 - 8:30	89	4	93	48	2	50	69	6	75	126	3	129	326	25	351	49	0	49	42	2	44	98	7	105	114	3	117	56	3	59	180	31	211	38	9	47	1235	95	1330
8:30 - 8:45	47	14	61	41	5	46	81	1	82	109	7	116	324	15	339	50	1	51	49	2	51	89	4	93	96	2	98	27	2	29	167	25	192	54	6	60	1134	84	1218
8:45 - 9:00	62	18	80	60	1	61	58	7	65	98	6	104	313	15	328	50	3	53	54	3	57	72	2	74	99	2	101	40	1	41	178	22	200	36	6	42	1120	86	1206
Σ	809	117	926	484	32	516	859	53	912	1094	46	1140	3153	173	3326	465	11	476	495	26	521	1216	45	1261	1034	23	1057	401	20	421	2323	249	2572	546	88	634	12879	883	13762

TIME PERIOD	VEHICLE MOVEMENT 1			2			3			4			5			6			VEHICLE MOVEMENT 7			8			9			10			11			12			GRAND TOTAL		
	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ
16:00 - 16:15	82	18	100	101	1	102	104	2	106	85	3	88	252	23	275	50	3	53	45	0	45	68	3	71	52	2	54	84	4	88	261	9	270	53	8	61	1237	76	1313
16:15 - 16:30	133	10	143	126	3	129	100	6	106	81	2	83	265	13	278	83	3	86	54	2	56	49	5	54	68	0	68	87	2	89	260	18	278	55	2	57	1361	66	1427
16:30 - 16:45	101	10	111	112	2	114	107	3	110	83	5	88	249	16	265	74	1	75	46	0	46	74	2	76	56	0	56	81	1	82	296	6	302	44	6	50	1323	52	1375
16:45 - 17:00	113	7	120	142	1	143	129	4	133	92	1	93	223	12	235	64	2	66	66	1	67	57	0	57	55	1	56	92	3	95	276	13	289	56	1	57	1365	46	1411
17:00 - 17:15	81	4	85	126	0	126	115	2	117	73	5	78	253	20	273	58	3	61	49	2	51	52	0	52	60	2	62	89	1	90	354	8	362	54	3	57	1364	50	1414
17:15 - 17:30	122	6	128	128	3	131	124	3	127	115	1	116	261	9	270	66	1	67	84	0	84	78	1	79	64	1	65	91	2	93	291	7	298	33	2	35	1457	36	1493
17:30 - 17:45	84	0	84	129	3	132	111	4	115	100	3	103	269	14	283	68	0	68	54	0	54	52	0	52	58	1	59	96	3	99	386	9	395	38	7	45	1445	44	1489
17:45 - 18:00	90	4	94	121	0	121	121	3	124	112	0	112	264	10	274	84	0	84	59	1	60	59	0	59	60	1	61	68	0	68	382	5	387	42	3	45	1462	27	1489
18:00 - 18:15	77	5	82	156	1	157	135	2	137	113	2	115	250	7	257	82	0	82	45	0	45	58	0	58	49	1	50	115	2	117	312	2	314	43	2	45	1435	24	1459
18:15 - 18:30	117	6	123	120	1	121	115	1	116	103	0	103	233	8	241	48	0	48	39	1	40	48	0	48	47	0	47	92	0	92	245	6	251	50	1	51	1257	24	1281
18:30 - 18:45	91	6	97	99	1	100	105	1	106	120	1	121	201	4	205	52	0	52	26	0	26	52	0	52	59	0	59	73	0	73	200	5	205	42	3	45	1120	21	1141
18:45 - 19:00	72	0	72	103	1	104	95	0	95	71	1	72	165	5	170	43	0	43	27	0	27	46	1	47	52	1	53	68	0	68	181	4	185	35	2	37	958	15	973
Σ	1163	76	1239	1463	17	1480	1361	31	1392	1148	24	1172	2885	141	3026	772	13	785	594	7	601	693	12	705	680	10	690	1036	18	1054	3444	92	3536	545	40	585	15784	481	16265

TIME PERIOD	VEHICLE MOVEMENT 1			2			3			4			5			6			VEHICLE MOVEMENT 7			8			9			10			11			12			GRAND TOTAL			
	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	
6:00 - 7:00	184	48	232	155	5	160	295	17	312	267	10	277	771	49	820	108	3	111	133	9	142	377	9	386	234	8	242	101	2	103	940	88	1028	191	34	225	3756	282	4038	
6:15 - 7:15	211	57	268	175	7	182	281	20	301	271	14	285	808	46	854	132	3	135	136	9	145	428	13	441	263	6	269	121	3	124	873	89	962	202	40	242	3901	307	4208	
6:30 - 7:30	221	50	271	174	9	183	258	20	278	336	14	350	894	52	946	156	3	159	137	5	142	412	17	429	302	7	309	125	5	130	760	79	839	183	36	219	3957	298	4255	
6:45 - 7:45	261	41	302	152	12	164	272	18	290	348	19	367	969	53	1022	167	4	171	145	9	154	451	17	468	348	6	354	122	6	128	658	68	726	198	36	234	4091	289	4380	
7:00 - 8:00	326	31	357	138	14	152	291	18	309	405	18	423	1105	51	1156	196	4	200	171	7	178	463	21	484	379	6	385	131	10	141	701	67	768	188	27	215	4464	274	4738	
7:15 - 8:15	359	17	376	138	17	155	293	15	308	420	15	435	1211	56	1267	169	4	173	179	8	187	459	16	475	426	7	433	146	11	157	702	64	766	180	24	204	4682	254	4936	
7:30 - 8:30	396	9	405	159	16	175	298	17	315	429	14	443	1236	65	1301	168	2	170	179	9	188	465	18	483	438	8	446	171	12	183	701	75	776	180	25	205	4820	270	5090	
7:45 - 8:45	**344**	**21**	**365**	**171**	**16**	**187**	**301**	**15**	**316**	**447**	**15**	**462**	**1277**	**71**	**1348**	**178**	**2**	**180**	**193**	**8**	**201**	**416**	**19**	**435**	**427**	**9**	**436**	**173**	**12**	**185**	**707**	**92**	**799**	**174**	**24**	**198**	**4808**	**304**	**5112**	**Peak**
8:00 - 9:00	299	38	337	191	13	204	273	18	291	422	18	440	1277	73	1350	191	4	195	191	10	201	376	15	391	421	9	430	169	8	177	682	94	776	167	27	194	4659	327	4986	

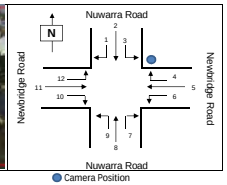
TIME PERIOD	VEHICLE MOVEMENT 1			2			3			4			5			6			VEHICLE MOVEMENT 7			8			9			10			11			12			GRAND TOTAL			
	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	
16:00 - 17:00	429	45	474	481	7	488	440	15	455	341	11	352	989	64	1053	271	9	280	211	3	214	248	10	258	231	3	234	344	10	354	1093	46	1139	208	17	225	5286	240	5526	
16:15 - 17:15	428	31	459	506	6	512	451	15	466	329	13	342	990	61	1051	279	9	288	215	5	220	232	7	239	239	3	242	349	7	356	1186	45	1231	209	12	221	5403	214	5617	
16:30 - 17:30	417	27	444	508	6	514	475	12	487	353	12	375	986	57	1043	262	7	269	245	3	248	261	3	264	235	4	239	353	7	360	1217	34	1251	187	12	199	5509	184	5693	
16:45 - 17:45	400	17	417	525	7	532	479	13	492	380	10	390	1006	55	1061	256	6	262	253	3	256	236	4	240	237	5	242	368	9	377	1307	37	1344	181	13	194	5631	176	5807	
17:00 - 18:00	377	14	391	504	6	510	471	12	483	400	9	409	1047	53	1100	276	4	280	246	3	249	241	1	242	242	5	247	344	6	350	1413	29	1442	167	15	182	5728	157	5885	
17:15 - 18:15	**373**	**15**	**388**	**534**	**7**	**541**	**491**	**12**	**503**	**440**	**6**	**446**	**1044**	**40**	**1084**	**300**	**1**	**301**	**242**	**1**	**243**	**247**	**1**	**248**	**231**	**4**	**235**	**370**	**7**	**377**	**1371**	**23**	**1394**	**156**	**14**	**170**	**5799**	**131**	**5930**	**Peak**
17:30 - 18:30	368	15	383	526	5	531	482	10	492	428	5	433	1016	39	1055	282	0	282	197	2	199	217	0	217	214	3	217	371	5	376	1325	22	1347	173	13	186	5599	119	5718	
17:45 - 18:45	375	22	397	496	3	499	476	7	483	448	3	451	948	29	977	266	0	266	169	2	171	217	0	217	205	2	217	348	2	350	1139	18	1157	177	9	186	5274	96	5370	
18:00 - 19:00	357	17	374	478	4	482	450	4	454	407	4	411	849	24	873	225	0	225	137	1	138	204	1	205	207	2	209	348	2	350	938	17	955	170	8	178	4770	84	4854	

Intersection of Newbridge Road and Nuwarra Road

Tuesday, 18 March 2014

Austraffic

Survey Start	**6:00 AM 16:00 PM**
Intersection Type	Cross Junction
Intersection No.	**8**
North Approach	**Nuwarra Road**
East Approach	**Newbridge Road**
South Approach	**Nuwarra Road**
West Approach	**Newbridge Road**
Date	**18/03/14**
Classification	**Light Heavy**



Camera Position

TIME PERIOD	VEHICLE MOVEMENT 1			2			3			4			5			6		
	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ
6:00 - 6:15	5	0	5	14	1	15	2	0	2	0	0	0	100	16	116	56	11	67
6:15 - 6:30	7	0	7	18	1	19	5	0	5	0	0	0	141	17	158	66	20	86
6:30 - 6:45	7	0	7	21	2	23	1	0	1	0	0	0	152	22	174	65	10	75
6:45 - 7:00	12	1	13	23	0	23	2	0	2	0	0	0	141	18	159	64	19	83
7:00 - 7:15	8	3	11	15	1	16	4	0	4	0	0	0	144	16	160	44	22	66
7:15 - 7:30	22	2	24	29	1	30	1	0	1	0	0	0	145	23	168	52	14	66
7:30 - 7:45	18	1	19	21	0	21	1	0	1	0	0	0	190	31	221	53	21	74
7:45 - 8:00	22	2	24	31	0	31	1	0	1	0	0	0	177	21	198	58	6	64
8:00 - 8:15	9	1	10	24	0	24	1	0	1	0	0	0	213	26	239	55	10	65
8:15 - 8:30	26	1	27	27	1	28	4	0	4	0	0	0	173	19	192	47	8	55
8:30 - 8:45	39	1	40	33	0	33	0	0	0	0	0	0	170	28	198	39	19	58
8:45 - 9:00	50	3	53	51	0	51	5	0	5	0	0	0	140	30	170	60	17	77
Σ	225	15	240	307	7	314	27	0	27	0	0	0	1886	267	2153	659	177	836

TIME PERIOD	VEHICLE MOVEMENT 7			8			9			10			11			12			GRAND TOTAL		
	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ
6:00 - 6:15	154	7	161	8	0	8	3	1	4	0	0	0	406	29	435	5	1	6	753	66	819
6:15 - 6:30	167	18	185	19	0	19	10	0	10	0	0	0	434	36	470	6	0	6	873	92	965
6:30 - 6:45	124	7	131	14	0	14	3	0	3	0	0	0	457	40	497	3	0	3	847	81	928
6:45 - 7:00	183	10	193	27	0	27	11	0	11	0	0	0	428	29	457	17	1	18	908	78	986
7:00 - 7:15	134	13	147	33	1	34	6	1	7	0	0	0	473	49	522	27	0	27	888	106	994
7:15 - 7:30	142	14	156	48	1	49	6	0	6	0	0	0	380	24	404	23	2	25	848	81	929
7:30 - 7:45	132	10	142	55	1	56	6	1	7	0	0	0	430	32	462	34	2	36	940	99	1039
7:45 - 8:00	152	6	158	49	0	49	8	1	9	0	0	0	372	32	404	29	3	32	898	71	970
8:00 - 8:15	168	9	177	66	3	69	6	0	6	0	0	0	403	34	437	36	1	37	981	84	1065
8:15 - 8:30	117	12	129	60	0	60	2	0	2	0	0	0	353	36	389	60	0	60	868	77	945
8:30 - 8:45	168	17	185	99	2	101	8	1	9	0	0	0	315	40	355	92	1	93	963	109	1072
8:45 - 9:00	104	13	117	72	2	74	9	0	9	0	0	0	254	30	284	52	0	52	797	95	892
Σ	1745	136	1881	550	10	560	78	5	83	0	0	0	4705	411	5116	384	11	395	10566	1039	11605

TIME PERIOD	VEHICLE MOVEMENT 1			2			3			4			5			6		
	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ
16:00 - 16:15	49	1	50	44	0	44	4	0	4	0	0	0	387	22	409	85	9	94
16:15 - 16:30	42	0	42	55	0	55	4	0	4	0	0	0	394	30	424	123	14	137
16:30 - 16:45	42	1	43	54	0	54	3	0	3	0	0	0	433	33	466	143	12	155
16:45 - 17:00	48	0	48	49	1	50	4	0	4	0	0	0	385	23	408	147	4	151
17:00 - 17:15	34	1	35	71	0	71	5	0	5	0	0	0	411	33	444	149	7	156
17:15 - 17:30	43	0	43	69	1	70	2	0	2	0	0	0	416	12	428	155	5	160
17:30 - 17:45	25	1	26	43	1	44	6	1	7	0	0	0	424	24	448	172	6	178
17:45 - 18:00	28	0	28	65	1	66	4	0	4	0	0	0	368	26	394	151	5	156
18:00 - 18:15	23	1	24	44	0	44	0	0	0	0	0	0	345	17	362	124	5	129
18:15 - 18:30	27	1	28	39	0	39	8	0	8	0	0	0	344	25	369	146	7	153
18:30 - 18:45	26	1	27	39	0	39	5	0	5	0	0	0	287	14	301	110	6	116
18:45 - 19:00	16	0	16	45	0	45	3	1	4	0	0	0	241	11	252	93	2	95
Σ	403	7	410	617	4	621	48	2	50	0	0	0	4435	270	4705	1598	82	1680

TIME PERIOD	VEHICLE MOVEMENT 7			8			9			10			11			12			GRAND TOTAL		
	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ
16:00 - 16:15	92	9	101	29	0	29	10	1	11	0	0	0	244	22	266	20	0	20	964	64	1028
16:15 - 16:30	116	7	123	49	0	49	10	1	11	0	0	0	225	23	248	21	0	21	1039	75	1114
16:30 - 16:45	105	10	115	34	0	34	10	1	11	0	0	0	255	30	285	21	0	21	1100	87	1187
16:45 - 17:00	105	4	109	29	0	29	11	1	12	0	0	0	224	22	246	15	0	15	1017	55	1072
17:00 - 17:15	90	9	99	26	0	26	10	1	11	0	0	0	321	15	336	27	0	27	1144	66	1210
17:15 - 17:30	107	4	111	37	1	38	12	0	12	0	0	0	313	27	340	15	0	15	1169	50	1219
17:30 - 17:45	107	5	112	48	0	48	11	0	11	0	0	0	305	14	319	25	0	25	1166	52	1218
17:45 - 18:00	104	5	109	41	0	41	15	1	16	0	0	0	276	16	292	9	0	9	1061	54	1115
18:00 - 18:15	101	2	103	46	0	46	17	0	17	0	0	0	201	12	213	15	0	15	916	37	953
18:15 - 18:30	84	0	84	42	0	42	9	0	9	0	0	0	197	19	216	18	0	18	914	52	966
18:30 - 18:45	65	9	74	38	0	38	7	0	7	0	0	0	136	10	146	17	0	17	730	40	770
18:45 - 19:00	68	2	70	21	0	21	9	0	9	0	0	0	132	10	142	18	0	18	646	26	672
Σ	1144	66	1210	440	1	441	131	6	137	0	0	0	2829	220	3049	221	0	221	11866	658	12524

TIME PERIOD	VEHICLE MOVEMENT 1			2			3			4			5			6		
	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ
6:00 - 7:00	31	1	32	76	4	80	10	0	10	0	0	0	534	73	607	251	60	311
6:15 - 7:15	34	4	38	77	4	81	12	0	12	0	0	0	579	73	651	239	71	310
6:30 - 7:30	49	6	55	88	4	92	8	0	8	0	0	0	582	79	661	225	65	290
6:45 - 7:45	60	7	67	88	2	90	8	0	8	0	0	0	620	88	708	213	76	289
7:00 - 8:00	70	8	78	96	2	98	7	0	7	0	0	0	656	91	747	207	63	270
7:15 - 8:15	71	6	77	105	1	106	4	0	4	0	0	0	725	101	826	218	51	269
7:30 - 8:30	75	5	80	103	1	104	7	0	7	0	0	0	753	97	850	213	45	258
7:45 - 8:45	**96**	**5**	**101**	**115**	**1**	**116**	**6**	**0**	**6**	**0**	**0**	**0**	**733**	**94**	**827**	**199**	**43**	**242**
8:00 - 9:00	124	6	130	135	1	136	10	0	10	0	0	0	696	103	799	201	54	255

TIME PERIOD	VEHICLE MOVEMENT 7			8			9			10			11			12			GRAND TOTAL			
	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	
6:00 - 7:00	628	42	670	68	0	68	27	1	28	0	0	0	1725	134	1859	31	2	33	3381	317	3698	
6:15 - 7:15	608	48	656	93	1	94	30	1	31	0	0	0	1792	154	1946	53	1	54	3516	357	3873	
6:30 - 7:30	583	44	627	122	2	124	26	1	27	0	0	0	1736	142	1880	70	3	73	3491	346	3837	
6:45 - 7:45	591	47	638	163	3	166	29	2	31	0	0	0	1711	134	1845	101	5	106	3584	364	3948	
7:00 - 8:00	560	43	603	185	3	188	26	3	29	0	0	0	1655	137	1792	113	7	120	3575	357	3932	
7:15 - 8:15	594	39	633	218	5	223	26	2	28	0	0	0	1585	122	1707	122	8	130	3698	335	4033	
7:30 - 8:30	569	37	606	230	4	234	22	2	24	0	0	0	1558	134	1692	159	6	165	3698	331	4029	
7:45 - 8:45	**605**	**44**	**649**	**274**	**5**	**279**	**24**	**2**	**26**	**0**	**0**	**0**	**1443**	**142**	**1585**	**217**	**5**	**222**	**3712**	**341**	**4053**	**Peak**
8:00 - 9:00	557	51	608	297	7	304	25	1	26	0	0	0	1325	140	1465	240	2	242	3610	365	3975	

TIME PERIOD	VEHICLE MOVEMENT 1			2			3			4			5			6		
	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ
16:00 - 17:00	181	2	183	202	1	203	15	0	15	0	0	0	1599	108	1707	498	39	537
16:15 - 17:15	166	2	168	229	1	230	16	0	16	0	0	0	1623	119	1742	562	37	599
16:30 - 17:30	167	2	169	243	2	245	14	0	14	0	0	0	1645	101	1746	594	28	622
16:45 - 17:45	150	2	152	232	3	235	17	1	18	0	0	0	1636	92	1728	623	22	645
17:00 - 18:00	**130**	**2**	**132**	**248**	**3**	**251**	**17**	**1**	**18**	**0**	**0**	**0**	**1619**	**95**	**1714**	**627**	**23**	**650**
17:15 - 18:15	119	2	121	221	3	224	12	1	13	0	0	0	1553	79	1632	602	21	623
17:30 - 18:30	103	3	106	191	2	193	18	1	19	0	0	0	1481	92	1573	593	23	616
17:45 - 18:45	104	3	107	187	1	188	17	0	17	0	0	0	1344	82	1426	531	23	554
18:00 - 19:00	92	3	95	167	0	167	16	1	17	0	0	0	1217	67	1284	473	20	493

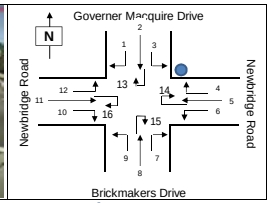
TIME PERIOD	VEHICLE MOVEMENT 7			8			9			10			11			12			GRAND TOTAL			
	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	
16:00 - 17:00	418	30	448	141	0	141	41	4	45	0	0	0	948	97	1045	77	0	77	4120	281	4401	
16:15 - 17:15	416	30	446	138	0	138	41	4	45	0	0	0	1025	90	1115	84	0	84	4300	283	4583	
16:30 - 17:30	407	27	434	126	1	127	43	3	46	0	0	0	1113	94	1207	78	0	78	4430	258	4688	
16:45 - 17:45	400	22	422	140	1	141	44	2	46	0	0	0	1162	78	1241	82	0	82	4496	223	4719	
17:00 - 18:00	**408**	**23**	**431**	**152**	**1**	**153**	**48**	**2**	**50**	**0**	**0**	**0**	**1215**	**72**	**1287**	**76**	**0**	**76**	**4540**	**222**	**4762**	**Peak**
17:15 - 18:15	419	16	435	172	1	173	55	1	56	0	0	0	1095	69	1164	64	0	64	4312	193	4505	
17:30 - 18:30	396	12	408	177	0	177	52	1	53	0	0	0	979	61	1040	67	0	67	4057	195	4252	
17:45 - 18:45	354	16	370	167	0	167	48	1	49	0	0	0	810	57	867	59	0	59	3621	183	3804	
18:00 - 19:00	318	13	331	147	0	147	42	0	42	0	0	0	666	51	717	68	0	68	3206	155	3361	

Intersection of Governor Macquarie Drive and Newbridge Road

Tuesday, 18 March 2014

Austraffic

Survey Start	6:00 AM 16:00 PM
Intersection Type	Cross Junction
Intersection No.	13
North Approach	Governor Macquarie Drive
East Approach	Newbridge Road
South Approach	Brickmakers Drive
West Approach	Newbridge Road
Date	18/03/14
Classification	Light Heavy



Camera Position

TIME PERIOD	VEHICLE MOVEMENT																																										GRAND TOTAL		
	1			2			3			4			5			6			7			8			9			10			11			12			13			14			15			16					
	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ
6:00 - 6:15	9	14	23	18	0	18	82	9	91	47	7	54	138	16	154	37	1	38	74	2	76	7	0	7	0	0	0	0	0	0	548	33	581	22	8	30	0	0	0	1	0	1	0	0	0	0	0	0	983	90	1073
6:15 - 6:30	12	14	26	10	1	11	99	18	117	46	23	69	177	23	200	49	0	49	83	0	83	7	0	7	1	0	1	1	0	1	572	45	617	20	3	23	0	0	0	2	0	2	0	0	0	0	0	0	1079	127	1206
6:30 - 6:45	12	12	24	16	0	16	76	14	90	55	11	66	204	25	229	44	4	48	71	2	73	11	2	13	0	0	0	3	0	3	555	52	607	13	1	14	0	0	0	0	0	0	0	0	0	0	1	1	1060	124	1184
6:45 - 7:00	13	7	20	16	1	17	87	10	97	87	6	93	188	27	215	60	3	63	139	1	140	16	0	16	2	0	2	2	0	2	583	29	612	18	5	23	0	0	0	0	0	0	0	0	0	0	0	0	1211	89	1300
7:00 - 7:15	11	14	25	16	3	19	100	12	112	101	10	111	168	26	194	39	1	40	111	1	112	24	2	26	1	0	1	3	0	3	578	53	631	18	7	25	0	0	0	0	0	0	0	0	0	0	0	0	1170	129	1299
7:15 - 7:30	10	11	21	6	0	6	117	10	127	92	11	103	186	28	214	29	1	30	152	3	155	36	0	36	0	0	0	1	0	1	520	30	550	16	2	18	0	0	0	0	0	0	0	0	0	0	0	0	1165	96	1261
7:30 - 7:45	11	11	22	15	0	15	155	7	162	132	7	139	224	30	254	35	1	36	141	0	141	31	1	32	1	0	1	1	0	1	528	34	562	11	10	21	0	0	0	1	0	1	0	0	0	0	0	0	1286	101	1387
7:45 - 8:00	23	9	32	18	0	18	120	10	130	106	7	113	208	26	234	34	0	34	132	2	134	32	1	33	1	0	1	1	0	1	520	37	557	14	9	23	0	0	0	1	0	1	0	0	0	0	0	0	1210	101	1311
8:00 - 8:15	21	9	30	23	0	23	141	13	154	124	16	140	226	25	251	44	2	46	147	2	149	40	0	40	3	0	3	2	1	3	540	29	569	20	9	29	0	0	0	1	0	1	0	0	0	1	0	1	1333	106	1439
8:15 - 8:30	23	15	38	35	1	36	148	15	163	138	14	152	202	20	222	44	3	47	128	0	128	50	0	50	3	0	3	0	0	0	429	37	466	11	8	19	0	0	0	0	0	0	0	0	0	0	0	0	1211	113	1324
8:30 - 8:45	20	14	34	31	2	33	122	14	136	131	20	151	211	33	244	47	0	47	129	2	131	44	1	45	2	0	2	0	0	0	494	41	535	30	8	38	0	0	0	0	0	0	0	0	0	0	0	0	1261	135	1396
8:45 - 9:00	28	12	40	25	6	31	111	13	124	127	18	145	176	36	212	45	1	46	96	0	96	40	1	41	3	0	3	4	0	4	322	35	357	49	10	59	0	0	0	0	0	0	0	0	0	0	0	0	1026	132	1158
Σ	193	142	335	229	14	243	1358	145	1503	1186	150	1336	2308	315	2623	507	17	524	1403	15	1418	338	8	346	17	0	17	18	1	19	6189	455	6644	242	80	322	0	0	0	6	0	6	0	0	0	1	1	2	13995	1343	15338

TIME PERIOD	VEHICLE MOVEMENT																																										GRAND TOTAL		
	1			2			3			4			5			6			7			8			9			10			11			12			13			14			15			16					
	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ
16:00 - 16:15	20	10	30	40	0	40	76	4	80	142	19	161	434	17	451	113	0	113	56	3	59	18	1	19	5	1	6	0	0	0	307	25	332	38	6	44	0	0	0	0	0	0	0	0	0	1	0	1	1250	86	1336
16:15 - 16:30	36	6	42	53	1	54	94	10	104	150	11	161	490	38	528	135	0	135	42	2	44	15	0	15	1	0	1	0	0	0	304	27	331	26	3	29	0	0	0	0	0	0	0	0	0	0	0	0	1346	98	1444
16:30 - 16:45	33	6	39	39	0	39	91	5	96	111	23	134	523	39	562	124	2	126	61	0	61	11	1	12	0	0	0	2	0	2	330	27	357	34	7	41	0	0	0	0	0	0	0	0	0	0	0	0	1359	110	1469
16:45 - 17:00	39	17	56	62	0	62	99	4	103	153	14	167	491	17	508	125	2	127	48	0	48	29	1	30	4	0	4	1	0	1	311	19	330	29	6	35	0	0	0	1	0	1	0	0	0	1	0	1	1393	80	1473
17:00 - 17:15	39	8	47	73	0	73	111	5	116	134	12	146	521	28	549	158	3	161	51	2	53	17	1	18	1	0	1	0	0	0	385	20	405	28	7	35	0	0	0	0	0	0	0	0	0	0	0	0	1518	86	1604
17:15 - 17:30	45	6	51	76	2	78	132	2	134	143	19	162	528	12	540	134	1	135	46	0	46	17	1	18	3	0	3	0	0	0	383	25	408	28	4	32	0	0	0	0	0	0	0	0	0	0	0	0	1535	72	1607
17:30 - 17:45	39	4	43	33	0	33	80	2	82	147	14	161	551	22	573	138	0	138	39	1	40	15	0	15	3	0	3	1	0	1	398	26	424	24	5	29	0	0	0	0	0	0	0	0	0	0	0	0	1468	74	1542
17:45 - 18:00	34	3	37	34	0	34	85	3	88	132	14	146	490	19	509	126	1	127	36	0	36	11	0	11	1	0	1	3	0	3	332	18	350	33	4	37	0	0	0	0	0	0	0	0	0	0	0	0	1317	62	1379
18:00 - 18:15	34	1	35	32	0	32	81	2	83	171	11	182	447	23	470	148	3	151	46	0	46	16	0	16	1	0	1	1	0	1	253	14	267	25	4	29	0	0	0	0	0	0	0	0	0	1	0	1	1256	58	1314
18:15 - 18:30	25	5	30	32	0	32	62	4	66	145	11	156	453	23	476	143	3	146	37	0	37	15	2	17	1	0	1	3	0	3	250	15	265	32	3	35	0	0	0	0	0	0	0	0	0	0	0	0	1198	66	1264
18:30 - 18:45	14	1	15	22	2	24	39	5	44	140	16	156	363	19	382	103	0	103	32	0	32	19	0	19	3	0	3	0	0	0	215	15	230	21	0	21	0	0	0	1	0	1	0	0	0	0	0	0	972	58	1030
18:45 - 19:00	29	3	32	30	1	31	57	0	57	98	3	101	292	12	304	91	0	91	34	0	34	19	0	19	0	0	0	2	0	2	185	6	191	23	2	25	0	0	0	0	0	0	0	0	0	1	0	1	861	27	888
Σ	387	70	457	526	6	532	1007	46	1053	1666	167	1833	5583	269	5852	1538	15	1553	528	8	536	202	7	209	23	1	24	13	0	13	3653	237	3890	341	51	392	0	0	0	2	0	2	0	0	0	4	0	4	15473	877	16350

TIME PERIOD	VEHICLE MOVEMENT																																										GRAND TOTAL			
	1			2			3			4			5			6			7			8			9			10			11			12			13			14			15			16						
	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	
6:00 - 7:00	46	47	93	60	2	62	344	51	395	235	47	282	707	91	798	190	8	198	367	5	372	41	2	43	3	0	3	6	0	6	2258	159	2417	73	17	90	0	0	0	3	0	3	0	0	0	0	1	1	4333	430	4763	
6:15 - 7:15	48	47	95	58	5	63	362	54	416	289	50	339	737	101	838	192	8	200	404	4	408	58	4	62	4	0	4	9	0	9	2288	179	2467	69	16	85	0	0	0	2	0	2	0	0	0	0	1	1	4520	469	4989	
6:30 - 7:30	46	44	90	54	4	58	380	46	426	335	38	373	746	106	852	172	9	181	473	7	480	87	4	91	3	0	3	9	0	9	2236	164	2400	65	15	80	0	0	0	0	0	0	0	0	0	0	1	1	4606	438	5044	
6:45 - 7:45	45	43	88	53	4	57	459	39	498	412	34	446	766	111	877	163	6	169	543	5	548	107	3	110	4	0	4	7	0	7	2209	146	2355	63	24	87	0	0	0	1	0	1	0	0	0	0	0	0	4832	415	5247	
7:00 - 8:00	55	45	100	55	3	58	492	39	531	431	35	466	786	110	896	137	3	140	536	6	542	123	4	127	3	0	3	6	0	6	2146	154	2300	39	28	87	0	0	0	2	0	2	0	0	0	0	0	0	4831	427	5258	
7:15 - 8:15	65	40	105	62	0	62	533	40	573	454	41	495	844	109	953	142	4	146	572	7	579	139	2	141	5	0	5	5	1	6	2108	130	2238	61	30	91	0	0	0	3	0	3	0	0	0	1	0	1	4994	404	5398	
7:30 - 8:30	78	44	122	91	1	92	564	45	609	500	44	544	860	101	961	157	6	163	548	4	552	153	2	155	8	0	8	4	1	5	2017	137	2154	56	36	92	0	0	0	3	0	3	0	0	0	1	0	1	5040	421	5461	
7:45 - 8:45	**87**	**47**	**134**	**107**	**3**	**110**	**531**	**52**	**583**	**499**	**57**	**556**	**847**	**104**	**951**	**169**	**5**	**174**	**536**	**6**	**542**	**166**	**2**	**168**	**9**	**0**	**9**	**3**	**1**	**4**	**1983**	**144**	**2127**	**75**	**34**	**109**	**0**	**0**	**0**	**2**	**0**	**2**	**0**	**0**	**0**	**1**	**0**	**1**	**5015**	**455**	**5470**	**Peak**
8:00 - 9:00	92	50	142	114	9	123	522	55	577	520	68	588	815	114	929	180	6	186	500	4	504	174	2	176	11	0	11	6	1	7	1785	142	1927	110	35	145	0	0	0	1	0	1	0	0	0	1	0	1	4831	486	5317	

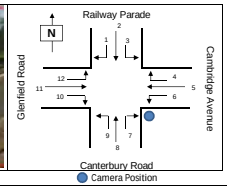
TIME PERIOD	VEHICLE MOVEMENT																																										GRAND TOTAL			
	1			2			3			4			5			6			7			8			9			10			11			12			13			14			15			16						
	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	
16:00 - 17:00	128	39	167	194	1	195	360	23	383	556	67	623	1938	111	2049	497	4	501	207	5	212	73	3	76	10	1	11	3	0	3	1252	98	1350	127	22	149	0	0	0	1	0	1	0	0	0	2	0	2	5348	374	5722	
16:15 - 17:15	147	37	184	227	1	228	395	24	419	548	60	608	2025	122	2147	542	7	549	202	4	206	72	3	75	6	0	6	3	0	3	1330	93	1423	117	23	140	0	0	0	1	0	1	0	0	0	1	0	1	5616	374	5990	
16:30 - 17:30	156	37	193	250	2	252	433	16	449	541	68	609	2063	96	2159	541	8	549	206	2	208	74	4	78	8	0	8	3	0	3	1409	91	1500	119	24	143	0	0	0	1	0	1	0	0	0	1	0	1	5805	348	6153	
16:45 - 17:45	**162**	**35**	**197**	**244**	**2**	**246**	**422**	**13**	**435**	**577**	**59**	**636**	**2091**	**79**	**2170**	**555**	**6**	**561**	**184**	**3**	**187**	**78**	**3**	**81**	**11**	**0**	**11**	**2**	**0**	**2**	**1477**	**90**	**1567**	**109**	**22**	**131**	**0**	**0**	**0**	**1**	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**1**	**5914**	**312**	**6226**	**Peak**
17:00 - 18:00	157	21	178	216	2	218	408	12	420	556	59	615	2090	81	2171	556	5	561	172	3	175	60	2	62	8	0	8	4	0	4	1498	89	1587	113	20	133	0	0	0	0	0	0	0	0	0	0	0	0	5838	294	6132	
17:15 - 18:15	152	14	166	175	2	177	378	9	387	593	58	651	2016	76	2092	546	5	551	167	1	168	59	1	60	8	0	8	5	0	5	1366	83	1449	110	17	127	0	0	0	0	0	0	0	0	0	1	0	1	5576	266	5842	
17:30 - 18:30	132	13	145	131	0	131	308	11	319	595	50	645	1941	87	2028	555	7	562	158	1	159	57	2	59	6	0	6	8	0	8	1233	73	1306	114	16	130	0	0	0	0	0	0	0	0	0	1	0	1	5239	260	5499	
17:45 - 18:45	107	10	117	120	2	122	267	14	281	588	52	640	1753	84	1837	520	7	527	151	0	151	61	2	63	6	0	6	7	0	7	1050	62	1112	111	11	122	0	0	0	0	0	0	0	0	0	1	0	1	4743	244	4987	
18:00 - 19:00	102	10	112	116	3	119	239	11	250	554	41	595	1555	77	1632	485	6	491	149	0	149	69	2	71	5	0	5	6	0	6	903	50	953	101	9	110	0	0	0	1	0	1	0	0	0	2	0	2	4287	209	4496	

Intersection of Cambridge Avenue and Canterbury Road

Tuesday, 18 March 2014

Austraffic

Survey Start	**6:00 AM 16:00 PM**
Intersection Type	Cross Junction
Intersection No.	**16**
North Approach	**Railway Parade**
East Approach	**Cambridge Avenue**
South Approach	**Canterbury Road**
West Approach	**Glenfield Road**
Date	**18/03/14**
Classification	**Light Heavy**



Camera Position

TIME PERIOD	1			2			3			4			5			6			7			8			9			10			11			12			GRAND TOTAL		
	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ
6:00 - 6:15	15	1	16	2	0	2	30	6	36	5	0	5	1	0	1	19	0	19	188	2	190	2	0	2	53	1	54	14	2	16	52	2	54	16	2	18	397	16	413
6:15 - 6:30	20	4	24	4	0	4	50	0	50	9	0	9	1	0	1	37	1	38	203	6	209	1	0	1	63	5	68	21	1	22	81	7	88	14	5	19	504	29	533
6:30 - 6:45	21	2	23	4	0	4	51	3	54	10	2	12	6	0	6	26	0	26	212	7	219	0	0	0	66	5	71	18	2	20	64	10	74	22	2	24	500	33	533
6:45 - 7:00	14	3	17	4	2	6	52	5	57	8	0	8	11	1	12	18	1	19	176	4	180	0	0	0	93	6	99	14	4	18	38	2	40	28	6	34	456	34	490
7:00 - 7:15	29	3	32	0	0	0	70	4	74	9	3	12	8	0	8	34	2	36	172	5	177	5	0	5	105	2	107	10	0	10	48	1	49	34	7	41	524	27	551
7:15 - 7:30	20	3	23	0	0	0	55	3	58	10	2	12	6	2	8	25	2	27	208	9	217	1	0	1	82	6	88	23	1	24	27	1	28	38	0	38	495	29	524
7:30 - 7:45	23	3	26	1	0	1	79	4	83	11	0	11	10	1	11	48	1	49	220	2	222	0	0	0	87	1	88	39	1	40	38	2	40	93	5	98	649	20	669
7:45 - 8:00	24	3	27	1	0	1	70	1	71	8	1	9	8	2	10	48	2	50	183	7	190	0	0	0	83	1	84	56	5	61	23	4	27	69	2	71	573	28	601
8:00 - 8:15	27	2	29	1	1	2	55	2	57	6	1	7	14	1	15	48	2	50	197	1	198	3	0	3	82	5	87	41	0	41	33	1	34	93	6	99	600	22	622
8:15 - 8:30	47	4	51	0	0	0	43	2	45	11	0	11	15	1	16	55	1	56	198	4	202	2	0	2	76	5	81	46	2	48	34	3	37	53	4	57	580	26	606
8:30 - 8:45	20	2	22	0	0	0	52	2	54	11	2	13	18	1	19	65	2	67	155	4	159	1	0	1	86	1	87	84	7	91	35	1	36	38	2	40	565	24	589
8:45 - 9:00	27	5	32	0	0	0	44	0	44	12	1	13	6	2	8	49	2	51	134	5	139	1	0	1	69	3	72	78	0	78	37	3	40	58	3	61	515	24	539
Σ	287	35	322	17	3	20	651	32	683	110	12	122	104	11	115	472	16	488	2246	56	2302	16	0	16	945	41	986	444	25	469	510	37	547	556	44	600	6358	312	6670

TIME PERIOD	1			2			3			4			5			6			7			8			9			10			11			12			GRAND TOTAL		
	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ
16:00 - 16:15	25	4	29	0	0	0	19	0	19	44	0	44	69	2	71	182	2	184	66	0	66	3	0	3	65	1	66	58	1	59	9	0	9	46	2	48	586	12	598
16:15 - 16:30	23	4	27	1	0	1	17	1	18	53	5	58	49	1	50	215	5	220	46	2	48	1	0	1	43	1	44	79	3	82	15	0	15	49	5	54	593	27	618
16:30 - 16:45	28	2	30	0	0	0	19	0	19	58	0	58	38	0	38	223	5	228	57	0	57	1	0	1	44	1	45	80	5	85	11	0	11	51	2	53	610	15	625
16:45 - 17:00	36	2	38	0	0	0	21	0	21	61	0	61	36	9	45	191	5	196	56	1	57	0	0	0	44	1	45	78	3	81	7	0	7	38	4	42	568	25	593
17:00 - 17:15	26	4	30	0	0	0	21	1	22	58	0	58	47	5	52	207	2	209	60	2	62	2	0	2	75	2	77	81	3	84	13	0	13	46	2	48	636	21	657
17:15 - 17:30	43	4	47	0	0	0	15	0	15	60	2	62	55	1	56	222	8	230	52	0	52	2	0	2	57	1	58	89	2	91	4	0	4	51	1	52	650	19	669
17:30 - 17:45	41	1	42	0	0	0	17	0	17	65	0	65	32	3	35	232	5	237	63	0	63	1	0	1	65	0	65	70	0	70	6	0	6	40	3	43	632	12	644
17:45 - 18:00	33	3	36	0	0	0	14	0	14	53	0	53	36	0	36	222	5	227	58	0	58	1	0	1	69	0	69	110	5	115	3	0	3	55	2	57	654	15	669
18:00 - 18:15	70	4	74	0	0	0	13	0	13	52	0	52	10	1	11	198	3	201	62	0	62	1	0	1	75	0	75	67	1	68	5	0	5	36	2	38	589	11	600
18:15 - 18:30	37	1	38	0	0	0	19	0	19	47	0	47	11	0	11	160	3	163	56	1	57	0	0	0	62	0	62	71	1	72	2	0	2	36	2	38	501	8	509
18:30 - 18:45	53	3	56	1	0	1	18	1	19	33	0	33	6	0	6	125	2	127	57	1	58	0	0	0	60	3	63	62	0	62	11	0	11	25	2	27	451	12	463
18:45 - 19:00	57	2	59	0	0	0	14	0	14	25	2	27	5	0	5	108	1	109	37	0	37	0	0	0	44	0	44	47	2	49	4	0	4	69	0	69	410	7	417
Σ	472	34	506	2	0	2	207	3	210	609	9	618	394	22	416	2285	46	2331	670	7	677	12	0	12	703	10	713	892	26	918	90	0	90	542	27	569	6878	184	7062

TIME PERIOD	1			2			3			4			5			6			7			8			9			10			11			12			GRAND TOTAL			
	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	
6:00 - 7:00	70	10	80	14	2	16	183	14	197	32	2	34	19	1	20	100	2	102	779	19	798	3	0	3	275	17	292	67	9	76	235	21	256	80	15	95	1857	112	1969	
6:15 - 7:15	84	12	96	12	2	14	223	12	235	36	5	41	26	1	27	115	4	119	763	22	785	6	0	6	327	18	345	63	7	70	231	20	251	98	20	118	1984	123	2107	
6:30 - 7:30	84	11	95	8	2	10	228	15	243	37	7	44	31	3	34	103	5	108	798	25	823	6	0	6	346	19	365	65	7	72	177	14	191	122	15	137	1975	123	2098	
6:45 - 7:45	86	12	98	5	2	7	256	16	272	38	5	43	35	4	39	125	6	131	776	20	796	6	0	6	367	15	382	86	6	92	151	6	157	193	18	211	2124	110	2234	
7:00 - 8:00	96	12	108	2	0	2	274	12	286	38	6	44	32	5	37	155	7	162	783	23	806	6	0	6	357	10	367	128	7	135	136	8	144	234	14	248	2241	104	2345	
7:15 - 8:15	94	11	105	3	1	4	259	10	269	35	4	39	38	6	44	169	7	176	808	19	827	4	0	4	334	13	347	159	7	166	121	8	129	293	13	306	2317	99	2416	
7:30 - 8:30	**121**	**12**	**133**	**3**	**1**	**4**	**247**	**9**	**256**	**36**	**2**	**38**	**47**	**5**	**52**	**198**	**6**	**205**	**798**	**14**	**812**	**5**	**0**	**5**	**328**	**12**	**340**	**182**	**8**	**190**	**128**	**10**	**138**	**308**	**17**	**325**	**2402**	**96**	**2498**	**Peak**
7:45 - 8:45	118	11	129	2	1	3	220	7	227	36	4	40	55	5	60	216	7	223	733	16	749	6	0	6	327	12	339	227	14	241	125	9	134	253	14	267	2318	100	2418	
8:00 - 9:00	121	13	134	1	1	2	194	6	200	40	4	44	53	5	58	217	7	224	684	14	698	7	0	7	313	14	327	249	9	258	139	8	147	242	15	257	2260	96	2356	

TIME PERIOD	1			2			3			4			5			6			7			8			9			10			11			12			GRAND TOTAL			
	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	Light	Heavy	Σ	
16:00 - 17:00	112	12	124	1	0	1	76	1	77	216	5	221	192	12	204	811	17	828	225	3	228	5	0	5	196	4	200	295	12	307	42	0	42	184	13	197	2355	79	2434	
16:15 - 17:15	113	12	125	1	0	1	78	2	80	230	5	235	170	15	185	836	17	853	219	5	224	4	0	4	206	5	211	318	14	332	46	0	46	184	13	197	2405	88	2493	
16:30 - 17:30	133	12	145	0	0	0	76	1	77	237	2	239	176	15	191	843	20	863	225	3	228	5	0	5	220	5	225	328	13	341	35	0	35	186	9	195	2464	80	2544	
16:45 - 17:45	146	11	157	0	0	0	74	1	75	244	2	246	170	18	188	852	20	872	231	3	234	5	0	5	241	4	245	318	8	326	30	0	30	175	10	185	2486	77	2563	
17:00 - 18:00	**143**	**12**	**155**	**0**	**0**	**0**	**67**	**1**	**68**	**236**	**2**	**238**	**170**	**9**	**179**	**883**	**20**	**903**	**233**	**2**	**235**	**6**	**0**	**6**	**266**	**3**	**269**	**350**	**10**	**360**	**26**	**0**	**26**	**192**	**8**	**200**	**2572**	**67**	**2639**	**Peak**
17:15 - 18:15	187	12	199	0	0	0	59	0	59	230	2	232	133	5	138	874	21	895	235	0	235	5	0	5	266	1	267	336	8	344	18	0	18	182	8	190	2525	57	2582	
17:30 - 18:30	181	9	190	0	0	0	63	0	63	217	0	217	89	4	93	812	16	828	239	1	240	5	0	5	271	0	271	318	7	325	16	0	16	167	9	176	2376	46	2422	
17:45 - 18:45	193	11	204	1	0	1	64	1	65	165	0	165	63	1	64	705	13	718	231	2	233	2	0	2	266	3	269	310	7	317	21	0	21	152	8	160	2195	46	2241	
18:00 - 19:00	217	10	227	1	0	1	64	1	65	157	2	159	32	1	33	591	9	600	212	2	214	1	0	1	241	3	244	247	4	251	22	0	22	166	6	172	1951	38	1989	

Appendix B

Intersection performance indicators

The operation of key intersections within was assessed using the SIDRA intersection modelling software. SIDRA calculates intersection performance measures including:

- level of service (LoS)
- degree of saturation (DoS)
- average delay
- queue length.

Level of Service (LoS)

Level of Service (Los) is a basic performance parameter used to describe the operation of an intersection. Levels of service range from A (indicating good intersection operation) to F (indicating over-saturated conditions with long delays and queues). At signalised intersections, the LoS criteria are related to average intersection delay (seconds per vehicle). At priority controlled (give-way and stop controlled) and roundabout intersections, the LoS is based on the modelled delay (seconds per vehicle) for the most delayed movement (refer to Table 1).

Degree of saturation (DoS)

The Degree of Saturation (DoS) is the ratio of demand flow to capacity, and therefore has no unit. As it approaches 1.0, extensive queues and delays could be expected. For a satisfactory situation, DoS should be less than the nominated practical degree of saturation, usually 0.9. The intersection DoS is based on the movement with the highest value.

Average vehicle delay

This is the difference between interrupted and uninterrupted travel times through the intersection and is measured in seconds per vehicle. At signalised intersections the average intersection delay is usually reported. At priority controlled intersections and roundabouts, the average delay for the most delayed movement is usually reported.

Queue length

Queue length is measured in metres reflecting the number of vehicles waiting at the stop line and is usually quoted as the 95th percentile back of queue, which is the value below which 95% of all observed queue lengths fall. It reflects the number of vehicles per traffic lane at the start of the green period, when traffic starts moving again after a red signal. The intersection queue length is usually taken from the movement with the longest queue length.

Table 1 Level of Service criteria for intersections

Level of Service	Average delay (seconds per vehicle)	Traffic signals, roundabout	Give Way and stop signs
A	Less than 14	Good operation	Good operation
B	15 to 28	Good with acceptable delays and spare capacity	Acceptable delays and spare capacity
C	29 to 42	Satisfactory	Satisfactory, but accident study required
D	43 to 56	Operating near capacity	Near capacity and accident study required
E	57 to 70	At capacity. At signals, incidents would cause excessive delays. Roundabouts require other control mode.	At capacity; requires other control mode
F	Greater than 71	Unsatisfactory with excessive queuing	Unsatisfactory with excessive queuing; requires other control mode

Source: RMS *Guide to Traffic Generating Developments*, 2002

Appendix C

2014 existing year SIDRA results

1. 2014 Existing year – Moorebank Avenue

I-01 Intersection of Moorebank Avenue and Bapaume Road

MOVEMENT SUMMARY

Site: I-01 2014 BASE AM

Intersection of Moorebank Avenue and Bapaume Road
2014 BASE AM PEAK 6:45 am - 7:45 am
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Moorebank Avenue (S)											
1	L2	19	0.0	0.010	8.2	LOS A	0.0	0.0	0.00	0.67	36.0
2	T1	1053	5.3	0.558	0.0	LOS A	0.0	0.0	0.00	0.00	59.8
Approach		1072	5.2	0.558	0.2	NA	0.0	0.0	0.00	0.01	59.1
North: Moorebank Avenue (S)											
8	T1	824	5.4	0.333	3.8	LOS A	3.8	27.8	0.24	0.08	50.7
9	R2	80	1.3	0.333	24.0	LOS B	3.8	27.8	1.00	0.32	34.1
Approach		904	5.0	0.333	5.6	NA	3.8	27.8	0.31	0.10	48.6
West: Bapaume Road (W)											
10	L2	3	33.3	0.018	27.5	LOS B	0.1	0.5	0.84	0.92	26.2
12	R2	1	0.0	0.057	183.7	LOS F	0.1	1.0	0.98	0.99	6.2
Approach		4	25.0	0.057	66.5	LOS E	0.1	1.0	0.87	0.94	14.5
All Vehicles		1980	5.2	0.558	2.8	NA	3.8	27.8	0.14	0.05	51.5

MOVEMENT SUMMARY

Site: I-01 2014 BASE PM

Intersection of Moorebank Avenue and Bapaume Road
2014 BASE AM PEAK 5:00 pm - 6:00 pm
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Moorebank Avenue (S)											
1	L2	1	0.0	0.001	8.2	LOS A	0.0	0.0	0.00	0.67	36.0
2	T1	521	4.4	0.275	0.0	LOS A	0.0	0.0	0.00	0.00	59.9
Approach		522	4.4	0.275	0.0	NA	0.0	0.0	0.00	0.00	59.9
North: Moorebank Avenue (S)											
8	T1	1388	2.8	0.375	2.6	LOS A	5.6	40.2	0.33	0.01	52.1
9	R2	19	11.1	0.375	13.6	LOS A	5.6	40.2	0.69	0.03	45.7
Approach		1407	2.9	0.375	2.8	NA	5.6	40.2	0.34	0.01	52.0
West: Bapaume Road (W)											
10	L2	88	3.6	0.135	11.8	LOS A	0.5	3.8	0.53	0.79	38.5
12	R2	13	0.0	0.422	165.1	LOS F	1.2	8.5	0.98	1.02	6.8
Approach		101	3.1	0.422	31.0	LOS C	1.2	8.5	0.59	0.81	24.4
All Vehicles		2031	3.3	0.422	3.5	NA	5.6	40.2	0.26	0.05	50.3

I-02 Intersection of Moorebank Avenue and Anzac Road

MOVEMENT SUMMARY

Site: I-02 2014 BASE AM

Intersection of Moorebank Avenue and Anzac Road
2014 BASE AM PEAK 6:45 am - 7:45 am
Signals - Fixed Time Cycle Time = 103 seconds (User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Moorebank Avenue (S)											
2	T1	895	3.4	0.690	10.6	LOS A	26.7	192.7	0.66	0.61	44.3
3	R2	334	3.5	0.642	23.3	LOS B	11.2	80.9	0.71	0.82	36.5
Approach		1228	3.4	0.690	14.0	LOS A	26.7	192.7	0.67	0.67	41.9
East: Anzac Road (E)											
4	L2	218	3.4	0.688	53.2	LOS D	10.7	77.3	0.99	0.85	24.3
6	R2	192	13.7	0.648	52.4	LOS D	9.3	72.9	0.98	0.83	24.6
Approach		409	8.2	0.688	52.8	LOS D	10.7	77.3	0.99	0.84	24.5
North: Moorebank Avenue (N)											
7	L2	263	10.0	0.172	8.3	LOS A	0.9	7.1	0.15	0.63	35.8
8	T1	565	3.4	0.329	6.9	LOS A	8.7	62.5	0.42	0.37	35.7
Approach		828	5.5	0.329	7.3	LOS A	8.7	62.5	0.34	0.45	35.7
All Vehicles		2466	4.9	0.690	18.2	LOS B	26.7	192.7	0.61	0.62	35.6

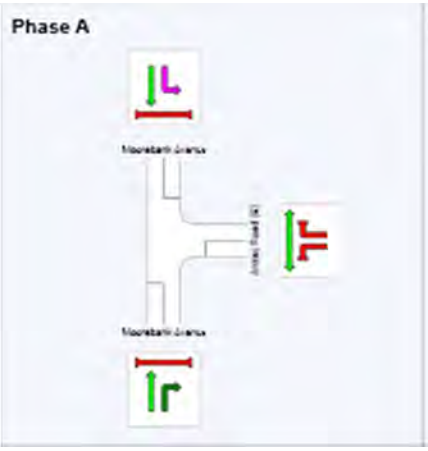
PHASING SUMMARY

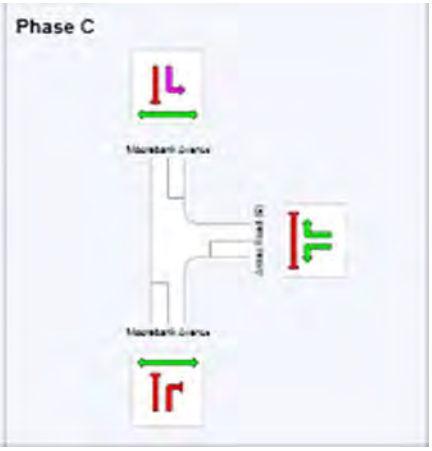
Site: I-02 2014 BASE AM

Intersection of Moorebank Avenue and Anzac Road
2014 BASE AM PEAK 6:45 am - 7:45 am
Signals - Fixed Time Cycle Time = 103 seconds (User-Given Phase Times)

Phase Timing Results

Phase	A	C
Phase Change Time (sec)	0	76
Green Time (sec)	70	21
Yellow Time (sec)	4	4
All-Red Time (sec)	2	2
Phase Time (sec)	76	27
Phase Split	74 %	26 %





MOVEMENT SUMMARY

Site: I-02 2014 BASE PM

Intersection of Moorebank Avenue and Anzac Road
2014 BASE AM PEAK 5:00 pm - 6:00 pm
Signals - Fixed Time Cycle Time = 110 seconds (User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Moorebank Avenue (S)											
2	T1	280	3.8	0.242	10.4	LOS A	6.8	48.8	0.49	0.42	45.0
3	R2	169	1.2	0.935	89.8	LOS F	13.3	94.0	1.00	1.13	17.3
Approach		449	2.8	0.935	40.3	LOS C	13.3	94.0	0.68	0.69	28.0
East: Anzac Road (E)											
4	L2	407	2.3	0.791	51.0	LOS D	21.5	153.4	0.99	0.90	24.9
6	R2	272	5.8	0.598	47.3	LOS D	13.0	95.3	0.93	0.83	26.1
Approach		679	3.7	0.791	49.5	LOS D	21.5	153.4	0.97	0.87	25.4
North: Moorebank Avenue (N)											
7	L2	289	4.0	0.180	8.3	LOS A	1.0	7.4	0.14	0.65	35.8
8	T1	1109	2.5	0.716	14.5	LOS A	30.7	219.3	0.69	0.62	25.4
Approach		1399	2.8	0.716	13.2	LOS A	30.7	219.3	0.57	0.63	27.0
All Vehicles		2527	3.0	0.935	27.8	LOS B	30.7	219.3	0.70	0.71	26.6

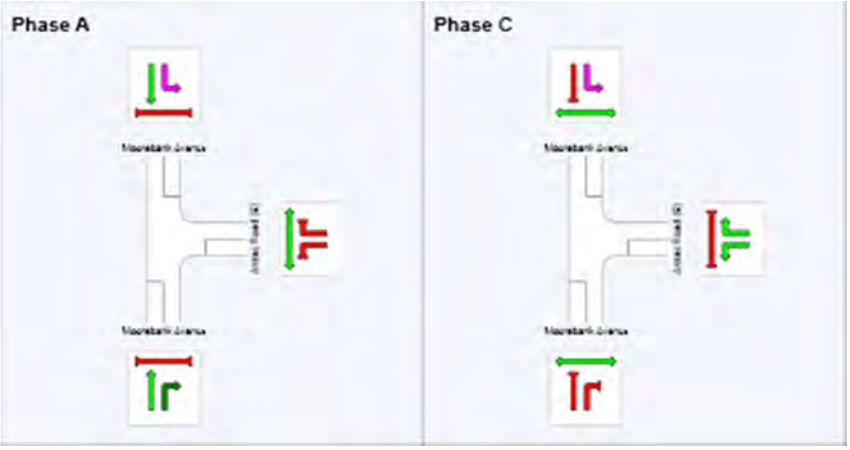
PHASING SUMMARY

Site: I-02 2014 BASE PM

Intersection of Moorebank Avenue and Anzac Road
2014 BASE AM PEAK 5:00 pm - 6:00 pm
Signals - Fixed Time Cycle Time = 110 seconds (User-Given Phase Times)

Phase Timing Results

Phase	A	C
Phase Change Time (sec)	0	73
Green Time (sec)	67	31
Yellow Time (sec)	4	4
All-Red Time (sec)	2	2
Phase Time (sec)	73	37
Phase Split	66 %	34 %



I-03 Intersection of Moorebank Avenue and Defence Support Access

MOVEMENT SUMMARY

Site: I-03 2014 BASE AM

Intersection of Moorebank Avenue and Defence Support Access (Military Access 1)
2014 BASE AM PEAK 6:45 am - 7:45 am
Signals - Fixed Time Cycle Time = 90 seconds (Optimum Cycle Time - Minimum Delay)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Moorebank Avenue (S)											
1	L2	16	0.0	0.010	8.6	LOS A	0.0	0.3	0.14	0.67	46.5
2	T1	1220	3.0	0.835	8.2	LOS A	35.2	253.1	0.70	0.67	44.4
Approach		1236	3.0	0.835	8.2	LOS A	35.2	253.1	0.70	0.67	44.4
North: Moorebank Avenue (N)											
8	T1	729	3.8	0.491	6.4	LOS A	12.2	88.1	0.46	0.43	49.0
9	R2	16	0.0	0.491	15.7	LOS B	12.2	88.1	0.52	0.48	47.6
Approach		745	3.7	0.491	6.6	LOS A	12.2	88.1	0.47	0.43	48.9
West: Military Access 1 (W)											
10	L2	2	0.0	0.020	49.6	LOS D	0.1	0.9	0.93	0.64	11.9
12	R2	1	0.0	0.020	49.7	LOS D	0.1	0.9	0.93	0.64	11.9
Approach		3	0.0	0.020	49.6	LOS D	0.1	0.9	0.93	0.64	11.9
All Vehicles		1984	3.2	0.835	7.7	LOS A	35.2	253.1	0.61	0.58	46.1

PHASING SUMMARY

Site: I-03 2014 BASE AM

Intersection of Moorebank Avenue and Defence Support Access (Military Access 1)
2014 BASE AM PEAK 6:45 am - 7:45 am
Signals - Fixed Time Cycle Time = 90 seconds (Optimum Cycle Time - Minimum Delay)

Phase Timing Results

Phase	A	B
Phase Change Time (sec)	0	75
Green Time (sec)	69	9
Yellow Time (sec)	4	4
All-Red Time (sec)	2	2
Phase Time (sec)	75	15
Phase Split	83 %	17 %

MOVEMENT SUMMARY

Site: I-03 2014 BASE PM

Intersection of Moorebank Avenue and Defence Support Access (Military Access 1)
2014 BASE AM PEAK 5:00 pm - 6:00 pm
Signals - Fixed Time Cycle Time = 90 seconds (Optimum Cycle Time - Minimum Delay)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Moorebank Avenue (S)											
1	L2	1	0.0	0.001	8.6	LOS A	0.0	0.0	0.14	0.66	46.6
2	T1	440	2.4	0.299	3.4	LOS A	5.7	41.0	0.33	0.29	52.2
Approach		441	2.4	0.299	3.4	LOS A	5.7	41.0	0.32	0.29	52.2
North: Moorebank Avenue (N)											
8	T1	1497	2.5	0.961	32.5	LOS C	57.1	408.6	0.58	0.76	30.8
9	R2	1	0.0	0.961	48.8	LOS D	57.1	408.6	0.66	0.89	27.6
Approach		1498	2.5	0.961	32.5	LOS C	57.1	408.6	0.58	0.76	30.8
West: Military Access 1 (W)											
10	L2	9	0.0	0.087	50.5	LOS D	0.6	4.0	0.95	0.69	11.7
12	R2	4	0.0	0.087	50.6	LOS D	0.6	4.0	0.95	0.69	11.7
Approach		14	0.0	0.087	50.5	LOS D	0.6	4.0	0.95	0.69	11.7
All Vehicles		1953	2.5	0.961	26.0	LOS B	57.1	408.6	0.53	0.65	33.3

PHASING SUMMARY

Site: I-03 2014 BASE PM

Intersection of Moorebank Avenue and Defence Support Access (Military Access 1)
2014 BASE AM PEAK 5:00 pm - 6:00 pm
Signals - Fixed Time Cycle Time = 90 seconds (Optimum Cycle Time - Minimum Delay)

Phase Timing Results

Phase	A	B
Phase Change Time (sec)	0	75
Green Time (sec)	69	9
Yellow Time (sec)	4	4
All-Red Time (sec)	2	2
Phase Time (sec)	75	15
Phase Split	83 %	17 %

I-04 Intersection of Moorebank Avenue and DNSDC Access

MOVEMENT SUMMARY

Site: I-04 2014 BASE AM

Intersection of Moorebank Avenue and DNSDC Access (Military Access 2)
2014 BASE AM PEAK 6:45 am - 7:45 am
Signals - Fixed Time Cycle Time = 80 seconds (Optimum Cycle Time - Minimum Delay)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Moorebank Avenue (S)											
2	T1	1265	2.6	0.696	5.4	LOS A	19.6	140.0	0.52	0.48	50.0
3	R2	22	0.0	0.696	14.2	LOS A	19.6	140.0	0.58	0.55	48.9
Approach		1287	2.5	0.696	5.5	LOS A	19.6	140.0	0.52	0.48	49.9
East: DNSDC Access (W)											
4	L2	5	20.0	0.037	45.8	LOS D	0.2	1.6	0.94	0.65	26.5
6	R2	7	14.3	0.039	43.5	LOS D	0.3	2.1	0.92	0.66	27.2
Approach		13	16.7	0.039	44.5	LOS D	0.3	2.1	0.93	0.66	26.9
North: Moorebank Avenue (N)											
7	L2	93	6.8	0.062	8.7	LOS A	0.3	2.2	0.17	0.66	46.4
8	T1	599	3.5	0.426	4.3	LOS A	8.8	63.8	0.41	0.37	50.5
Approach		692	4.0	0.426	4.9	LOS A	8.8	63.8	0.38	0.41	49.9
West: Carpark Access (W)											
10	L2	1	0.0	0.005	42.5	LOS C	0.0	0.3	0.90	0.60	12.9
12	R2	1	0.0	0.007	45.1	LOS D	0.0	0.3	0.93	0.60	12.1
Approach		2	0.0	0.007	43.8	LOS D	0.0	0.3	0.92	0.60	12.5
All Vehicles		1994	3.1	0.696	5.6	LOS A	19.6	140.0	0.47	0.46	49.6

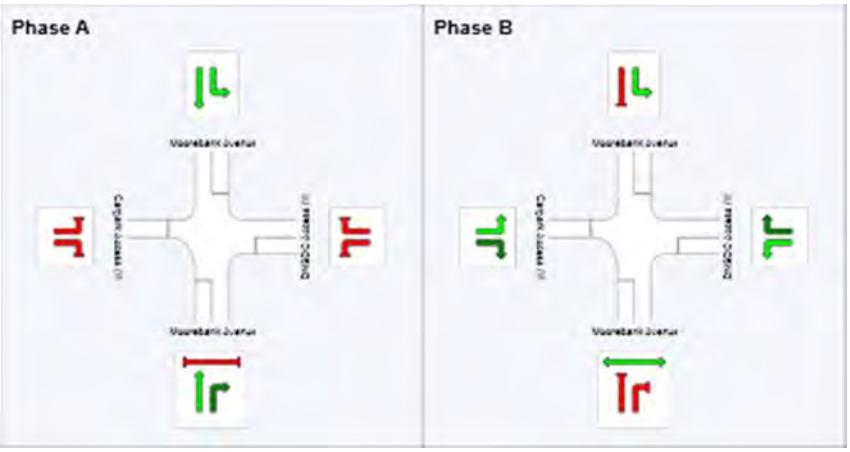
PHASING SUMMARY

Site: I-04 2014 BASE AM

Intersection of Moorebank Avenue and DNSDC Access (Military Access 2)
2014 BASE AM PEAK 6:45 am - 7:45 am
Signals - Fixed Time Cycle Time = 80 seconds (Optimum Cycle Time - Minimum Delay)

Phase Timing Results

Phase	A	B
Phase Change Time (sec)	0	65
Green Time (sec)	59	9
Yellow Time (sec)	4	4
All-Red Time (sec)	2	2
Phase Time (sec)	65	15
Phase Split	81 %	19 %



MOVEMENT SUMMARY

Site: I-04 2014 BASE PM

Intersection of Moorebank Avenue and DNSDC Access (Military Access 2)
2014 BASE AM PEAK 5:00 pm - 6:00 pm
Signals - Fixed Time Cycle Time = 110 seconds (Optimum Cycle Time - Minimum Delay)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Moorebank Avenue (S)											
2	T1	407	2.1	0.202	3.2	LOS A	4.2	29.8	0.27	0.23	53.9
3	R2	1	0.0	0.202	11.7	LOS A	4.2	29.8	0.29	0.25	53.3
Approach		408	2.1	0.202	3.2	LOS A	4.2	29.8	0.27	0.23	53.9
East: DNSDC Access (W)											
4	L2	4	0.0	0.042	63.6	LOS E	0.2	1.6	0.97	0.64	21.8
6	R2	22	9.5	0.161	61.2	LOS E	1.2	8.7	0.96	0.71	22.3
Approach		26	8.0	0.161	61.6	LOS E	1.2	8.7	0.96	0.70	22.2
North: Moorebank Avenue (N)											
7	L2	6	16.7	0.004	8.5	LOS A	0.0	0.2	0.11	0.60	46.7
8	T1	1468	2.2	0.948	28.7	LOS C	83.9	598.2	0.89	0.97	29.3
Approach		1475	2.3	0.948	28.6	LOS C	83.9	598.2	0.88	0.97	29.3
West: Carpark Access (W)											
10	L2	6	0.0	0.042	59.6	LOS E	0.3	2.2	0.95	0.66	9.8
12	R2	3	0.0	0.031	63.5	LOS E	0.2	1.2	0.97	0.63	9.1
Approach		9	0.0	0.042	60.9	LOS E	0.3	2.2	0.95	0.65	9.6
All Vehicles		1919	2.3	0.948	23.8	LOS B	83.9	598.2	0.75	0.81	32.7

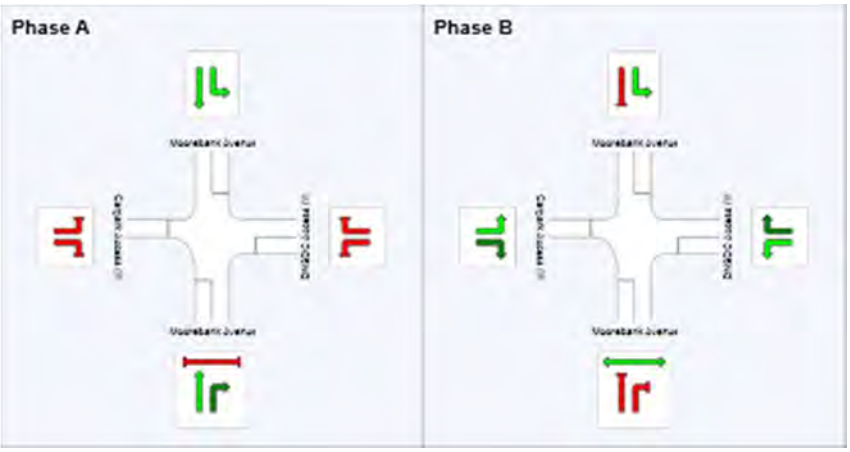
PHASING SUMMARY

Site: I-04 2014 BASE PM

Intersection of Moorebank Avenue and DNSDC Access (Military Access 2)
2014 BASE AM PEAK 5:00 pm - 6:00 pm
Signals - Fixed Time Cycle Time = 110 seconds (Optimum Cycle Time - Minimum Delay)

Phase Timing Results

Phase	A	B
Phase Change Time (sec)	0	95
Green Time (sec)	89	9
Yellow Time (sec)	4	4
All-Red Time (sec)	2	2
Phase Time (sec)	95	15
Phase Split	86 %	14 %



I-05 Intersection of Moorebank Avenue and Chatham Avenue

MOVEMENT SUMMARY

Site: I-05 2014 BASE AM

Intersection of Moorebank Avenue and Chatham Avenue
2014 BASE AM PEAK 6:45 am - 7:45 am
Signals - Fixed Time Cycle Time = 110 seconds (Optimum Cycle Time - Minimum Delay)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Moorebank Avenue (S)											
1	L2	43	0.0	0.028	9.8	LOS A	0.4	2.6	0.18	0.69	47.3
2	T1	1272	2.5	0.979	53.0	LOS D	90.3	645.9	0.97	1.17	23.5
Approach		1315	2.4	0.979	51.6	LOS D	90.3	645.9	0.95	1.15	23.9
North: Moorebank Avenue (N)											
8	T1	443	4.8	0.290	2.8	LOS A	5.8	42.2	0.27	0.24	54.5
9	R2	132	0.8	0.713	61.2	LOS E	7.3	51.8	1.00	0.95	22.2
Approach		575	3.8	0.713	16.1	LOS B	7.3	51.8	0.44	0.40	41.0
West: Chatham Avenue (W)											
10	L2	17	6.3	0.155	57.6	LOS E	1.4	11.3	0.94	0.72	20.6
12	R2	12	27.3	0.155	57.7	LOS E	1.4	11.3	0.94	0.72	20.6
Approach		28	14.8	0.155	57.6	LOS E	1.4	11.3	0.94	0.72	20.6
All Vehicles		1918	3.0	0.979	41.1	LOS C	90.3	645.9	0.79	0.92	27.3

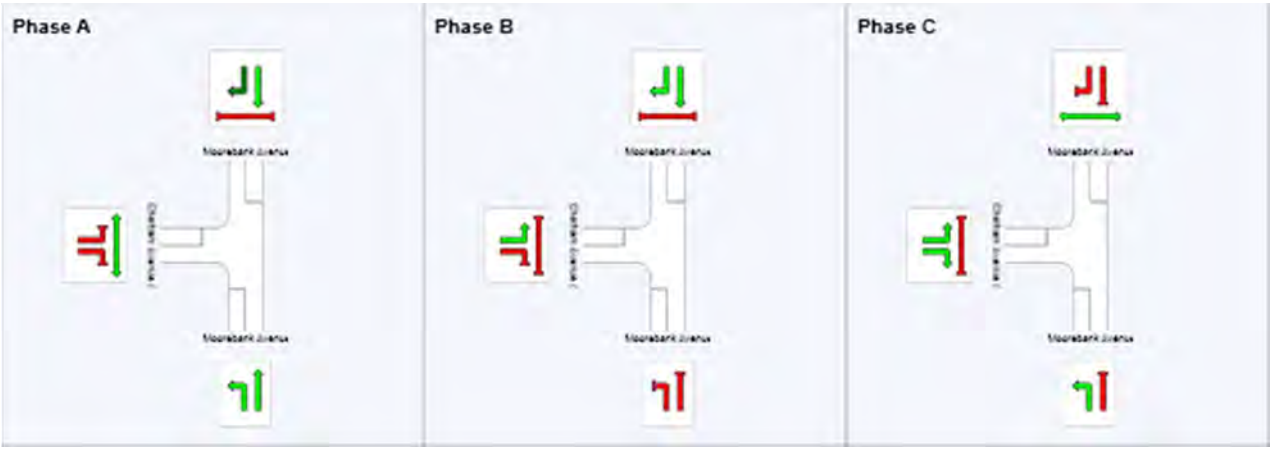
PHASING SUMMARY

Site: I-05 2014 BASE AM

Intersection of Moorebank Avenue and Chatham Avenue
2014 BASE AM PEAK 6:45 am - 7:45 am
Signals - Fixed Time Cycle Time = 110 seconds (Optimum Cycle Time - Minimum Delay)

Phase Timing Results

Phase	A	B	C
Phase Change Time (sec)	0	83	95
Green Time (sec)	77	6	9
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	83	12	15
Phase Split	75 %	11 %	14 %



MOVEMENT SUMMARY

Site: I-05 2014 BASE PM

Intersection of Moorebank Avenue and Chatham Avenue
2014 BASE AM PEAK 5:00 pm - 6:00 pm
Signals - Fixed Time Cycle Time = 100 seconds (Optimum Cycle Time - Minimum Delay)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Moorebank Avenue (S)											
1	L2	9	0.0	0.006	9.9	LOS A	0.1	0.6	0.19	0.67	47.2
2	T1	365	2.0	0.288	7.1	LOS A	7.1	50.7	0.44	0.38	48.5
Approach		375	2.0	0.288	7.2	LOS A	7.1	50.7	0.43	0.39	48.4
North: Moorebank Avenue (N)											
8	T1	1444	2.2	0.981	47.6	LOS D	93.8	669.2	0.92	1.15	25.0
9	R2	26	0.0	0.037	13.0	LOS A	0.4	2.6	0.36	0.72	44.1
Approach		1471	2.1	0.981	47.0	LOS D	93.8	669.2	0.91	1.14	25.2
West: Chatham Avenue (W)											
10	L2	40	2.6	0.180	48.2	LOS D	2.1	15.2	0.90	0.75	23.1
12	R2	9	0.0	0.180	48.3	LOS D	2.1	15.2	0.90	0.75	23.1
Approach		49	2.1	0.180	48.2	LOS D	2.1	15.2	0.90	0.75	23.1
All Vehicles		1895	2.1	0.981	39.2	LOS C	93.8	669.2	0.82	0.98	27.8

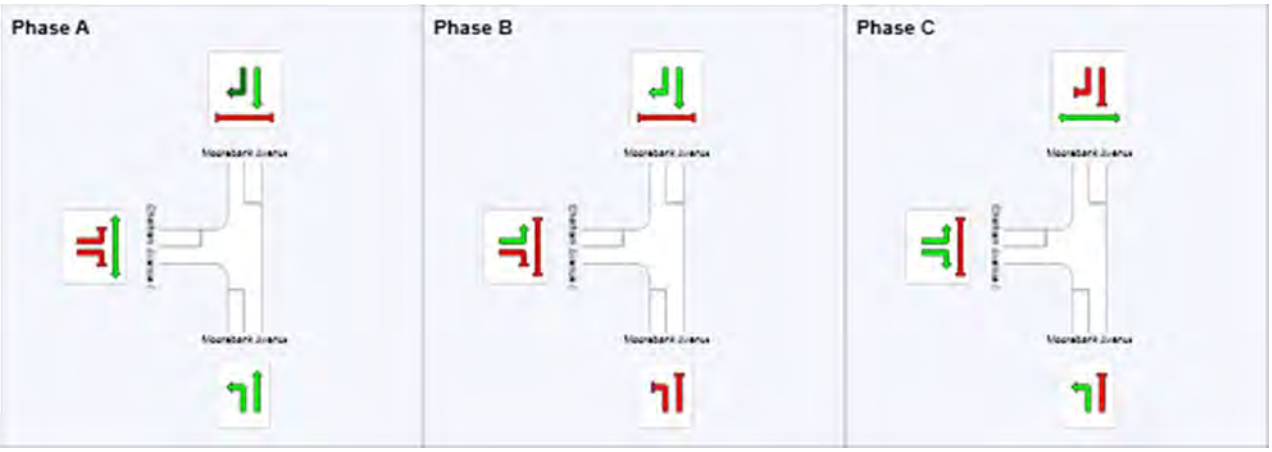
PHASING SUMMARY

Site: I-05 2014 BASE PM

Intersection of Moorebank Avenue and Chatham Avenue
2014 BASE AM PEAK 5:00 pm - 6:00 pm
Signals - Fixed Time Cycle Time = 100 seconds (Optimum Cycle Time - Minimum Delay)

Phase Timing Results

Phase	A	B	C
Phase Change Time (sec)	0	73	85
Green Time (sec)	67	6	9
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	73	12	15
Phase Split	73 %	12 %	15 %



2. 2014 Existing year – On the wider road network

I-01 Intersection of the Hume Highway and Orange Grove Road

MOVEMENT SUMMARY

Site: I-01 2014 BASE AM

Hume Highway / Orange Grove Road
2014 BASE AM PEAK 7:45 am - 8:45 am
Signals - Fixed Time Cycle Time = 150 seconds (User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total	Demand Flows HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	95% Back of Queue Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	v/c	sec		veh	m		per veh	km/h
NorthEast: Hume Highway (NE)											
25	T1	877	11.3	0.623	22.1	LOS B	17.2	132.2	0.81	0.73	37.1
26	R2	354	10.1	0.876	84.4	LOS F	14.9	113.5	1.00	0.91	24.2
Approach		1231	10.9	0.876	40.0	LOS C	17.2	132.2	0.86	0.78	30.8
NorthWest: Orange Grove Road (NW)											
27	L2	525	6.6	0.612	9.1	LOS A	7.5	55.6	0.22	0.63	51.4
29	R2	1163	6.6	0.858	67.3	LOS E	29.8	220.3	0.98	0.89	24.6
Approach		1688	6.6	0.858	49.2	LOS D	29.8	220.3	0.75	0.81	30.0
SouthWest: Hume Highway (SW)											
30	L2	1119	6.5	0.391	10.9	LOS A	11.2	83.0	0.31	0.69	52.8
31	T1	1936	4.9	0.695	19.5	LOS B	28.9	210.8	0.59	0.54	42.8
Approach		3055	5.5	0.695	16.4	LOS B	28.9	210.8	0.49	0.59	46.6
All Vehicles		5974	6.9	0.876	30.5	LOS C	29.8	220.3	0.64	0.69	36.3

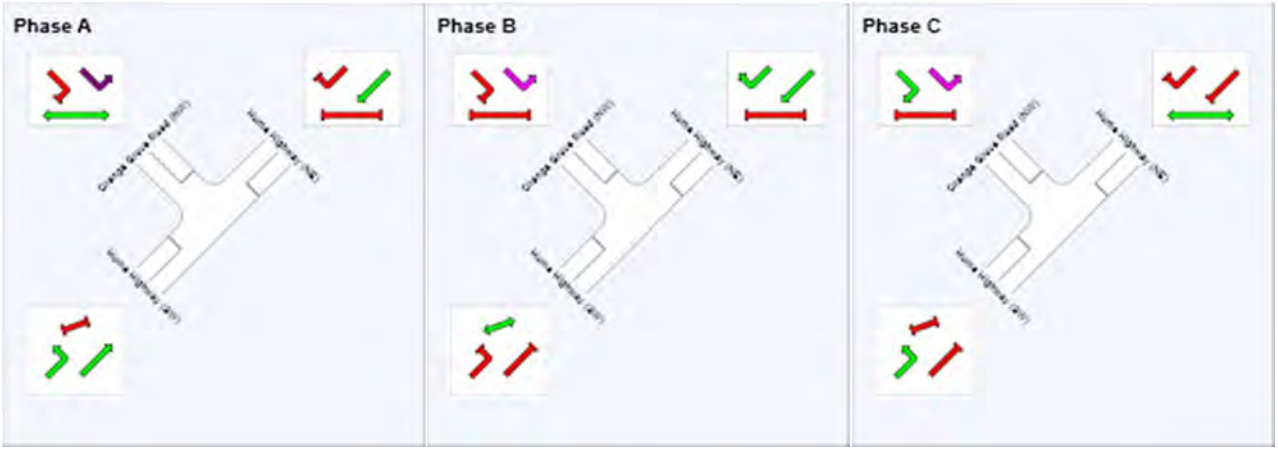
PHASING SUMMARY

Site: I-01 2014 BASE AM

Hume Highway / Orange Grove Road
2014 BASE AM PEAK 7:45 am - 8:45 am
Signals - Fixed Time Cycle Time = 150 seconds (User-Given Phase Times)

Phase Timing Results

Phase	A	B	C
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	86	109
Green Time (sec)	79	16	35
Yellow Time (sec)	5	4	5
All-Red Time (sec)	2	2	2
Phase Time (sec)	86	22	42
Phase Split	57 %	15 %	28 %



MOVEMENT SUMMARY

Site: I-01 2014 BASE PM

Hume Highway / Orange Grove Road
2014 BASE PM PEAK 4:30 pm - 5:30 pm
Signals - Fixed Time Cycle Time = 150 seconds (User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
NorthEast: Hume Highway (NE)											
25	T1	1605	3.3	0.828	22.8	LOS B	32.4	233.5	0.79	0.75	36.7
26	R2	754	2.8	0.862	44.2	LOS D	17.5	125.5	1.00	0.93	34.4
Approach		2359	3.1	0.862	29.6	LOS C	32.4	233.5	0.85	0.81	35.7
NorthWest: Orange Grove Road (NW)											
27	L2	365	4.3	0.337	11.0	LOS A	5.2	37.6	0.23	0.62	50.4
29	R2	1252	3.1	0.956	82.7	LOS F	37.4	269.0	1.00	0.98	21.8
Approach		1617	3.4	0.956	66.5	LOS E	37.4	269.0	0.83	0.90	25.4
SouthWest: Hume Highway (SW)											
30	L2	1208	3.0	0.713	19.2	LOS B	18.2	130.9	0.76	0.82	46.0
31	T1	1029	5.3	0.925	72.3	LOS F	31.7	231.6	1.00	1.04	20.9
Approach		2238	4.0	0.925	43.6	LOS D	31.7	231.6	0.87	0.92	31.3
All Vehicles		6214	3.5	0.956	44.3	LOS D	37.4	269.0	0.85	0.87	30.6

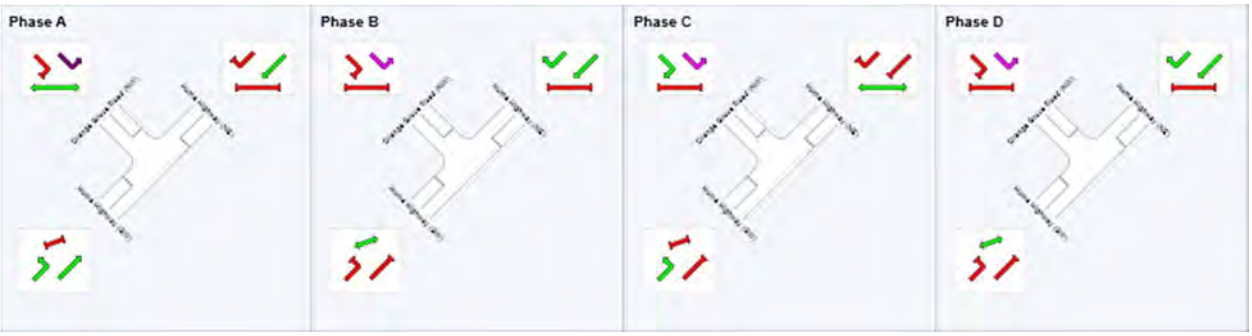
PHASING SUMMARY

Site: I-01 2014 BASE PM

Hume Highway / Orange Grove Road
2014 BASE PM PEAK 4:30 pm - 5:30 pm
Signals - Fixed Time Cycle Time = 150 seconds (User-Given Phase Times)

Phase Timing Results

Phase	A	B	C	D
Reference Phase	Yes	No	No	No
Phase Change Time (sec)	0	53	81	124
Green Time (sec)	47	21	37	19
Yellow Time (sec)	5	4	5	4
All-Red Time (sec)	2	2	2	2
Phase Time (sec)	54	27	44	25
Phase Split	36 %	18 %	29 %	17 %



I-02 Intersection of the Hume Highway and Elizabeth Drive

MOVEMENT SUMMARY

Site: I-02 2014 BASE AM

Hume Highway / Elizabeth Drive
2014 BASE AM PEAK 7:45 am - 8:45 am
Signals - Fixed Time Cycle Time = 150 seconds (User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Hume Highway (S)											
1	L2	116	5.5	0.128	21.1	LOS B	2.9	21.5	0.38	0.67	37.4
2	T1	2066	6.3	0.792	35.4	LOS C	40.4	298.3	0.85	0.76	27.5
Approach		2182	6.2	0.808	34.6	LOS C	40.4	298.3	0.82	0.76	28.0
East: Elizabeth Drive (E)											
4	L2	34	6.2	0.362	59.6	LOS E	8.5	62.8	0.90	0.81	18.6
5	T1	412	5.9	0.362	55.8	LOS D	9.7	71.3	0.89	0.82	23.8
6	R2	133	2.4	0.641	75.0	LOS F	9.6	68.3	1.00	0.81	15.2
Approach		578	5.1	0.641	60.4	LOS E	9.7	71.3	0.91	0.81	21.2
North: Hume Highway (N)											
7	L2	76	2.8	0.567	24.6	LOS B	19.5	146.0	0.55	0.53	32.4
8	T1	1578	8.7	0.567	18.0	LOS B	19.5	146.0	0.53	0.49	37.3
9	R2	305	9.7	1.098	187.9	LOS F	18.5	140.5	1.00	1.25	9.7
Approach		1959	8.7	1.098	44.7	LOS D	19.5	146.0	0.60	0.61	24.4
West: Elizabeth Drive (W)											
10	L2	544	5.4	0.918	72.4	LOS F	42.7	312.5	1.00	0.95	19.4
11	T1	929	3.1	0.922	74.3	LOS F	37.0	266.1	1.00	1.02	18.5
12	R2	436	6.5	1.083	179.8	LOS F	26.3	194.1	1.00	1.25	10.1
Approach		1909	4.5	1.083	97.8	LOS F	42.7	312.5	1.00	1.05	15.6
All Vehicles		6628	6.4	1.098	58.1	LOS E	42.7	312.5	0.82	0.80	21.2

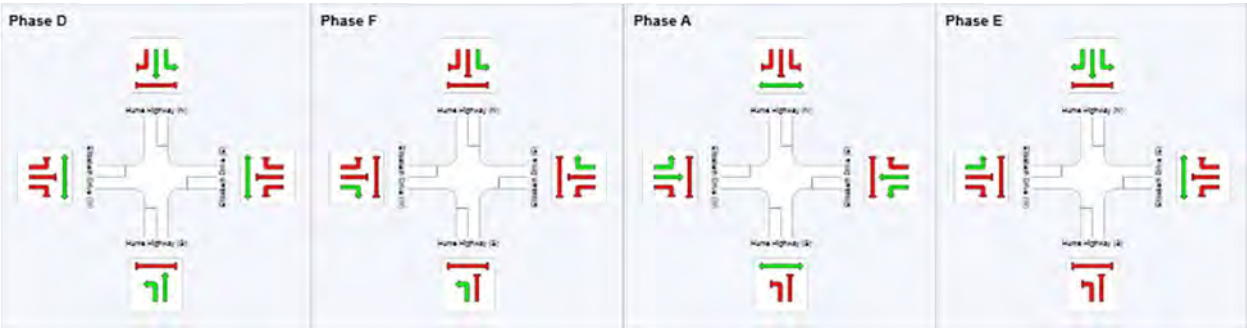
PHASING SUMMARY

Site: I-02 2014 BASE AM

Hume Highway / Elizabeth Drive
2014 BASE AM PEAK 7:45 am - 8:45 am
Signals - Fixed Time Cycle Time = 150 seconds (User-Given Phase Times)

Phase Timing Results

Phase	D	F	A	E
Reference Phase	Yes	No	No	No
Phase Change Time (sec)	0	68	91	132
Green Time (sec)	62	17	35	12
Yellow Time (sec)	4	4	4	4
All-Red Time (sec)	2	2	2	2
Phase Time (sec)	68	23	41	18
Phase Split	45 %	15 %	27 %	12 %



MOVEMENT SUMMARY

Site: I-02 2014 BASE PM

Hume Highway / Elizabeth Drive
2014 BASE PM PEAK 4:30 pm - 5:30 pm
Signals - Fixed Time Cycle Time = 150 seconds (User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Hume Highway (S)											
1	L2	286	4.4	0.426	39.9	LOS C	13.2	95.8	0.68	0.77	28.4
2	T1	1419	4.8	0.819	51.7	LOS D	32.3	235.2	0.94	0.86	22.0
Approach		1705	4.8	0.819	49.7	LOS D	32.3	235.2	0.90	0.85	23.0
East: Elizabeth Drive (E)											
4	L2	109	1.0	0.817	73.1	LOS F	23.0	163.3	1.00	0.92	16.1
5	T1	938	2.5	0.817	67.8	LOS E	28.2	201.6	1.00	0.92	20.8
6	R2	146	0.0	0.985	114.7	LOS F	13.8	96.3	1.00	1.14	11.1
Approach		1194	2.0	0.985	74.0	LOS F	28.2	201.6	1.00	0.94	18.7
North: Hume Highway (N)											
7	L2	61	5.2	0.785	20.1	LOS B	30.1	216.0	0.60	0.57	35.9
8	T1	2247	2.9	0.785	14.5	LOS B	30.8	220.9	0.60	0.56	40.3
9	R2	857	2.9	0.818	65.8	LOS E	29.7	212.9	0.98	0.89	21.5
Approach		3165	3.0	0.818	28.5	LOS C	30.8	220.9	0.70	0.65	31.7
West: Elizabeth Drive (W)											
10	L2	307	6.5	0.406	33.0	LOS C	12.4	91.8	0.60	0.75	30.1
11	T1	493	4.7	0.630	60.0	LOS E	15.9	115.6	0.93	0.80	21.3
12	R2	287	2.6	0.985	116.1	LOS F	13.5	96.8	1.00	1.09	14.3
Approach		1087	4.6	0.985	67.2	LOS E	15.9	115.6	0.86	0.86	20.3
All Vehicles		7152	3.5	0.985	47.0	LOS D	32.3	235.2	0.82	0.78	24.4

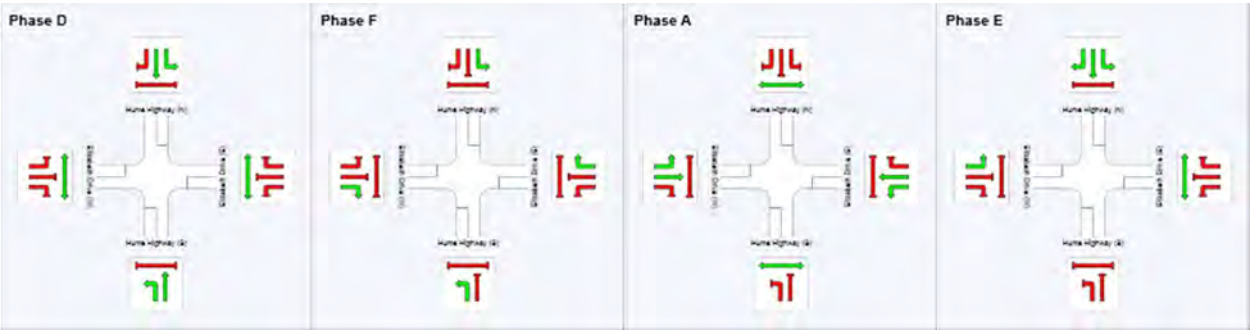
PHASING SUMMARY

Site: I-02 2014 BASE PM

Hume Highway / Elizabeth Drive
2014 BASE PM PEAK 4:30 pm - 5:30 pm
Signals - Fixed Time Cycle Time = 150 seconds (User-Given Phase Times)

Phase Timing Results

Phase	D	F	A	E
Reference Phase	Yes	No	No	No
Phase Change Time (sec)	0	53	71	108
Green Time (sec)	47	12	31	36
Yellow Time (sec)	4	4	4	4
All-Red Time (sec)	2	2	2	2
Phase Time (sec)	53	18	37	42
Phase Split	35 %	12 %	25 %	28 %



I-03 Intersection of the Hume Highway and Memorial Avenue

MOVEMENT SUMMARY

Site: I-03 2014 BASE AM

Hume Highway / Memorial Avenue
2014 BASE AM PEAK 7:45 am - 8:45 am
Signals - Fixed Time Cycle Time = 150 seconds (User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Hume Highway (S)											
1	L2	138	1.5	0.839	40.6	LOS C	42.1	310.4	0.89	0.84	34.3
2	T1	1848	7.2	0.839	32.8	LOS C	42.2	313.8	0.82	0.77	34.1
3	R2	235	0.0	0.998	121.0	LOS F	23.1	161.6	1.00	1.08	15.2
Approach		2221	6.1	0.998	42.6	LOS D	42.2	313.8	0.84	0.81	30.3
East: Memorial Avenue (E)											
4	L2	22	19.0	1.001	123.6	LOS F	13.7	101.8	1.00	1.19	15.2
5	T1	137	5.4	1.001	118.9	LOS F	13.7	101.8	1.00	1.19	14.8
6	R2	107	12.7	1.001	123.6	LOS F	12.4	95.4	1.00	1.19	10.9
Approach		266	9.5	1.001	121.2	LOS F	13.7	101.8	1.00	1.19	13.3
North: Hume Highway (N)											
7	L2	104	6.1	0.088	12.3	LOS A	2.2	16.4	0.35	0.64	39.5
8	T1	1542	11.1	0.646	26.7	LOS B	24.9	191.1	0.67	0.60	37.2
9	R2	87	3.6	0.381	71.5	LOS F	6.0	43.1	0.96	0.78	21.5
Approach		1734	10.4	0.646	28.1	LOS B	24.9	191.1	0.67	0.61	36.0
West: Memorial Avenue (W)											
10	L2	109	2.9	1.004	106.4	LOS F	26.3	187.2	1.00	1.18	16.8
11	T1	393	1.6	1.004	109.2	LOS F	34.4	245.0	1.00	1.21	15.6
12	R2	139	3.0	1.004	120.7	LOS F	34.4	245.0	1.00	1.23	18.9
Approach		641	2.1	1.004	111.2	LOS F	34.4	245.0	1.00	1.21	16.6
All Vehicles		4862	7.3	1.004	50.8	LOS D	42.2	313.8	0.81	0.81	27.1

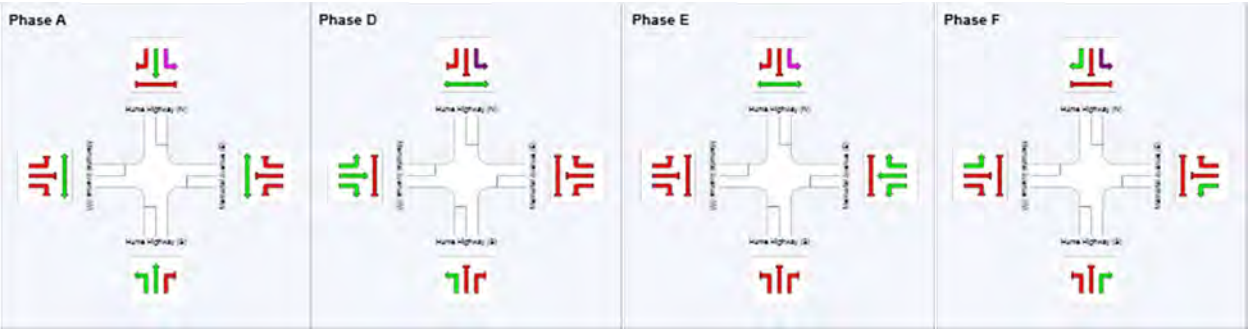
PHASING SUMMARY

Site: I-03 2014 BASE AM

Hume Highway / Memorial Avenue
2014 BASE AM PEAK 7:45 am - 8:45 am
Signals - Fixed Time Cycle Time = 150 seconds (User-Given Phase Times)

Phase Timing Results

Phase	A	D	E	F
Reference Phase	Yes	No	No	No
Phase Change Time (sec)	0	75	108	125
Green Time (sec)	69	27	11	19
Yellow Time (sec)	4	4	4	4
All-Red Time (sec)	2	2	2	2
Phase Time (sec)	75	33	17	25
Phase Split	50 %	22 %	11 %	17 %



MOVEMENT SUMMARY

Site: I-03 2014 BASE PM

Hume Highway / Memorial Avenue
2014 BASE PM PEAK 4:30 pm - 5:30 pm
Signals - Fixed Time Cycle Time = 150 seconds (User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Hume Highway (S)											
1	L2	113	0.9	0.717	40.6	LOS C	29.8	217.3	0.82	0.77	34.3
2	T1	1522	5.7	0.717	32.8	LOS C	30.3	222.2	0.77	0.70	34.1
3	R2	109	0.0	0.737	83.1	LOS F	8.3	58.3	1.00	0.84	19.7
Approach		1744	5.0	0.737	36.4	LOS C	30.3	222.2	0.79	0.72	32.7
East: Memorial Avenue (E)											
4	L2	46	0.0	1.180	258.8	LOS F	36.3	258.4	1.00	1.67	8.4
5	T1	247	2.6	1.180	254.3	LOS F	36.3	258.4	1.00	1.65	8.2
6	R2	180	6.4	1.180	259.2	LOS F	33.4	245.0	1.00	1.58	5.9
Approach		474	3.8	1.180	256.6	LOS F	36.3	258.4	1.00	1.62	7.4
North: Hume Highway (N)											
7	L2	140	3.0	0.082	8.0	LOS A	1.7	12.5	0.23	0.61	43.9
8	T1	2696	3.0	0.830	10.0	LOS A	35.9	257.8	0.50	0.46	48.8
9	R2	197	2.1	0.747	51.6	LOS D	8.8	62.7	1.00	0.88	25.7
Approach		3033	3.0	0.830	12.6	LOS A	35.9	257.8	0.52	0.49	45.9
West: Memorial Avenue (W)											
10	L2	71	1.5	0.770	69.3	LOS E	12.5	88.7	1.00	0.92	22.2
11	T1	179	1.2	0.770	66.7	LOS E	15.7	110.1	1.00	0.91	21.0
12	R2	145	0.0	0.770	74.5	LOS F	15.7	110.1	1.00	0.89	25.0
Approach		395	0.8	0.770	70.1	LOS E	15.7	110.1	1.00	0.90	22.8
All Vehicles		5645	3.5	1.180	44.5	LOS D	36.3	258.4	0.68	0.69	29.0

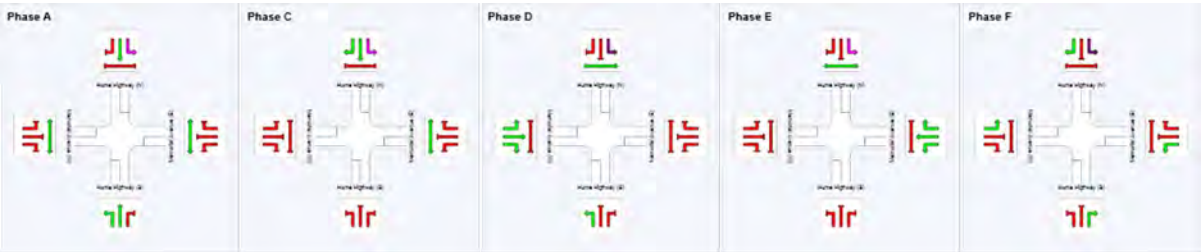
PHASING SUMMARY

Site: I-03 2014 BASE PM

Hume Highway / Memorial Avenue
2014 BASE PM PEAK 4:30 pm - 5:30 pm
Signals - Fixed Time Cycle Time = 150 seconds (User-Given Phase Times)

Phase Timing Results

Phase	A	C	D	E	F
Reference Phase	Yes	No	No	No	No
Phase Change Time (sec)	0	70	82	110	132
Green Time (sec)	64	6	22	16	12
Yellow Time (sec)	4	4	4	4	4
All-Red Time (sec)	2	2	2	2	2
Phase Time (sec)	70	12	28	22	18
Phase Split	47 %	8 %	19 %	15 %	12 %



I-04 Intersection of the Hume Highway and Hoxton Park Drive

MOVEMENT SUMMARY

Site: I-04 2014 BASE AM

Hume Highway / Hoxton Park Road / Macquarie Street
2014 BASE AM PEAK 7:45 am - 8:45 am
Signals - Fixed Time Cycle Time = 150 seconds (User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Hume Highway (S)											
1	L2	76	6.9	0.060	6.8	LOS A	0.3	1.9	0.05	0.56	52.5
2	T1	1917	5.1	0.714	24.9	LOS B	30.9	225.7	0.69	0.63	41.1
3	R2	1046	1.9	0.931	53.9	LOS D	26.6	189.5	1.00	0.98	25.8
Approach		3039	4.1	0.931	34.4	LOS C	30.9	225.7	0.78	0.75	35.3
East: Macquarie Street (E)											
4	L2	286	5.9	0.185	21.6	LOS B	4.4	32.4	0.65	0.72	38.8
5	T1	389	4.6	0.812	74.6	LOS F	14.9	108.1	1.00	0.92	23.5
Approach		676	5.1	0.812	52.1	LOS D	14.9	108.1	0.85	0.84	27.7
North: Hume Highway (N)											
7	L2	177	15.5	0.831	58.9	LOS E	33.7	257.4	0.95	0.99	26.5
8	T1	1326	8.1	0.831	53.1	LOS D	35.8	267.9	0.93	0.89	30.1
9	R2	184	19.4	0.941	100.6	LOS F	16.3	133.1	1.00	1.05	22.2
Approach		1687	10.1	0.941	58.9	LOS E	35.8	267.9	0.94	0.92	28.5
West: Hoxton Park Road (W)											
10	L2	267	16.1	0.463	46.5	LOS D	15.1	120.4	0.83	0.81	32.8
11	T1	997	4.2	0.804	55.8	LOS D	22.6	164.1	0.94	0.87	27.7
12	R2	324	3.2	0.918	88.3	LOS F	14.6	105.2	1.00	0.95	23.0
Approach		1588	6.0	0.918	60.9	LOS E	22.6	164.1	0.93	0.88	27.3
All Vehicles		6991	6.1	0.941	48.1	LOS D	35.8	267.9	0.86	0.83	30.6

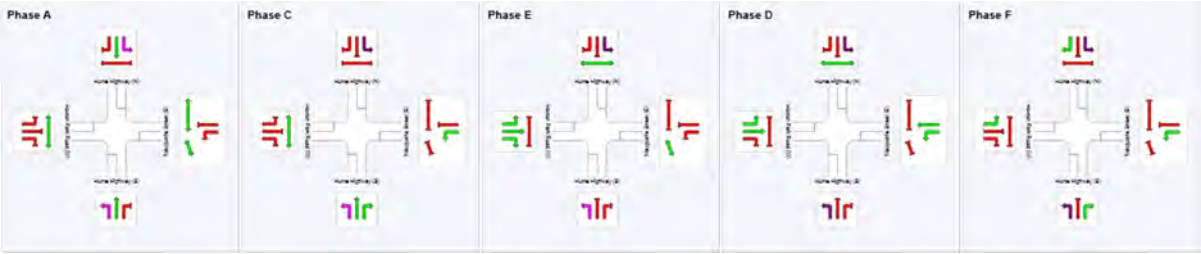
PHASING SUMMARY

Site: I-04 2014 BASE AM

Hume Highway / Hoxton Park Road / Macquarie Street
2014 BASE AM PEAK 7:45 am - 8:45 am
Signals - Fixed Time Cycle Time = 150 seconds (User-Given Phase Times)

Phase Timing Results

Phase	A	C	E	D	F
Reference Phase	Yes	No	No	No	No
Phase Change Time (sec)	0	51	79	101	126
Green Time (sec)	45	22	16	19	18
Yellow Time (sec)	4	4	4	4	4
All-Red Time (sec)	2	2	2	2	2
Phase Time (sec)	51	28	22	25	24
Phase Split	34 %	19 %	15 %	17 %	16 %



MOVEMENT SUMMARY

Site: I-04 2014 BASE PM

Hume Highway / Hoxton Park Road / Macquarie Street
2014 BASE PM PEAK 4:30 pm - 5:30 pm
Signals - Fixed Time Cycle Time = 150 seconds (User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Hume Highway (S)											
1	L2	151	5.6	0.124	8.5	LOS A	1.2	8.6	0.12	0.58	51.1
2	T1	1504	5.2	0.572	22.4	LOS B	21.1	154.0	0.59	0.53	42.4
3	R2	416	1.3	0.921	93.2	LOS F	17.4	123.1	1.00	0.99	18.4
Approach		2071	4.4	0.921	35.6	LOS C	21.1	154.0	0.64	0.62	35.4
East: Macquarie Street (E)											
4	L2	700	1.5	0.906	67.5	LOS E	23.4	166.0	0.82	0.90	22.7
5	T1	612	3.3	0.941	84.6	LOS F	25.6	183.9	1.00	1.05	21.7
Approach		1312	2.3	0.941	75.5	LOS F	25.6	183.9	0.91	0.97	22.2
North: Hume Highway (N)											
7	L2	94	5.6	0.851	18.2	LOS B	39.0	279.8	0.63	0.63	45.4
8	T1	2585	2.6	0.851	12.8	LOS A	41.7	298.3	0.59	0.56	48.4
9	R2	219	6.7	1.158	241.6	LOS F	30.9	228.9	1.00	1.42	11.9
Approach		2898	3.1	1.158	30.2	LOS C	41.7	298.3	0.62	0.63	38.5
West: Hoxton Park Road (W)											
10	L2	226	3.7	0.361	44.5	LOS D	12.2	88.3	0.79	0.79	33.6
11	T1	595	3.9	0.364	45.5	LOS D	11.5	82.9	0.84	0.71	30.8
12	R2	327	1.6	1.036	119.8	LOS F	18.8	133.5	1.00	1.09	18.9
Approach		1148	3.2	1.036	66.5	LOS E	18.8	133.5	0.88	0.83	26.3
All Vehicles		7428	3.3	1.158	45.3	LOS D	41.7	298.3	0.72	0.72	31.8

PHASING SUMMARY

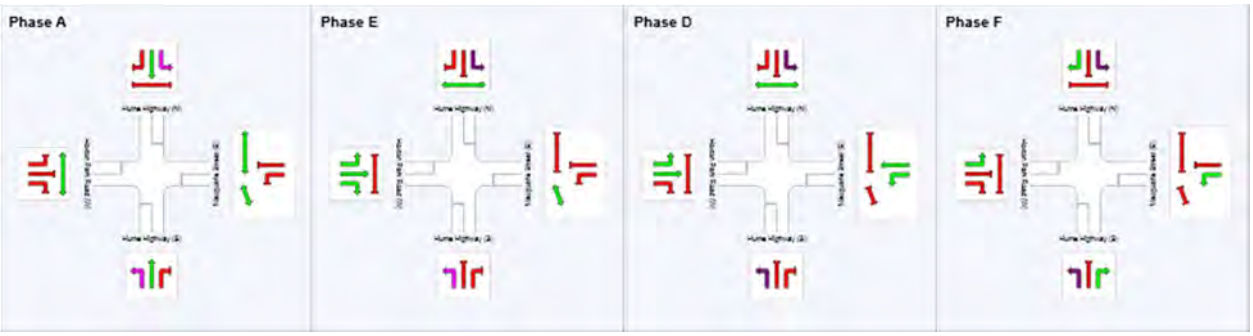
Site: I-04 2014 BASE PM

Hume Highway / Hoxton Park Road / Macquarie Street
2014 BASE PM PEAK 4:30 pm - 5:30 pm
Signals - Fixed Time Cycle Time = 150 seconds (User-Given Phase Times)

Phase times specified by the user
Sequence: TCS 405 PM
Movement Class: All Movement Classes
Input Sequence: A, E, D, F
Output Sequence: A, E, D, F

Phase Timing Results

Phase	A	E	D	F
Reference Phase	Yes	No	No	No
Phase Change Time (sec)	0	79	99	128
Green Time (sec)	73	14	23	16
Yellow Time (sec)	4	4	4	4
All-Red Time (sec)	2	2	2	2
Phase Time (sec)	79	20	29	22
Phase Split	53 %	13 %	19 %	15 %



I-05 Intersection of the Hume Highway and Reilly Street

MOVEMENT SUMMARY

Site: I-05 2014 BASE AM

Hume Highway / Reilly Street
2014 BASE AM PEAK 7:45 am - 8:45 am
Signals - Fixed Time Cycle Time = 150 seconds (User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Hume Hignway (S)											
1	L2	73	2.9	0.821	17.9	LOS B	37.8	272.8	0.59	0.57	43.7
2	T1	2833	3.6	0.821	11.7	LOS A	37.8	272.8	0.57	0.54	46.0
3	R2	13	8.3	0.076	20.1	LOS B	0.4	3.0	0.45	0.66	38.4
Approach		2918	3.6	0.821	11.8	LOS A	37.8	272.8	0.57	0.54	45.8
East: Congressional Drive (E)											
4	L2	42	2.5	0.234	59.6	LOS E	5.1	36.7	0.89	0.73	24.4
5	T1	40	5.3	0.234	55.0	LOS D	5.1	36.7	0.89	0.73	23.9
6	R2	77	4.1	0.348	66.1	LOS E	5.1	37.0	0.93	0.77	18.9
Approach		159	4.0	0.348	61.6	LOS E	5.1	37.0	0.91	0.75	21.7
North: Hume Hignway (N)											
7	L2	28	3.7	0.482	15.4	LOS B	19.9	147.6	0.47	0.45	41.5
8	T1	1647	7.2	0.482	9.5	LOS A	20.0	148.4	0.45	0.42	48.1
9	R2	88	1.2	0.596	32.3	LOS C	4.7	33.4	0.99	0.85	30.7
Approach		1764	6.9	0.596	10.7	LOS A	20.0	148.4	0.48	0.44	46.6
West: Reilly Street (W)											
10	L2	99	4.3	0.231	50.5	LOS D	6.3	45.7	0.82	0.75	24.4
11	T1	12	9.1	0.231	45.9	LOS D	6.3	45.7	0.82	0.75	25.6
12	R2	211	2.0	0.892	85.8	LOS F	17.5	124.3	1.00	1.00	21.0
Approach		321	3.0	0.892	73.5	LOS F	17.5	124.3	0.94	0.91	22.0
All Vehicles		5162	4.7	0.892	16.8	LOS B	37.8	272.8	0.57	0.53	41.4

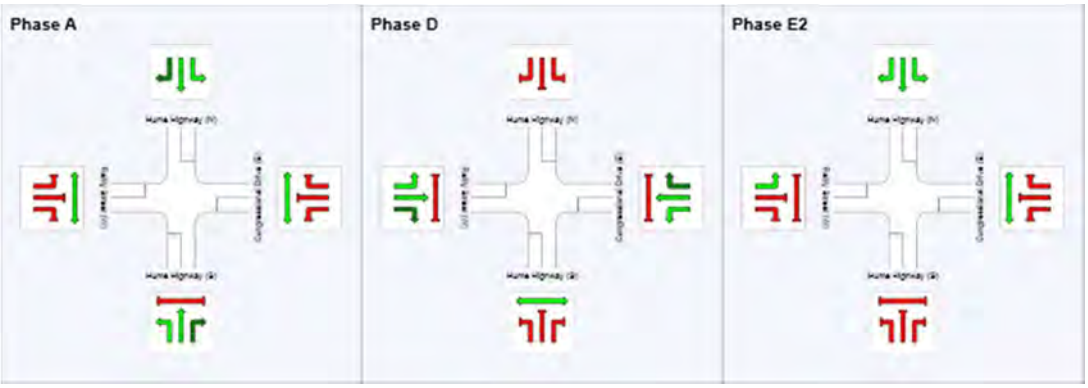
PHASING SUMMARY

Site: I-05 2014 BASE AM

Hume Highway / Reilly Street
2014 BASE AM PEAK 7:45 am - 8:45 am
Signals - Fixed Time Cycle Time = 150 seconds (User-Given Phase Times)

Phase Timing Results

Phase	A	D	E2
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	100	137
Green Time (sec)	94	31	7
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	100	37	13
Phase Split	67 %	25 %	9 %



MOVEMENT SUMMARY

Site: I-05 2014 BASE PM

Hume Highway / Reilly Street
2014 BASE PM PEAK 4:30 pm - 5:30 pm
Signals - Fixed Time Cycle Time = 150 seconds (User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Hume Hignway (S)											
1	L2	219	0.5	0.629	19.3	LOS B	23.7	170.7	0.50	0.55	42.0
2	T1	1955	4.5	0.629	11.3	LOS A	23.7	170.7	0.43	0.42	46.0
3	R2	21	5.0	0.371	28.0	LOS B	1.0	7.1	0.59	0.72	34.4
Approach		2195	4.1	0.629	12.2	LOS A	23.7	170.7	0.44	0.44	45.3
East: Congressional Drive (E)											
4	L2	36	2.9	0.163	59.6	LOS E	3.5	24.8	0.88	0.72	24.3
5	T1	21	0.0	0.163	55.0	LOS D	3.5	24.8	0.88	0.72	23.8
6	R2	44	0.0	0.179	62.1	LOS E	2.8	19.5	0.89	0.74	19.8
Approach		101	1.0	0.179	59.7	LOS E	3.5	24.8	0.88	0.73	22.3
North: Hume Hignway (N)											
7	L2	62	0.0	0.916	13.1	LOS A	39.3	279.9	0.44	0.45	43.7
8	T1	3367	2.3	0.916	8.9	LOS A	39.3	279.9	0.35	0.37	48.6
9	R2	163	1.3	0.784	44.7	LOS D	10.4	73.3	1.00	0.97	26.5
Approach		3593	2.2	0.916	10.6	LOS A	39.3	279.9	0.38	0.39	46.7
West: Reilly Street (W)											
10	L2	56	0.0	0.190	53.9	LOS D	4.8	33.9	0.84	0.72	24.0
11	T1	27	0.0	0.190	49.3	LOS D	4.8	33.9	0.84	0.72	25.0
12	R2	232	1.8	0.932	94.6	LOS F	20.4	145.3	1.00	1.05	19.8
Approach		315	1.3	0.932	83.5	LOS F	20.4	145.3	0.96	0.96	20.7
All Vehicles		6203	2.8	0.932	15.7	LOS B	39.3	279.9	0.44	0.44	42.3

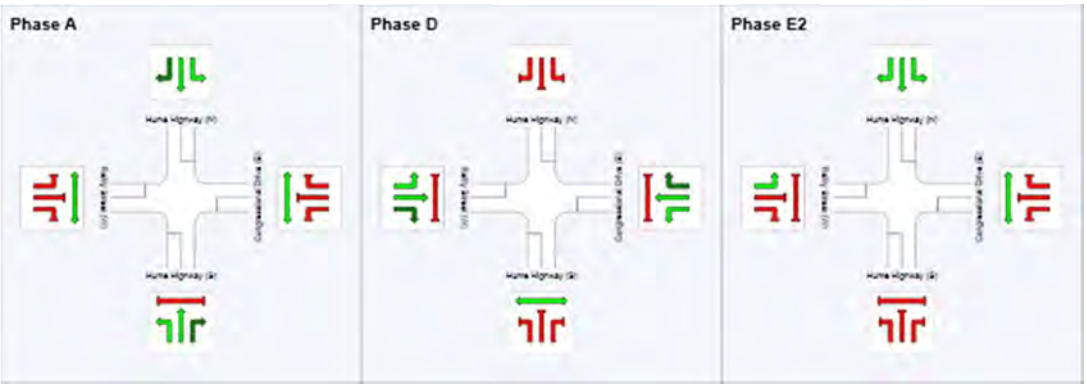
PHASING SUMMARY

Site: I-05 2014 BASE PM

Hume Highway / Reilly Street
2014 BASE PM PEAK 4:30 pm - 5:30 pm
Signals - Fixed Time Cycle Time = 150 seconds (User-Given Phase Times)

Phase Timing Results

Phase	A	D	E2
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	98	135
Green Time (sec)	92	31	9
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	98	37	15
Phase Split	65 %	25 %	10 %



I-06 Intersection of Newbridge Road and Moorebank Avenue

MOVEMENT SUMMARY

Site: I-06 2014 BASE AM

Network: 2014 BASE AM

Newbridge Road / Moorebank Avenue
2014 BASE AM PEAK 7:45 am - 8:45 am
Signals - Fixed Time Cycle Time = 133 seconds (User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total	Demand Flows HV	Arrival Flows Total	Arrival Flows HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	95% Back of Queue Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Moorebank Avenue (S)													
1	L2	1202	3.2	1202	3.2	0.620	18.7	LOS B	12.8	91.9	0.55	0.81	42.5
3	R2	1060	9.0	1060	9.0	0.623	14.8	LOS B	12.1	91.3	0.38	0.67	52.8
Approach		2262	5.9	2262	5.9	0.623	16.9	LOS B	12.8	91.9	0.47	0.75	48.0
East: Newbridge Road (E)													
4	L2	453	19.8	453	19.8	0.376	17.1	LOS B	4.8	39.2	0.63	0.76	52.9
5	T1	691	5.2	691	5.2	0.902	69.9	LOS E	25.4	186.0	1.00	1.03	37.9
Approach		1143	11.0	1143	11.0	0.902	49.0	LOS D	25.4	186.0	0.85	0.92	41.4
West: Newbridge Road (W)													
11	T1	1121	6.4	1121	6.4	0.603	8.8	LOS A	12.4	91.3	0.37	0.33	63.3
12	R2	572	7.4	572	7.4	0.874	49.9	LOS D	14.8	109.8	1.00	0.95	26.8
Approach		1693	6.7	1693	6.7	0.874	22.6	LOS B	14.8	109.8	0.58	0.54	52.0
All Vehicles		5098	7.3	5098	7.3	0.902	26.0	LOS B	25.4	186.0	0.60	0.72	47.3

PHASING SUMMARY

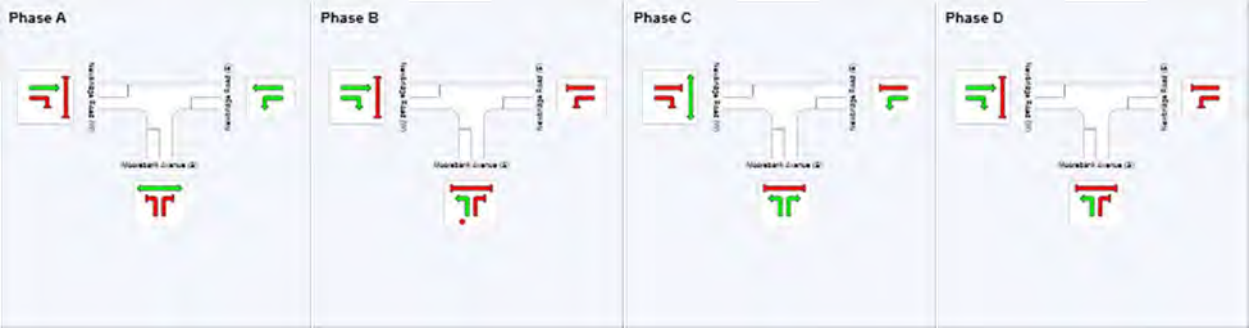
Site: I-06 2014 BASE AM

Network: 2014 BASE AM

Newbridge Road / Moorebank Avenue
2014 BASE AM PEAK 7:45 am - 8:45 am
Signals - Fixed Time Cycle Time = 133 seconds (User-Given Phase Times)

Phase Timing Results

Phase	A	B	C	D
Reference Phase	Yes	No	No	No
Phase Change Time (sec)	0	33	55	116
Green Time (sec)	27	16	55	11
Yellow Time (sec)	4	4	4	4
All-Red Time (sec)	2	2	2	2
Phase Time (sec)	33	22	61	17
Phase Split	25 %	17 %	46 %	13 %



MOVEMENT SUMMARY

Site: I-06 2014 BASE PM

Network: 2014 BASE PM

Newbridge Road / Moorebank Avenue
2014 BASE PM PEAK 4:30 pm - 5:30 pm
Signals - Fixed Time Cycle Time = 116 seconds (User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total	Demand Flows HV	Arrival Flows Total	Arrival Flows HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	95% Back of Queue Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Moorebank Avenue (S)													
1	L2	700	3.3	700	3.3	0.400	21.4	LOS B	9.4	67.6	0.51	0.72	40.6
3	R2	697	10.7	697	10.7	0.901	51.5	LOS D	17.1	130.6	1.00	0.94	35.5
Approach		1397	7.0	1397	7.0	0.901	36.4	LOS C	17.1	130.6	0.76	0.83	37.3
East: Newbridge Road (E)													
4	L2	1048	5.1	1048	5.1	0.682	26.2	LOS B	23.4	171.3	0.73	0.82	46.6
5	T1	1132	4.7	1132	4.7	0.760	36.2	LOS C	26.9	196.1	0.90	0.80	48.7
Approach		2180	4.9	2180	4.9	0.760	31.4	LOS C	26.9	196.1	0.82	0.81	47.9
West: Newbridge Road (W)													
11	T1	918	3.8	918	3.8	0.359	8.6	LOS A	11.0	79.4	0.46	0.41	63.4
12	R2	947	2.7	947	2.7	0.887	43.4	LOS D	26.6	190.3	0.97	0.92	29.1
Approach		1865	3.2	1865	3.2	0.887	26.3	LOS B	26.6	190.3	0.72	0.67	47.7
All Vehicles		5442	4.9	5442	4.9	0.901	30.9	LOS C	26.9	196.1	0.77	0.77	45.3

PHASING SUMMARY

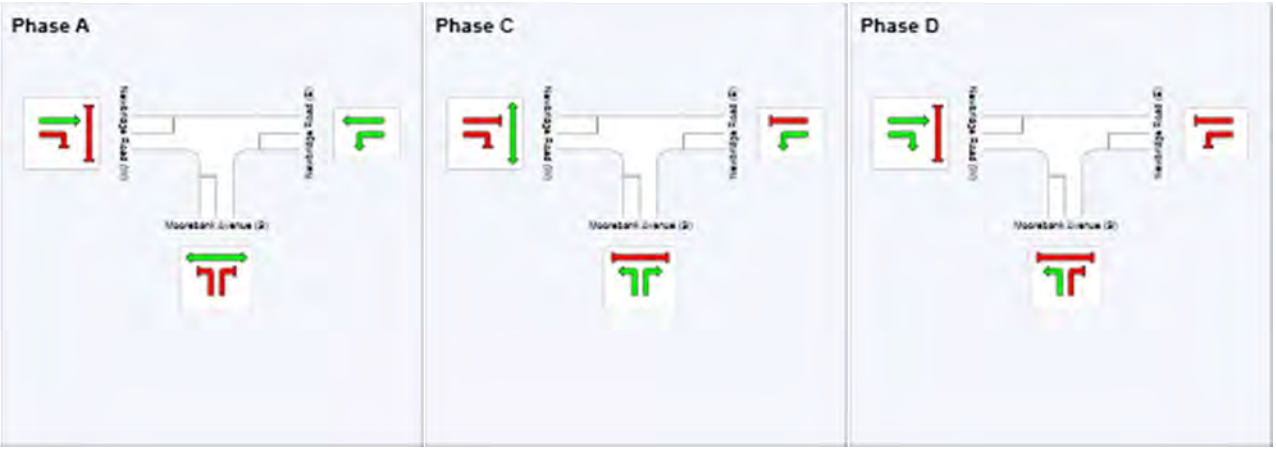
Site: I-06 2014 BASE PM

Network: 2014 BASE PM

Newbridge Road / Moorebank Avenue
2014 BASE PM PEAK 4:30 pm - 5:30 pm
Signals - Fixed Time Cycle Time = 116 seconds (User-Given Phase Times)

Phase Timing Results

Phase	A	C	D
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	44	76
Green Time (sec)	38	26	34
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	44	32	40
Phase Split	38 %	28 %	34 %



I-07 Intersection of Moorebank Avenue and Heathcote Road

MOVEMENT SUMMARY

Site: I-07 2014 BASE AM

Network: 2014 BASE AM

Moorebank Avenue / Heathcote Road
2014 BASE AM PEAK 7:45 am - 8:45 am
Signals - Fixed Time Cycle Time = 133 seconds (User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total	Demand Flows HV	Arrival Flows Total	Arrival Flows HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	95% Back of Queue Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Moorebank Avenue (S)													
2	T1	1524	5.7	1524	5.7	0.838	12.1	LOS A	29.9	219.5	0.58	0.55	35.4
3	R2	20	21.1	20	21.1	0.183	71.8	LOS F	1.3	10.6	0.98	0.71	30.5
Approach		1544	5.9	1544	5.9	0.838	12.9	LOS A	29.9	219.5	0.59	0.55	35.1
East: Heathcote Road (E)													
4	L2	22	57.1	22	57.1	0.934	81.7	LOS F	31.7	239.0	1.00	1.04	27.4
6	R2	735	6.0	735	6.0	0.934	71.3	LOS F	31.7	239.0	1.00	0.99	27.8
Approach		757	7.5	757	7.5	0.934	71.6	LOS F	31.7	239.0	1.00	0.99	27.8
North: Moorebank Avenue (N)													
7	L2	513	7.8	513	7.8	0.300	10.4	LOS A	9.5	71.0	0.52	0.70	51.6
8	T1	540	17.0	540	17.0	0.305	20.5	LOS B	10.1	81.0	0.63	0.54	31.2
Approach		1053	12.5	1053	12.5	0.305	15.6	LOS B	10.1	81.0	0.58	0.62	44.1
All Vehicles		3354	8.3	3354	8.3	0.934	27.0	LOS B	31.7	239.0	0.68	0.67	34.3

PHASING SUMMARY

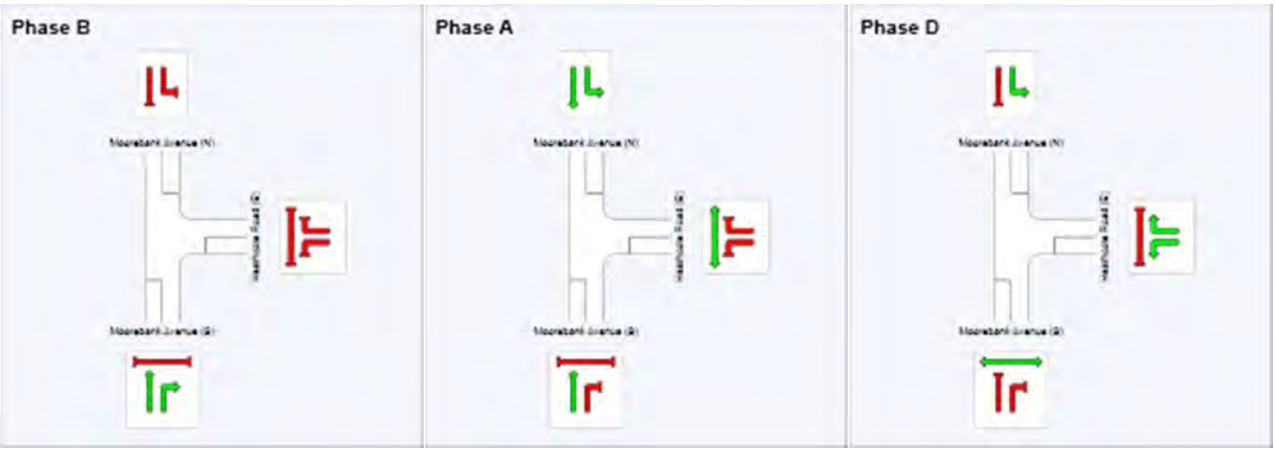
Site: I-07 2014 BASE AM

Network: 2014 BASE AM

Moorebank Avenue / Heathcote Road
2014 BASE AM PEAK 7:45 am - 8:45 am
Signals - Fixed Time Cycle Time = 133 seconds (User-Given Phase Times)

Phase Timing Results

Phase	B	A	D
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	15	88
Green Time (sec)	9	67	39
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	15	73	45
Phase Split	11 %	55 %	34 %



MOVEMENT SUMMARY

Site: I-07 2014 BASE PM

Network: 2014 BASE PM

Moorebank Avenue / Heathcote Road
2014 BASE PM PEAK 4:30 pm - 5:30 pm
Signals - Fixed Time Cycle Time = 116 seconds (User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total	Demand Flows HV	Arrival Flows Total	Arrival Flows HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	95% Back of Queue Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Moorebank Avenue (S)													
2	T1	858	8.3	858	8.3	0.636	13.6	LOS A	17.2	129.0	0.65	0.59	33.7
3	R2	38	8.3	38	8.3	0.313	64.1	LOS E	2.2	16.2	0.99	0.73	32.3
Approach		896	8.3	896	8.3	0.636	15.7	LOS B	17.2	129.0	0.66	0.59	33.4
East: Heathcote Road (E)													
4	L2	64	19.7	64	19.7	0.890	49.7	LOS D	23.7	176.2	0.99	0.94	35.2
6	R2	544	5.0	544	5.0	0.890	45.9	LOS D	23.7	176.2	0.95	0.90	34.3
Approach		608	6.6	608	6.6	0.890	46.3	LOS D	23.7	176.2	0.95	0.90	34.5
North: Moorebank Avenue (N)													
7	L2	760	3.6	760	3.6	0.356	7.5	LOS A	5.0	36.2	0.24	0.61	53.8
8	T1	1235	4.1	1235	4.1	0.628	6.1	LOS A	10.4	75.2	0.32	0.29	47.1
Approach		1995	3.9	1995	3.9	0.628	6.6	LOS A	10.4	75.2	0.29	0.41	51.2
All Vehicles		3499	5.5	3499	5.5	0.890	15.8	LOS B	23.7	176.2	0.50	0.54	42.3

PHASING SUMMARY

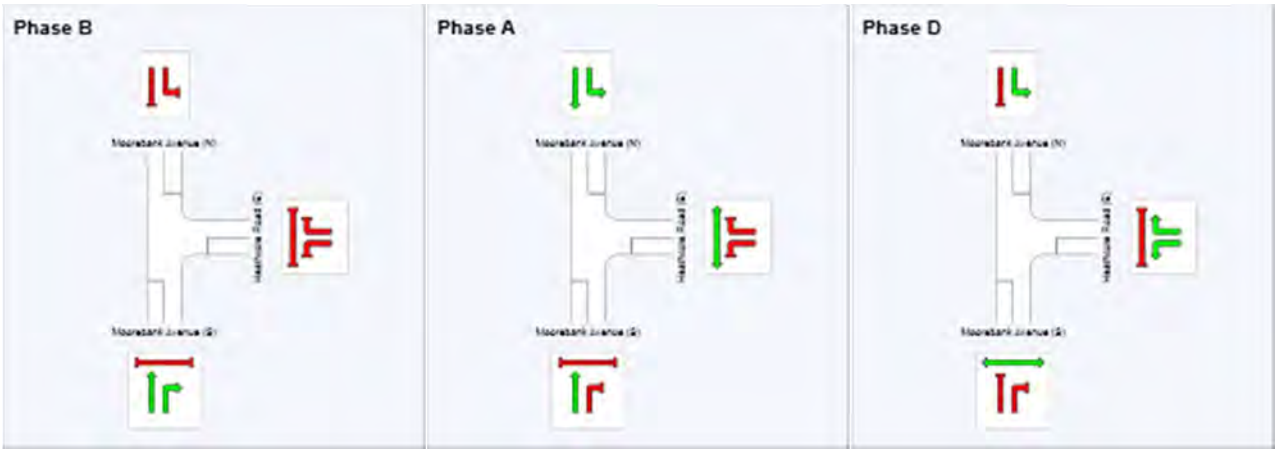
Site: I-07 2014 BASE PM

Network: 2014 BASE PM

Moorebank Avenue / Heathcote Road
2014 BASE PM PEAK 4:30 pm - 5:30 pm
Signals - Fixed Time Cycle Time = 116 seconds (User-Given Phase Times)

Phase Timing Results

Phase	B	A	D
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	14	80
Green Time (sec)	8	60	30
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	14	66	36
Phase Split	12 %	57 %	31 %



I-08 Intersection of Moorebank Avenue and Industry Park Access

MOVEMENT SUMMARY

Site: I-08 2014 BASE AM

Moorebank Avenue / Industry Park Access
2014 BASE AM PEAK 7:45 am - 8:45 am
Signals - Fixed Time Cycle Time = 100 seconds (User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Moorebank Avenue (S)											
1	L2	76	1.4	0.063	8.0	LOS A	0.8	5.4	0.29	0.62	41.7
2	T1	1540	4.9	0.529	4.7	LOS A	14.3	104.5	0.42	0.39	54.4
Approach		1616	4.8	0.529	4.9	LOS A	14.3	104.5	0.41	0.40	53.7
North: Moorebank Avenue (N)											
8	T1	521	16.2	0.192	3.3	LOS A	3.4	26.8	0.29	0.25	56.0
9	R2	52	38.8	0.441	17.9	LOS B	1.5	13.6	0.55	0.72	30.8
Approach		573	18.2	0.441	4.6	LOS A	3.4	26.8	0.31	0.29	53.3
West: Industry Park Access (W)											
10	L2	20	63.2	0.076	4.6	LOS A	0.2	2.7	0.31	0.39	30.3
12	R2	47	71.1	0.250	48.3	LOS D	1.6	18.1	0.94	0.71	23.4
Approach		67	68.7	0.250	35.4	LOS C	1.6	18.1	0.76	0.62	24.7
All Vehicles		2256	10.1	0.529	5.7	LOS A	14.3	104.5	0.40	0.38	52.0

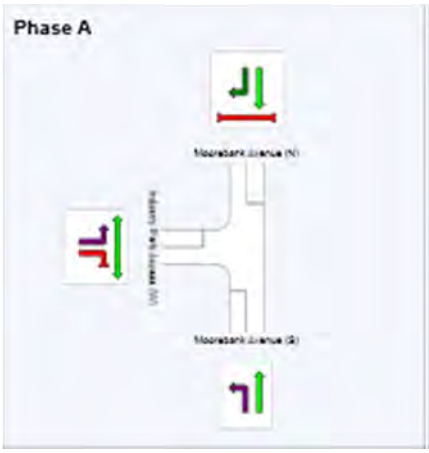
PHASING SUMMARY

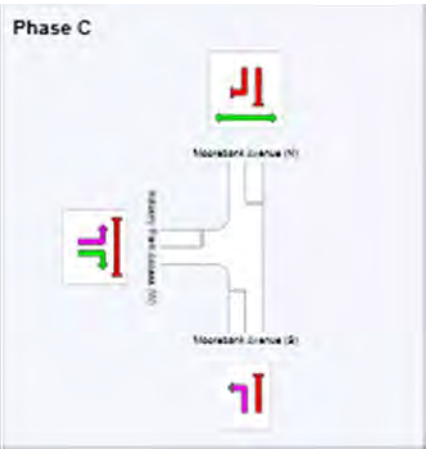
Site: I-08 2014 BASE AM

Moorebank Avenue / Industry Park Access
2014 BASE AM PEAK 7:45 am - 8:45 am
Signals - Fixed Time Cycle Time = 100 seconds (User-Given Phase Times)

Phase Timing Results

Phase	A	C
Reference Phase	Yes	No
Phase Change Time (sec)	0	83
Green Time (sec)	77	11
Yellow Time (sec)	4	4
All-Red Time (sec)	2	2
Phase Time (sec)	83	17
Phase Split	83 %	17 %





MOVEMENT SUMMARY

Site: I-08 2014 BASE PM

Moorebank Avenue / Industry Park Access
2014 BASE PM PEAK 4:30 pm - 5:30 pm
Signals - Fixed Time Cycle Time = 65 seconds (User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Moorebank Avenue (S)											
1	L2	7	14.3	0.006	6.5	LOS A	0.0	0.2	0.21	0.57	42.8
2	T1	883	7.6	0.343	4.3	LOS A	5.6	42.0	0.43	0.38	54.8
Approach		891	7.7	0.343	4.3	LOS A	5.6	42.0	0.43	0.38	54.7
North: Moorebank Avenue (N)											
8	T1	1281	3.9	0.486	5.0	LOS A	9.4	68.0	0.50	0.45	54.1
9	R2	22	61.9	0.089	12.5	LOS A	0.3	3.4	0.44	0.65	34.0
Approach		1303	4.8	0.486	5.1	LOS A	9.4	68.0	0.50	0.45	53.8
West: Industry Park Access (W)											
10	L2	28	14.8	0.045	3.1	LOS A	0.2	1.4	0.30	0.39	35.6
12	R2	160	9.2	0.373	32.0	LOS C	2.5	18.8	0.96	0.75	28.3
Approach		188	10.1	0.373	27.7	LOS B	2.5	18.8	0.86	0.70	28.9
All Vehicles		2382	6.3	0.486	6.6	LOS A	9.4	68.0	0.50	0.45	50.9

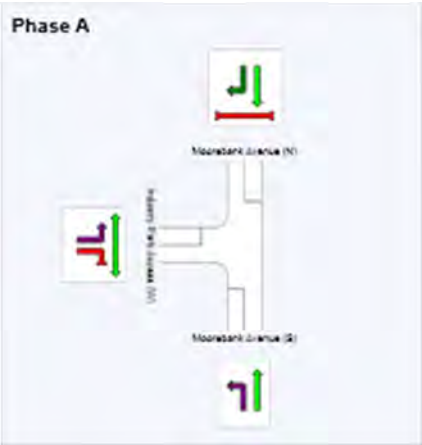
PHASING SUMMARY

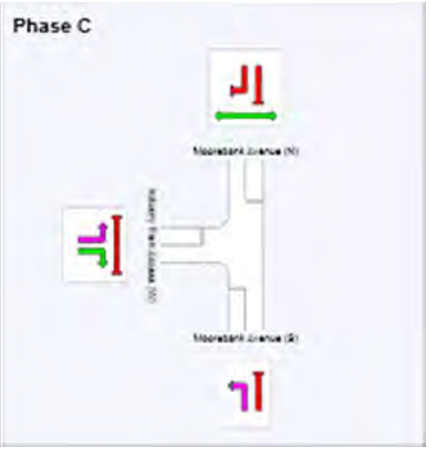
Site: I-08 2014 BASE PM

Moorebank Avenue / Industry Park Access
2014 BASE PM PEAK 4:30 pm - 5:30 pm
Signals - Fixed Time Cycle Time = 65 seconds (User-Given Phase Times)

Phase Timing Results

Phase	A	C
Reference Phase	Yes	No
Phase Change Time (sec)	0	51
Green Time (sec)	45	8
Yellow Time (sec)	4	4
All-Red Time (sec)	2	2
Phase Time (sec)	51	14
Phase Split	78 %	22 %





I-09 Intersection of Moorebank Avenue and Church Road

MOVEMENT SUMMARY

Site: I-09 2014 BASE AM

Moorebank Avenue / Church Road
2014 BASE AM PEAK 7:45 am - 8:45 am
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Moorebank Avenue (S)											
2	T1	1704	6.4	0.552	2.3	LOS A	8.1	59.8	0.24	0.10	57.2
3	R2	228	7.8	0.552	14.7	LOS B	8.1	59.8	1.00	0.42	46.1
Approach		1933	6.6	0.690	3.8	NA	8.1	59.8	0.33	0.14	55.6
East: Church Road (E)											
4	L2	171	14.2	0.184	6.3	LOS A	0.7	5.7	0.40	0.62	48.1
6	R2	6	0.0	0.125	67.4	LOS E	0.3	2.2	0.97	0.99	26.6
Approach		177	13.7	0.184	8.5	LOS A	0.7	5.7	0.42	0.63	46.7
North: Moorebank Avenue (N)											
7	L2	27	0.0	0.164	5.6	LOS A	0.0	0.0	0.00	0.06	57.7
8	T1	538	21.1	0.164	0.0	LOS A	0.0	0.0	0.00	0.03	59.6
Approach		565	20.1	0.164	0.3	NA	0.0	0.0	0.00	0.03	59.5
All Vehicles		2675	9.9	0.690	3.4	NA	8.1	59.8	0.27	0.15	55.7

MOVEMENT SUMMARY

Site: I-09 2014 BASE PM

Moorebank Avenue / Church Road
2014 BASE PM PEAK 4:30 pm - 5:30 pm
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Moorebank Avenue (S)											
2	T1	918	11.9	0.394	4.8	LOS A	5.2	40.4	0.22	0.07	55.2
3	R2	84	11.3	0.394	26.8	LOS B	5.2	40.4	1.00	0.33	40.1
Approach		1002	11.9	0.394	6.6	NA	5.2	40.4	0.29	0.10	53.4
East: Church Road (E)											
4	L2	361	4.4	0.913	84.2	LOS F	25.2	183.1	1.00	2.46	23.7
6	R2	1	0.0	0.027	91.7	LOS F	0.1	0.5	0.97	0.99	22.5
Approach		362	4.4	0.913	84.3	LOS F	25.2	183.1	1.00	2.46	23.7
North: Moorebank Avenue (N)											
7	L2	12	9.1	0.754	6.1	LOS A	0.0	0.0	0.00	0.01	57.0
8	T1	1415	4.5	0.754	0.5	LOS A	0.0	0.0	0.00	0.00	59.0
Approach		1426	4.6	0.754	0.5	NA	0.0	0.0	0.00	0.00	58.9
All Vehicles		2791	7.2	0.913	13.6	NA	25.2	183.1	0.23	0.36	47.7

I-10 Intersection of Heathcote Road and Nuwarra Road

MOVEMENT SUMMARY

Site: I-10 2014 BASE AM

Heathcote Road / Nuwarra Road / Wattle Grove Drive
2014 BASE AM PEAK 7:45 am - 8:45 am
Signals - Fixed Time Cycle Time = 131 seconds (User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	v/c	sec		veh	m		per veh	km/h
SouthEast: Heathcote Road (SE)											
4	L2	189	1.1	0.127	7.5	LOS A	2.0	14.4	0.23	0.61	49.0
5	T1	1419	5.3	0.832	27.2	LOS B	35.5	259.8	0.79	0.73	41.2
6	R2	486	3.2	0.952	62.8	LOS E	13.4	96.4	1.00	1.04	29.6
Approach		2095	4.4	0.952	33.7	LOS C	35.5	259.8	0.79	0.79	37.9
NorthEast: Nuwarra Road (NE)											
7	L2	333	4.7	0.361	16.6	LOS B	9.9	71.9	0.55	0.73	46.6
8	T1	197	8.6	0.317	52.2	LOS D	5.6	42.0	0.92	0.73	26.5
9	R2	384	5.8	1.041	174.0	LOS F	24.6	180.7	1.00	1.32	15.1
Approach		914	6.0	1.041	90.4	LOS F	24.6	180.7	0.82	0.98	22.9
NorthWest: Heathcote Road (NW)											
10	L2	208	12.1	0.275	21.0	LOS B	6.2	48.0	0.67	0.75	42.9
11	T1	841	11.5	0.740	34.1	LOS C	21.5	165.7	0.80	0.70	38.2
12	R2	195	6.5	0.653	72.0	LOS F	6.4	47.2	1.00	0.81	20.5
Approach		1244	10.8	0.740	37.8	LOS C	21.5	165.7	0.81	0.72	35.6
SouthWest: Wattle Grove Drive (SW)											
1	L2	459	2.1	0.560	32.5	LOS C	20.4	145.6	0.84	0.95	31.2
2	T1	458	4.4	0.625	56.0	LOS D	13.7	99.8	0.98	0.82	25.2
3	R2	212	4.0	1.027	125.4	LOS F	19.8	143.1	1.00	1.24	14.6
Approach		1128	3.4	1.027	59.5	LOS E	20.4	145.6	0.93	0.95	23.7
All Vehicles		5381	5.9	1.041	49.7	LOS D	35.5	259.8	0.83	0.84	30.9

PHASING SUMMARY

Site: I-10 2014 BASE AM

Heathcote Road / Nuwarra Road / Wattle Grove Drive
2014 BASE AM PEAK 7:45 am - 8:45 am
Signals - Fixed Time Cycle Time = 131 seconds (User-Given Phase Times)

Phase Timing Results

Phase	A	B	D	E	G
Reference Phase	Yes	No	No	No	No
Phase Change Time (sec)	0	54	67	86	114
Green Time (sec)	48	7	13	22	11
Yellow Time (sec)	4	4	4	4	4
All-Red Time (sec)	2	2	2	2	2
Phase Time (sec)	54	13	19	28	17
Phase Split	41 %	10 %	15 %	21 %	13 %

MOVEMENT SUMMARY

Site: I-10 2014 BASE PM

Heathcote Road / Nuwarra Road / Wattle Grove Drive
2014 BASE PM PEAK 4:30 pm - 5:30 pm
Signals - Fixed Time Cycle Time = 139 seconds (User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
SouthEast: Heathcote Road (SE)											
4	L2	283	2.6	0.232	13.0	LOS A	6.7	48.3	0.41	0.67	44.2
5	T1	1098	5.5	0.754	34.4	LOS C	29.6	216.9	0.83	0.74	38.0
6	R2	395	3.2	0.944	94.6	LOS F	16.3	117.0	1.00	1.05	23.6
Approach		1776	4.5	0.944	44.3	LOS D	29.6	216.9	0.80	0.80	33.6
NorthEast: Nuwarra Road (NE)											
7	L2	513	2.5	0.656	36.4	LOS C	23.1	165.4	0.85	0.97	37.4
8	T1	541	1.2	0.830	64.6	LOS E	19.6	138.7	1.00	0.93	23.3
9	R2	467	6.1	0.936	86.4	LOS F	19.6	144.2	1.00	1.00	24.2
Approach		1521	3.1	0.936	61.8	LOS E	23.1	165.4	0.95	0.97	27.7
NorthWest: Heathcote Road (NW)											
10	L2	209	6.0	0.193	21.9	LOS B	6.9	50.9	0.53	0.72	42.6
11	T1	1317	2.7	0.936	53.1	LOS D	45.6	326.8	0.87	0.93	31.7
12	R2	379	1.9	0.838	76.5	LOS F	14.1	100.0	1.00	0.90	19.7
Approach		1905	2.9	0.936	54.3	LOS D	45.6	326.8	0.86	0.90	30.1
SouthWest: Wattle Grove Drive (SW)											
1	L2	252	1.7	0.291	22.9	LOS B	10.1	72.1	0.66	0.74	35.8
2	T1	278	1.1	0.378	55.7	LOS D	8.4	59.2	0.93	0.76	25.2
3	R2	261	1.2	0.970	99.2	LOS F	22.4	158.5	1.00	1.11	17.3
Approach		791	1.3	0.970	59.6	LOS E	22.4	158.5	0.87	0.87	23.7
All Vehicles		5993	3.2	0.970	54.0	LOS D	45.6	326.8	0.87	0.88	29.6

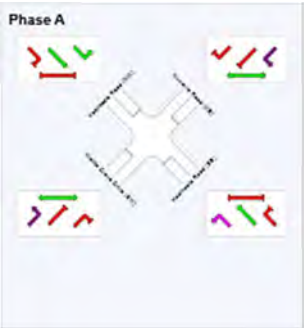
PHASING SUMMARY

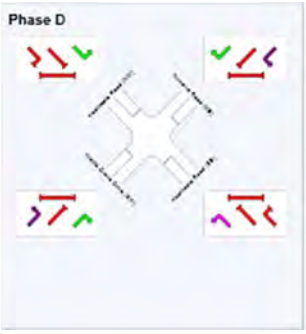
Site: I-10 2014 BASE PM

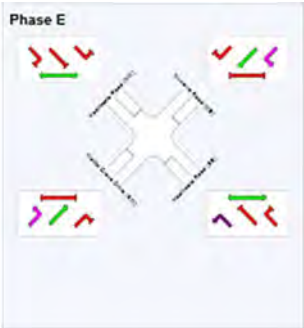
Heathcote Road / Nuwarra Road / Wattle Grove Drive
2014 BASE PM PEAK 4:30 pm - 5:30 pm
Signals - Fixed Time Cycle Time = 139 seconds (User-Given Phase Times)

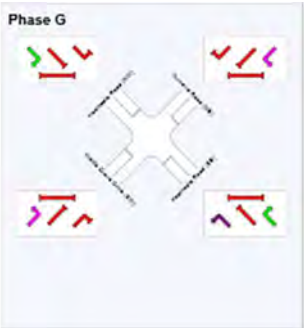
Phase Timing Results

Phase	A	D	E	G
Reference Phase	Yes	No	No	No
Phase Change Time (sec)	0	61	87	117
Green Time (sec)	55	20	24	16
Yellow Time (sec)	4	4	4	4
All-Red Time (sec)	2	2	2	2
Phase Time (sec)	61	26	30	22
Phase Split	44 %	19 %	22 %	16 %









I-11 Intersection of Newbridge Road and Nuwarra Road

MOVEMENT SUMMARY

Site: I-11 2014 BASE AM

Newbridge Road / Nuwarra Road
2014 BASE AM PEAK 7:45 am - 8:45 am
Signals - Fixed Time Cycle Time = 140 seconds (User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Nuwarra Road (S)											
1	L2	27	7.7	0.528	47.1	LOS D	17.8	127.1	0.87	0.80	38.2
2	T1	294	1.8	0.528	44.1	LOS D	17.8	127.1	0.87	0.80	31.7
3	R2	683	6.8	0.991	113.5	LOS F	35.9	265.8	1.00	1.13	22.8
Approach		1004	5.3	0.991	91.4	LOS F	35.9	265.8	0.96	1.02	25.2
East: Newbridge Road (E)											
4	L2	255	17.8	0.438	21.2	LOS B	11.3	90.0	0.62	0.71	48.4
5	T1	871	11.4	0.438	20.2	LOS B	12.9	99.4	0.56	0.51	53.1
Approach		1125	12.8	0.438	20.4	LOS B	12.9	99.4	0.57	0.56	52.0
North: Nuwarra Road (N)											
7	L2	6	0.0	0.761	77.8	LOS F	7.1	50.3	1.00	0.90	26.7
8	T1	122	0.9	0.952	81.6	LOS F	11.4	82.3	1.00	0.96	24.9
9	R2	106	5.0	0.952	96.5	LOS F	11.4	82.3	1.00	1.14	24.6
Approach		235	2.7	0.952	88.2	LOS F	11.4	82.3	1.00	1.04	24.8
West: Newbridge Road (W)											
10	L2	234	2.3	0.836	40.5	LOS C	35.7	263.5	0.88	0.86	36.9
11	T1	1668	9.0	0.890	35.8	LOS C	42.4	319.7	0.89	0.88	45.0
Approach		1902	8.1	0.890	36.4	LOS C	42.4	319.7	0.89	0.87	43.8
All Vehicles		4266	8.4	0.991	48.0	LOS D	42.4	319.7	0.83	0.83	37.7

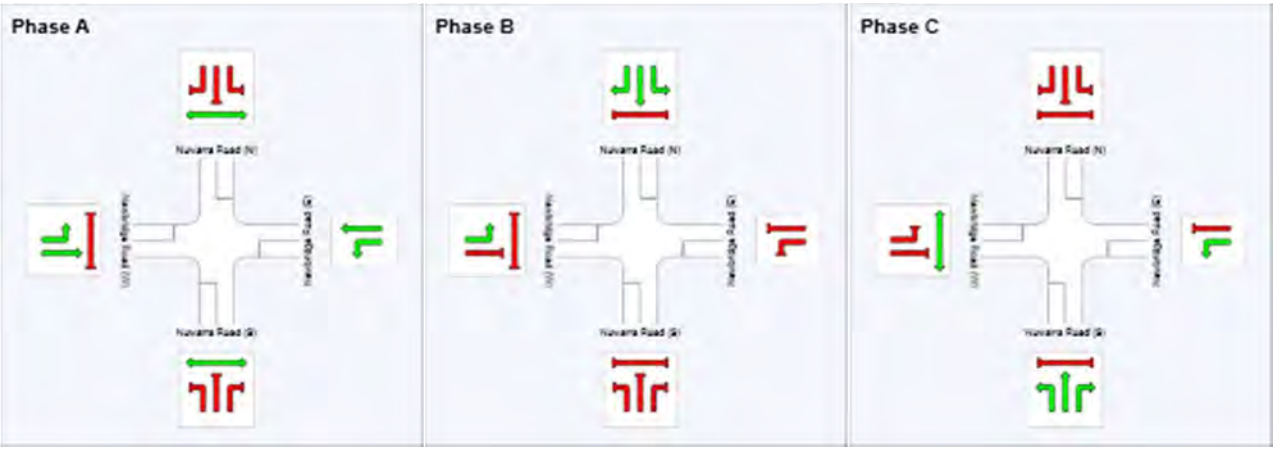
PHASING SUMMARY

Site: I-11 2014 BASE AM

Newbridge Road / Nuwarra Road
2014 BASE AM PEAK 7:45 am - 8:45 am
Signals - Fixed Time Cycle Time = 140 seconds (User-Given Phase Times)

Phase Timing Results

Phase	A	B	C
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	72	89
Green Time (sec)	66	11	45
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	72	17	51
Phase Split	51 %	12 %	36 %



MOVEMENT SUMMARY

Site: I-11 2014 BASE PM

Newbridge Road / Nuwarra Road
2014 BASE PM PEAK 4:30 pm - 5:30 pm
Signals - Fixed Time Cycle Time = 140 seconds (User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Nuwarra Road (S)											
1	L2	48	6.5	0.641	66.9	LOS E	11.9	85.0	0.99	0.82	32.8
2	T1	134	0.8	0.641	62.5	LOS E	11.9	85.0	0.99	0.82	29.8
3	R2	457	6.2	0.856	77.4	LOS F	16.9	124.5	1.00	0.93	28.5
Approach		639	5.1	0.856	73.5	LOS F	16.9	124.5	1.00	0.90	29.1
East: Newbridge Road (E)											
4	L2	655	4.5	0.628	13.6	LOS A	16.0	116.6	0.37	0.68	53.1
5	T1	1838	5.8	0.628	12.2	LOS A	24.2	178.0	0.47	0.47	58.6
Approach		2493	5.4	0.628	12.6	LOS A	24.2	178.0	0.44	0.52	57.2
North: Nuwarra Road (N)											
7	L2	15	0.0	0.766	70.4	LOS E	14.6	102.9	1.00	0.90	30.2
8	T1	258	0.8	0.957	72.8	LOS F	20.3	143.2	1.00	0.95	27.9
9	R2	178	1.2	0.957	96.3	LOS F	20.3	143.2	1.00	1.10	26.2
Approach		451	0.9	0.957	82.0	LOS F	20.3	143.2	1.00	1.01	27.2
West: Newbridge Road (W)											
10	L2	82	0.0	0.395	18.2	LOS B	10.5	77.2	0.40	0.43	50.2
11	T1	1271	7.8	0.449	11.2	LOS A	11.3	84.4	0.38	0.36	59.5
Approach		1353	7.3	0.449	11.6	LOS A	11.3	84.4	0.38	0.36	58.8
All Vehicles		4935	5.5	0.957	26.5	LOS B	24.2	178.0	0.55	0.57	47.3

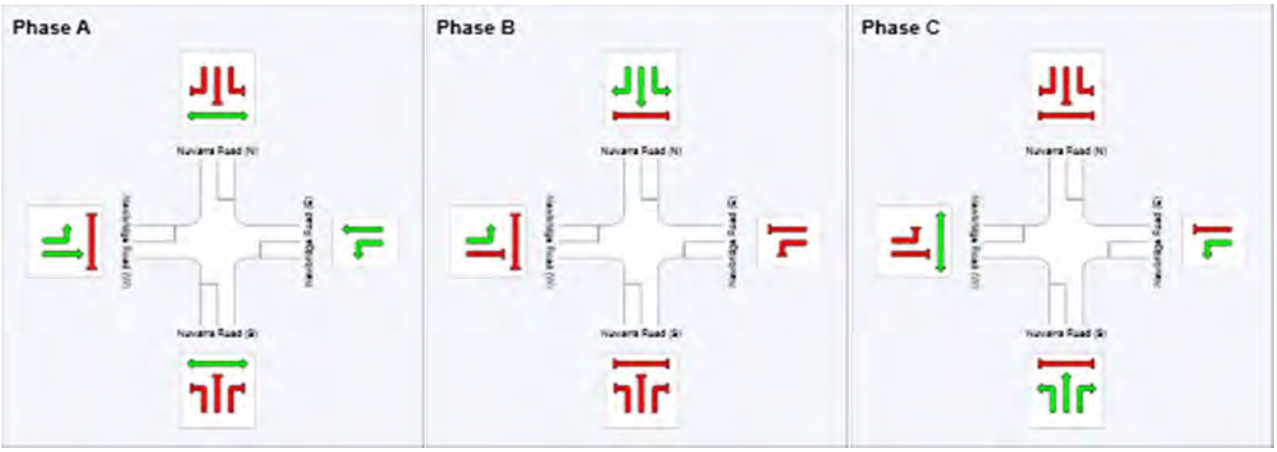
PHASING SUMMARY

Site: I-11 2014 BASE PM

Newbridge Road / Nuwarra Road
2014 BASE PM PEAK 4:30 pm - 5:30 pm
Signals - Fixed Time Cycle Time = 140 seconds (User-Given Phase Times)

Phase Timing Results

Phase	A	B	C
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	87	113
Green Time (sec)	81	20	21
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	87	26	27
Phase Split	62 %	19 %	19 %



I-12 Intersection of Newbridge Road and Governor Macquarie Drive

MOVEMENT SUMMARY

Site: I-12 2014 BASE AM

Newbridge Road / Governor Macquarie Drive
2014 BASE AM PEAK 7:45 am - 8:45 am
Signals - Fixed Time Cycle Time = 140 seconds (User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Brickmakers Drive (S)											
1	L2	9	0.0	0.763	72.0	LOS F	13.0	91.7	1.00	0.89	26.5
2	T1	177	1.2	0.763	67.7	LOS E	13.0	91.7	1.00	0.89	26.2
3	R2	571	1.1	0.982	102.4	LOS F	24.7	174.7	1.00	1.12	26.7
Approach		757	1.1	0.982	93.9	LOS F	24.7	174.7	1.00	1.06	26.6
East: Newbridge Road (E)											
4	L2	183	2.9	0.132	7.5	LOS A	1.4	9.9	0.16	0.63	58.3
5	T1	1001	10.9	0.292	12.4	LOS A	10.1	77.5	0.49	0.43	60.8
6	R2	585	10.3	0.809	72.0	LOS F	20.3	154.6	1.00	0.88	36.0
Approach		1769	9.9	0.809	31.6	LOS C	20.3	154.6	0.62	0.60	49.2
North: Governor Macquarie Drive (N)											
7	L2	614	8.9	0.586	50.4	LOS D	17.8	133.9	0.91	0.83	40.8
8	T1	116	2.7	0.470	63.5	LOS E	7.5	53.6	0.97	0.78	27.1
9	R2	141	35.1	0.831	80.5	LOS F	10.5	95.4	1.00	0.93	28.2
Approach		871	12.3	0.831	57.0	LOS E	17.8	133.9	0.93	0.84	37.0
West: Newbridge Road (W)											
10	L2	115	31.2	0.908	51.2	LOS D	52.4	399.7	0.97	0.96	37.4
11	T1	2239	6.8	0.908	43.5	LOS D	53.7	397.4	0.96	0.95	45.8
12	R2	4	25.0	0.022	32.1	LOS C	0.2	1.4	0.60	0.66	38.2
Approach		2358	8.0	0.908	43.8	LOS D	53.7	399.7	0.96	0.95	45.4
All Vehicles		5755	8.3	0.982	48.6	LOS D	53.7	399.7	0.86	0.84	41.9

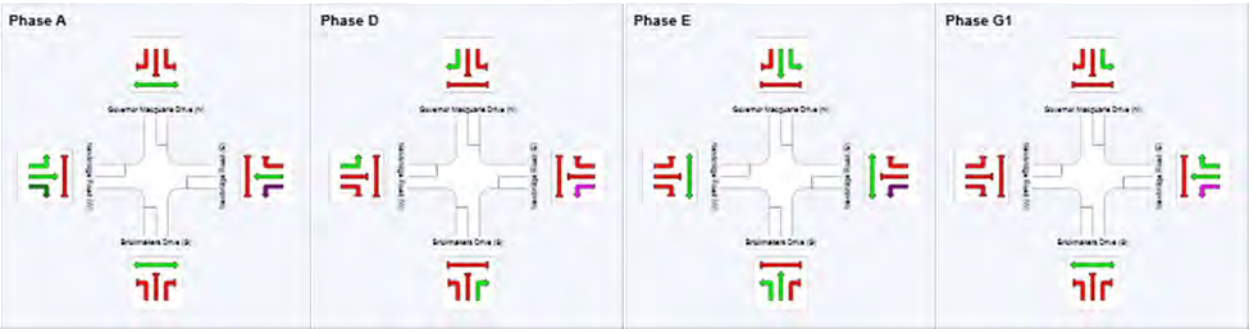
PHASING SUMMARY

Site: I-12 2014 BASE AM

Newbridge Road / Governor Macquarie Drive
2014 BASE AM PEAK 7:45 am - 8:45 am
Signals - Fixed Time Cycle Time = 140 seconds (User-Given Phase Times)

Phase Timing Results

Phase	A	D	E	G1
Reference Phase	Yes	No	No	No
Phase Change Time (sec)	0	66	88	112
Green Time (sec)	60	16	18	22
Yellow Time (sec)	4	4	4	4
All-Red Time (sec)	2	2	2	2
Phase Time (sec)	66	22	24	28
Phase Split	47 %	16 %	17 %	20 %



MOVEMENT SUMMARY

Site: I-12 2014 BASE PM

Newbridge Road / Governor Macquarie Drive
2014 BASE AM PEAK 7:45 am - 8:45 am
Signals - Fixed Time Cycle Time = 140 seconds (User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Brickmakers Drive (S)											
1	L2	8	0.0	0.450	68.6	LOS E	5.9	43.2	0.98	0.77	27.2
2	T1	82	5.1	0.450	64.5	LOS E	5.9	43.2	0.98	0.77	26.9
3	R2	219	1.0	0.519	69.0	LOS E	7.2	51.0	0.99	0.79	32.8
Approach		309	2.0	0.519	67.8	LOS E	7.2	51.0	0.98	0.78	31.3
East: Newbridge Road (E)											
4	L2	578	1.5	0.420	9.2	LOS A	6.7	47.8	0.27	0.68	57.2
5	T1	2273	4.4	0.693	15.2	LOS B	36.4	264.2	0.64	0.59	59.1
6	R2	641	11.2	1.023	133.8	LOS F	32.6	249.9	1.00	1.12	26.0
Approach		3492	5.2	1.023	36.0	LOS C	36.4	264.2	0.65	0.70	47.4
North: Governor Macquarie Drive (N)											
7	L2	473	3.6	0.371	47.4	LOS D	12.7	91.4	0.84	0.80	41.9
8	T1	265	0.8	0.851	73.0	LOS F	19.0	133.8	1.00	0.94	25.2
9	R2	203	19.2	0.963	101.0	LOS F	17.4	141.9	1.00	1.06	25.1
Approach		941	6.2	0.963	66.2	LOS E	19.0	141.9	0.92	0.89	33.2
West: Newbridge Road (W)											
10	L2	151	16.8	0.628	35.6	LOS C	26.2	197.3	0.74	0.71	43.1
11	T1	1579	6.1	0.628	28.0	LOS B	26.2	197.3	0.72	0.65	52.1
12	R2	3	0.0	0.043	39.7	LOS C	0.1	1.0	0.67	0.68	35.1
Approach		1733	7.0	0.628	28.7	LOS C	26.2	197.3	0.72	0.66	51.3
All Vehicles		6475	5.7	1.023	39.9	LOS C	36.4	264.2	0.72	0.72	45.0

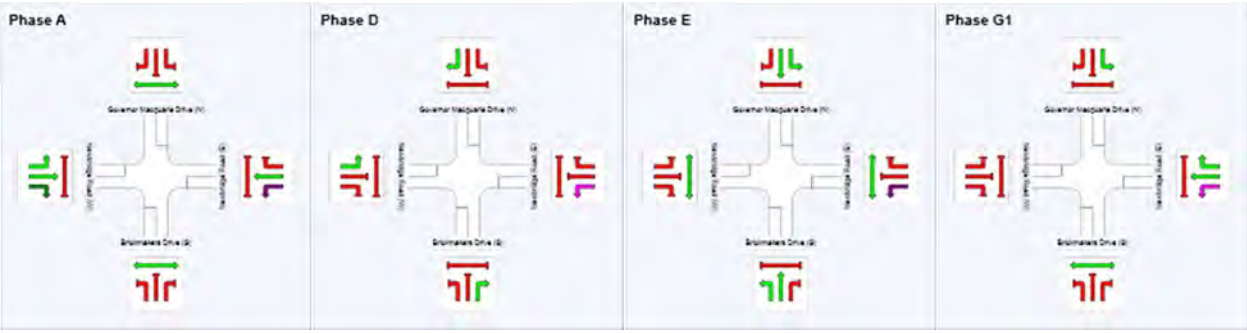
PHASING SUMMARY

Site: I-12 2014 BASE PM

Newbridge Road / Governor Macquarie Drive
2014 BASE AM PEAK 7:45 am - 8:45 am
Signals - Fixed Time Cycle Time = 140 seconds (User-Given Phase Times)

Phase Timing Results

Phase	A	D	E	G1
Reference Phase	Yes	No	No	No
Phase Change Time (sec)	0	67	89	110
Green Time (sec)	61	16	15	24
Yellow Time (sec)	4	4	4	4
All-Red Time (sec)	2	2	2	2
Phase Time (sec)	67	22	21	30
Phase Split	48 %	16 %	15 %	21 %



I-13 Intersection of Moorebank Avenue and M5 Motorway

MOVEMENT SUMMARY

Site: I-13 2014 BASE AM

Moorebank Avenue / the M5 Motorway
2014 BASE AM PEAK 7:45 am - 8:45 am
Signals - Fixed Time Cycle Time = 74 seconds (User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Moorebank Avenue (S)											
1	L2	255	11.2	0.217	8.8	LOS A	2.7	20.7	0.40	0.66	50.6
2	T1	576	4.2	0.660	29.2	LOS C	9.9	71.5	0.96	0.83	39.3
3	R2	257	2.9	0.358	32.7	LOS C	4.4	31.9	0.89	0.77	37.0
Approach		1087	5.5	0.660	25.2	LOS B	9.9	71.5	0.81	0.77	40.8
East: M5 Motorway on&off ramp (E)											
4	L2	219	7.2	0.209	7.6	LOS A	1.5	11.4	0.35	0.65	51.8
6	R2	224	6.1	0.233	28.7	LOS C	3.2	23.7	0.82	0.75	40.5
Approach		443	6.7	0.233	18.3	LOS B	3.2	23.7	0.59	0.70	45.1
North: Moorebank Avenue (N)											
7	L2	43	48.8	0.042	7.5	LOS A	0.3	2.5	0.26	0.59	51.4
8	T1	143	12.5	0.173	25.1	LOS B	2.1	16.4	0.84	0.65	41.2
9	R2	409	26.2	0.699	36.2	LOS C	8.5	73.1	0.96	0.84	36.9
Approach		596	24.6	0.699	31.5	LOS C	8.5	73.1	0.88	0.78	38.6
West: M5 Motorway on&off ramp (W)											
10	L2	1462	8.2	0.833	6.1	LOS A	0.0	0.0	0.00	0.52	54.1
12	R2	324	4.2	0.333	29.5	LOS C	4.8	34.8	0.85	0.77	38.8
Approach		1786	7.5	0.833	10.3	LOS A	4.8	34.8	0.15	0.57	50.8
All Vehicles		3913	9.4	0.833	18.6	LOS B	9.9	73.1	0.50	0.67	45.1

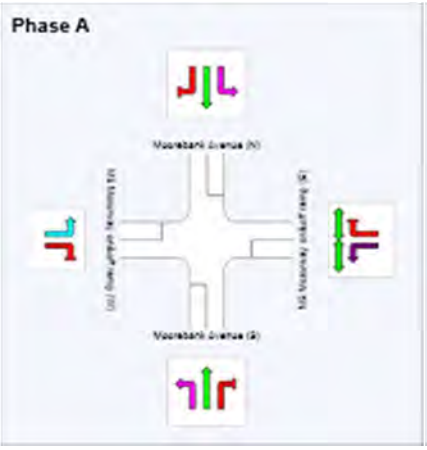
PHASING SUMMARY

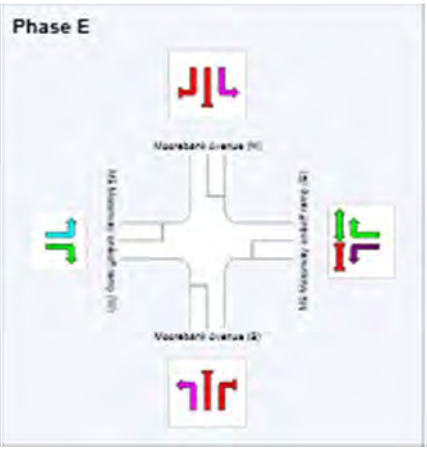
Site: I-13 2014 BASE AM

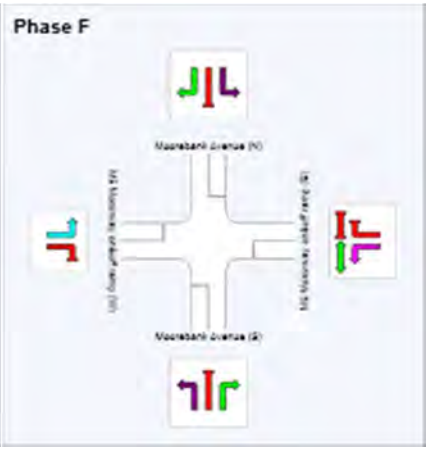
Moorebank Avenue / the M5 Motorway
2014 BASE AM PEAK 7:45 am - 8:45 am
Signals - Fixed Time Cycle Time = 74 seconds (User-Given Phase Times)

Phase Timing Results

Phase	A	E	F
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	24	51
Green Time (sec)	17	20	16
Yellow Time (sec)	4	4	4
All-Red Time (sec)	3	3	3
Phase Time (sec)	24	27	23
Phase Split	32 %	36 %	31 %







MOVEMENT SUMMARY

Site: I-13 2014 BASE PM

Moorebank Avenue / the M5 Motorway
2014 BASE PM PEAK 4:30 pm - 5:30 pm
Signals - Fixed Time Cycle Time = 94 seconds (User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Moorebank Avenue (S)											
1	L2	271	3.1	0.320	16.5	LOS B	6.2	44.6	0.62	0.74	45.6
2	T1	151	7.7	0.381	44.1	LOS D	3.4	25.1	0.97	0.75	33.3
3	R2	234	2.3	0.194	27.6	LOS B	4.0	28.7	0.72	0.74	39.3
Approach		655	3.9	0.381	26.8	LOS B	6.2	44.6	0.74	0.74	39.9
East: M5 Motorway on&off ramp (E)											
4	L2	332	2.9	0.335	9.9	LOS A	4.6	32.9	0.47	0.69	50.1
6	R2	73	21.7	0.133	42.3	LOS C	1.4	12.0	0.88	0.72	35.0
Approach		404	6.3	0.335	15.8	LOS B	4.6	32.9	0.54	0.70	46.2
North: Moorebank Avenue (N)											
7	L2	109	6.7	0.084	6.7	LOS A	0.6	4.8	0.22	0.60	53.1
8	T1	609	3.6	0.654	35.0	LOS C	12.8	92.3	0.96	0.81	36.7
9	R2	1321	7.4	0.880	38.4	LOS C	28.4	211.5	0.99	1.03	36.3
Approach		2040	6.2	0.880	35.7	LOS C	28.4	211.5	0.94	0.94	37.1
West: M5 Motorway on&off ramp (W)											
10	L2	546	15.2	0.326	5.8	LOS A	0.0	0.0	0.00	0.52	54.3
12	R2	221	3.8	0.359	43.8	LOS D	4.6	33.3	0.93	0.78	33.2
Approach		767	11.9	0.359	16.7	LOS B	4.6	33.3	0.27	0.59	46.5
All Vehicles		3866	7.0	0.880	28.3	LOS B	28.4	211.5	0.73	0.81	40.0

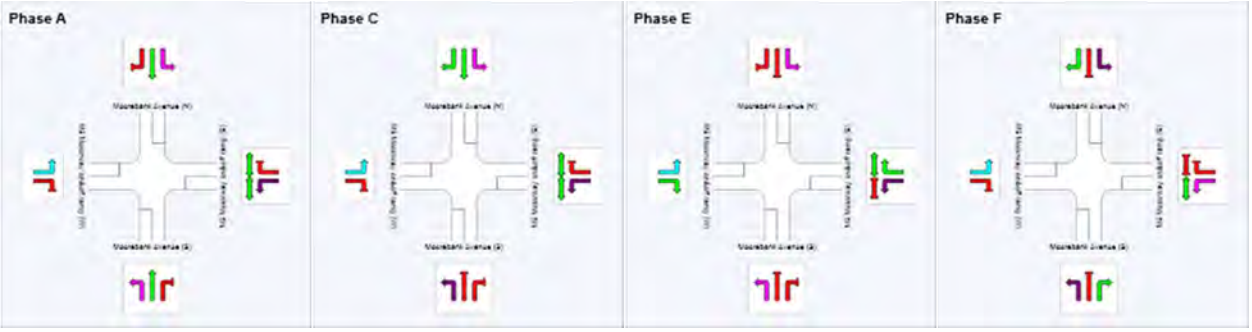
PHASING SUMMARY

Site: I-13 2014 BASE PM

Moorebank Avenue / the M5 Motorway
2014 BASE PM PEAK 4:30 pm - 5:30 pm
Signals - Fixed Time Cycle Time = 94 seconds (User-Given Phase Times)

Phase Timing Results

Phase	A	C	E	F
Reference Phase	Yes	No	No	No
Phase Change Time (sec)	0	17	30	53
Green Time (sec)	10	6	16	34
Yellow Time (sec)	4	4	4	4
All-Red Time (sec)	3	3	3	3
Phase Time (sec)	17	13	23	41
Phase Split	18 %	14 %	24 %	44 %



I-14 Intersection of M5 Motorway and Hume Highway

MOVEMENT SUMMARY

Site: I-14 2014 BASE AM

M5 Motorway / Hume Highway
2014 BASE AM PEAK 7:45 am - 8:45 am
Signals - Fixed Time Cycle Time = 159 seconds (User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Hume Highway (S)											
2	T1	3674	4.5	0.886	2.0	LOS A	18.4	133.7	0.22	0.21	58.4
3	R2	553	4.2	0.761	37.2	LOS C	13.2	96.0	0.95	0.83	39.8
Approach		4226	4.5	0.886	6.6	LOS A	18.4	133.7	0.31	0.29	55.0
East: M5 Motorway on&off-ramp (E)											
4	L2	288	6.6	0.115	30.3	LOS C	4.1	30.0	0.59	0.70	42.0
6	R2	1001	3.9	1.030	144.1	LOS F	38.2	276.2	1.00	1.13	15.2
Approach		1289	4.5	1.030	118.7	LOS F	38.2	276.2	0.91	1.04	18.8
North: Hume Highway (N)											
7	L2	604	5.9	0.447	10.1	LOS A	12.9	94.9	0.37	0.68	48.9
8	T1	1140	7.0	0.463	28.1	LOS B	16.4	121.8	0.61	0.53	43.5
Approach		1744	6.6	0.463	21.8	LOS B	16.4	121.8	0.53	0.58	44.8
All Vehicles		7260	5.0	1.030	30.2	LOS C	38.2	276.2	0.47	0.49	41.5

PHASING SUMMARY

Site: I-14 2014 BASE AM

M5 Motorway / Hume Highway
2014 BASE AM PEAK 7:45 am - 8:45 am
Signals - Fixed Time Cycle Time = 159 seconds (User-Given Phase Times)

Phase Timing Results

Phase	A	B	C	D
Reference Phase	No	No	No	Yes
Phase Change Time (sec)	20	97	123	0
Green Time (sec)	70	19	29	13
Yellow Time (sec)	4	4	4	4
All-Red Time (sec)	3	3	3	3
Phase Time (sec)	77	26	36	20
Phase Split	48 %	16 %	23 %	13 %

MOVEMENT SUMMARY

Site: I-14 2014 BASE PM

M5 Motorway / Hume Highway
2014 BASE PM PEAK 4:30 pm - 5:30 pm
Signals - Fixed Time Cycle Time = 159 seconds (User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Hume Highway (S)											
2	T1	2325	3.8	0.568	2.0	LOS A	5.7	40.9	0.11	0.10	58.4
3	R2	349	1.8	0.891	82.9	LOS F	14.3	101.8	1.00	0.91	28.2
Approach		2675	3.5	0.891	12.6	LOS A	14.3	101.8	0.22	0.20	51.2
East: M5 Motorway on&off-ramp (E)											
4	L2	1167	3.6	0.836	59.7	LOS E	38.9	280.4	0.91	0.89	32.8
6	R2	936	3.6	0.884	84.4	LOS F	26.3	189.9	1.00	0.95	21.9
Approach		2103	3.6	0.884	70.7	LOS F	38.9	280.4	0.95	0.92	28.0
North: Hume Highway (N)											
7	L2	743	2.1	0.518	8.8	LOS A	14.8	105.7	0.36	0.68	50.0
8	T1	2613	2.7	0.803	18.8	LOS B	41.2	294.9	0.68	0.63	47.8
Approach		3356	2.6	0.803	16.6	LOS B	41.2	294.9	0.61	0.64	48.2
All Vehicles		8134	3.1	0.891	29.3	LOS C	41.2	294.9	0.57	0.57	41.9

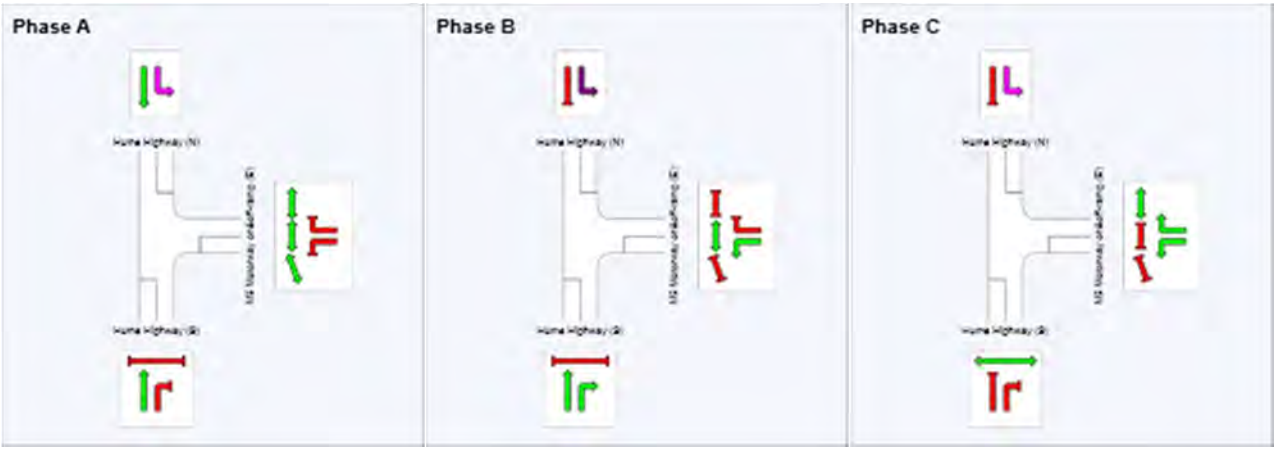
PHASING SUMMARY

Site: I-14 2014 BASE PM

M5 Motorway / Hume Highway
2014 BASE PM PEAK 4:30 pm - 5:30 pm
Signals - Fixed Time Cycle Time = 159 seconds (User-Given Phase Times)

Phase Timing Results

Phase	A	B	C
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	97	121
Green Time (sec)	90	17	31
Yellow Time (sec)	4	4	4
All-Red Time (sec)	3	3	3
Phase Time (sec)	97	24	38
Phase Split	61 %	15 %	24 %



I-15 Intersection of Cambridge Avenue and Canterbury Road

MOVEMENT SUMMARY

Site: I-15 2014 BASE AM

Canterbury Road / Cambridge Avenue / Glenfield Road
2014 BASE AM PEAK 7:45 am - 8:45 am
Roundabout

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Canterbury Road (S)											
1	L2	357	3.5	0.369	5.3	LOS A	2.0	14.4	0.48	0.60	53.4
2	T1	6	0.0	0.617	5.1	LOS A	4.8	34.0	0.58	0.70	51.8
3	R2	788	2.1	0.617	10.5	LOS A	4.8	34.0	0.58	0.70	51.9
Approach		1152	2.6	0.617	8.8	LOS A	4.8	34.0	0.55	0.67	52.3
East: Cambridge Avenue (E)											
4	L2	235	3.1	0.125	3.5	LOS A	0.0	0.0	0.00	0.43	56.5
5	T1	63	8.3	0.063	5.0	LOS A	0.3	2.5	0.47	0.55	53.6
6	R2	42	10.0	0.063	10.3	LOS A	0.3	2.5	0.47	0.58	53.8
Approach		340	5.0	0.125	4.6	LOS A	0.3	2.5	0.15	0.47	55.6
North: Railway Parade (N)											
7	L2	239	3.1	0.364	10.2	LOS A	2.4	16.9	0.86	0.93	51.0
8	T1	3	33.3	0.290	11.5	LOS A	1.6	11.8	0.82	0.93	48.2
9	R2	136	8.5	0.290	16.8	LOS B	1.6	11.8	0.82	0.93	47.2
Approach		378	5.3	0.364	12.6	LOS A	2.4	16.9	0.84	0.93	49.6
West: Glenfield Road (W)											
10	L2	281	5.2	0.510	10.9	LOS A	4.3	31.8	0.90	0.98	49.3
11	T1	141	6.7	0.510	11.2	LOS A	4.3	31.8	0.90	1.00	49.4
12	R2	254	5.8	0.510	17.4	LOS B	4.0	29.7	0.89	1.03	47.4
Approach		676	5.8	0.510	13.4	LOS A	4.3	31.8	0.89	1.00	48.6
All Vehicles		2545	4.1	0.617	10.0	LOS A	4.8	34.0	0.63	0.77	51.4

MOVEMENT SUMMARY

Site: I-15 2014 BASE PM

Canterbury Road / Cambridge Avenue / Glenfield Road
2014 BASE PM PEAK 4:30 pm - 5:30 pm
Roundabout

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Canterbury Road (S)											
1	L2	237	2.2	0.264	6.2	LOS A	1.3	9.2	0.59	0.72	53.0
2	T1	5	0.0	0.240	5.7	LOS A	1.2	8.5	0.57	0.77	51.9
3	R2	240	1.3	0.240	11.1	LOS A	1.2	8.5	0.57	0.77	52.0
Approach		482	1.7	0.264	8.6	LOS A	1.3	9.2	0.58	0.75	52.4
East: Cambridge Avenue (E)											
4	L2	908	2.3	0.480	3.5	LOS A	0.0	0.0	0.00	0.43	56.4
5	T1	201	7.9	0.280	5.8	LOS A	1.8	12.7	0.58	0.64	52.8
6	R2	252	0.8	0.280	10.9	LOS A	1.8	12.7	0.60	0.68	53.0
Approach		1361	2.9	0.480	5.2	LOS A	1.8	12.7	0.20	0.51	55.2
North: Railway Parade (N)											
7	L2	81	1.3	0.103	6.5	LOS A	0.5	3.3	0.57	0.68	53.8
8	T1	1	0.0	0.161	6.0	LOS A	0.8	6.0	0.58	0.76	51.8
9	R2	153	8.3	0.161	11.4	LOS A	0.8	6.0	0.58	0.76	50.7
Approach		235	5.8	0.161	9.7	LOS A	0.8	6.0	0.57	0.73	51.8
West: Glenfield Road (W)											
10	L2	205	4.6	0.274	6.4	LOS A	1.4	10.5	0.58	0.68	52.8
11	T1	37	0.0	0.274	6.3	LOS A	1.4	10.5	0.58	0.68	54.9
12	R2	359	3.8	0.342	11.4	LOS A	2.0	14.5	0.60	0.76	50.7
Approach		601	3.9	0.342	9.4	LOS A	2.0	14.5	0.59	0.73	51.6
Vehicles		2679	3.1	0.480	7.2	LOS A	2.0	14.5	0.39	0.62	53.6

Appendix D

2015 SIDRA results with and without Moorebank IMT

1. 2015 Future traffic with Moorebank IMT development (Early Works)

I-01 Intersection of Moorebank Avenue and Bapaume Road

MOVEMENT SUMMARY

Site: I-01 2015 FU MINT AM

Intersection of Moorebank Avenue and Bapaume Road
2015 Future with MINT AM PEAK
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Moorebank Avenue (S)											
1	L2	23	0.0	0.012	8.2	LOS A	0.0	0.0	0.00	0.67	36.0
2	T1	1086	5.6	0.577	0.0	LOS A	0.0	0.0	0.00	0.00	59.8
Approach		1109	5.5	0.577	0.2	NA	0.0	0.0	0.00	0.01	59.0
North: Moorebank Avenue (S)											
8	T1	775	6.3	0.344	2.9	LOS A	3.2	23.1	0.17	0.08	52.7
9	R2	88	2.4	0.344	25.2	LOS B	3.2	23.1	1.00	0.45	32.9
Approach		863	5.9	0.344	5.2	NA	3.2	23.1	0.25	0.11	49.6
West: Bapaume Road (W)											
10	L2	4	50.0	0.033	35.0	LOS C	0.1	1.0	0.87	0.93	22.7
12	R2	1	0.0	0.060	193.8	LOS F	0.2	1.1	0.98	0.99	5.9
Approach		5	40.0	0.060	66.8	LOS E	0.2	1.1	0.89	0.95	14.5
All Vehicles		1978	5.7	0.577	2.6	NA	3.2	23.1	0.11	0.06	52.3

MOVEMENT SUMMARY

Site: I-01 2015 FU MINT PM

Intersection of Moorebank Avenue and Bapaume Road
2015 Future with MINT PM PEAK
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Moorebank Avenue (S)											
1	L2	1	0.0	0.001	8.2	LOS A	0.0	0.0	0.00	0.67	36.0
2	T1	572	5.0	0.303	0.0	LOS A	0.0	0.0	0.00	0.00	59.9
Approach		573	5.0	0.303	0.0	NA	0.0	0.0	0.00	0.00	59.9
North: Moorebank Avenue (S)											
8	T1	1383	3.1	0.377	3.2	LOS A	6.1	44.3	0.37	0.01	51.4
9	R2	20	15.8	0.377	14.7	LOS B	6.1	44.3	0.77	0.03	44.6
Approach		1403	3.3	0.377	3.3	NA	6.1	44.3	0.37	0.01	51.3
West: Bapaume Road (W)											
10	L2	97	4.3	0.160	12.5	LOS A	0.6	4.5	0.56	0.82	37.8
12	R2	17	0.0	0.616	220.7	LOS F	1.9	13.0	0.99	1.05	5.2
Approach		114	3.7	0.616	43.4	LOS D	1.9	13.0	0.63	0.86	19.7
All Vehicles		2089	3.8	0.616	4.6	NA	6.1	44.3	0.29	0.06	48.4

I-02 Intersection of Moorebank Avenue and Anzac Road

MOVEMENT SUMMARY

Site: I-02 2015 FU MINT AM

Intersection of Moorebank Avenue and Anzac Road
2015 Future with MINT AM PEAK
Signals - Fixed Time Cycle Time = 103 seconds (User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Moorebank Avenue (S)											
2	T1	919	3.9	0.711	10.9	LOS A	28.2	204.2	0.67	0.62	44.0
3	R2	346	3.3	0.620	22.4	LOS B	11.2	80.6	0.68	0.82	37.1
Approach		1265	3.7	0.711	14.0	LOS A	28.2	204.2	0.68	0.68	41.9
East: Anzac Road (E)											
4	L2	187	3.9	0.594	51.5	LOS D	8.9	64.5	0.97	0.82	24.8
6	R2	194	13.6	0.655	52.5	LOS D	9.4	73.8	0.98	0.83	24.6
Approach		381	8.8	0.655	52.0	LOS D	9.4	73.8	0.98	0.83	24.7
North: Moorebank Avenue (N)											
7	L2	274	10.0	0.179	8.3	LOS A	1.0	7.4	0.15	0.63	35.7
8	T1	505	4.4	0.296	6.7	LOS A	7.5	54.7	0.41	0.36	36.1
Approach		779	6.4	0.296	7.3	LOS A	7.5	54.7	0.32	0.45	36.0
All Vehicles		2425	5.4	0.711	17.8	LOS B	28.2	204.2	0.61	0.63	36.0

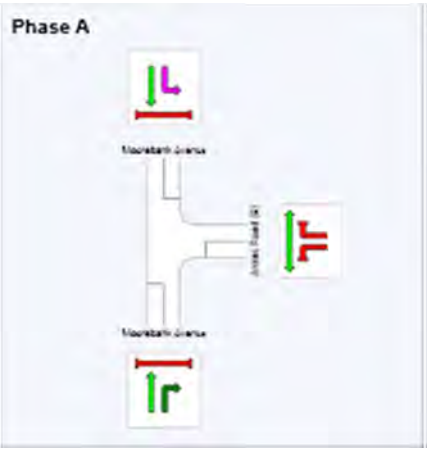
PHASING SUMMARY

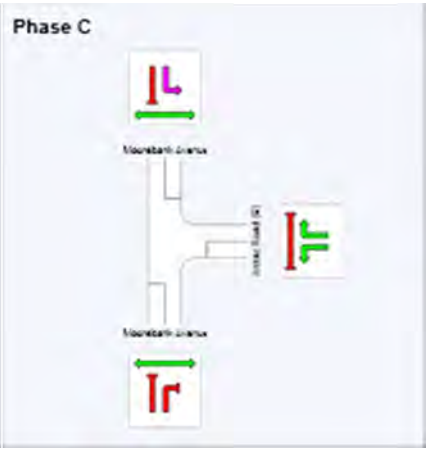
Site: I-02 2015 FU MINT AM

Intersection of Moorebank Avenue and Anzac Road
2015 Future with MINT AM PEAK
Signals - Fixed Time Cycle Time = 103 seconds (User-Given Phase Times)

Phase Timing Results

Phase	A	C
Phase Change Time (sec)	0	76
Green Time (sec)	70	21
Yellow Time (sec)	4	4
All-Red Time (sec)	2	2
Phase Time (sec)	76	27
Phase Split	74 %	26 %





MOVEMENT SUMMARY

Site: I-02 2015 FU MINT PM

Intersection of Moorebank Avenue and Anzac Road
2015 Future with MINT PM PEAK
Signals - Fixed Time Cycle Time = 110 seconds (User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total	Demand Flows HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	95% Back of Queue Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Moorebank Avenue (S)											
2	T1	314	4.7	0.272	10.6	LOS A	7.7	56.4	0.50	0.43	44.7
3	R2	176	1.2	0.966	103.0	LOS F	14.9	105.6	1.00	1.18	15.6
Approach		489	3.4	0.966	43.8	LOS D	14.9	105.6	0.68	0.70	26.8
East: Anzac Road (E)											
4	L2	412	2.3	0.799	51.5	LOS D	21.9	156.4	0.99	0.91	24.8
6	R2	279	5.7	0.614	47.5	LOS D	13.4	98.2	0.94	0.84	26.0
Approach		691	3.7	0.799	49.9	LOS D	21.9	156.4	0.97	0.88	25.3
North: Moorebank Avenue (N)											
7	L2	292	4.0	0.181	8.3	LOS A	1.0	7.4	0.14	0.65	35.8
8	T1	1105	2.9	0.715	14.5	LOS A	30.5	219.0	0.69	0.62	25.4
Approach		1397	3.1	0.715	13.2	LOS A	30.5	219.0	0.57	0.63	27.0
All Vehicles		2577	3.3	0.966	28.8	LOS C	30.5	219.0	0.70	0.71	26.2

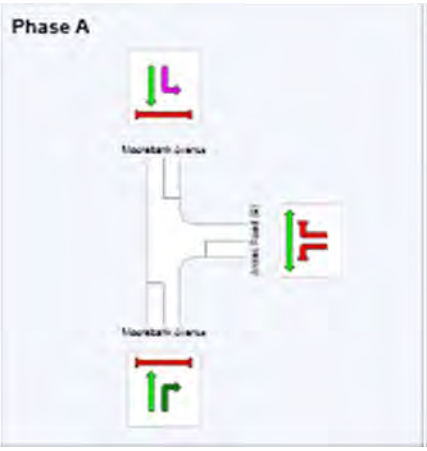
PHASING SUMMARY

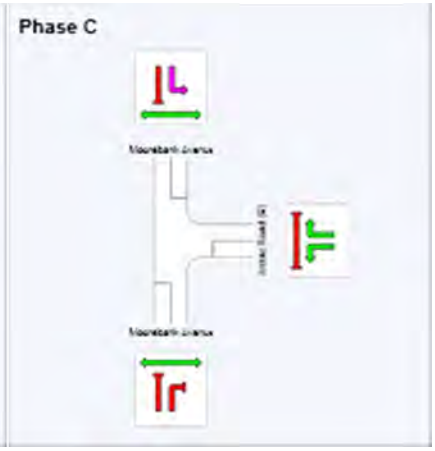
Site: I-02 2015 FU MINT PM

Intersection of Moorebank Avenue and Anzac Road
2015 Future with MINT PM PEAK
Signals - Fixed Time Cycle Time = 110 seconds (User-Given Phase Times)

Phase Timing Results

Phase	A	C
Phase Change Time (sec)	0	73
Green Time (sec)	67	31
Yellow Time (sec)	4	4
All-Red Time (sec)	2	2
Phase Time (sec)	73	37
Phase Split	66 %	34 %





I-03 Intersection of Moorebank Avenue and Defence Support Access

MOVEMENT SUMMARY

Site: I-03 2015 FU MINT AM

Intersection of Moorebank Avenue and Defence Support Access (Military Access 1)
2015 Future with MINT AM PEAK
Signals - Fixed Time Cycle Time = 90 seconds (Optimum Cycle Time - Minimum Delay)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total	Demand Flows HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	95% Back of Queue Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Moorebank Avenue (S)											
1	L2	8	0.0	0.005	8.6	LOS A	0.0	0.2	0.14	0.67	46.5
2	T1	1263	3.6	0.866	12.1	LOS A	42.8	308.7	0.76	0.75	40.4
Approach		1272	3.6	0.866	12.1	LOS A	42.8	308.7	0.75	0.75	40.4
North: Moorebank Avenue (N)											
8	T1	616	4.6	0.494	9.2	LOS A	12.1	88.1	0.53	0.48	45.8
9	R2	23	13.6	0.494	19.8	LOS B	12.1	88.1	0.62	0.57	43.3
Approach		639	4.9	0.494	9.6	LOS A	12.1	88.1	0.53	0.49	45.7
West: Military Access 1 (W)											
10	L2	4	75.0	0.048	51.0	LOS D	0.2	2.4	0.94	0.65	11.6
12	R2	1	0.0	0.048	51.1	LOS D	0.2	2.4	0.94	0.65	11.6
Approach		5	60.0	0.048	51.0	LOS D	0.2	2.4	0.94	0.65	11.6
All Vehicles		1916	4.2	0.866	11.4	LOS A	42.8	308.7	0.68	0.66	42.1

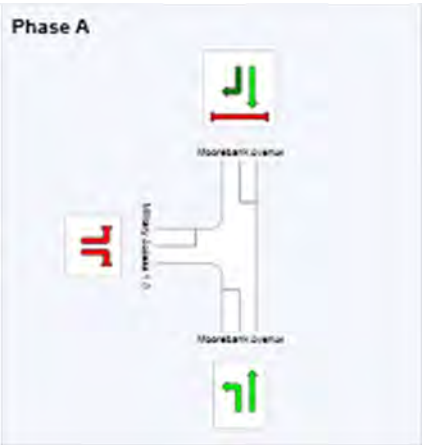
PHASING SUMMARY

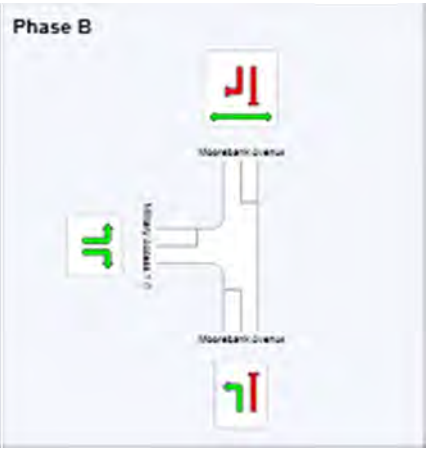
Site: I-03 2015 FU MINT AM

Intersection of Moorebank Avenue and Defence Support Access (Military Access 1)
2015 Future with MINT AM PEAK
Signals - Fixed Time Cycle Time = 90 seconds (Optimum Cycle Time - Minimum Delay)

Phase Timing Results

Phase	A	B
Phase Change Time (sec)	0	75
Green Time (sec)	69	9
Yellow Time (sec)	4	4
All-Red Time (sec)	2	2
Phase Time (sec)	75	15
Phase Split	83 %	17 %





MOVEMENT SUMMARY

Site: I-03 2015 FU MINT PM

Intersection of Moorebank Avenue and Defence Support Access (Military Access 1)
2015 Future with MINT PM PEAK
Signals - Fixed Time Cycle Time = 90 seconds (Optimum Cycle Time - Minimum Delay)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total	Demand Flows HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	95% Back of Queue Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Moorebank Avenue (S)											
1	L2	1	0.0	0.001	8.6	LOS A	0.0	0.0	0.14	0.66	46.6
2	T1	466	3.2	0.318	3.4	LOS A	6.2	44.6	0.33	0.30	52.1
Approach		467	3.2	0.318	3.4	LOS A	6.2	44.6	0.33	0.30	52.1
North: Moorebank Avenue (N)											
8	T1	1492	2.7	0.967	35.2	LOS C	59.3	425.4	0.59	0.78	29.6
9	R2	4	75.0	0.967	52.4	LOS D	59.3	425.4	0.67	0.93	26.4
Approach		1496	2.9	0.967	35.3	LOS C	59.3	425.4	0.59	0.78	29.6
West: Military Access 1 (W)											
10	L2	23	13.6	0.217	51.7	LOS D	1.4	10.4	0.96	0.72	11.5
12	R2	8	0.0	0.217	51.8	LOS D	1.4	10.4	0.96	0.72	11.5
Approach		32	10.0	0.217	51.7	LOS D	1.4	10.4	0.96	0.72	11.5
All Vehicles		1995	3.1	0.967	28.1	LOS B	59.3	425.4	0.53	0.67	32.2

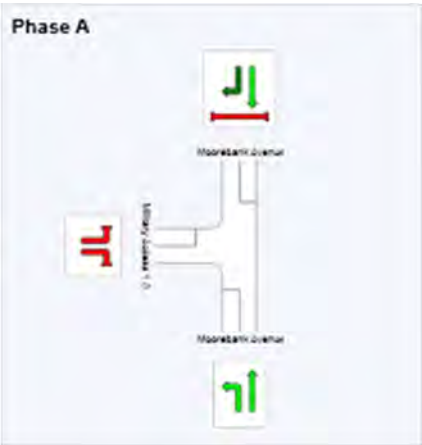
PHASING SUMMARY

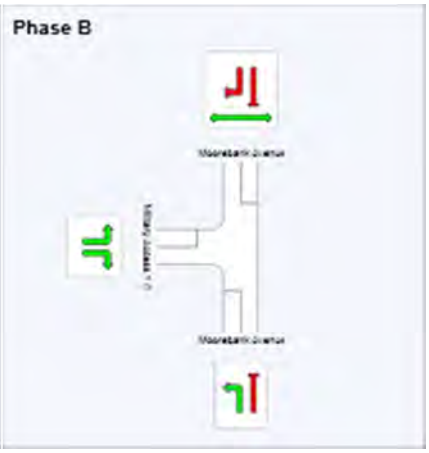
Site: I-03 2015 FU MINT PM

Intersection of Moorebank Avenue and Defence Support Access (Military Access 1)
2015 Future with MINT PM PEAK
Signals - Fixed Time Cycle Time = 90 seconds (Optimum Cycle Time - Minimum Delay)

Phase Timing Results

Phase	A	B
Phase Change Time (sec)	0	75
Green Time (sec)	69	9
Yellow Time (sec)	4	4
All-Red Time (sec)	2	2
Phase Time (sec)	75	15
Phase Split	83 %	17 %





I-04 Intersection of Moorebank Avenue and DNSDC Access

MOVEMENT SUMMARY

Site: I-04 2015 FU MINT AM

Intersection of Moorebank Avenue and DNSDC Access (Military Access 2)
2015 Future with MINT AM PEAK
Signals - Fixed Time Cycle Time = 80 seconds (Optimum Cycle Time - Minimum Delay)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Moorebank Avenue (S)											
2	T1	1272	3.6	0.705	5.4	LOS A	19.7	142.2	0.52	0.48	49.9
3	R2	22	0.0	0.705	14.3	LOS A	19.7	142.2	0.59	0.55	48.9
Approach		1294	3.5	0.705	5.5	LOS A	19.7	142.2	0.52	0.48	49.9
East: DNSDC Access (W)											
4	L2	5	20.0	0.037	45.8	LOS D	0.2	1.6	0.94	0.65	26.5
6	R2	7	14.3	0.039	43.5	LOS D	0.3	2.1	0.92	0.66	27.2
Approach		13	16.7	0.039	44.5	LOS D	0.3	2.1	0.93	0.66	26.9
North: Moorebank Avenue (N)											
7	L2	94	6.7	0.062	8.7	LOS A	0.3	2.3	0.17	0.66	46.4
8	T1	522	4.2	0.373	4.0	LOS A	7.3	52.9	0.39	0.35	50.9
Approach		616	4.6	0.373	4.8	LOS A	7.3	52.9	0.36	0.40	50.2
West: Carpark Access (W)											
10	L2	1	0.0	0.005	42.5	LOS C	0.0	0.3	0.90	0.60	12.9
12	R2	1	0.0	0.007	45.1	LOS D	0.0	0.3	0.93	0.60	12.1
Approach		2	0.0	0.007	43.8	LOS D	0.0	0.3	0.92	0.60	12.5
All Vehicles		1924	3.9	0.705	5.6	LOS A	19.7	142.2	0.47	0.46	49.6

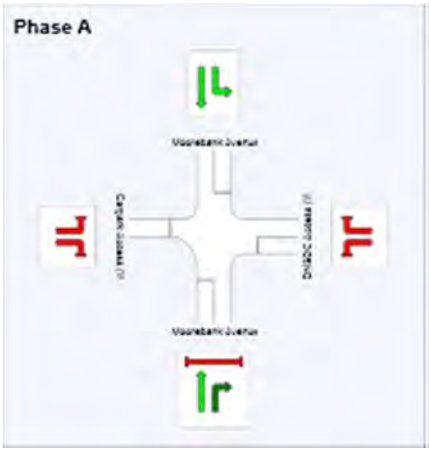
PHASING SUMMARY

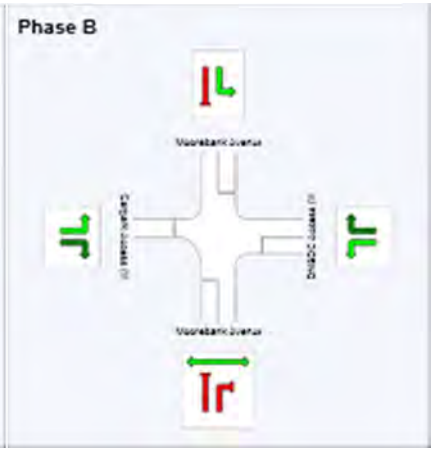
Site: I-04 2015 FU MINT AM

Intersection of Moorebank Avenue and DNSDC Access (Military Access 2)
2015 Future with MINT AM PEAK
Signals - Fixed Time Cycle Time = 80 seconds (Optimum Cycle Time - Minimum Delay)

Phase Timing Results

Phase	A	B
Phase Change Time (sec)	0	65
Green Time (sec)	59	9
Yellow Time (sec)	4	4
All-Red Time (sec)	2	2
Phase Time (sec)	65	15
Phase Split	81 %	19 %





MOVEMENT SUMMARY

Site: I-04 2015 FU MINT PM

Intersection of Moorebank Avenue and DNSDC Access (Military Access 2)
2015 Future with MINT PM PEAK
Signals - Fixed Time Cycle Time = 110 seconds (Optimum Cycle Time - Minimum Delay)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total	Demand Flows HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	95% Back of Queue Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Moorebank Avenue (S)											
2	T1	466	3.2	0.232	3.3	LOS A	4.9	35.5	0.28	0.24	53.7
3	R2	1	0.0	0.232	11.8	LOS A	4.9	35.5	0.30	0.26	53.1
Approach		467	3.2	0.232	3.3	LOS A	4.9	35.5	0.28	0.24	53.7
East: DNSDC Access (W)											
4	L2	4	0.0	0.042	63.6	LOS E	0.2	1.6	0.97	0.64	21.8
6	R2	22	9.5	0.157	61.1	LOS E	1.2	8.7	0.96	0.71	22.3
Approach		26	8.0	0.157	61.5	LOS E	1.2	8.7	0.96	0.70	22.2
North: Moorebank Avenue (N)											
7	L2	6	16.7	0.004	8.5	LOS A	0.0	0.2	0.11	0.60	46.7
8	T1	1494	2.6	0.966	37.9	LOS C	96.9	693.3	0.95	1.08	25.5
Approach		1500	2.7	0.966	37.7	LOS C	96.9	693.3	0.94	1.08	25.5
West: Carpark Access (W)											
10	L2	1	0.0	0.007	58.7	LOS E	0.1	0.4	0.94	0.60	9.9
12	R2	1	0.0	0.010	62.9	LOS E	0.1	0.4	0.96	0.59	9.2
Approach		2	0.0	0.010	60.8	LOS E	0.1	0.4	0.95	0.59	9.5
All Vehicles		1996	2.8	0.966	30.0	LOS C	96.9	693.3	0.79	0.88	29.6

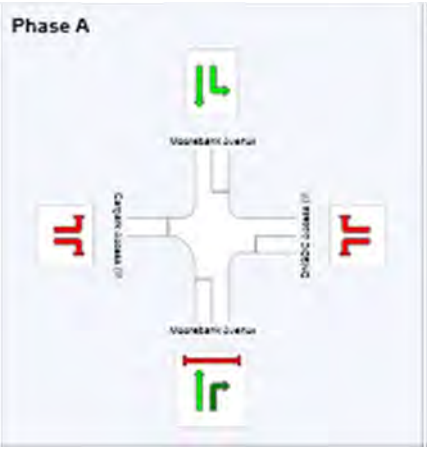
PHASING SUMMARY

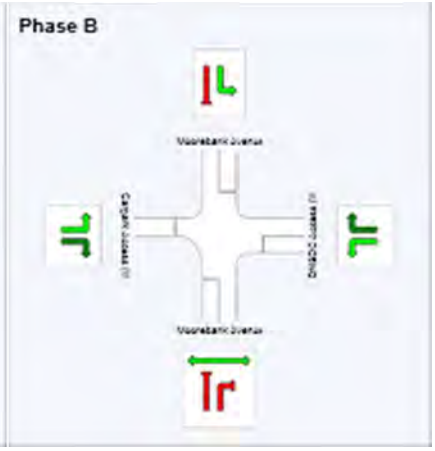
Site: I-04 2015 FU MINT PM

Intersection of Moorebank Avenue and DNSDC Access (Military Access 2)
2015 Future with MINT PM PEAK
Signals - Fixed Time Cycle Time = 110 seconds (Optimum Cycle Time - Minimum Delay)

Phase Timing Results

Phase	A	B
Phase Change Time (sec)	0	95
Green Time (sec)	89	9
Yellow Time (sec)	4	4
All-Red Time (sec)	2	2
Phase Time (sec)	95	15
Phase Split	86 %	14 %





I-05 Intersection of Moorebank Avenue and Chatham Avenue

MOVEMENT SUMMARY

Site: I-05 2015 FU MINT AM

Intersection of Moorebank Avenue and Chatham Avenue
2015 Future with MINT AM PEAK
Signals - Fixed Time Cycle Time = 110 seconds (Optimum Cycle Time - Minimum Delay)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total	Demand Flows HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	95% Back of Queue Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Moorebank Avenue (S)											
1	L2	5	0.0	0.003	9.7	LOS A	0.0	0.3	0.17	0.67	47.3
2	T1	1292	3.3	0.971	48.9	LOS D	91.2	657.0	1.00	1.17	24.6
Approach		1297	3.3	0.971	48.7	LOS D	91.2	657.0	1.00	1.16	24.6
North: Moorebank Avenue (N)											
8	T1	514	4.1	0.337	2.9	LOS A	7.0	51.1	0.28	0.25	54.2
9	R2	14	15.4	0.083	52.5	LOS D	0.7	5.3	0.91	0.70	24.4
Approach		527	4.4	0.337	4.2	LOS A	7.0	51.1	0.30	0.27	52.6
West: Chatham Avenue (W)											
10	L2	3	66.7	0.023	52.4	LOS D	0.2	2.0	0.88	0.64	21.9
12	R2	1	0.0	0.023	52.5	LOS D	0.2	2.0	0.88	0.64	21.9
Approach		4	50.0	0.023	52.4	LOS D	0.2	2.0	0.88	0.64	21.9
All Vehicles		1828	3.7	0.971	35.9	LOS C	91.2	657.0	0.80	0.90	29.1

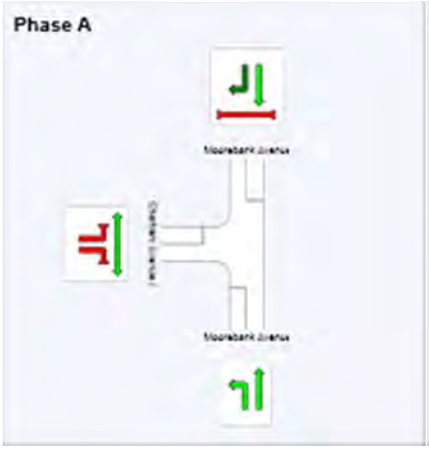
PHASING SUMMARY

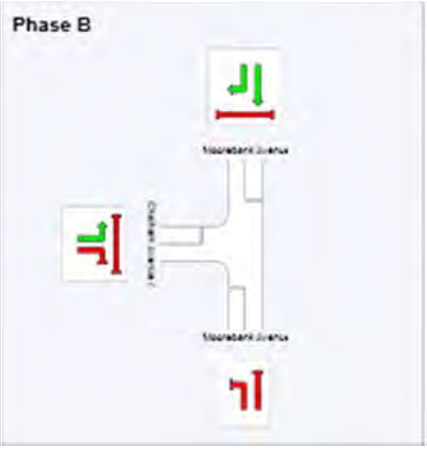
Site: I-05 2015 FU MINT AM

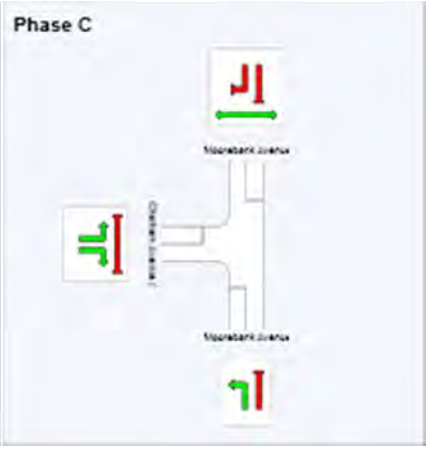
Intersection of Moorebank Avenue and Chatham Avenue
2015 Future with MINT AM PEAK
Signals - Fixed Time Cycle Time = 110 seconds (Optimum Cycle Time - Minimum Delay)

Phase Timing Results

Phase	A	B	C
Phase Change Time (sec)	0	83	95
Green Time (sec)	77	6	9
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	83	12	15
Phase Split	75 %	11 %	14 %







MOVEMENT SUMMARY

Site: I-05 2015 FU MINT PM

Intersection of Moorebank Avenue and Chatham Avenue
2015 Future with MINT PM PEAK
Signals - Fixed Time Cycle Time = 100 seconds (Optimum Cycle Time - Minimum Delay)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total	Demand Flows HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	95% Back of Queue Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Moorebank Avenue (S)											
1	L2	1	0.0	0.001	9.9	LOS A	0.0	0.1	0.18	0.66	47.2
2	T1	453	2.8	0.353	7.5	LOS A	9.4	67.2	0.46	0.41	47.9
Approach		454	2.8	0.353	7.5	LOS A	9.4	67.2	0.46	0.41	47.9
North: Moorebank Avenue (N)											
8	T1	1496	2.5	0.992	54.9	LOS D	109.2	780.2	1.00	1.26	23.0
9	R2	3	66.7	0.007	13.8	LOS A	0.0	0.5	0.38	0.54	43.3
Approach		1499	2.6	0.992	54.8	LOS D	109.2	780.2	1.00	1.26	23.0
West: Chatham Avenue (W)											
10	L2	14	15.4	0.081	49.3	LOS D	0.8	6.3	0.90	0.70	22.8
12	R2	5	0.0	0.081	49.5	LOS D	0.8	6.3	0.90	0.70	22.8
Approach		19	11.1	0.081	49.4	LOS D	0.8	6.3	0.90	0.70	22.8
All Vehicles		1972	2.7	0.992	43.9	LOS D	109.2	780.2	0.87	1.06	26.2

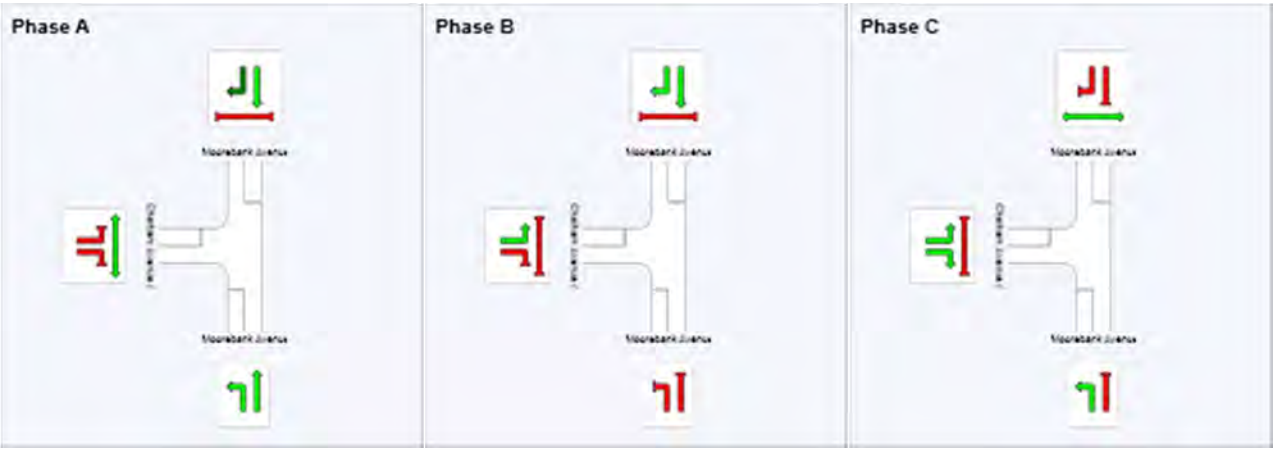
PHASING SUMMARY

Site: I-05 2015 FU MINT PM

Intersection of Moorebank Avenue and Chatham Avenue
2015 Future with MINT PM PEAK
Signals - Fixed Time Cycle Time = 100 seconds (Optimum Cycle Time - Minimum Delay)

Phase Timing Results

Phase	A	B	C
Phase Change Time (sec)	0	73	85
Green Time (sec)	67	6	9
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	73	12	15
Phase Split	73 %	12 %	15 %



2. 2015 Future traffic without Moorebank IMT development (Do-nothing scenario)

I-01 Intersection of Moorebank Avenue and Bapaume Road

MOVEMENT SUMMARY

Site: I-01 2015 DN BASE AM

Intersection of Moorebank Avenue and Bapaume Road
2015 Do-nothing AM PEAK
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Moorebank Avenue (S)											
1	L2	19	0.0	0.010	5.5	LOS A	0.0	0.0	0.00	0.58	45.1
2	T1	1082	5.3	0.574	0.0	LOS A	0.0	0.0	0.00	0.00	59.8
Approach		1101	5.2	0.574	0.1	NA	0.0	0.0	0.00	0.01	59.5
North: Moorebank Avenue (S)											
8	T1	839	5.4	0.344	3.9	LOS A	4.0	29.1	0.23	0.08	51.9
9	R2	81	1.3	0.344	22.7	LOS B	4.0	29.1	1.00	0.33	38.3
Approach		920	5.0	0.344	5.6	NA	4.0	29.1	0.30	0.10	49.9
West: Bapaume Road (W)											
10	L2	3	33.3	0.020	27.0	LOS B	0.1	0.6	0.85	0.94	33.0
12	R2	1	0.0	0.066	206.7	LOS F	0.2	1.2	0.98	0.99	5.6
Approach		4	25.0	0.066	71.9	LOS F	0.2	1.2	0.88	0.95	18.3
All Vehicles		2025	5.1	0.574	2.8	NA	4.0	29.1	0.14	0.05	54.4

MOVEMENT SUMMARY

Site: I-01 2015 DN BASE PM

Intersection of Moorebank Avenue and Bapaume Road
2015 Do-nothing PM PEAK
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Moorebank Avenue (S)											
1	L2	1	0.0	0.001	5.5	LOS A	0.0	0.0	0.00	0.58	45.1
2	T1	540	4.5	0.285	0.0	LOS A	0.0	0.0	0.00	0.00	59.9
Approach		541	4.5	0.285	0.0	NA	0.0	0.0	0.00	0.00	59.9
North: Moorebank Avenue (S)											
8	T1	1398	2.8	0.378	2.8	LOS A	5.8	41.7	0.35	0.01	54.4
9	R2	19	11.1	0.378	11.4	LOS A	5.8	41.7	0.72	0.02	47.9
Approach		1417	2.9	0.378	2.9	NA	5.8	41.7	0.35	0.01	54.3
West: Bapaume Road (W)											
10	L2	89	3.5	0.140	9.4	LOS A	0.5	3.9	0.54	0.76	45.9
12	R2	13	0.0	0.448	176.2	LOS F	1.3	9.0	0.98	1.02	6.4
Approach		102	3.1	0.448	30.1	LOS C	1.3	9.0	0.60	0.79	31.2
All Vehicles		2060	3.3	0.448	3.5	NA	5.8	41.7	0.27	0.05	53.2

I-02 Intersection of Moorebank Avenue and Anzac Road

MOVEMENT SUMMARY

Site: I-02 2015 DN BASE AM

Intersection of Moorebank Avenue and Anzac Road
2015 Do-nothing AM PEAK
Signals - Fixed Time Cycle Time = 103 seconds (User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total	Demand Flows HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	95% Back of Queue Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Moorebank Avenue (S)											
2	T1	912	3.5	0.684	9.5	LOS A	26.0	187.5	0.63	0.58	47.8
3	R2	346	3.3	0.535	25.3	LOS B	13.1	94.5	0.84	0.83	41.5
Approach		1258	3.4	0.684	13.8	LOS A	26.0	187.5	0.69	0.65	45.1
East: Anzac Road (E)											
4	L2	219	3.4	0.265	24.0	LOS B	6.7	48.6	0.66	0.75	42.1
6	R2	193	13.7	0.733	54.0	LOS D	9.9	77.3	1.00	0.87	21.0
Approach		412	8.2	0.733	38.1	LOS C	9.9	77.3	0.82	0.81	31.2
North: Moorebank Avenue (N)											
7	L2	274	10.0	0.179	6.1	LOS A	0.9	7.2	0.15	0.59	49.8
8	T1	569	3.3	0.527	22.4	LOS B	15.9	114.3	0.76	0.65	37.4
Approach		843	5.5	0.527	17.1	LOS B	15.9	114.3	0.56	0.63	40.7
All Vehicles		2513	4.9	0.733	18.9	LOS B	26.0	187.5	0.67	0.67	40.4

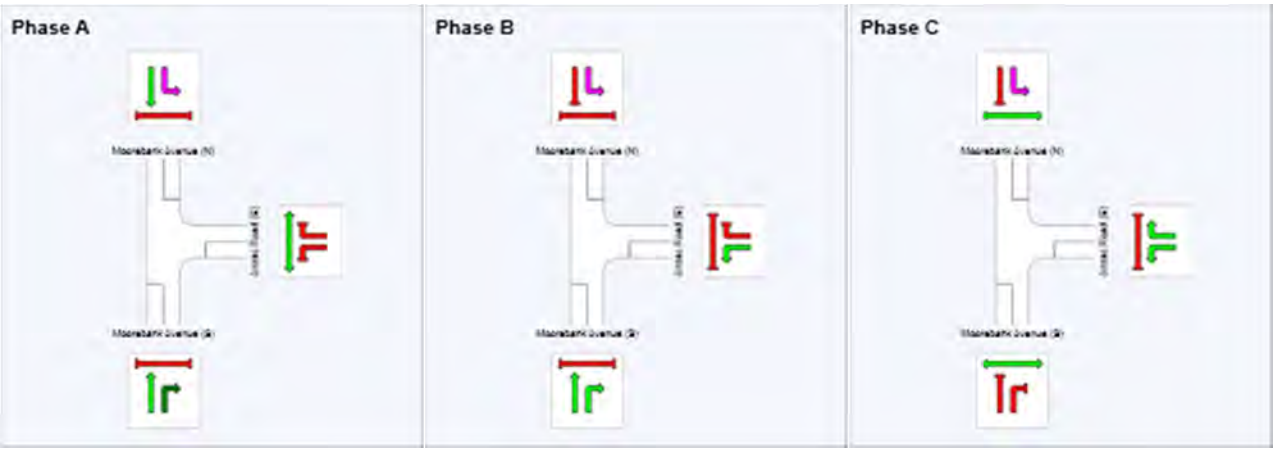
PHASING SUMMARY

Site: I-02 2015 DN BASE AM

Intersection of Moorebank Avenue and Anzac Road
2015 Do-nothing AM PEAK
Signals - Fixed Time Cycle Time = 103 seconds (User-Given Phase Times)

Phase Timing Results

Phase	A	B	C
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	50	78
Green Time (sec)	44	22	19
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	50	28	25
Phase Split	49 %	27 %	24 %



MOVEMENT SUMMARY

Site: I-02 2015 DN BASE PM

Intersection of Moorebank Avenue and Anzac Road
2015 Do-nothing PM PEAK
Signals - Fixed Time Cycle Time = 110 seconds (User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Moorebank Avenue (S)											
2	T1	282	3.7	0.236	9.5	LOS A	6.5	46.9	0.47	0.40	47.8
3	R2	171	1.2	0.788	58.5	LOS E	9.7	68.5	1.00	1.00	30.2
Approach		453	2.8	0.788	27.9	LOS B	9.7	68.5	0.67	0.63	37.0
East: Anzac Road (E)											
4	L2	419	2.3	0.615	35.8	LOS C	18.3	130.5	0.87	0.84	37.1
6	R2	279	5.7	0.661	47.2	LOS D	13.8	101.0	0.96	0.84	22.5
Approach		698	3.6	0.661	40.3	LOS C	18.3	130.5	0.91	0.84	31.2
North: Moorebank Avenue (N)											
7	L2	291	4.0	0.181	6.0	LOS A	1.0	7.3	0.14	0.59	50.2
8	T1	1117	2.5	0.847	25.1	LOS B	41.4	295.6	0.85	0.80	35.7
Approach		1407	2.8	0.847	21.2	LOS B	41.4	295.6	0.70	0.76	38.0
All Vehicles		2558	3.0	0.847	27.6	LOS B	41.4	295.6	0.75	0.76	35.3

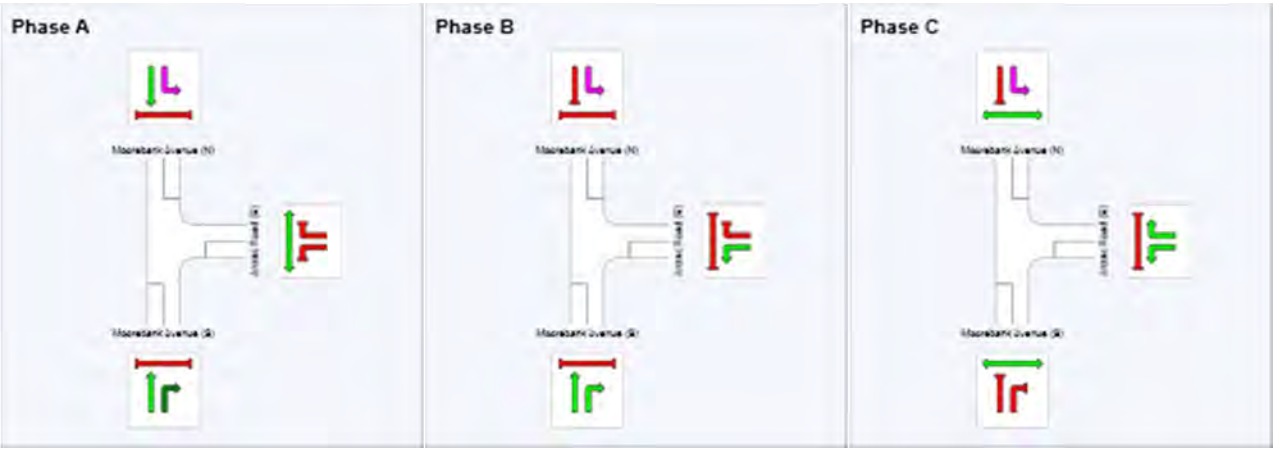
PHASING SUMMARY

Site: I-02 2015 DN BASE PM

Intersection of Moorebank Avenue and Anzac Road
2015 Do-nothing PM PEAK
Signals - Fixed Time Cycle Time = 110 seconds (User-Given Phase Times)

Phase Timing Results

Phase	A	B	C
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	63	75
Green Time (sec)	57	6	29
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	63	12	35
Phase Split	57 %	11 %	32 %



I-03 Intersection of Moorebank Avenue and Defence Support Access

MOVEMENT SUMMARY

Site: I-03 2015 DN BASE AM

Intersection of Moorebank Avenue and Defence Support Access (Military Access 1)
2015 Do-nothing AM PEAK
Signals - Fixed Time Cycle Time = 90 seconds (Optimum Cycle Time - Minimum Delay)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Moorebank Avenue (S)											
1	L2	16	0.0	0.010	6.0	LOS A	0.0	0.3	0.14	0.59	46.8
2	T1	1242	3.1	0.838	7.8	LOS A	35.4	254.5	0.69	0.66	52.5
Approach		1258	3.0	0.838	7.8	LOS A	35.4	254.5	0.69	0.66	52.4
North: Moorebank Avenue (N)											
8	T1	735	3.7	0.487	6.0	LOS A	11.9	86.2	0.45	0.41	54.0
9	R2	16	0.0	0.487	12.5	LOS A	11.9	86.2	0.51	0.46	31.1
Approach		751	3.6	0.487	6.1	LOS A	11.9	86.2	0.45	0.41	53.4
West: Military Access 1 (W)											
10	L2	2	0.0	0.023	48.3	LOS D	0.1	0.9	0.94	0.63	25.5
12	R2	1	0.0	0.023	48.2	LOS D	0.1	0.9	0.94	0.63	22.8
Approach		3	0.0	0.023	48.3	LOS D	0.1	0.9	0.94	0.63	24.6
All Vehicles		2012	3.2	0.838	7.3	LOS A	35.4	254.5	0.60	0.57	52.7

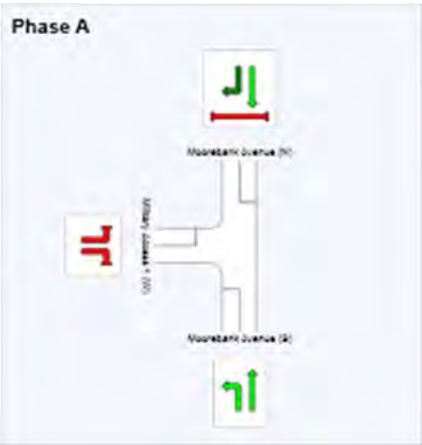
PHASING SUMMARY

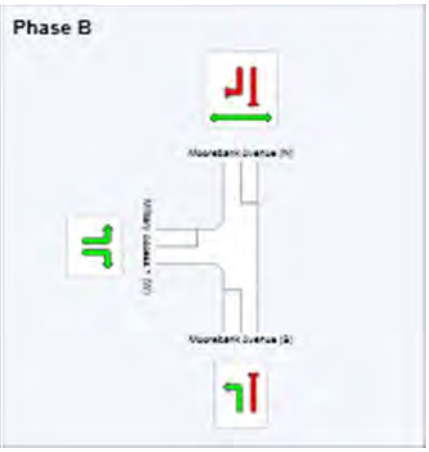
Site: I-03 2015 DN BASE AM

Intersection of Moorebank Avenue and Defence Support Access (Military Access 1)
2015 Do-nothing AM PEAK
Signals - Fixed Time Cycle Time = 90 seconds (Optimum Cycle Time - Minimum Delay)

Phase Timing Results

Phase	A	B
Reference Phase	Yes	No
Phase Change Time (sec)	0	76
Green Time (sec)	70	8
Yellow Time (sec)	4	4
All-Red Time (sec)	2	2
Phase Time (sec)	76	14
Phase Split	84 %	16 %





MOVEMENT SUMMARY

Site: I-03 2015 DN BASE PM

Intersection of Moorebank Avenue and Defence Support Access (Military Access 1)
2015 Do-nothing PM PEAK
Signals - Fixed Time Cycle Time = 90 seconds (Optimum Cycle Time - Minimum Delay)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total	Demand Flows HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	95% Back of Queue Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Moorebank Avenue (S)											
1	L2	1	0.0	0.001	6.0	LOS A	0.0	0.0	0.14	0.58	46.8
2	T1	443	2.4	0.297	3.1	LOS A	5.5	39.4	0.31	0.28	56.8
Approach		444	2.4	0.297	3.1	LOS A	5.5	39.4	0.31	0.28	56.8
North: Moorebank Avenue (N)											
8	T1	1513	2.5	0.956	30.4	LOS C	55.5	397.0	0.56	0.73	38.5
9	R2	1	0.0	0.956	43.4	LOS D	55.5	397.0	0.64	0.86	21.7
Approach		1514	2.5	0.956	30.4	LOS C	55.5	397.0	0.56	0.73	38.5
West: Military Access 1 (W)											
10	L2	9	0.0	0.100	49.3	LOS D	0.6	4.1	0.96	0.68	25.2
12	R2	4	0.0	0.100	49.2	LOS D	0.6	4.1	0.96	0.68	22.6
Approach		14	0.0	0.100	49.2	LOS D	0.6	4.1	0.96	0.68	24.4
All Vehicles		1972	2.5	0.956	24.4	LOS B	55.5	397.0	0.51	0.62	41.4

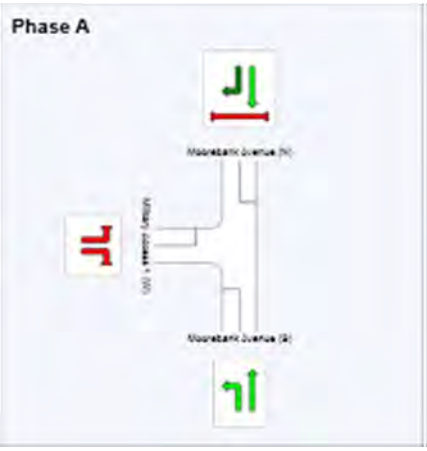
PHASING SUMMARY

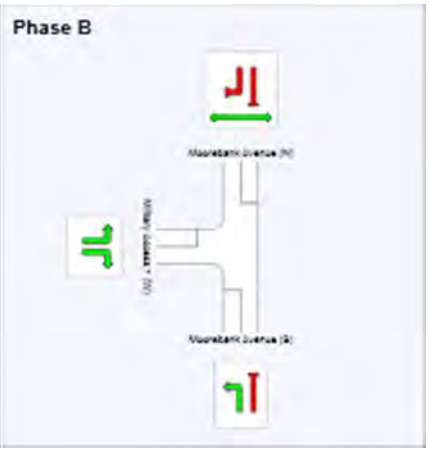
Site: I-03 2015 DN BASE PM

Intersection of Moorebank Avenue and Defence Support Access (Military Access 1)
2015 Do-nothing PM PEAK
Signals - Fixed Time Cycle Time = 90 seconds (Optimum Cycle Time - Minimum Delay)

Phase Timing Results

Phase	A	B
Reference Phase	Yes	No
Phase Change Time (sec)	0	76
Green Time (sec)	70	8
Yellow Time (sec)	4	4
All-Red Time (sec)	2	2
Phase Time (sec)	76	14
Phase Split	84 %	16 %





I-04 Intersection of Moorebank Avenue and DNSDC Access

MOVEMENT SUMMARY

Site: I-04 2015 DN BASE AM

Intersection of Moorebank Avenue and DNSDC Access (Military Access 2)
2015 Do-nothing AM PEAK
Signals - Fixed Time Cycle Time = 80 seconds (Optimum Cycle Time - Minimum Delay)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total	Demand Flows HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	95% Back of Queue Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Moorebank Avenue (S)											
2	T1	1288	2.6	0.696	4.9	LOS A	19.3	138.4	0.50	0.46	55.0
3	R2	22	0.0	0.696	11.1	LOS A	19.3	138.4	0.57	0.53	53.5
Approach		1311	2.6	0.696	5.0	LOS A	19.3	138.4	0.50	0.47	54.9
East: DNSDC Access (W)											
4	L2	5	20.0	0.043	44.8	LOS D	0.2	1.7	0.95	0.65	33.8
6	R2	7	14.3	0.042	42.0	LOS C	0.3	2.1	0.93	0.66	33.0
Approach		13	16.7	0.043	43.2	LOS D	0.3	2.1	0.94	0.65	33.4
North: Moorebank Avenue (N)											
7	L2	94	6.7	0.062	6.1	LOS A	0.3	2.3	0.17	0.61	52.1
8	T1	603	3.5	0.422	3.9	LOS A	8.5	61.3	0.39	0.36	56.0
Approach		697	3.9	0.422	4.2	LOS A	8.5	61.3	0.36	0.39	55.5
West: Carpark Access (W)											
10	L2	1	0.0	0.006	39.4	LOS C	0.0	0.3	0.92	0.59	24.3
12	R2	1	0.0	0.007	41.7	LOS C	0.0	0.3	0.94	0.59	26.0
Approach		2	0.0	0.007	40.5	LOS C	0.0	0.3	0.93	0.59	25.2
All Vehicles		2022	3.1	0.696	5.0	LOS A	19.3	138.4	0.46	0.44	54.8

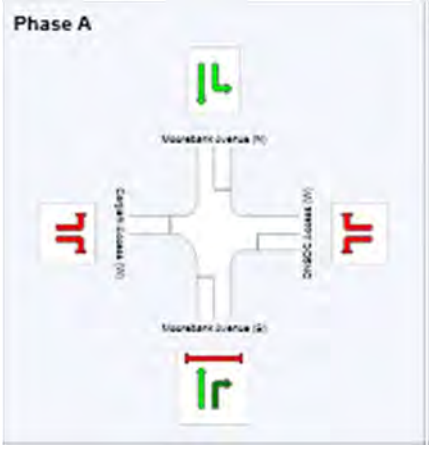
PHASING SUMMARY

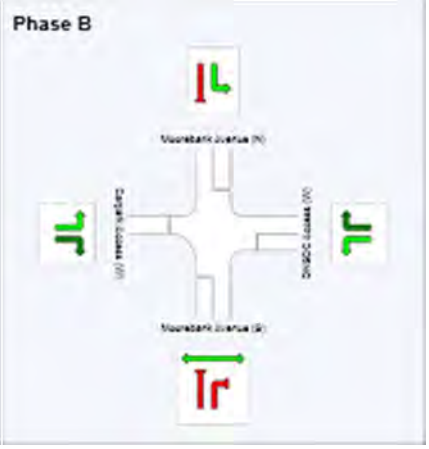
Site: I-04 2015 DN BASE AM

Intersection of Moorebank Avenue and DNSDC Access (Military Access 2)
2015 Do-nothing AM PEAK
Signals - Fixed Time Cycle Time = 80 seconds (Optimum Cycle Time - Minimum Delay)

Phase Timing Results

Phase	A	B
Reference Phase	Yes	No
Phase Change Time (sec)	0	66
Green Time (sec)	60	8
Yellow Time (sec)	4	4
All-Red Time (sec)	2	2
Phase Time (sec)	66	14
Phase Split	83 %	18 %





MOVEMENT SUMMARY

Site: I-04 2015 DN BASE PM

Intersection of Moorebank Avenue and DNSDC Access (Military Access 2)
2015 Do-nothing PM PEAK
Signals - Fixed Time Cycle Time = 110 seconds (Optimum Cycle Time - Minimum Delay)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total	Demand Flows HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	95% Back of Queue Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Moorebank Avenue (S)											
2	T1	411	2.1	0.201	2.9	LOS A	4.1	28.9	0.26	0.22	57.0
3	R2	1	0.0	0.201	8.8	LOS A	4.1	28.9	0.28	0.24	55.4
Approach		412	2.0	0.201	2.9	LOS A	4.1	28.9	0.26	0.22	56.9
East: DNSDC Access (W)											
4	L2	4	0.0	0.050	62.6	LOS E	0.2	1.6	0.98	0.64	29.2
6	R2	22	9.5	0.176	59.9	LOS E	1.2	8.9	0.97	0.71	28.1
Approach		26	8.0	0.176	60.3	LOS E	1.2	8.9	0.97	0.70	28.3
North: Moorebank Avenue (N)											
7	L2	6	16.7	0.004	6.1	LOS A	0.0	0.2	0.11	0.59	51.9
8	T1	1484	2.2	0.947	27.6	LOS B	83.4	595.0	0.88	0.95	39.9
Approach		1491	2.3	0.947	27.5	LOS B	83.4	595.0	0.87	0.95	39.9
West: Carpark Access (W)											
10	L2	6	0.0	0.047	56.7	LOS E	0.3	2.3	0.95	0.65	19.4
12	R2	3	0.0	0.036	60.5	LOS E	0.2	1.2	0.98	0.62	21.0
Approach		9	0.0	0.047	57.9	LOS E	0.3	2.3	0.96	0.64	20.0
All Vehicles		1938	2.3	0.947	22.9	LOS B	83.4	595.0	0.74	0.79	42.3

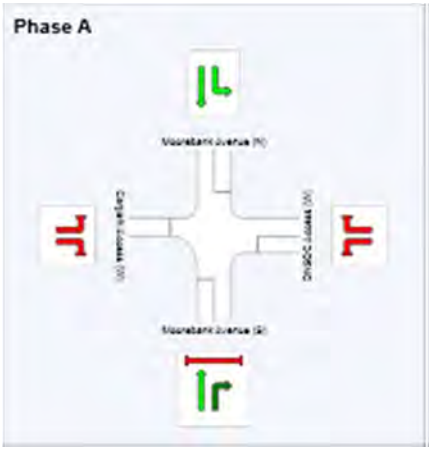
PHASING SUMMARY

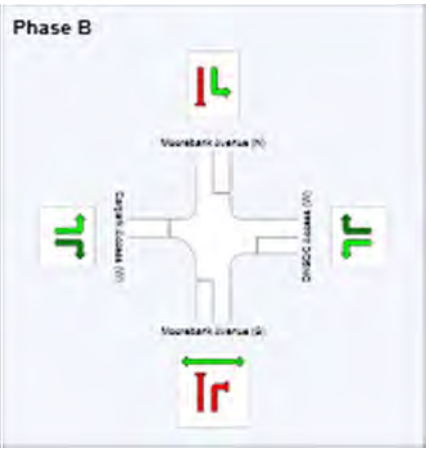
Site: I-04 2015 DN BASE PM

Intersection of Moorebank Avenue and DNSDC Access (Military Access 2)
2015 Do-nothing PM PEAK
Signals - Fixed Time Cycle Time = 110 seconds (Optimum Cycle Time - Minimum Delay)

Phase Timing Results

Phase	A	B
Reference Phase	Yes	No
Phase Change Time (sec)	0	96
Green Time (sec)	90	8
Yellow Time (sec)	4	4
All-Red Time (sec)	2	2
Phase Time (sec)	96	14
Phase Split	87 %	13 %





I-05 Intersection of Moorebank Avenue and Chatham Avenue

MOVEMENT SUMMARY

Site: I-05 2015 DN BASE AM

Intersection of Moorebank Avenue and Chatham Avenue
2015 Do-nothing AM PEAK
Signals - Fixed Time Cycle Time = 110 seconds (Optimum Cycle Time - Minimum Delay)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Moorebank Avenue (S)											
1	L2	43	0.0	0.028	7.1	LOS A	0.4	2.6	0.18	0.61	51.7
2	T1	1295	2.5	0.983	55.1	LOS D	93.9	671.5	0.98	1.19	31.4
Approach		1338	2.4	0.983	53.6	LOS D	93.9	671.5	0.95	1.17	31.8
North: Moorebank Avenue (N)											
8	T1	446	4.7	0.288	2.5	LOS A	5.6	40.5	0.26	0.23	57.6
9	R2	133	0.8	0.725	59.2	LOS E	7.4	52.4	1.00	0.96	28.2
Approach		579	3.8	0.725	15.5	LOS B	7.4	52.4	0.43	0.40	47.2
West: Chatham Avenue (W)											
10	L2	17	6.3	0.170	56.3	LOS D	1.5	11.4	0.95	0.72	29.1
12	R2	12	27.3	0.170	56.5	LOS D	1.5	11.4	0.95	0.72	28.7
Approach		28	14.8	0.170	56.3	LOS D	1.5	11.4	0.95	0.72	29.0
All Vehicles		1945	3.0	0.983	42.3	LOS C	93.9	671.5	0.80	0.93	35.1

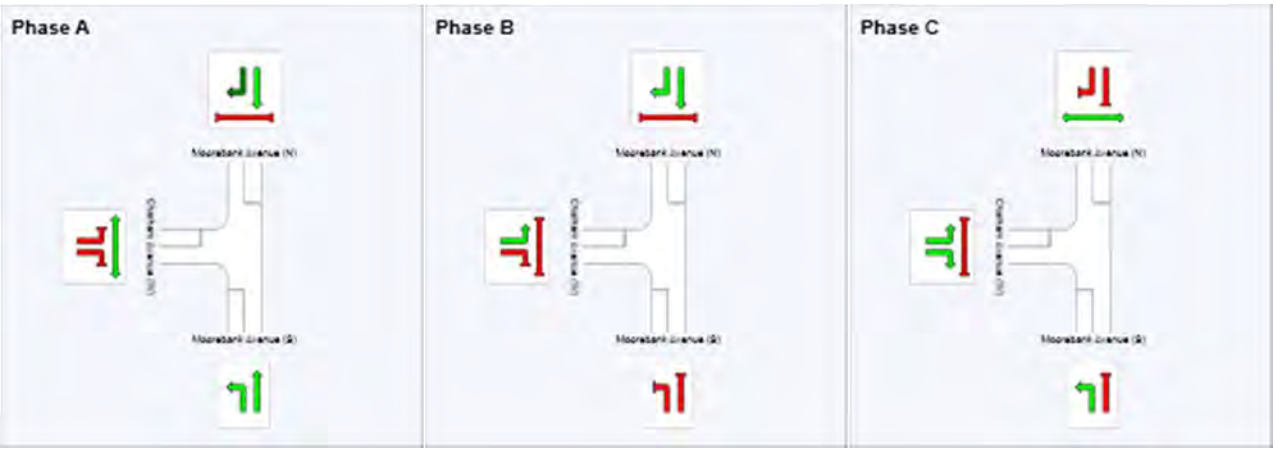
PHASING SUMMARY

Site: I-05 2015 DN BASE AM

Intersection of Moorebank Avenue and Chatham Avenue
2015 Do-nothing AM PEAK
Signals - Fixed Time Cycle Time = 110 seconds (Optimum Cycle Time - Minimum Delay)

Phase Timing Results

Phase	A	B	C
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	84	96
Green Time (sec)	78	6	8
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	84	12	14
Phase Split	76 %	11 %	13 %



MOVEMENT SUMMARY

Site: I-05 2015 DN BASE PM

Intersection of Moorebank Avenue and Chatham Avenue
2015 Do-nothing PM PEAK
Signals - Fixed Time Cycle Time = 100 seconds (Optimum Cycle Time - Minimum Delay)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Moorebank Avenue (S)											
1	L2	9	0.0	0.006	7.2	LOS A	0.1	0.6	0.19	0.60	51.6
2	T1	367	2.0	0.290	7.1	LOS A	7.2	51.1	0.44	0.38	53.7
Approach		377	2.0	0.290	7.1	LOS A	7.2	51.1	0.43	0.39	53.6
North: Moorebank Avenue (N)											
8	T1	1460	2.2	0.991	54.0	LOS D	101.1	720.6	0.96	1.22	31.7
9	R2	26	0.0	0.037	10.0	LOS A	0.4	2.6	0.36	0.66	48.9
Approach		1486	2.1	0.991	53.3	LOS D	101.1	720.6	0.95	1.21	31.9
West: Chatham Avenue (W)											
10	L2	40	2.6	0.180	45.6	LOS D	2.1	15.2	0.90	0.74	32.2
12	R2	9	0.0	0.180	45.5	LOS D	2.1	15.2	0.90	0.74	32.2
Approach		49	2.1	0.180	45.6	LOS D	2.1	15.2	0.90	0.74	32.2
All Vehicles		1913	2.1	0.991	44.0	LOS D	101.1	720.6	0.84	1.03	34.7

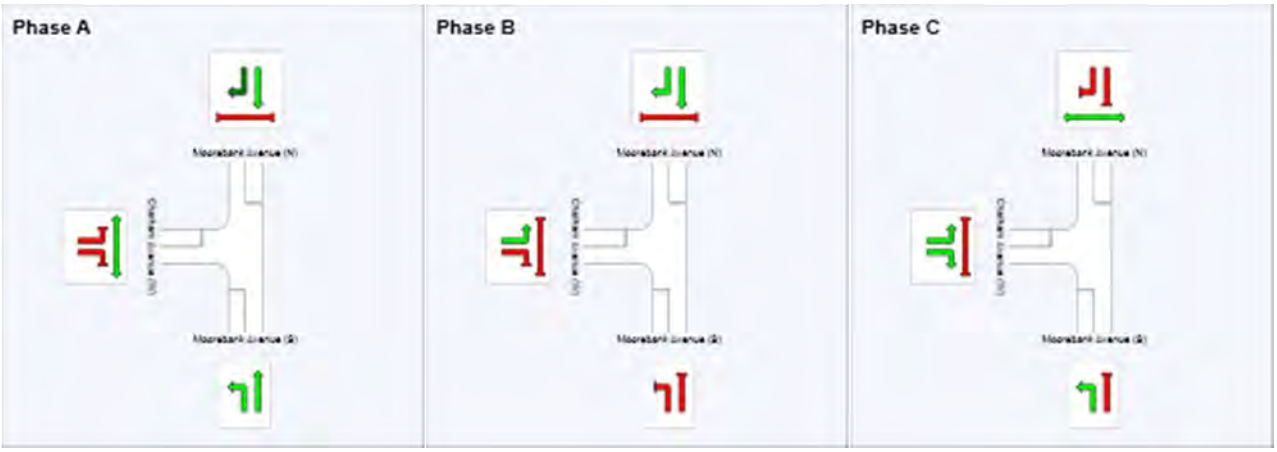
PHASING SUMMARY

Site: I-05 2015 DN BASE PM

Intersection of Moorebank Avenue and Chatham Avenue
2015 Do-nothing PM PEAK
Signals - Fixed Time Cycle Time = 100 seconds (Optimum Cycle Time - Minimum Delay)

Phase Timing Results

Phase	A	B	C
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	73	85
Green Time (sec)	67	6	9
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	73	12	15
Phase Split	73 %	12 %	15 %



Appendix E

2016 SIDRA results with and without Moorebank IMT

1. 2016 Future traffic with Moorebank IMT development (Phase A)

I-01 Intersection of Moorebank Avenue, Anzac Road and Bapaume Road

MOVEMENT SUMMARY

Site: I-01 2016 FU MINT AM

Intersection of Moorebank Avenue, Anzac Road and Bapaume Road
2016 Future with MINT AM PEAK
Signals - Fixed Time Cycle Time = 100 seconds (Optimum Cycle Time - Minimum Delay)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Moorebank Avenue (S)											
1	L2	28	0.0	0.607	24.7	LOS B	15.3	117.2	0.66	0.60	38.7
2	T1	1001	12.1	0.607	17.2	LOS B	15.3	117.2	0.65	0.59	38.9
3	R2	349	3.3	0.640	18.5	LOS B	7.6	54.4	0.73	0.81	39.7
Approach		1379	9.6	0.640	17.7	LOS B	15.3	117.2	0.67	0.65	39.1
East: Anzac Road (E)											
4	L2	200	3.7	0.328	33.2	LOS C	7.3	53.0	0.77	0.79	31.4
5	T1	7	0.0	0.328	26.2	LOS B	7.3	53.0	0.77	0.79	31.4
6	R2	191	13.8	0.641	49.9	LOS D	8.9	69.9	0.97	0.83	25.4
Approach		398	8.5	0.641	41.1	LOS C	8.9	69.9	0.87	0.81	28.2
North: Moorebank Avenue (N)											
7	L2	284	10.0	0.164	7.6	LOS A	0.0	0.0	0.00	0.57	48.5
8	T1	658	16.0	0.396	15.0	LOS B	7.9	63.1	0.53	0.46	39.1
9	R2	128	18.0	0.348	18.6	LOS B	2.4	19.6	0.71	0.76	36.4
Approach		1071	14.7	0.396	13.4	LOS A	7.9	63.1	0.41	0.52	40.9
West: Bapaume Road (W)											
10	L2	25	91.7	0.061	11.7	LOS A	0.3	4.1	0.44	0.54	36.8
11	T1	1	0.0	0.008	38.1	LOS C	0.1	0.6	0.86	0.59	20.3
12	R2	1	0.0	0.008	45.2	LOS D	0.1	0.6	0.86	0.59	20.3
Approach		27	84.6	0.061	14.0	LOS A	0.3	4.1	0.47	0.55	34.6
All Vehicles		2875	12.0	0.641	19.3	LOS B	15.3	117.2	0.60	0.62	37.5

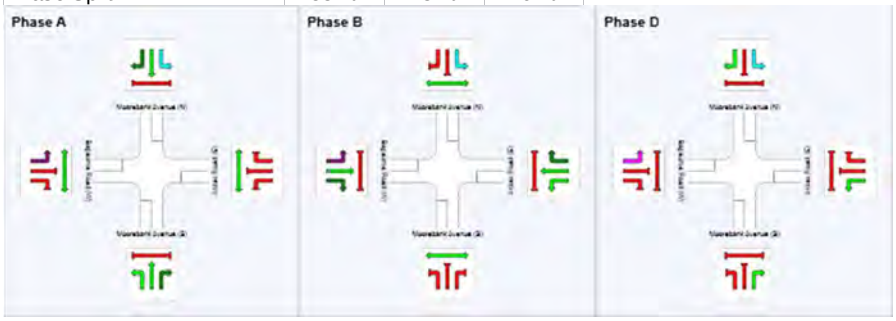
PHASING SUMMARY

Site: I-01 2016 FU MINT AM

Intersection of Moorebank Avenue, Anzac Road and Bapaume Road
2016 Future with MINT AM PEAK
Signals - Fixed Time Cycle Time = 100 seconds (Optimum Cycle Time - Minimum Delay)

Phase Timing Results

Phase	A	B	D
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	53	81
Green Time (sec)	47	22	13
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	53	28	19
Phase Split	53 %	28 %	19 %



MOVEMENT SUMMARY

Site: I-01 2016 FU MINT PM

Intersection of Moorebank Avenue, Anzac Road and Bapaume Road
2016 Future with MINT PM PEAK
Signals - Fixed Time Cycle Time = 100 seconds (Optimum Cycle Time - Minimum Delay)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total	Demand Flows HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	95% Back of Queue Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Moorebank Avenue (S)											
1	L2	1	0.0	0.214	11.2	LOS A	2.0	16.9	0.19	0.17	53.4
2	T1	469	21.1	0.214	3.7	LOS A	2.0	16.9	0.19	0.17	53.5
3	R2	188	1.1	0.536	37.6	LOS C	8.3	58.9	0.96	0.87	29.4
Approach		659	15.3	0.536	13.4	LOS A	8.3	58.9	0.41	0.37	43.4
East: Anzac Road (E)											
4	L2	424	2.2	0.570	32.6	LOS C	16.0	113.9	0.82	0.84	31.6
5	T1	1	0.0	0.570	25.6	LOS B	16.0	113.9	0.82	0.84	31.6
6	R2	287	5.5	0.909	67.1	LOS E	17.2	126.3	1.00	1.04	21.1
Approach		713	3.5	0.909	46.5	LOS D	17.2	126.3	0.90	0.92	26.3
North: Moorebank Avenue (N)											
7	L2	286	4.0	0.159	7.6	LOS A	0.0	0.0	0.00	0.59	48.5
8	T1	1191	9.7	0.757	18.5	LOS B	20.3	153.6	0.71	0.64	36.0
9	R2	41	59.0	0.145	26.0	LOS B	1.2	13.0	0.63	0.68	31.6
Approach		1518	10.0	0.757	16.7	LOS B	20.3	153.6	0.57	0.63	37.7
West: Bapaume Road (W)											
10	L2	137	18.5	0.199	10.9	LOS A	1.9	15.2	0.37	0.63	37.5
11	T1	9	0.0	0.112	34.4	LOS C	1.2	8.2	0.83	0.70	21.2
12	R2	20	0.0	0.112	41.5	LOS C	1.2	8.2	0.83	0.70	21.2
Approach		166	15.2	0.199	15.9	LOS B	1.9	15.2	0.45	0.64	33.1
All Vehicles		3056	9.9	0.909	22.9	LOS B	20.3	153.6	0.61	0.64	34.8

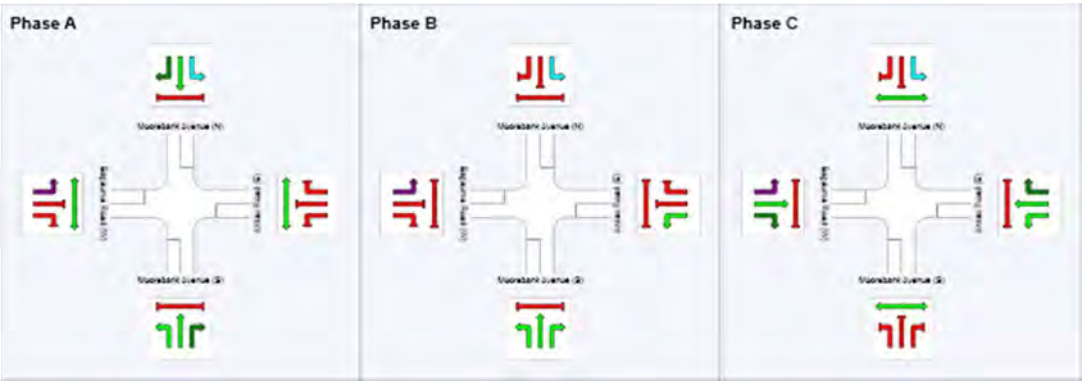
PHASING SUMMARY

Site: I-01 2016 FU MINT PM

Intersection of Moorebank Avenue, Anzac Road and Bapaume Road
2016 Future with MINT PM PEAK
Signals - Fixed Time Cycle Time = 100 seconds (Optimum Cycle Time - Minimum Delay)

Phase Timing Results

Phase	A	B	C
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	53	70
Green Time (sec)	47	11	24
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	53	17	30
Phase Split	53 %	17 %	30 %



I-02 Intersection of Moorebank Avenue, Warehouse Access 1 and DNSDC Access

MOVEMENT SUMMARY

Site: I-02 2016 FU MINT AM

Intersection of Moorebank Avenue, Warehouse Access 1 and DNSDC Access
2016 Future with MINT AM PEAK
Signals - Fixed Time Cycle Time = 100 seconds (Optimum Cycle Time - Minimum Delay)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Moorebank Avenue (S)											
1	L2	6	0.0	0.562	9.6	LOS A	7.9	59.6	0.26	0.24	46.1
2	T1	1361	8.9	0.562	4.0	LOS A	7.9	59.6	0.26	0.24	53.3
3	R2	22	0.0	0.198	56.7	LOS E	1.1	7.6	0.98	0.70	12.3
Approach		1389	8.7	0.562	4.9	LOS A	7.9	59.6	0.27	0.24	51.5
East: DNSDC Access (E)											
4	L2	5	20.0	0.096	52.8	LOS D	0.6	4.8	0.95	0.69	15.7
6	R2	7	14.3	0.096	52.8	LOS D	0.6	4.8	0.95	0.69	18.7
Approach		13	16.7	0.096	52.8	LOS D	0.6	4.8	0.95	0.69	17.5
North: Moorebank Avenue (N)											
7	L2	95	6.7	0.354	13.6	LOS A	8.8	67.9	0.48	0.49	29.6
8	T1	739	13.0	0.354	8.0	LOS A	9.0	69.7	0.48	0.45	47.3
9	R2	26	44.0	0.310	58.9	LOS E	1.3	12.9	0.99	0.72	17.0
Approach		860	13.2	0.354	10.2	LOS A	9.0	69.7	0.49	0.46	43.1
West: Warehouse Access 1 (W)											
10	L2	13	91.7	0.071	44.1	LOS D	0.6	7.0	0.87	0.69	19.6
12	R2	1	0.0	0.071	43.3	LOS D	0.6	7.0	0.87	0.69	18.2
Approach		14	84.6	0.071	44.1	LOS D	0.6	7.0	0.87	0.69	19.5
All Vehicles		2276	10.9	0.562	7.4	LOS A	9.0	69.7	0.36	0.33	47.3

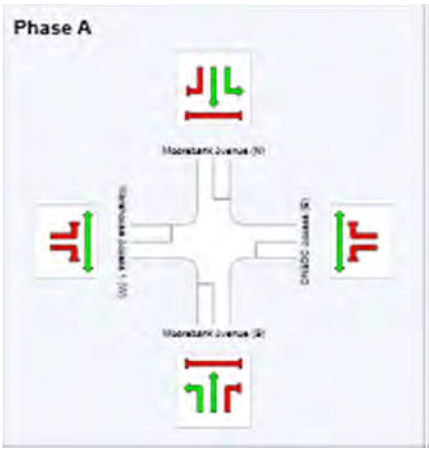
PHASING SUMMARY

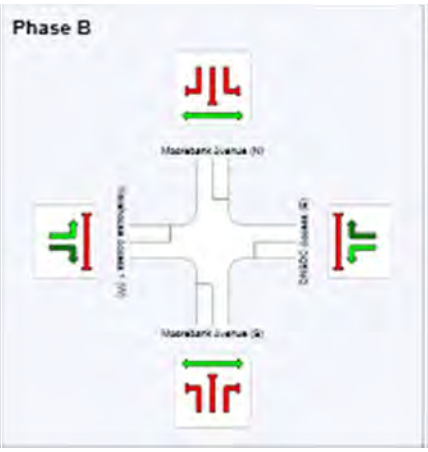
Site: I-02 2016 FU MINT AM

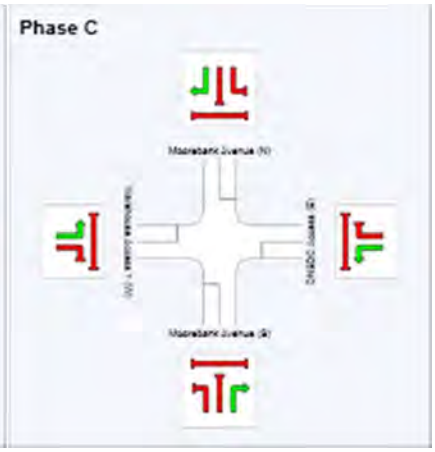
Intersection of Moorebank Avenue, Warehouse Access 1 and DNSDC Access
2016 Future with MINT AM PEAK
Signals - Fixed Time Cycle Time = 100 seconds (Optimum Cycle Time - Minimum Delay)

Phase Timing Results

Phase	A	B	C
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	72	88
Green Time (sec)	66	10	6
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	72	16	12
Phase Split	72 %	16 %	12 %







MOVEMENT SUMMARY

Site: I-02 2016 FU MINT PM

Intersection of Moorebank Avenue, Warehouse Access 1 and DNSDC Access
2016 Future with MINT PM PEAK
Signals - Fixed Time Cycle Time = 100 seconds (Optimum Cycle Time - Minimum Delay)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Moorebank Avenue (S)											
1	L2	1	0.0	0.260	8.6	LOS A	2.3	18.1	0.17	0.15	48.0
2	T1	612	14.5	0.260	3.0	LOS A	2.3	18.1	0.17	0.15	54.8
3	R2	1	0.0	0.006	13.9	LOS A	0.0	0.1	0.40	0.62	21.9
Approach		614	14.4	0.260	3.0	LOS A	2.3	18.1	0.17	0.15	54.7
East: DNSDC Access (E)											
4	L2	4	0.0	0.224	55.9	LOS D	1.3	9.7	0.98	0.71	15.6
6	R2	22	9.5	0.224	55.9	LOS D	1.3	9.7	0.98	0.71	18.1
Approach		26	8.0	0.224	55.9	LOS D	1.3	9.7	0.98	0.71	17.7
North: Moorebank Avenue (N)											
7	L2	6	16.7	0.564	10.3	LOS A	15.5	114.8	0.43	0.40	32.4
8	T1	1618	7.0	0.564	4.5	LOS A	15.5	114.8	0.42	0.39	52.5
9	R2	13	91.7	0.187	59.6	LOS E	0.6	8.1	0.98	0.69	16.5
Approach		1637	7.7	0.564	5.0	LOS A	15.5	114.8	0.43	0.39	51.7
West: Warehouse Access 1 (W)											
10	L2	26	44.0	0.167	47.3	LOS D	1.5	13.3	0.92	0.72	19.4
12	R2	6	0.0	0.167	46.9	LOS D	1.5	13.3	0.92	0.72	17.3
Approach		33	35.5	0.167	47.2	LOS D	1.5	13.3	0.92	0.72	19.0
All Vehicles		2309	9.9	0.564	5.6	LOS A	15.5	114.8	0.37	0.34	50.7

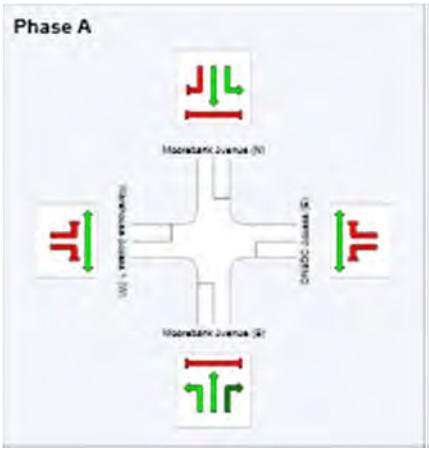
PHASING SUMMARY

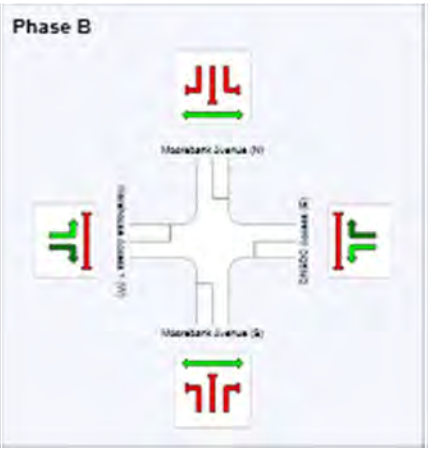
Site: I-02 2016 FU MINT PM

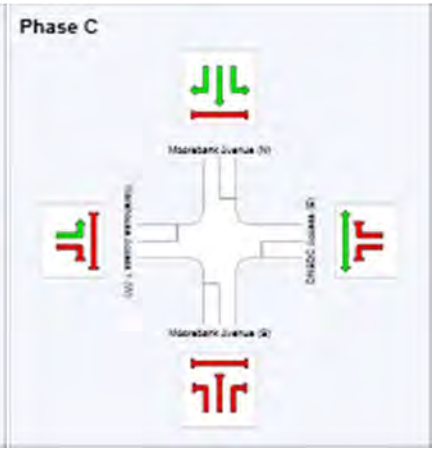
Intersection of Moorebank Avenue, Warehouse Access 1 and DNSDC Access
2016 Future with MINT PM PEAK
Signals - Fixed Time Cycle Time = 100 seconds (Optimum Cycle Time - Minimum Delay)

Phase Timing Results

Phase	A	B	C
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	72	88
Green Time (sec)	66	10	6
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	72	16	12
Phase Split	72 %	16 %	12 %







I-03 Intersection of Moorebank Avenue and Warehouse Access 2

MOVEMENT SUMMARY

Site: I-03 2016 FU MINT AM

Intersection of Moorebank Avenue and Warehouse Access 2
2016 Future with MINT AM PEAK
Signals - Fixed Time Cycle Time = 90 seconds (Optimum Cycle Time - Minimum Delay)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Moorebank Avenue (S)											
1	L2	6	0.0	0.600	18.4	LOS B	18.1	135.6	0.65	0.59	45.0
2	T1	1377	8.0	0.600	10.9	LOS A	18.2	135.7	0.65	0.59	45.0
Approach		1383	7.9	0.600	11.0	LOS A	18.2	135.7	0.65	0.59	45.0
North: Moorebank Avenue (N)											
8	T1	718	11.9	0.262	0.8	LOS A	1.0	8.0	0.07	0.06	56.8
9	R2	26	44.0	0.120	15.6	LOS B	0.4	3.8	0.59	0.67	31.2
Approach		744	13.0	0.262	1.4	LOS A	1.0	8.0	0.09	0.08	55.4
West: Warehouse Access 2 (W)											
10	L2	13	91.7	0.060	39.5	LOS C	0.5	6.0	0.84	0.66	13.8
12	R2	1	0.0	0.060	39.6	LOS C	0.5	6.0	0.84	0.66	13.8
Approach		14	84.6	0.060	39.5	LOS C	0.5	6.0	0.84	0.66	13.8
All Vehicles		2141	10.2	0.600	7.8	LOS A	18.2	135.7	0.46	0.42	46.6

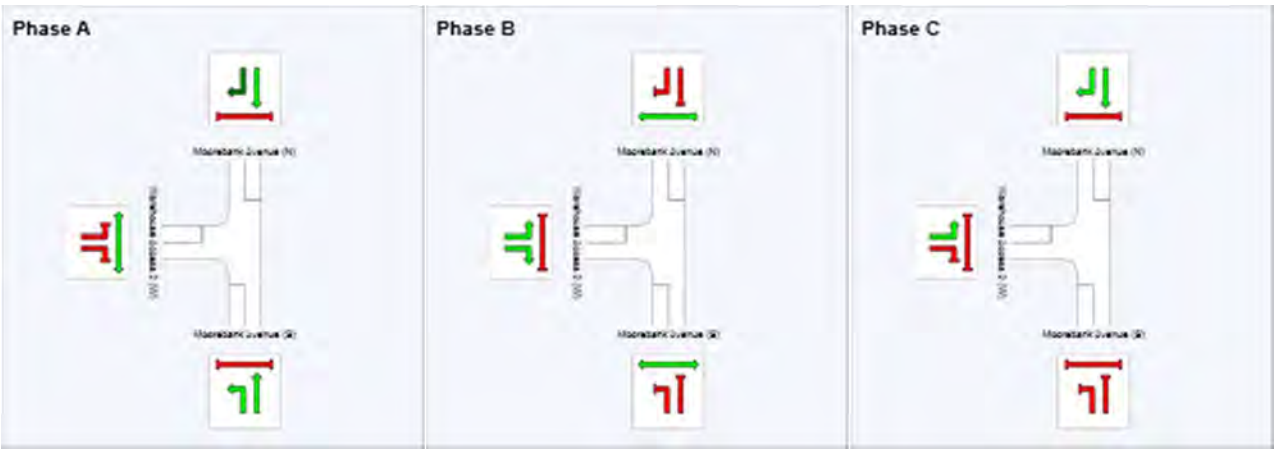
PHASING SUMMARY

Site: I-03 2016 FU MINT AM

Intersection of Moorebank Avenue and Warehouse Access 2
2016 Future with MINT AM PEAK
Signals - Fixed Time Cycle Time = 90 seconds (Optimum Cycle Time - Minimum Delay)

Phase Timing Results

Phase	A	B	C
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	62	78
Green Time (sec)	56	10	6
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	62	16	12
Phase Split	69 %	18 %	13 %



MOVEMENT SUMMARY

Site: I-03 2016 FU MINT PM

Intersection of Moorebank Avenue and Warehouse Access 2
2016 Future with MINT PM PEAK
Signals - Fixed Time Cycle Time = 90 seconds (Optimum Cycle Time - Minimum Delay)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Moorebank Avenue (S)											
1	L2	1	0.0	0.262	15.6	LOS B	5.7	44.7	0.48	0.42	48.1
2	T1	585	13.1	0.262	8.2	LOS A	5.7	44.7	0.48	0.42	48.1
Approach		586	13.1	0.262	8.2	LOS A	5.7	44.7	0.48	0.42	48.1
North: Moorebank Avenue (N)											
8	T1	1616	6.3	0.571	1.2	LOS A	3.8	28.2	0.12	0.11	55.5
9	R2	13	91.7	0.036	11.7	LOS A	0.2	1.9	0.40	0.55	35.3
Approach		1628	7.0	0.571	1.3	LOS A	3.8	28.2	0.12	0.11	55.2
West: Warehouse Access 2 (W)											
10	L2	26	44.0	0.137	42.8	LOS D	1.3	11.5	0.89	0.72	13.0
12	R2	6	0.0	0.137	42.9	LOS D	1.3	11.5	0.89	0.72	13.0
Approach		33	35.5	0.137	42.8	LOS D	1.3	11.5	0.89	0.72	13.0
All Vehicles		2247	9.0	0.571	3.7	LOS A	5.7	44.7	0.23	0.20	50.9

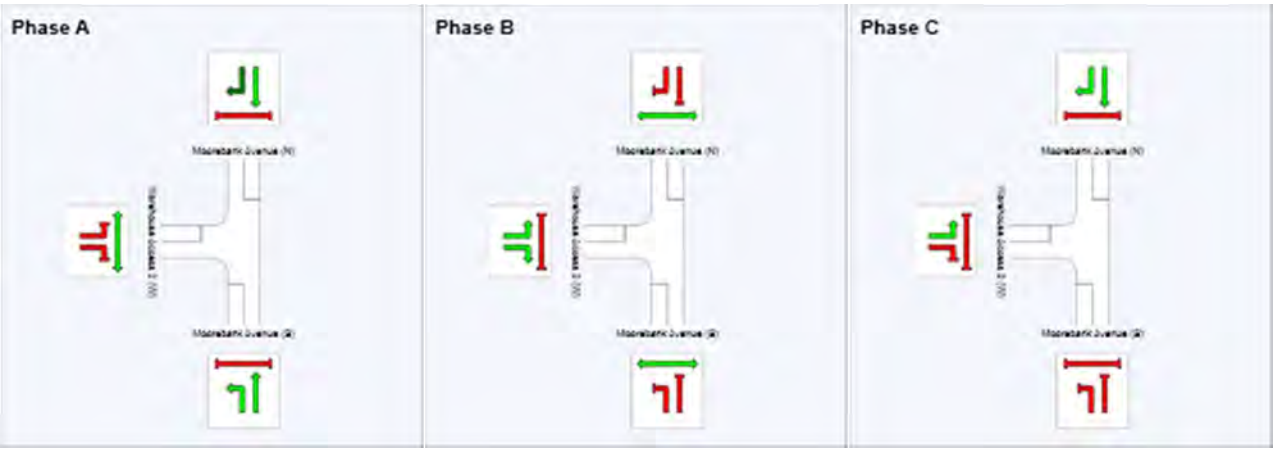
PHASING SUMMARY

Site: I-03 2016 FU MINT PM

Intersection of Moorebank Avenue and Warehouse Access 2
2016 Future with MINT PM PEAK
Signals - Fixed Time Cycle Time = 90 seconds (Optimum Cycle Time - Minimum Delay)

Phase Timing Results

Phase	A	B	C
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	62	78
Green Time (sec)	56	10	6
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	62	16	12
Phase Split	69 %	18 %	13 %



I-04 Intersection of Moorebank Avenue and Warehouse Access 3

MOVEMENT SUMMARY

Site: I-04 2016 FU MINT AM

Intersection of Moorebank Avenue and Warehouse Access 3
2016 Future with MINT AM PEAK
Signals - Fixed Time Cycle Time = 90 seconds (Optimum Cycle Time - Minimum Delay)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Moorebank Avenue (S)											
1	L2	13	0.0	0.590	18.3	LOS B	17.8	131.6	0.64	0.59	44.0
2	T1	1361	6.4	0.590	10.8	LOS A	17.9	131.9	0.64	0.59	44.0
Approach		1374	6.4	0.590	10.9	LOS A	17.9	131.9	0.64	0.59	44.0
North: Moorebank Avenue (N)											
8	T1	667	9.5	0.240	3.5	LOS A	4.3	32.5	0.32	0.28	53.8
9	R2	51	43.8	0.227	15.8	LOS B	0.8	7.8	0.61	0.69	41.9
Approach		718	11.9	0.240	4.3	LOS A	4.3	32.5	0.34	0.31	52.8
West: Warehouse Access 3 (W)											
10	L2	23	95.5	0.104	39.1	LOS C	0.9	11.1	0.84	0.68	13.9
12	R2	1	0.0	0.104	39.2	LOS C	0.9	11.1	0.84	0.68	13.9
Approach		24	91.3	0.104	39.1	LOS C	0.9	11.1	0.84	0.68	13.9
All Vehicles		2116	9.2	0.590	9.0	LOS A	17.9	131.9	0.54	0.49	46.5

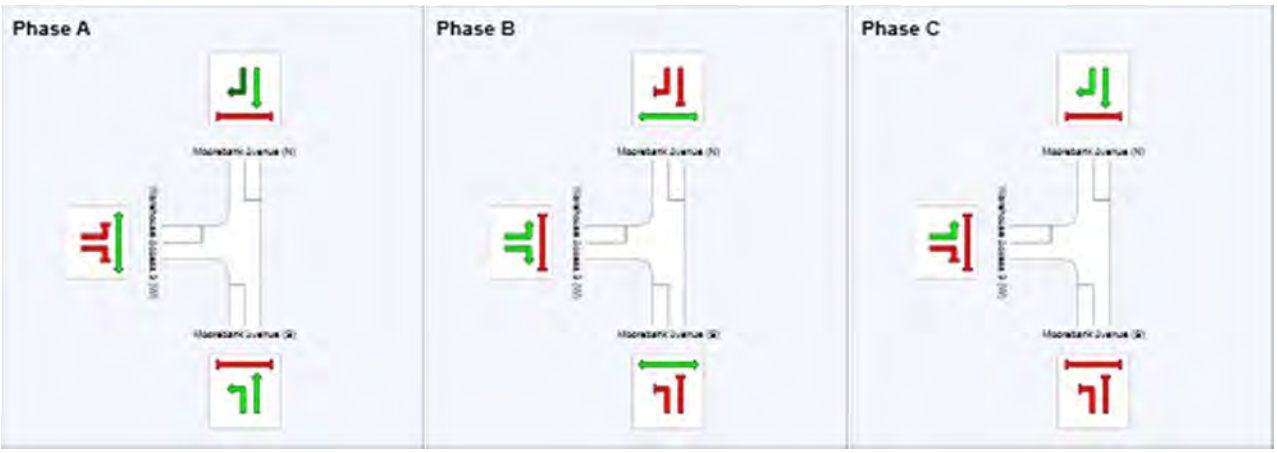
PHASING SUMMARY

Site: I-04 2016 FU MINT AM

Intersection of Moorebank Avenue and Warehouse Access 3
2016 Future with MINT AM PEAK
Signals - Fixed Time Cycle Time = 90 seconds (Optimum Cycle Time - Minimum Delay)

Phase Timing Results

Phase	A	B	C
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	62	78
Green Time (sec)	56	10	6
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	62	16	12
Phase Split	69 %	18 %	13 %



MOVEMENT SUMMARY

Site: I-04 2016 FU MINT PM

Intersection of Moorebank Avenue and Warehouse Access 3
2016 Future with MINT PM PEAK
Signals - Fixed Time Cycle Time = 90 seconds (Optimum Cycle Time - Minimum Delay)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Moorebank Avenue (S)											
1	L2	1	0.0	0.244	16.4	LOS B	5.4	41.4	0.50	0.43	46.3
2	T1	535	10.2	0.244	9.0	LOS A	5.4	41.5	0.50	0.43	46.3
Approach		536	10.2	0.244	9.0	LOS A	5.4	41.5	0.50	0.43	46.3
North: Moorebank Avenue (N)											
8	T1	1600	5.0	0.562	5.0	LOS A	14.7	107.6	0.46	0.42	51.5
9	R2	23	95.5	0.061	11.7	LOS A	0.3	3.5	0.40	0.56	45.3
Approach		1623	6.3	0.562	5.0	LOS A	14.7	107.6	0.46	0.42	51.4
West: Warehouse Access 3 (W)											
10	L2	51	43.8	0.257	42.9	LOS D	2.5	22.6	0.90	0.75	13.0
12	R2	13	0.0	0.257	43.0	LOS D	2.5	22.6	0.90	0.75	13.0
Approach		63	35.0	0.257	42.9	LOS D	2.5	22.6	0.90	0.75	13.0
All Vehicles		2222	8.1	0.562	7.1	LOS A	14.7	107.6	0.48	0.43	48.9

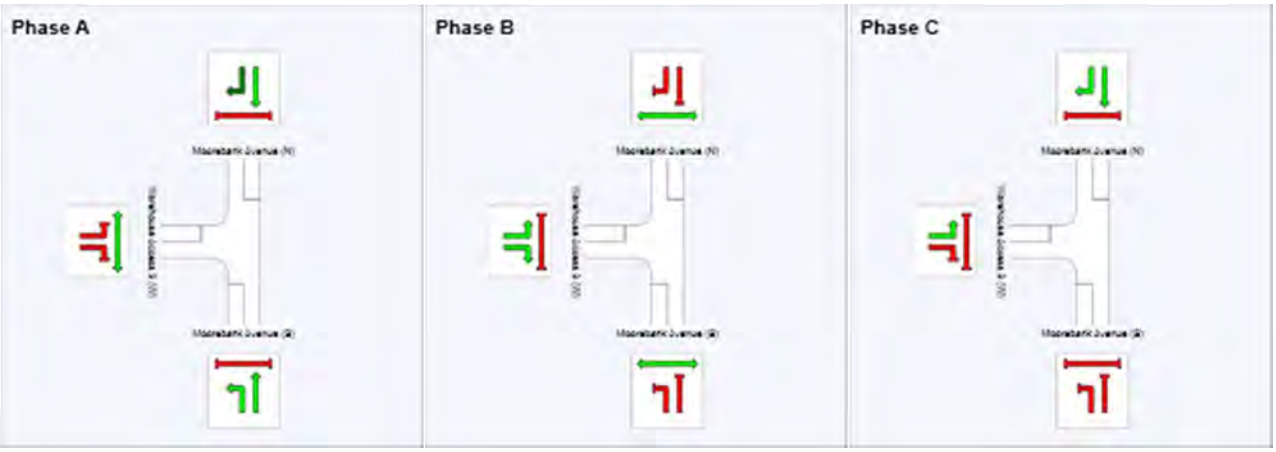
PHASING SUMMARY

Site: I-04 2016 FU MINT PM

Intersection of Moorebank Avenue and Warehouse Access 3
2016 Future with MINT PM PEAK
Signals - Fixed Time Cycle Time = 90 seconds (Optimum Cycle Time - Minimum Delay)

Phase Timing Results

Phase	A	B	C
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	60	76
Green Time (sec)	54	10	8
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	60	16	14
Phase Split	67 %	18 %	16 %



I-05 Intersection of Moorebank Avenue and Main Access

MOVEMENT SUMMARY

Site: I-05 2016 FU MINT AM

Intersection of Moorebank Avenue and Main Access
2016 Future with MINT AM PEAK
Signals - Fixed Time Cycle Time = 90 seconds (Optimum Cycle Time - Minimum Delay)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Moorebank Avenue (S)											
1	L2	24	0.0	0.591	19.4	LOS B	18.3	131.2	0.67	0.62	42.9
2	T1	1329	3.2	0.591	11.9	LOS A	18.3	131.6	0.67	0.61	43.0
Approach		1354	3.2	0.591	12.0	LOS A	18.3	131.6	0.67	0.61	43.0
North: Moorebank Avenue (N)											
8	T1	566	3.3	0.225	4.0	LOS A	4.3	31.2	0.34	0.29	53.1
9	R2	101	43.8	0.472	17.8	LOS B	2.1	19.8	0.74	0.75	40.4
Approach		667	9.5	0.472	6.1	LOS A	4.3	31.2	0.40	0.36	50.8
West: Main Access (W)											
10	L2	45	97.7	0.089	36.6	LOS C	0.8	10.6	0.81	0.67	14.6
12	R2	1	0.0	0.089	37.2	LOS C	0.8	10.1	0.81	0.67	14.4
Approach		46	95.5	0.089	36.6	LOS C	0.8	10.6	0.81	0.67	14.6
All Vehicles		2067	7.3	0.591	10.7	LOS A	18.3	131.6	0.58	0.53	44.7

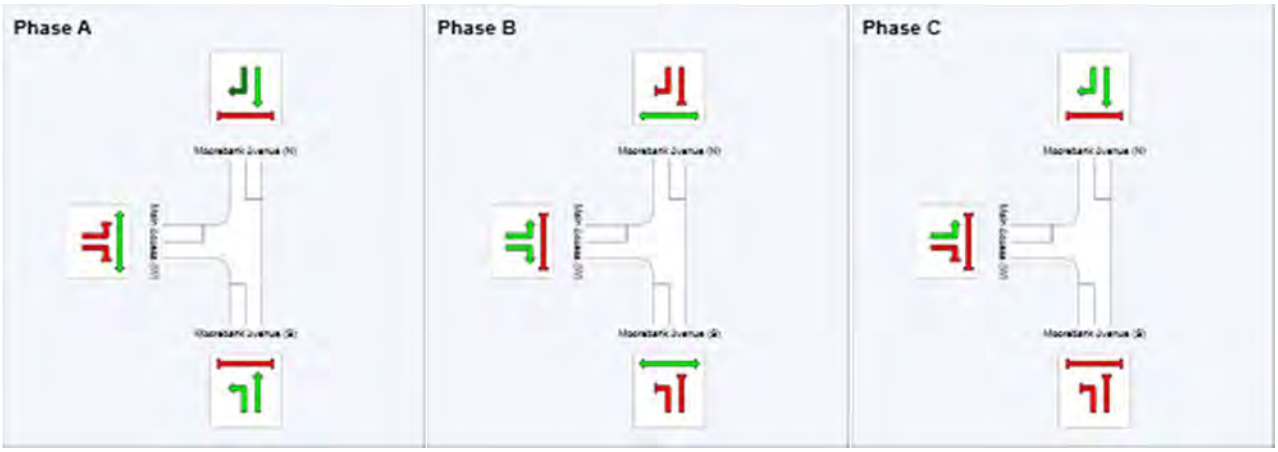
PHASING SUMMARY

Site: I-05 2016 FU MINT AM

Intersection of Moorebank Avenue and Main Access
2016 Future with MINT AM PEAK
Signals - Fixed Time Cycle Time = 90 seconds (Optimum Cycle Time - Minimum Delay)

Phase Timing Results

Phase	A	B	C
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	60	78
Green Time (sec)	54	12	6
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	60	18	12
Phase Split	67 %	20 %	13 %



MOVEMENT SUMMARY

Site: I-05 2016 FU MINT PM

Intersection of Moorebank Avenue and Main Access
2016 Future with MINT PM PEAK
Signals - Fixed Time Cycle Time = 90 seconds (Optimum Cycle Time - Minimum Delay)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Moorebank Avenue (S)											
1	L2	1	0.0	0.232	21.6	LOS B	5.5	38.9	0.61	0.52	41.4
2	T1	434	2.4	0.232	14.1	LOS A	5.5	39.0	0.61	0.52	41.4
Approach		435	2.4	0.232	14.2	LOS A	5.5	39.0	0.61	0.52	41.4
North: Moorebank Avenue (N)											
8	T1	1568	2.3	0.624	5.8	LOS A	18.3	130.5	0.49	0.45	50.4
9	R2	45	97.7	0.100	12.0	LOS A	0.6	7.5	0.43	0.58	45.0
Approach		1614	5.0	0.624	6.0	LOS A	18.3	130.5	0.49	0.46	50.3
West: Main Access (W)											
10	L2	101	43.8	0.176	30.9	LOS C	2.7	26.0	0.75	0.72	16.5
12	R2	24	0.0	0.176	46.1	LOS D	1.5	11.7	0.92	0.73	12.3
Approach		125	35.3	0.176	33.9	LOS C	2.7	26.0	0.78	0.72	15.5
All Vehicles		2174	6.2	0.624	9.2	LOS A	18.3	130.5	0.53	0.48	46.4

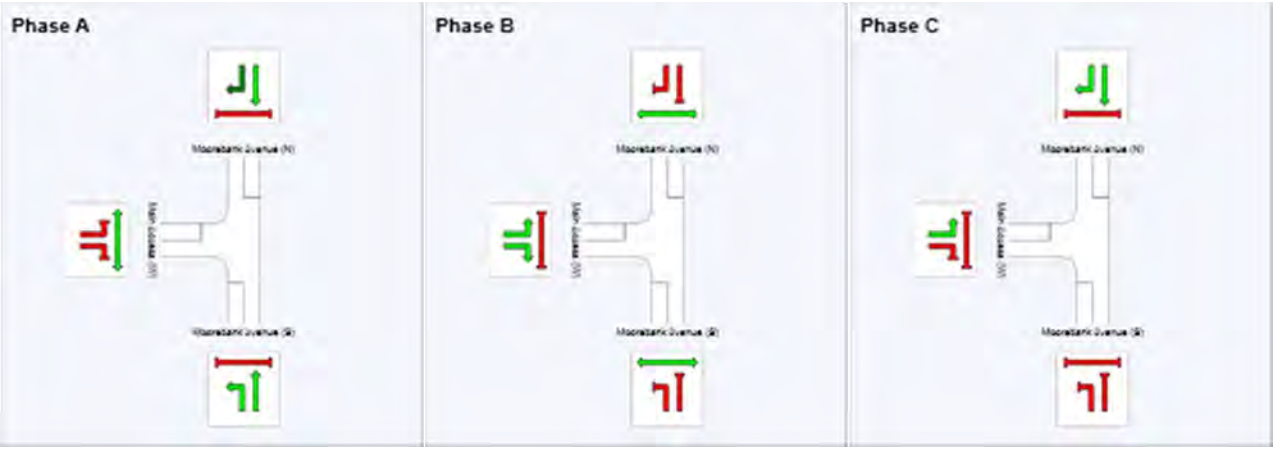
PHASING SUMMARY

Site: I-05 2016 FU MINT PM

Intersection of Moorebank Avenue and Main Access
2016 Future with MINT PM PEAK
Signals - Fixed Time Cycle Time = 90 seconds (Optimum Cycle Time - Minimum Delay)

Phase Timing Results

Phase	A	B	C
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	50	68
Green Time (sec)	44	12	16
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	50	18	22
Phase Split	56 %	20 %	24 %



2. 2016 Future traffic without Moorebank IMT development (Do-nothing scenario)

I-01 Intersection of Moorebank Avenue and Bapaume Road

MOVEMENT SUMMARY

Site: I-01 2016 DN BASE AM

Intersection of Moorebank Avenue and Bapaume Road
2016 Do-nothing AM PEAK
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Moorebank Avenue (S)											
1	L2	19	0.0	0.010	5.5	LOS A	0.0	0.0	0.00	0.58	45.1
2	T1	1102	5.3	0.584	0.0	LOS A	0.0	0.0	0.00	0.00	59.8
Approach		1121	5.2	0.584	0.1	NA	0.0	0.0	0.00	0.01	59.5
North: Moorebank Avenue (S)											
8	T1	854	5.4	0.355	4.0	LOS A	4.2	30.1	0.22	0.08	51.8
9	R2	82	1.3	0.355	23.8	LOS B	4.2	30.1	1.00	0.35	37.6
Approach		936	5.1	0.355	5.7	NA	4.2	30.1	0.29	0.10	49.7
West: Bapaume Road (W)											
10	L2	3	33.3	0.021	28.4	LOS B	0.1	0.6	0.86	0.94	32.4
12	R2	1	0.0	0.074	229.6	LOS F	0.2	1.3	0.99	0.99	5.1
Approach		4	25.0	0.074	78.7	LOS F	0.2	1.3	0.89	0.95	17.2
All Vehicles		2061	5.2	0.584	2.8	NA	4.2	30.1	0.13	0.05	54.3

MOVEMENT SUMMARY

Site: I-01 2016 DN BASE PM

Intersection of Moorebank Avenue and Bapaume Road
2016 Do-nothing PM PEAK
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Moorebank Avenue (S)											
1	L2	1	0.0	0.001	5.5	LOS A	0.0	0.0	0.00	0.58	45.1
2	T1	554	4.6	0.292	0.0	LOS A	0.0	0.0	0.00	0.00	59.9
Approach		555	4.6	0.292	0.0	NA	0.0	0.0	0.00	0.00	59.9
North: Moorebank Avenue (S)											
8	T1	1407	2.8	0.381	2.9	LOS A	6.0	43.0	0.36	0.01	54.2
9	R2	19	11.1	0.381	11.6	LOS A	6.0	43.0	0.74	0.02	47.7
Approach		1426	2.9	0.381	3.0	NA	6.0	43.0	0.36	0.01	54.1
West: Bapaume Road (W)											
10	L2	91	3.5	0.145	9.6	LOS A	0.6	4.0	0.55	0.77	45.8
12	R2	13	0.0	0.471	189.1	LOS F	1.4	9.5	0.98	1.03	6.0
Approach		103	3.1	0.471	31.6	LOS C	1.4	9.5	0.60	0.80	30.5
All Vehicles		2084	3.3	0.471	3.6	NA	6.0	43.0	0.28	0.05	52.9

I-02 Intersection of Moorebank Avenue and Anzac Road

MOVEMENT SUMMARY

Site: I-02 2016 DN BASE AM

Intersection of Moorebank Avenue and Anzac Road
2016 Do-nothing AM PEAK
Signals - Fixed Time Cycle Time = 103 seconds (User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Moorebank Avenue (S)											
2	T1	928	3.5	0.697	9.6	LOS A	27.0	194.4	0.64	0.59	47.6
3	R2	349	3.3	0.543	25.5	LOS B	13.4	96.5	0.85	0.83	41.4
Approach		1278	3.5	0.697	14.0	LOS A	27.0	194.4	0.70	0.66	45.0
East: Anzac Road (E)											
4	L2	220	3.3	0.266	24.1	LOS B	6.8	48.8	0.66	0.75	42.1
6	R2	194	13.6	0.736	54.1	LOS D	10.0	77.9	1.00	0.87	21.0
Approach		414	8.1	0.736	38.1	LOS C	10.0	77.9	0.82	0.81	31.1
North: Moorebank Avenue (N)											
7	L2	284	10.0	0.186	6.1	LOS A	1.0	7.5	0.15	0.59	49.8
8	T1	576	3.3	0.532	22.4	LOS B	16.1	115.9	0.76	0.66	37.3
Approach		860	5.5	0.532	17.0	LOS B	16.1	115.9	0.56	0.63	40.7
All Vehicles		2552	4.9	0.736	18.9	LOS B	27.0	194.4	0.67	0.67	40.3

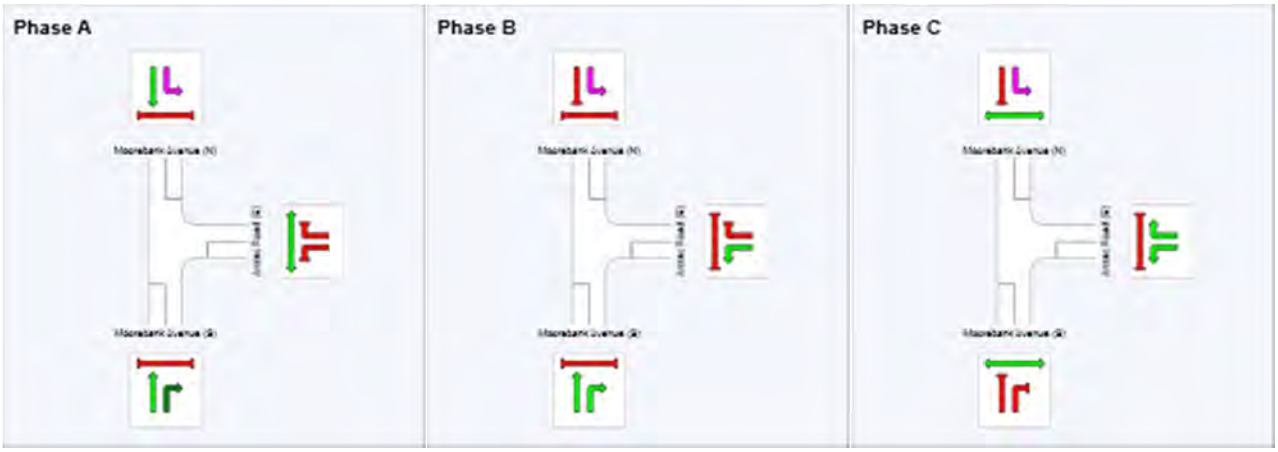
PHASING SUMMARY

Site: I-02 2016 DN BASE AM

Intersection of Moorebank Avenue and Anzac Road
2016 Do-nothing AM PEAK
Signals - Fixed Time Cycle Time = 103 seconds (User-Given Phase Times)

Phase Timing Results

Phase	A	B	C
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	50	78
Green Time (sec)	44	22	19
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	50	28	25
Phase Split	49 %	27 %	24 %



MOVEMENT SUMMARY

Site: I-02 2016 DN BASE PM

Intersection of Moorebank Avenue and Anzac Road
2016 Do-nothing PM PEAK
Signals - Fixed Time Cycle Time = 110 seconds (User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Moorebank Avenue (S)											
2	T1	284	3.7	0.238	9.5	LOS A	6.5	47.3	0.47	0.40	47.8
3	R2	172	1.2	0.801	59.8	LOS E	9.8	69.7	1.00	1.01	29.9
Approach		456	2.8	0.801	28.4	LOS B	9.8	69.7	0.67	0.63	36.8
East: Anzac Road (E)											
4	L2	432	2.2	0.633	36.0	LOS C	19.0	135.6	0.88	0.84	37.0
6	R2	287	5.5	0.680	47.6	LOS D	14.3	104.9	0.97	0.84	22.4
Approach		719	3.5	0.680	40.7	LOS C	19.0	135.6	0.91	0.84	31.1
North: Moorebank Avenue (N)											
7	L2	228	5.1	0.143	6.0	LOS A	0.8	5.6	0.13	0.59	50.2
8	T1	1124	2.4	0.852	25.7	LOS B	42.2	301.7	0.85	0.81	35.4
Approach		1353	2.9	0.852	22.4	LOS B	42.2	301.7	0.73	0.77	37.3
All Vehicles		2527	3.0	0.852	28.7	LOS C	42.2	301.7	0.77	0.77	34.8

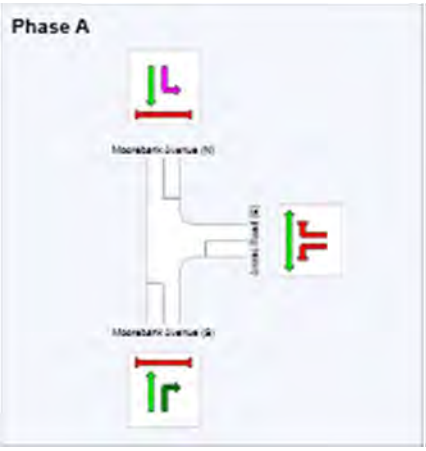
PHASING SUMMARY

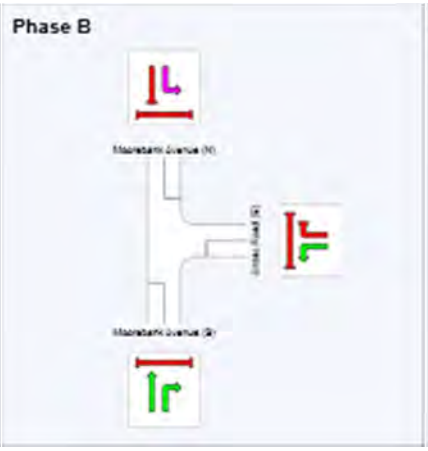
Site: I-02 2016 DN BASE PM

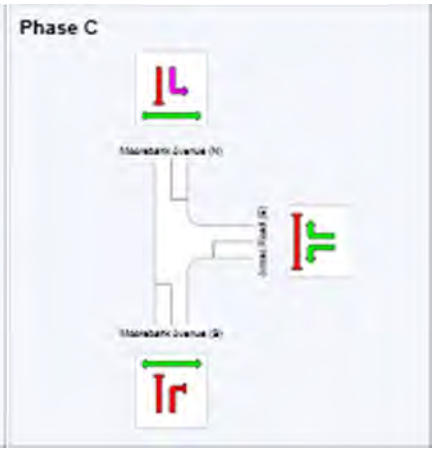
Intersection of Moorebank Avenue and Anzac Road
2016 Do-nothing PM PEAK
Signals - Fixed Time Cycle Time = 110 seconds (User-Given Phase Times)

Phase Timing Results

Phase	A	B	C
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	63	75
Green Time (sec)	57	6	29
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	63	12	35
Phase Split	57 %	11 %	32 %







I-03 Intersection of Moorebank Avenue and Defence Support Access

MOVEMENT SUMMARY

Site: I-03 2016 DN BASE AM

Intersection of Moorebank Avenue and Defence Support Access (Military Access 1)
2016 Do-nothing AM PEAK
Signals - Fixed Time Cycle Time = 90 seconds (Optimum Cycle Time - Minimum Delay)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Moorebank Avenue (S)											
1	L2	16	0.0	0.010	6.0	LOS A	0.0	0.3	0.14	0.59	46.8
2	T1	1265	3.1	0.854	9.7	LOS A	39.1	281.1	0.72	0.70	51.0
Approach		1281	3.0	0.854	9.6	LOS A	39.1	281.1	0.71	0.70	50.9
North: Moorebank Avenue (N)											
8	T1	740	3.7	0.498	6.4	LOS A	12.4	89.4	0.46	0.42	53.6
9	R2	16	0.0	0.498	13.0	LOS A	12.4	89.4	0.52	0.48	30.9
Approach		756	3.6	0.498	6.5	LOS A	12.4	89.4	0.46	0.42	53.1
West: Military Access 1 (W)											
10	L2	2	0.0	0.023	48.3	LOS D	0.1	0.9	0.94	0.63	25.5
12	R2	1	0.0	0.023	48.2	LOS D	0.1	0.9	0.94	0.63	22.8
Approach		3	0.0	0.023	48.3	LOS D	0.1	0.9	0.94	0.63	24.6
All Vehicles		2040	3.3	0.854	8.5	LOS A	39.1	281.1	0.62	0.60	51.7

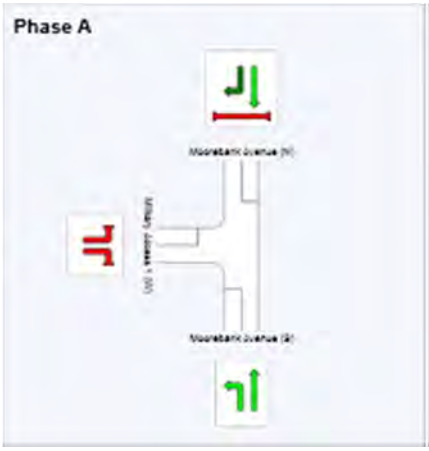
PHASING SUMMARY

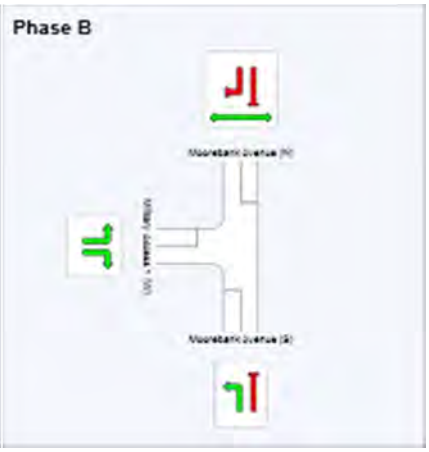
Site: I-03 2016 DN BASE AM

Intersection of Moorebank Avenue and Defence Support Access (Military Access 1)
2016 Do-nothing AM PEAK
Signals - Fixed Time Cycle Time = 90 seconds (Optimum Cycle Time - Minimum Delay)

Phase Timing Results

Phase	A	B
Reference Phase	Yes	No
Phase Change Time (sec)	0	76
Green Time (sec)	70	8
Yellow Time (sec)	4	4
All-Red Time (sec)	2	2
Phase Time (sec)	76	14
Phase Split	84 %	16 %





MOVEMENT SUMMARY

Site: I-03 2016 DN BASE PM

Intersection of Moorebank Avenue and Defence Support Access (Military Access 1)
2016 Do-nothing PM PEAK
Signals - Fixed Time Cycle Time = 90 seconds (Optimum Cycle Time - Minimum Delay)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Moorebank Avenue (S)											
1	L2	1	0.0	0.001	6.0	LOS A	0.0	0.0	0.14	0.58	46.8
2	T1	446	2.4	0.299	3.1	LOS A	5.6	39.8	0.31	0.28	56.8
Approach		447	2.4	0.299	3.1	LOS A	5.6	39.8	0.31	0.28	56.8
North: Moorebank Avenue (N)											
8	T1	1634	2.3	1.041	75.6	LOS F	111.5	796.2	0.85	1.30	25.2
9	R2	1	0.0	1.041	101.2	LOS F	111.5	796.2	1.00	1.58	13.8
Approach		1635	2.3	1.041	75.7	LOS F	111.5	796.2	0.85	1.30	25.1
West: Military Access 1 (W)											
10	L2	9	0.0	0.100	49.3	LOS D	0.6	4.1	0.96	0.68	25.2
12	R2	4	0.0	0.100	49.2	LOS D	0.6	4.1	0.96	0.68	22.6
Approach		14	0.0	0.100	49.2	LOS D	0.6	4.1	0.96	0.68	24.4
All Vehicles		2096	2.3	1.041	60.0	LOS E	111.5	796.2	0.73	1.07	28.5

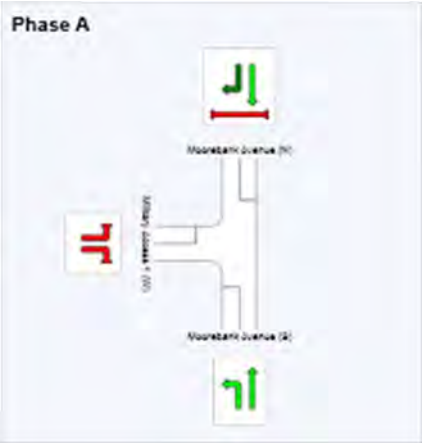
PHASING SUMMARY

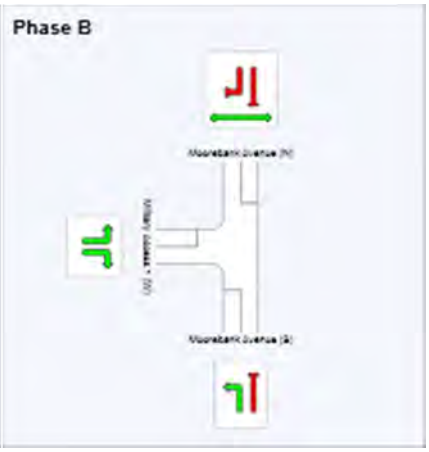
Site: I-03 2016 DN BASE PM

Intersection of Moorebank Avenue and Defence Support Access (Military Access 1)
2016 Do-nothing PM PEAK
Signals - Fixed Time Cycle Time = 90 seconds (Optimum Cycle Time - Minimum Delay)

Phase Timing Results

Phase	A	B
Reference Phase	Yes	No
Phase Change Time (sec)	0	76
Green Time (sec)	70	8
Yellow Time (sec)	4	4
All-Red Time (sec)	2	2
Phase Time (sec)	76	14
Phase Split	84 %	16 %





I-04 Intersection of Moorebank Avenue and DNSDC Access

MOVEMENT SUMMARY

Site: I-04 2016 DN BASE AM

Intersection of Moorebank Avenue and DNSDC Access (Military Access 2)
2016 Do-nothing AM PEAK
Signals - Fixed Time Cycle Time = 80 seconds (Optimum Cycle Time - Minimum Delay)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Moorebank Avenue (S)											
2	T1	1312	2.6	0.714	5.0	LOS A	19.9	142.6	0.51	0.47	54.9
3	R2	22	0.0	0.714	11.2	LOS A	19.9	142.6	0.58	0.54	53.4
Approach		1334	2.6	0.714	5.1	LOS A	19.9	142.6	0.51	0.47	54.9
East: DNSDC Access (W)											
4	L2	5	20.0	0.043	44.8	LOS D	0.2	1.7	0.95	0.65	33.8
6	R2	7	14.3	0.042	42.0	LOS C	0.3	2.1	0.93	0.66	33.0
Approach		13	16.7	0.043	43.2	LOS D	0.3	2.1	0.94	0.65	33.4
North: Moorebank Avenue (N)											
7	L2	95	6.7	0.063	6.1	LOS A	0.3	2.3	0.17	0.61	52.1
8	T1	607	3.5	0.425	3.9	LOS A	8.6	61.9	0.40	0.36	56.0
Approach		702	3.9	0.425	4.2	LOS A	8.6	61.9	0.36	0.39	55.5
West: Carpark Access (W)											
10	L2	1	0.0	0.006	39.4	LOS C	0.0	0.3	0.92	0.59	24.3
12	R2	1	0.0	0.007	41.7	LOS C	0.0	0.3	0.94	0.59	26.0
Approach		2	0.0	0.007	40.5	LOS C	0.0	0.3	0.93	0.59	25.2
All Vehicles		2051	3.1	0.714	5.1	LOS A	19.9	142.6	0.46	0.45	54.8

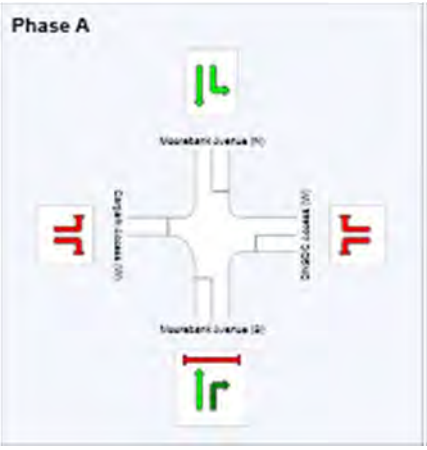
PHASING SUMMARY

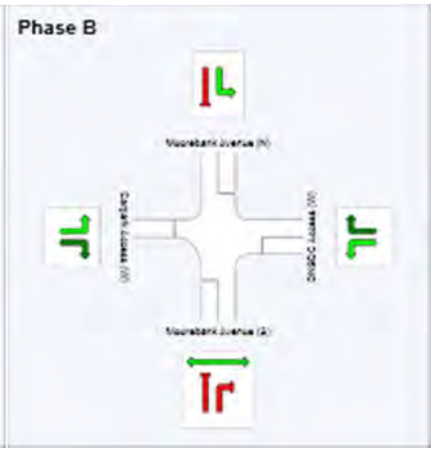
Site: I-04 2016 DN BASE AM

Intersection of Moorebank Avenue and DNSDC Access (Military Access 2)
2016 Do-nothing AM PEAK
Signals - Fixed Time Cycle Time = 80 seconds (Optimum Cycle Time - Minimum Delay)

Phase Timing Results

Phase	A	B
Reference Phase	Yes	No
Phase Change Time (sec)	0	66
Green Time (sec)	60	8
Yellow Time (sec)	4	4
All-Red Time (sec)	2	2
Phase Time (sec)	66	14
Phase Split	83 %	18 %





MOVEMENT SUMMARY

Site: I-04 2016 DN BASE PM

Intersection of Moorebank Avenue and DNSDC Access (Military Access 2)
2016 Do-nothing PM PEAK
Signals - Fixed Time Cycle Time = 110 seconds (Optimum Cycle Time - Minimum Delay)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Moorebank Avenue (S)											
2	T1	414	2.0	0.203	2.9	LOS A	4.1	29.1	0.26	0.22	56.9
3	R2	1	0.0	0.203	8.8	LOS A	4.1	29.1	0.28	0.24	55.4
Approach		415	2.0	0.203	2.9	LOS A	4.1	29.1	0.26	0.22	56.9
East: DNSDC Access (W)											
4	L2	4	0.0	0.050	62.6	LOS E	0.2	1.6	0.98	0.64	29.2
6	R2	22	9.5	0.176	59.9	LOS E	1.2	8.9	0.97	0.71	28.1
Approach		26	8.0	0.176	60.3	LOS E	1.2	8.9	0.97	0.70	28.3
North: Moorebank Avenue (N)											
7	L2	6	16.7	0.004	6.1	LOS A	0.0	0.2	0.11	0.59	51.9
8	T1	1500	2.2	0.957	32.2	LOS C	90.4	644.4	0.91	1.01	37.8
Approach		1506	2.2	0.957	32.1	LOS C	90.4	644.4	0.90	1.01	37.8
West: Carpark Access (W)											
10	L2	6	0.0	0.047	56.7	LOS E	0.3	2.3	0.95	0.65	19.4
12	R2	3	0.0	0.036	60.5	LOS E	0.2	1.2	0.98	0.62	21.0
Approach		9	0.0	0.047	57.9	LOS E	0.3	2.3	0.96	0.64	20.0
All Vehicles		1957	2.3	0.957	26.4	LOS B	90.4	644.4	0.77	0.84	40.4

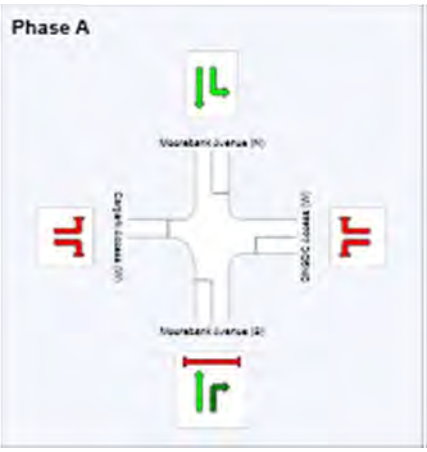
PHASING SUMMARY

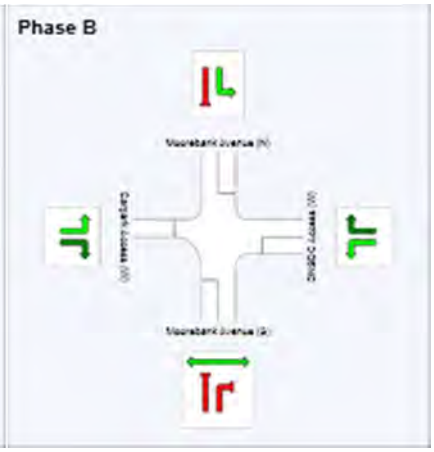
Site: I-04 2016 DN BASE PM

Intersection of Moorebank Avenue and DNSDC Access (Military Access 2)
2016 Do-nothing PM PEAK
Signals - Fixed Time Cycle Time = 110 seconds (Optimum Cycle Time - Minimum Delay)

Phase Timing Results

Phase	A	B
Reference Phase	Yes	No
Phase Change Time (sec)	0	96
Green Time (sec)	90	8
Yellow Time (sec)	4	4
All-Red Time (sec)	2	2
Phase Time (sec)	96	14
Phase Split	87 %	13 %





I-05 Intersection of Moorebank Avenue and Chatham Avenue

MOVEMENT SUMMARY

Site: I-05 2016 DN BASE AM

Intersection of Moorebank Avenue and Chatham Avenue
2016 Do-nothing AM PEAK
Signals - Fixed Time Cycle Time = 110 seconds (Optimum Cycle Time - Minimum Delay)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Moorebank Avenue (S)											
1	L2	43	0.0	0.028	7.1	LOS A	0.4	2.6	0.18	0.61	51.7
2	T1	1319	2.6	1.001	68.3	LOS E	109.6	783.7	1.00	1.28	28.2
Approach		1362	2.5	1.001	66.3	LOS E	109.6	783.7	0.97	1.26	28.6
North: Moorebank Avenue (N)											
8	T1	449	4.7	0.290	2.5	LOS A	5.6	40.9	0.26	0.23	57.6
9	R2	134	0.8	0.775	62.8	LOS E	7.4	51.9	1.00	0.96	27.3
Approach		583	3.8	0.775	16.3	LOS B	7.4	51.9	0.43	0.40	46.7
West: Chatham Avenue (W)											
10	L2	17	6.3	0.170	56.3	LOS D	1.5	11.4	0.95	0.72	29.1
12	R2	12	27.3	0.170	56.5	LOS D	1.5	11.4	0.95	0.72	28.7
Approach		28	14.8	0.170	56.3	LOS D	1.5	11.4	0.95	0.72	29.0
All Vehicles		1974	3.0	1.001	51.4	LOS D	109.6	783.7	0.81	1.00	32.2

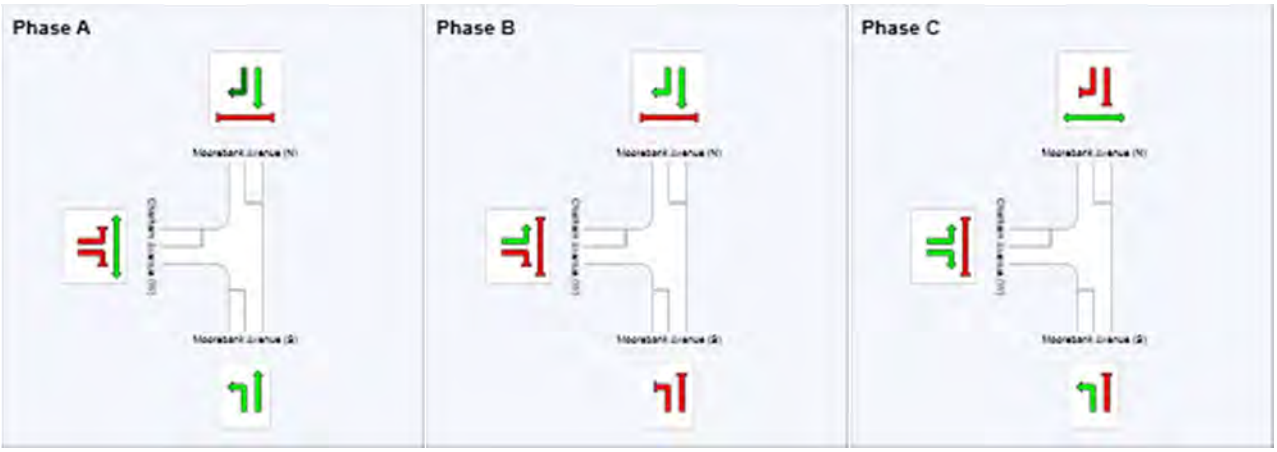
PHASING SUMMARY

Site: I-05 2016 DN BASE AM

Intersection of Moorebank Avenue and Chatham Avenue
2016 Do-nothing AM PEAK
Signals - Fixed Time Cycle Time = 110 seconds (Optimum Cycle Time - Minimum Delay)

Phase Timing Results

Phase	A	B	C
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	84	96
Green Time (sec)	78	6	8
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	84	12	14
Phase Split	76 %	11 %	13 %



MOVEMENT SUMMARY

Site: I-05 2016 DN BASE PM

Intersection of Moorebank Avenue and Chatham Avenue
2016 Do-nothing PM PEAK
Signals - Fixed Time Cycle Time = 100 seconds (Optimum Cycle Time - Minimum Delay)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Moorebank Avenue (S)											
1	L2	9	0.0	0.006	7.2	LOS A	0.1	0.6	0.19	0.60	51.6
2	T1	369	2.0	0.292	7.1	LOS A	7.2	51.5	0.44	0.38	53.7
Approach		379	1.9	0.292	7.1	LOS A	7.2	51.5	0.43	0.39	53.6
North: Moorebank Avenue (N)											
8	T1	1476	2.1	1.002	62.2	LOS E	115.5	823.3	1.00	1.30	29.6
9	R2	26	0.0	0.037	10.0	LOS A	0.4	2.6	0.36	0.66	48.9
Approach		1502	2.1	1.002	61.3	LOS E	115.5	823.3	0.99	1.29	29.8
West: Chatham Avenue (W)											
10	L2	40	2.6	0.180	45.6	LOS D	2.1	15.2	0.90	0.74	32.2
12	R2	9	0.0	0.180	45.5	LOS D	2.1	15.2	0.90	0.74	32.2
Approach		49	2.1	0.180	45.6	LOS D	2.1	15.2	0.90	0.74	32.2
All Vehicles		1931	2.1	1.002	50.2	LOS D	115.5	823.3	0.88	1.10	32.7

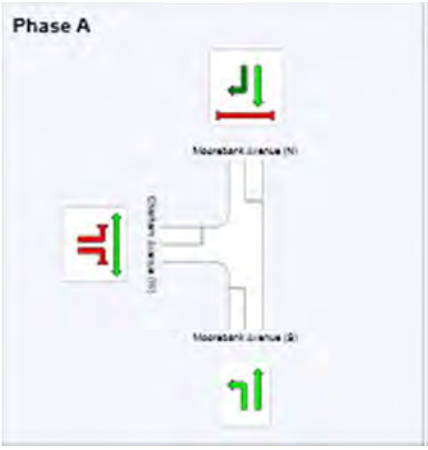
PHASING SUMMARY

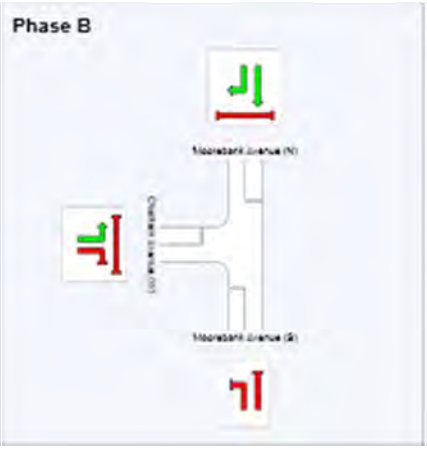
Site: I-05 2016 DN BASE PM

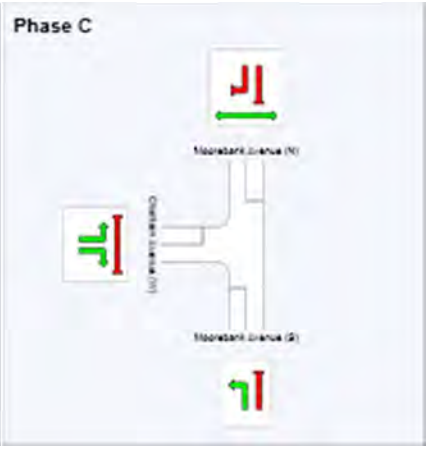
Intersection of Moorebank Avenue and Chatham Avenue
2016 Do-nothing PM PEAK
Signals - Fixed Time Cycle Time = 100 seconds (Optimum Cycle Time - Minimum Delay)

Phase Timing Results

Phase	A	B	C
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	73	85
Green Time (sec)	67	6	9
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	73	12	15
Phase Split	73 %	12 %	15 %







Appendix F

2023 SIDRA results with and without Moorebank IMT

1. 2023 Future traffic with Moorebank IMT development (Phase B)

I-01 Intersection of Moorebank Avenue, Anzac Road and Bapaume Road

MOVEMENT SUMMARY

Site: I-01 2023 FU MINT AM

Intersection of Moorebank Avenue, Anzac Road and Bapaume Road
2023 Future with MINT AM PEAK
Signals - Fixed Time Cycle Time = 100 seconds (Optimum Cycle Time - Minimum Delay)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Moorebank Avenue (S)											
1	L2	33	0.0	0.758	29.7	LOS C	21.9	172.3	0.81	0.74	35.3
2	T1	1147	15.6	0.758	22.1	LOS B	21.9	172.3	0.80	0.73	35.5
3	R2	427	3.2	0.734	21.2	LOS B	10.1	72.7	0.89	0.87	37.8
Approach		1607	12.0	0.758	22.0	LOS B	21.9	172.6	0.83	0.77	36.1
East: Anzac Road (E)											
4	L2	214	3.4	0.352	33.5	LOS C	8.0	57.5	0.78	0.80	31.3
5	T1	9	0.0	0.352	26.5	LOS B	8.0	57.5	0.78	0.80	31.3
6	R2	200	13.7	0.771	56.2	LOS D	10.2	80.0	1.00	0.90	23.6
Approach		423	8.2	0.771	44.0	LOS D	10.2	80.0	0.88	0.85	27.1
North: Moorebank Avenue (N)											
7	L2	351	9.9	0.202	7.6	LOS A	0.0	0.0	0.00	0.57	48.5
8	T1	763	20.8	0.505	18.4	LOS B	10.9	90.1	0.63	0.55	36.3
9	R2	137	13.1	0.314	20.7	LOS B	3.0	23.2	0.78	0.78	34.9
Approach		1251	16.9	0.505	15.6	LOS B	10.9	90.1	0.47	0.58	38.9
West: Bapaume Road (W)											
10	L2	20	89.5	0.049	14.0	LOS A	0.3	4.2	0.51	0.56	34.8
11	T1	1	0.0	0.011	42.2	LOS C	0.1	0.6	0.90	0.60	19.2
12	R2	1	0.0	0.011	49.3	LOS D	0.1	0.6	0.90	0.60	19.2
Approach		22	81.0	0.049	17.0	LOS B	0.3	4.2	0.54	0.57	32.3
All Vehicles		3303	13.8	0.771	22.4	LOS B	21.9	172.6	0.70	0.71	35.4

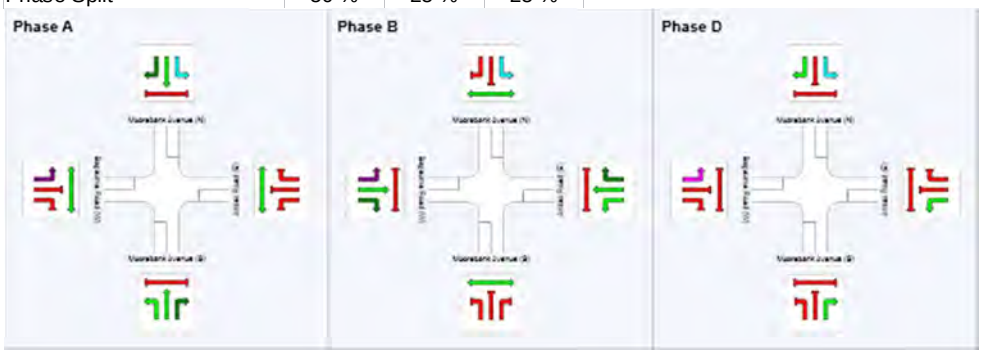
PHASING SUMMARY

Site: I-01 2023 FU MINT AM

Intersection of Moorebank Avenue, Anzac Road and Bapaume Road
2023 Future with MINT AM PEAK
Signals - Fixed Time Cycle Time = 100 seconds (Optimum Cycle Time - Minimum Delay)

Phase Timing Results

Phase	A	B	D
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	50	75
Green Time (sec)	44	19	19
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	50	25	25
Phase Split	50 %	25 %	25 %



MOVEMENT SUMMARY

Site: I-01 2023 FU MINT PM

Intersection of Moorebank Avenue, Anzac Road and Bapaume Road
2023 Future with MINT PM PEAK
Signals - Fixed Time Cycle Time = 105 seconds (Optimum Cycle Time - Minimum Delay)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Moorebank Avenue (S)											
1	L2	1	0.0	0.279	12.6	LOS A	3.3	28.4	0.24	0.21	51.4
2	T1	572	27.1	0.279	5.2	LOS A	3.3	28.4	0.24	0.21	51.4
3	R2	206	1.0	0.879	69.9	LOS E	13.1	92.2	1.00	1.13	20.5
Approach		779	20.1	0.879	22.3	LOS B	13.1	92.2	0.44	0.45	36.8
East: Anzac Road (E)											
4	L2	499	2.3	0.720	38.1	LOS C	21.9	156.2	0.92	0.87	29.3
5	T1	1	0.0	0.720	31.1	LOS C	21.9	156.2	0.92	0.87	29.3
6	R2	343	5.5	0.896	64.6	LOS E	20.8	152.3	1.00	1.01	21.6
Approach		843	3.6	0.896	48.9	LOS D	21.9	156.2	0.95	0.92	25.6
North: Moorebank Avenue (N)											
7	L2	309	4.1	0.171	7.6	LOS A	0.0	0.0	0.00	0.59	48.5
8	T1	1321	13.1	0.819	19.6	LOS B	25.1	195.6	0.69	0.66	35.4
9	R2	37	51.4	0.138	25.2	LOS B	1.1	11.2	0.60	0.68	32.1
Approach		1667	12.2	0.819	17.5	LOS B	25.1	195.6	0.56	0.65	37.2
West: Bapaume Road (W)											
10	L2	145	13.8	0.237	11.8	LOS A	2.2	17.6	0.41	0.66	36.7
11	T1	12	0.0	0.179	42.4	LOS C	1.6	11.5	0.90	0.73	19.0
12	R2	24	0.0	0.179	49.5	LOS D	1.6	11.5	0.90	0.73	19.0
Approach		181	11.0	0.237	18.8	LOS B	2.2	17.6	0.51	0.67	31.0
All Vehicles		3471	11.9	0.896	26.3	LOS B	25.1	195.6	0.63	0.67	32.9

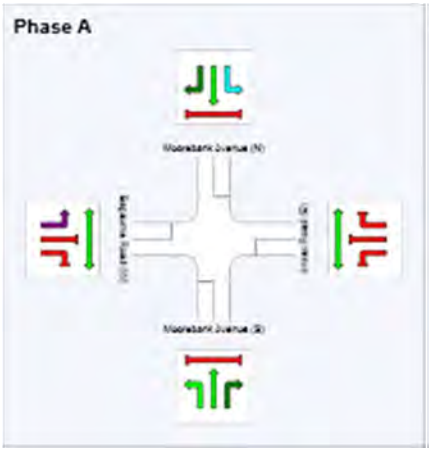
PHASING SUMMARY

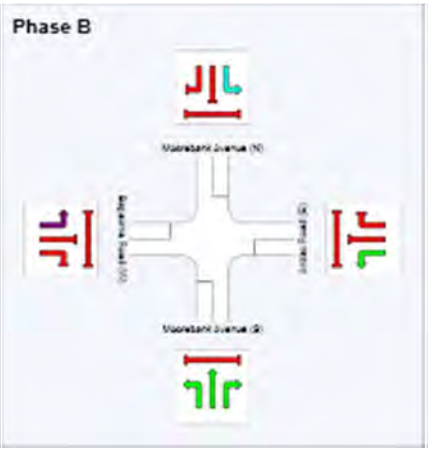
Site: I-01 2023 FU MINT PM

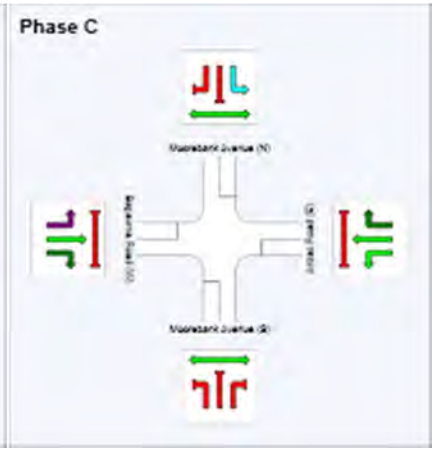
Intersection of Moorebank Avenue, Anzac Road and Bapaume Road
2023 Future with MINT PM PEAK
Signals - Fixed Time Cycle Time = 105 seconds (Optimum Cycle Time - Minimum Delay)

Phase Timing Results

Phase	A	B	C
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	59	71
Green Time (sec)	53	6	28
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	59	12	34
Phase Split	56 %	11 %	32 %







I-02 Intersection of Moorebank Avenue, Warehouse Access 1 and DNSDC Access

MOVEMENT SUMMARY

Site: I-02 2023 FU MINT AM

Intersection of Moorebank Avenue, Warehouse Access 1 and DNSDC Access
2023 Future with MINT AM PEAK
Signals - Fixed Time Cycle Time = 100 seconds (Optimum Cycle Time - Minimum Delay)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Moorebank Avenue (S)											
1	L2	11	0.0	0.664	10.1	LOS A	11.3	86.2	0.32	0.30	45.1
2	T1	1583	11.0	0.664	4.5	LOS A	11.3	86.2	0.32	0.29	52.5
3	R2	24	0.0	0.217	56.9	LOS E	1.2	8.4	0.98	0.71	12.3
Approach		1618	10.8	0.664	5.3	LOS A	11.3	86.2	0.33	0.30	50.9
East: DNSDC Access (E)											
4	L2	5	20.0	0.093	52.7	LOS D	0.6	4.7	0.95	0.69	15.7
6	R2	7	14.3	0.093	52.7	LOS D	0.6	4.7	0.95	0.69	18.7
Approach		13	16.7	0.093	52.7	LOS D	0.6	4.7	0.95	0.69	17.5
North: Moorebank Avenue (N)											
7	L2	111	6.7	0.406	14.0	LOS A	10.4	82.0	0.50	0.52	29.3
8	T1	824	17.2	0.406	8.4	LOS A	10.5	84.4	0.50	0.48	46.8
9	R2	41	41.0	0.476	59.7	LOS E	2.1	20.1	1.00	0.74	16.8
Approach		976	17.0	0.476	11.2	LOS A	10.5	84.4	0.52	0.49	42.0
West: Warehouse Access 1 (W)											
10	L2	18	94.1	0.097	43.5	LOS D	0.8	9.9	0.87	0.70	19.7
12	R2	1	0.0	0.097	42.7	LOS D	0.8	9.9	0.87	0.70	18.4
Approach		19	88.9	0.097	43.5	LOS D	0.8	9.9	0.87	0.70	19.7
All Vehicles		2625	13.7	0.664	8.0	LOS A	11.3	86.2	0.41	0.38	46.5

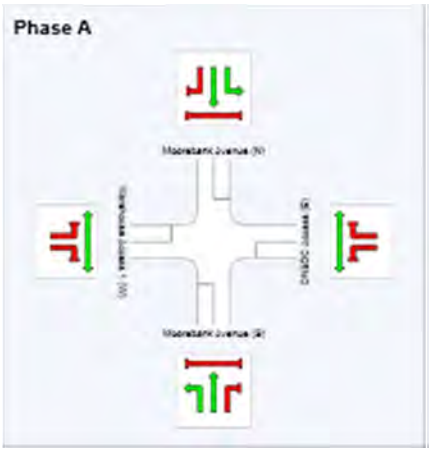
PHASING SUMMARY

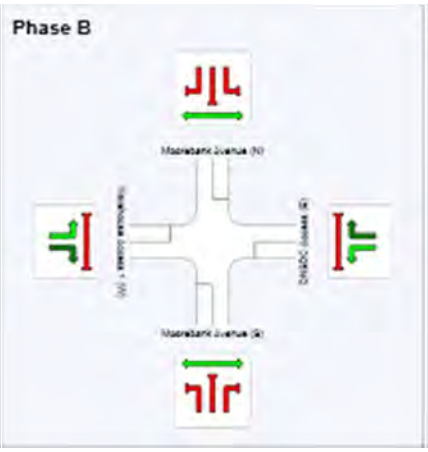
Site: I-02 2023 FU MINT AM

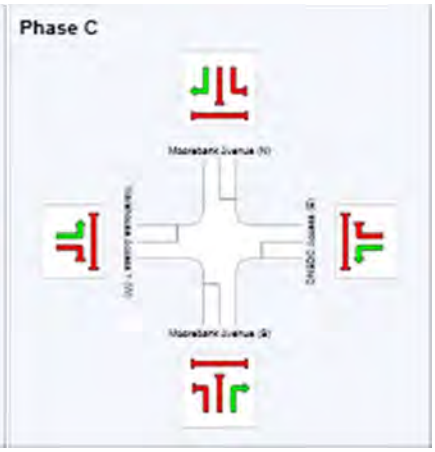
Intersection of Moorebank Avenue, Warehouse Access 1 and DNSDC Access
2023 Future with MINT AM PEAK
Signals - Fixed Time Cycle Time = 100 seconds (Optimum Cycle Time - Minimum Delay)

Phase Timing Results

Phase	A	B	C
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	72	88
Green Time (sec)	66	10	6
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	72	16	12
Phase Split	72 %	16 %	12 %







MOVEMENT SUMMARY

Site: I-02 2023 FU MINT PM

Intersection of Moorebank Avenue, Warehouse Access 1 and DNSDC Access
2023 Future with MINT PM PEAK
Signals - Fixed Time Cycle Time = 100 seconds (Optimum Cycle Time - Minimum Delay)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Moorebank Avenue (S)											
1	L2	1	0.0	0.312	8.7	LOS A	2.9	23.3	0.18	0.16	47.7
2	T1	713	19.4	0.312	3.1	LOS A	2.9	23.3	0.18	0.16	54.6
3	R2	1	0.0	0.008	16.4	LOS B	0.0	0.2	0.45	0.62	21.0
Approach		715	19.3	0.312	3.2	LOS A	2.9	23.3	0.18	0.16	54.5
East: DNSDC Access (E)											
4	L2	4	0.0	0.229	55.9	LOS D	1.3	10.0	0.98	0.72	15.6
6	R2	23	9.1	0.229	55.9	LOS D	1.3	10.0	0.98	0.72	18.1
Approach		27	7.7	0.229	55.9	LOS D	1.3	10.0	0.98	0.72	17.7
North: Moorebank Avenue (N)											
7	L2	6	16.7	0.645	10.9	LOS A	19.7	148.5	0.48	0.45	32.0
8	T1	1821	9.1	0.645	5.1	LOS A	19.7	148.5	0.48	0.44	51.7
9	R2	18	94.1	0.268	60.2	LOS E	0.9	11.7	0.99	0.71	16.3
Approach		1845	10.0	0.645	5.6	LOS A	19.7	148.5	0.48	0.45	50.8
West: Warehouse Access 1 (W)											
10	L2	41	41.0	0.265	48.1	LOS D	2.3	21.0	0.93	0.75	19.2
12	R2	11	0.0	0.265	47.7	LOS D	2.3	21.0	0.93	0.75	17.1
Approach		52	32.7	0.265	48.0	LOS D	2.3	21.0	0.93	0.75	18.8
All Vehicles		2639	12.9	0.645	6.3	LOS A	19.7	148.5	0.41	0.38	49.7

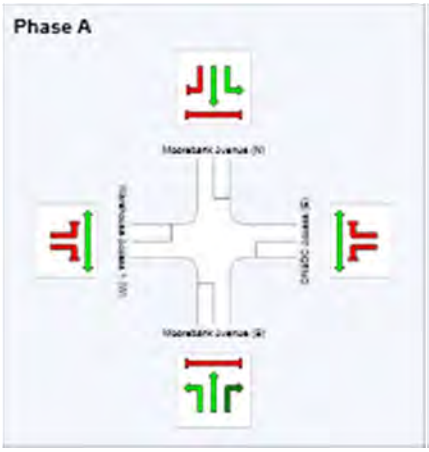
PHASING SUMMARY

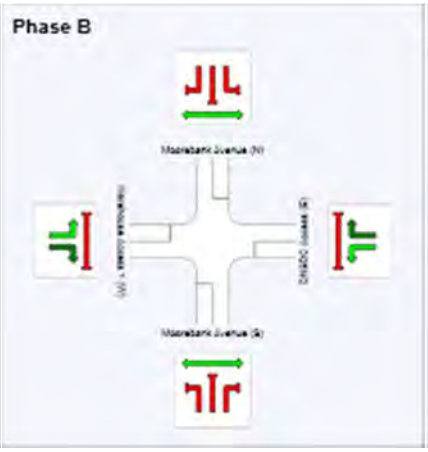
Site: I-02 2023 FU MINT PM

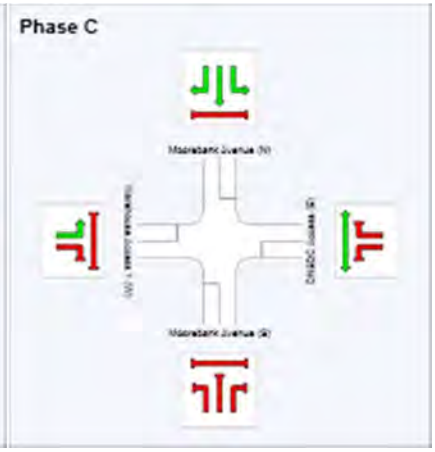
Intersection of Moorebank Avenue, Warehouse Access 1 and DNSDC Access
2023 Future with MINT PM PEAK
Signals - Fixed Time Cycle Time = 100 seconds (Optimum Cycle Time - Minimum Delay)

Phase Timing Results

Phase	A	B	C
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	72	88
Green Time (sec)	66	10	6
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	72	16	12
Phase Split	72 %	16 %	12 %







I-03 Intersection of Moorebank Avenue and Warehouse Access 2

MOVEMENT SUMMARY

Site: I-03 2023 FU MINT AM

Intersection of Moorebank Avenue and Warehouse Access 2
2023 Future with MINT AM PEAK
Signals - Fixed Time Cycle Time = 90 seconds (Optimum Cycle Time - Minimum Delay)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Moorebank Avenue (S)											
1	L2	14	0.0	0.705	19.7	LOS B	23.6	178.6	0.73	0.67	43.7
2	T1	1596	9.6	0.705	12.2	LOS A	23.6	178.9	0.73	0.67	43.7
Approach		1609	9.5	0.705	12.3	LOS A	23.6	178.9	0.73	0.67	43.7
North: Moorebank Avenue (N)											
8	T1	775	15.6	0.290	0.9	LOS A	1.2	9.2	0.07	0.07	56.8
9	R2	55	40.4	0.278	19.3	LOS B	1.2	11.1	0.72	0.73	28.2
Approach		829	17.3	0.290	2.1	LOS A	1.2	11.1	0.12	0.11	53.5
West: Warehouse Access 2 (W)											
10	L2	23	95.5	0.104	39.1	LOS C	0.9	11.1	0.84	0.68	13.9
12	R2	1	0.0	0.104	39.2	LOS C	0.9	11.1	0.84	0.68	13.9
Approach		24	91.3	0.104	39.1	LOS C	0.9	11.1	0.84	0.68	13.9
All Vehicles		2463	12.9	0.705	9.1	LOS A	23.6	178.9	0.52	0.48	45.0

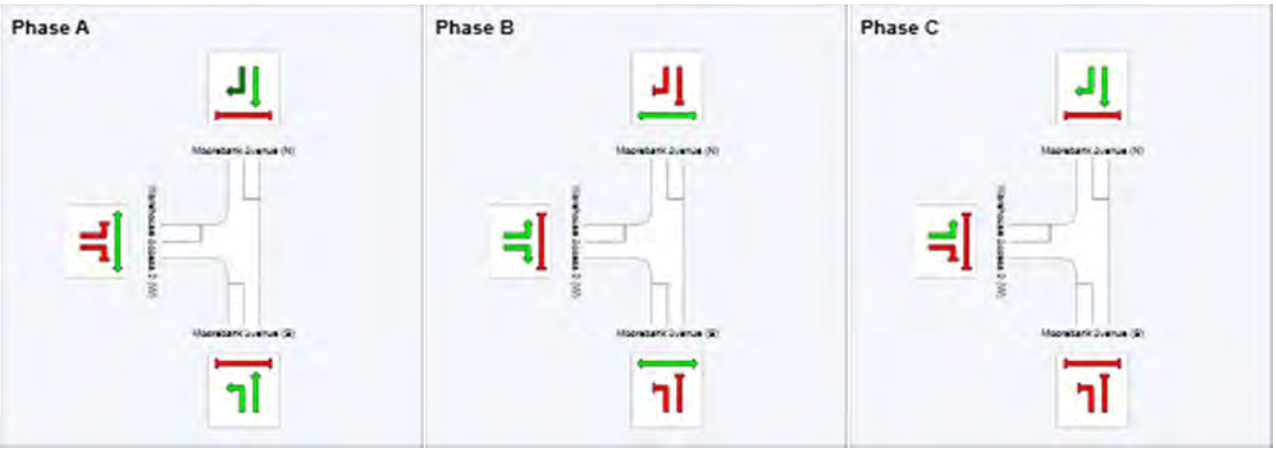
PHASING SUMMARY

Site: I-03 2023 FU MINT AM

Intersection of Moorebank Avenue and Warehouse Access 2
2023 Future with MINT AM PEAK
Signals - Fixed Time Cycle Time = 90 seconds (Optimum Cycle Time - Minimum Delay)

Phase Timing Results

Phase	A	B	C
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	62	78
Green Time (sec)	56	10	6
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	62	16	12
Phase Split	69 %	18 %	13 %



MOVEMENT SUMMARY

Site: I-03 2023 FU MINT PM

Intersection of Moorebank Avenue and Warehouse Access 2
2023 Future with MINT PM PEAK
Signals - Fixed Time Cycle Time = 85 seconds (Optimum Cycle Time - Minimum Delay)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Moorebank Avenue (S)											
1	L2	1	0.0	0.314	16.4	LOS B	6.7	53.8	0.53	0.46	47.2
2	T1	658	17.6	0.314	8.9	LOS A	6.7	53.8	0.53	0.46	47.2
Approach		659	17.6	0.314	9.0	LOS A	6.7	53.8	0.53	0.46	47.2
North: Moorebank Avenue (N)											
8	T1	1814	8.0	0.660	1.3	LOS A	5.0	37.3	0.15	0.13	54.9
9	R2	23	95.5	0.076	12.3	LOS A	0.3	3.6	0.44	0.57	34.7
Approach		1837	9.1	0.660	1.5	LOS A	5.0	37.3	0.15	0.14	54.5
West: Warehouse Access 2 (W)											
10	L2	55	40.4	0.270	41.1	LOS C	2.6	22.8	0.90	0.75	13.4
12	R2	14	0.0	0.270	41.2	LOS C	2.6	22.8	0.90	0.75	13.4
Approach		68	32.3	0.270	41.1	LOS C	2.6	22.8	0.90	0.75	13.4
All Vehicles		2564	11.9	0.660	4.4	LOS A	6.7	53.8	0.27	0.24	49.3

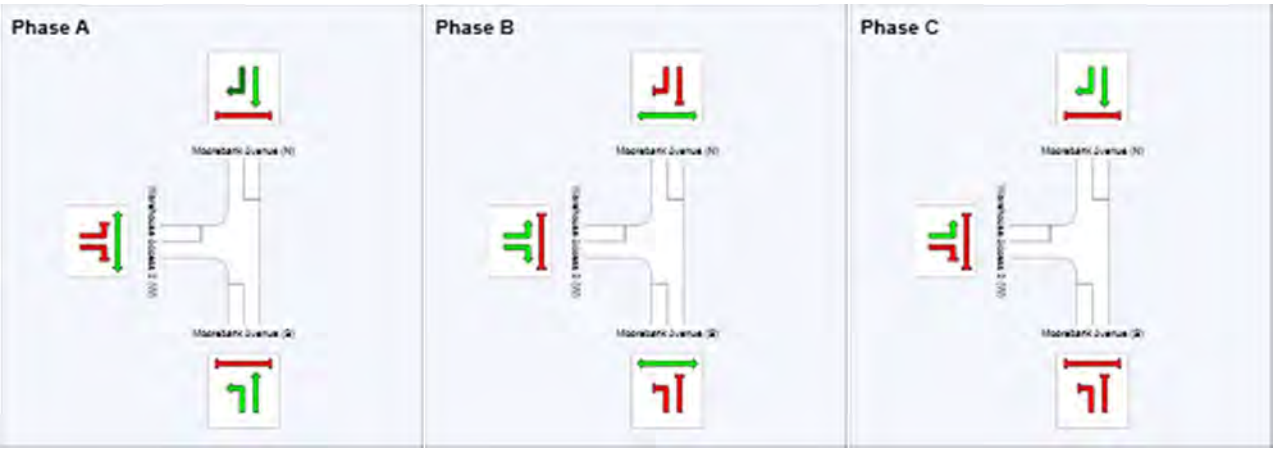
PHASING SUMMARY

Site: I-03 2023 FU MINT PM

Intersection of Moorebank Avenue and Warehouse Access 2
2023 Future with MINT PM PEAK
Signals - Fixed Time Cycle Time = 85 seconds (Optimum Cycle Time - Minimum Delay)

Phase Timing Results

Phase	A	B	C
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	57	73
Green Time (sec)	51	10	6
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	57	16	12
Phase Split	67 %	19 %	14 %



I-04 Intersection of Moorebank Avenue and Warehouse Access 3

MOVEMENT SUMMARY

Site: I-04 2023 FU MINT AM

Intersection of Moorebank Avenue and Warehouse Access 3
2023 Future with MINT AM PEAK
Signals - Fixed Time Cycle Time = 90 seconds (Optimum Cycle Time - Minimum Delay)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Moorebank Avenue (S)											
1	L2	3	0.0	0.694	19.5	LOS B	23.1	173.7	0.72	0.66	42.8
2	T1	1593	8.5	0.694	12.1	LOS A	23.1	173.8	0.72	0.66	42.8
Approach		1596	8.5	0.694	12.1	LOS A	23.1	173.8	0.72	0.66	42.8
North: Moorebank Avenue (N)											
8	T1	751	13.9	0.278	3.6	LOS A	5.0	39.3	0.33	0.29	53.6
9	R2	24	69.6	0.141	18.0	LOS B	0.5	5.1	0.66	0.67	40.3
Approach		775	15.6	0.278	4.1	LOS A	5.0	39.3	0.34	0.30	53.1
West: Warehouse Access 3 (W)											
10	L2	18	94.1	0.082	38.8	LOS C	0.7	8.5	0.83	0.67	14.0
12	R2	1	0.0	0.082	39.0	LOS C	0.7	8.5	0.83	0.67	14.0
Approach		19	88.9	0.082	38.9	LOS C	0.7	8.5	0.83	0.67	14.0
All Vehicles		2389	11.5	0.694	9.7	LOS A	23.1	173.8	0.60	0.54	45.6

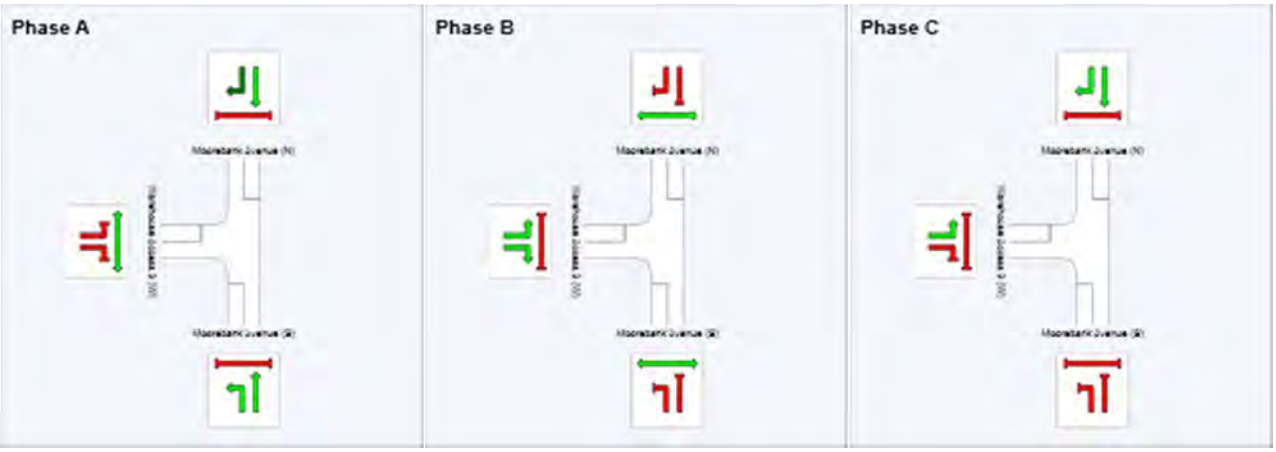
PHASING SUMMARY

Site: I-04 2023 FU MINT AM

Intersection of Moorebank Avenue and Warehouse Access 3
2023 Future with MINT AM PEAK
Signals - Fixed Time Cycle Time = 90 seconds (Optimum Cycle Time - Minimum Delay)

Phase Timing Results

Phase	A	B	C
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	62	78
Green Time (sec)	56	10	6
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	62	16	12
Phase Split	69 %	18 %	13 %



MOVEMENT SUMMARY

Site: I-04 2023 FU MINT PM

Intersection of Moorebank Avenue and Warehouse Access 3
2023 Future with MINT PM PEAK
Signals - Fixed Time Cycle Time = 90 seconds (Optimum Cycle Time - Minimum Delay)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Moorebank Avenue (S)											
1	L2	1	0.0	0.288	15.8	LOS B	6.3	50.3	0.49	0.43	47.0
2	T1	634	15.6	0.288	8.3	LOS A	6.3	50.3	0.49	0.43	47.0
Approach		635	15.6	0.288	8.3	LOS A	6.3	50.3	0.49	0.43	47.0
North: Moorebank Avenue (N)											
8	T1	1811	7.0	0.649	5.6	LOS A	19.0	141.1	0.52	0.48	50.6
9	R2	18	94.1	0.056	11.9	LOS A	0.2	2.7	0.41	0.56	45.1
Approach		1828	7.9	0.649	5.6	LOS A	19.0	141.1	0.52	0.48	50.6
West: Warehouse Access 3 (W)											
10	L2	24	69.6	0.116	40.8	LOS C	1.0	11.0	0.86	0.70	13.5
12	R2	3	0.0	0.116	41.0	LOS C	1.0	11.0	0.86	0.70	13.5
Approach		27	61.5	0.116	40.9	LOS C	1.0	11.0	0.86	0.70	13.5
All Vehicles		2491	10.4	0.649	6.7	LOS A	19.0	141.1	0.51	0.47	49.2

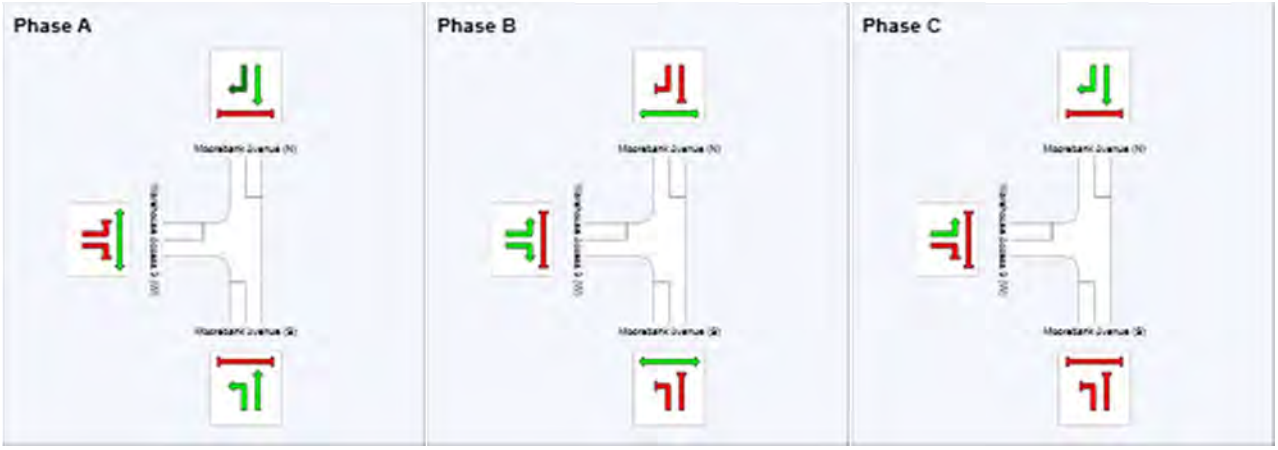
PHASING SUMMARY

Site: I-04 2023 FU MINT PM

Intersection of Moorebank Avenue and Warehouse Access 3
2023 Future with MINT PM PEAK
Signals - Fixed Time Cycle Time = 90 seconds (Optimum Cycle Time - Minimum Delay)

Phase Timing Results

Phase	A	B	C
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	62	78
Green Time (sec)	56	10	6
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	62	16	12
Phase Split	69 %	18 %	13 %



I-05 Intersection of Moorebank Avenue and Main Access

MOVEMENT SUMMARY

Site: I-05 2023 FU MINT AM

Intersection of Moorebank Avenue and Main Access
2023 Future with MINT AM PEAK
Signals - Fixed Time Cycle Time = 85 seconds (Optimum Cycle Time - Minimum Delay)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Moorebank Avenue (S)											
1	L2	35	0.0	0.748	23.6	LOS B	24.6	176.5	0.83	0.77	39.1
2	T1	1508	3.2	0.748	16.1	LOS B	24.6	177.3	0.83	0.76	39.3
Approach		1543	3.1	0.748	16.3	LOS B	24.6	177.3	0.83	0.76	39.2
North: Moorebank Avenue (N)											
8	T1	581	2.9	0.235	4.2	LOS A	4.5	32.2	0.36	0.31	52.7
9	R2	169	51.6	0.715	30.8	LOS C	5.5	55.7	1.00	0.93	32.9
Approach		751	13.9	0.715	10.2	LOS A	5.5	55.7	0.50	0.45	46.6
West: Main Access (W)											
10	L2	88	98.8	0.142	31.6	LOS C	1.4	18.5	0.77	0.68	16.2
12	R2	1	0.0	0.142	31.8	LOS C	1.4	17.7	0.77	0.68	16.2
Approach		89	97.6	0.142	31.6	LOS C	1.4	18.5	0.77	0.68	16.2
All Vehicles		2383	10.1	0.748	15.0	LOS B	24.6	177.3	0.73	0.66	40.7

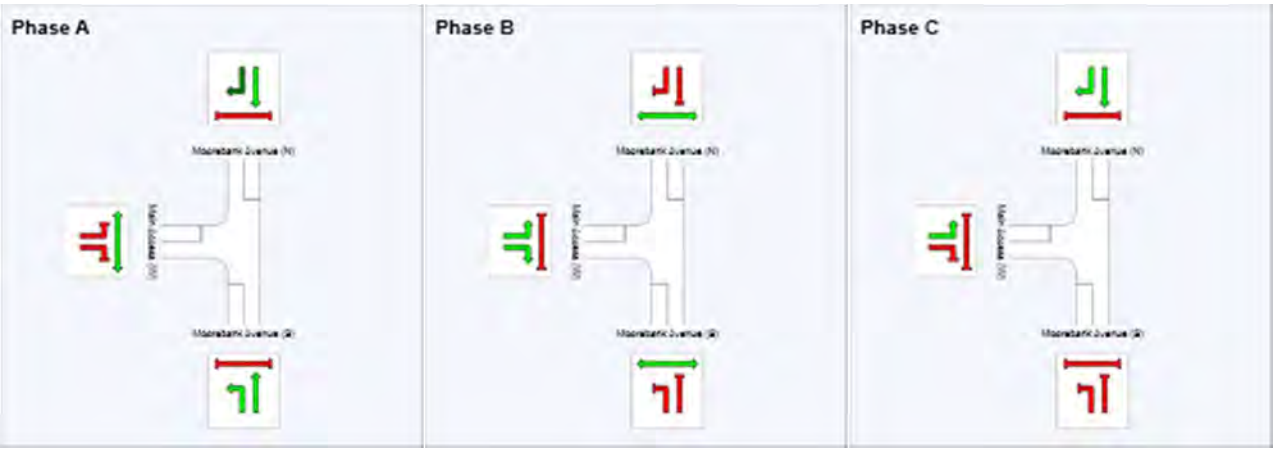
PHASING SUMMARY

Site: I-05 2023 FU MINT AM

Intersection of Moorebank Avenue and Main Access
2023 Future with MINT AM PEAK
Signals - Fixed Time Cycle Time = 85 seconds (Optimum Cycle Time - Minimum Delay)

Phase Timing Results

Phase	A	B	C
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	52	70
Green Time (sec)	46	12	9
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	52	18	15
Phase Split	61 %	21 %	18 %



MOVEMENT SUMMARY

Site: I-05 2023 FU MINT PM

Intersection of Moorebank Avenue and Main Access
2023 Future with MINT PM PEAK
Signals - Fixed Time Cycle Time = 90 seconds (Optimum Cycle Time - Minimum Delay)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Moorebank Avenue (S)											
1	L2	1	0.0	0.303	27.2	LOS B	7.0	49.7	0.72	0.61	37.1
2	T1	464	2.5	0.303	19.8	LOS B	7.0	49.8	0.72	0.61	37.1
Approach		465	2.5	0.303	19.8	LOS B	7.0	49.8	0.72	0.61	37.1
North: Moorebank Avenue (N)											
8	T1	1726	2.3	0.708	6.2	LOS A	20.9	149.1	0.53	0.49	49.9
9	R2	88	98.8	0.181	12.6	LOS A	1.2	15.1	0.48	0.61	44.5
Approach		1815	7.0	0.708	6.5	LOS A	20.9	149.1	0.53	0.49	49.6
West: Main Access (W)											
10	L2	169	51.6	0.253	26.4	LOS B	4.2	42.6	0.69	0.71	18.4
12	R2	35	0.0	0.253	46.7	LOS D	2.1	17.0	0.93	0.75	12.1
Approach		204	42.8	0.253	29.8	LOS C	4.2	42.6	0.73	0.72	16.9
All Vehicles		2484	9.1	0.708	10.9	LOS A	20.9	149.1	0.58	0.53	44.5

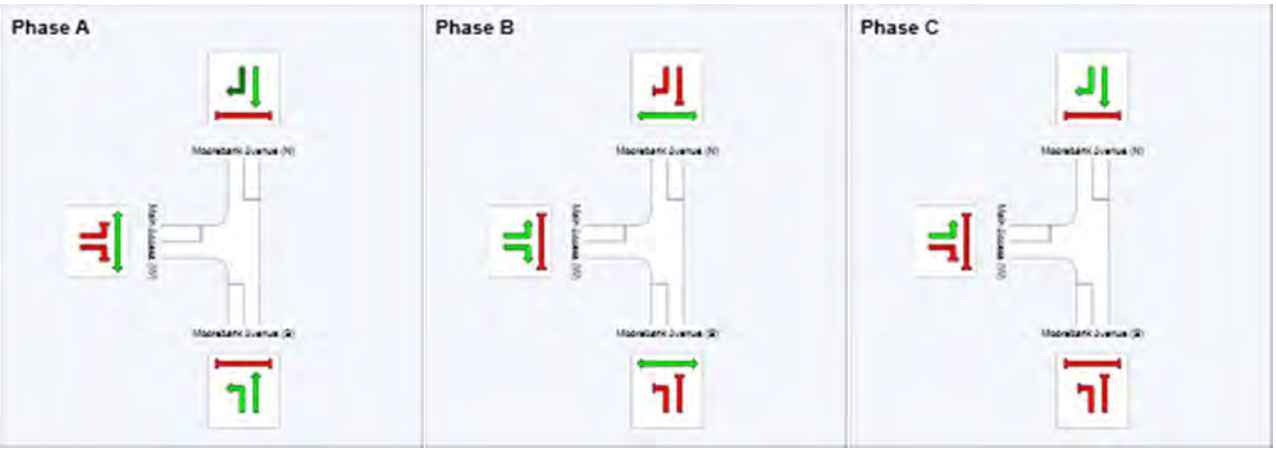
PHASING SUMMARY

Site: I-05 2023 FU MINT PM

Intersection of Moorebank Avenue and Main Access
2023 Future with MINT PM PEAK
Signals - Fixed Time Cycle Time = 90 seconds (Optimum Cycle Time - Minimum Delay)

Phase Timing Results

Phase	A	B	C
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	42	60
Green Time (sec)	36	12	24
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	42	18	30
Phase Split	47 %	20 %	33 %



2. 2023 Future traffic without Moorebank IMT development (Do-nothing scenario)

I-01 Intersection of Moorebank Avenue and Bapaume Road

MOVEMENT SUMMARY

Site: I-01 2023 DN BASE AM

Intersection of Moorebank Avenue and Bapaume Road
2023 Do-nothing AM PEAK
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Moorebank Avenue (S)											
1	L2	20	0.0	0.011	5.5	LOS A	0.0	0.0	0.00	0.58	45.1
2	T1	1191	5.2	0.631	0.0	LOS A	0.0	0.0	0.00	0.00	59.7
Approach		1211	5.1	0.631	0.1	NA	0.0	0.0	0.00	0.01	59.5
North: Moorebank Avenue (S)											
8	T1	949	5.4	0.421	4.1	LOS A	4.1	29.9	0.16	0.07	51.8
9	R2	88	1.2	0.421	30.0	LOS C	4.1	29.9	1.00	0.42	33.9
Approach		1038	5.1	0.421	6.3	NA	4.1	29.9	0.24	0.10	49.0
West: Bapaume Road (W)											
10	L2	3	33.3	0.028	35.7	LOS C	0.1	0.7	0.89	0.95	29.2
12	R2	1	0.0	0.136	416.1	LOS F	0.3	2.3	0.99	1.00	2.9
Approach		4	25.0	0.136	130.8	LOS F	0.3	2.3	0.92	0.96	11.9
All Vehicles		2253	5.1	0.631	3.2	NA	4.1	29.9	0.11	0.05	53.6

MOVEMENT SUMMARY

Site: I-01 2023 DN BASE PM

Intersection of Moorebank Avenue and Bapaume Road
2023 Do-nothing PM PEAK
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Moorebank Avenue (S)											
1	L2	1	0.0	0.001	5.5	LOS A	0.0	0.0	0.00	0.58	45.1
2	T1	627	4.5	0.331	0.0	LOS A	0.0	0.0	0.00	0.00	59.9
Approach		628	4.5	0.331	0.0	NA	0.0	0.0	0.00	0.00	59.9
North: Moorebank Avenue (S)											
8	T1	1507	2.8	0.409	3.7	LOS A	7.5	53.5	0.42	0.01	52.8
9	R2	20	10.5	0.409	13.3	LOS A	7.5	53.5	0.86	0.03	46.1
Approach		1527	2.9	0.409	3.8	NA	7.5	53.5	0.42	0.01	52.7
West: Bapaume Road (W)											
10	L2	97	3.3	0.173	10.6	LOS A	0.7	4.8	0.59	0.82	44.9
12	R2	14	0.0	0.773	385.4	LOS F	2.3	16.4	1.00	1.07	3.2
Approach		111	2.9	0.773	57.0	LOS E	2.3	16.4	0.64	0.85	22.3
All Vehicles		2266	3.3	0.773	5.4	NA	7.5	53.5	0.31	0.05	50.2

I-02 Intersection of Moorebank Avenue and Anzac Road

MOVEMENT SUMMARY

Site: I-02 2023 DN BASE AM

Intersection of Moorebank Avenue and Anzac Road
2023 Do-nothing AM PEAK
Signals - Fixed Time Cycle Time = 103 seconds (User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Moorebank Avenue (S)											
2	T1	1021	3.5	0.896	22.5	LOS B	42.5	306.1	0.71	0.75	37.3
3	R2	427	3.2	0.685	30.9	LOS C	16.6	119.4	0.92	0.93	39.0
Approach		1448	3.4	0.896	25.0	LOS B	42.5	306.1	0.77	0.80	38.0
East: Anzac Road (E)											
4	L2	231	3.2	0.278	24.2	LOS B	7.2	51.4	0.66	0.76	42.0
6	R2	203	13.5	0.772	55.5	LOS D	10.7	83.3	1.00	0.89	20.7
Approach		434	8.0	0.772	38.8	LOS C	10.7	83.3	0.82	0.82	30.9
North: Moorebank Avenue (N)											
7	L2	351	9.9	0.229	6.1	LOS A	1.3	9.7	0.16	0.59	49.8
8	T1	617	3.2	0.570	22.9	LOS B	17.6	126.8	0.77	0.67	37.1
Approach		967	5.7	0.570	16.8	LOS B	17.6	126.8	0.55	0.64	40.9
All Vehicles		2849	4.9	0.896	24.3	LOS B	42.5	306.1	0.70	0.75	37.3

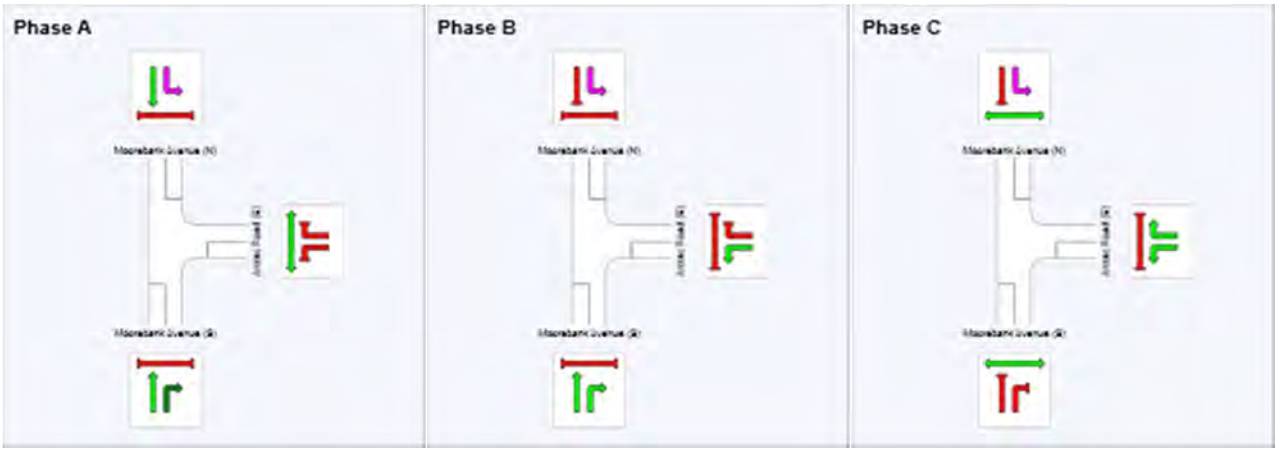
PHASING SUMMARY

Site: I-02 2023 DN BASE AM

Intersection of Moorebank Avenue and Anzac Road
2023 Do-nothing AM PEAK
Signals - Fixed Time Cycle Time = 103 seconds (User-Given Phase Times)

Phase Timing Results

Phase	A	B	C
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	50	78
Green Time (sec)	44	22	19
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	50	28	25
Phase Split	49 %	27 %	24 %



MOVEMENT SUMMARY

Site: I-02 2023 DN BASE PM

Intersection of Moorebank Avenue and Anzac Road
2023 Do-nothing PM PEAK
Signals - Fixed Time Cycle Time = 110 seconds (User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Moorebank Avenue (S)											
2	T1	303	3.8	0.254	9.6	LOS A	7.1	51.1	0.47	0.41	47.6
3	R2	184	1.1	0.961	89.0	LOS F	12.9	91.2	1.00	1.20	24.1
Approach		487	2.8	0.961	39.6	LOS C	12.9	91.2	0.67	0.71	32.0
East: Anzac Road (E)											
4	L2	507	2.3	0.745	38.2	LOS C	23.8	170.1	0.93	0.87	36.2
6	R2	343	5.5	0.813	53.7	LOS D	19.0	139.2	1.00	0.92	21.1
Approach		851	3.6	0.813	44.4	LOS D	23.8	170.1	0.96	0.89	30.0
North: Moorebank Avenue (N)											
7	L2	315	4.0	0.196	6.0	LOS A	1.1	8.1	0.14	0.59	50.2
8	T1	1204	2.4	0.913	34.2	LOS C	54.1	386.9	0.90	0.92	31.2
Approach		1519	2.8	0.913	28.4	LOS B	54.1	386.9	0.74	0.85	33.8
All Vehicles		2857	3.0	0.961	35.1	LOS C	54.1	386.9	0.79	0.84	32.0

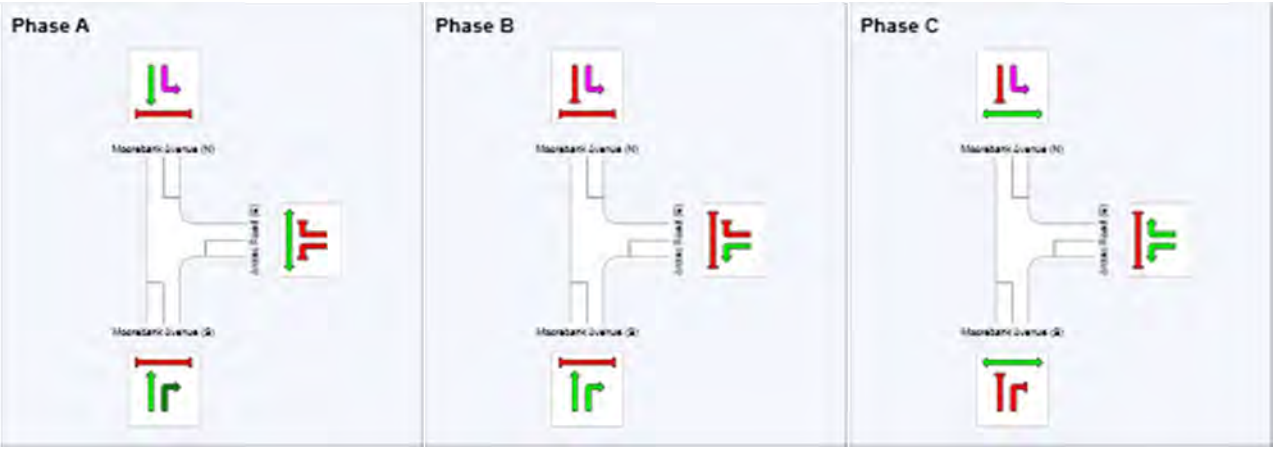
PHASING SUMMARY

Site: I-02 2023 DN BASE PM

Intersection of Moorebank Avenue and Anzac Road
2023 Do-nothing PM PEAK
Signals - Fixed Time Cycle Time = 110 seconds (User-Given Phase Times)

Phase Timing Results

Phase	A	B	C
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	63	75
Green Time (sec)	57	6	29
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	63	12	35
Phase Split	57 %	11 %	32 %



I-03 Intersection of Moorebank Avenue and Defence Support Access

MOVEMENT SUMMARY

Site: I-03 2023 DN BASE AM

Intersection of Moorebank Avenue and Defence Support Access (Military Access 1)
2023 Do-nothing AM PEAK
Signals - Fixed Time Cycle Time = 90 seconds (Optimum Cycle Time - Minimum Delay)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Moorebank Avenue (S)											
1	L2	17	0.0	0.010	6.0	LOS A	0.1	0.4	0.14	0.60	46.8
2	T1	1437	3.1	0.973	44.0	LOS D	88.0	632.3	0.98	1.20	33.2
Approach		1454	3.0	0.973	43.5	LOS D	88.0	632.3	0.97	1.19	33.3
North: Moorebank Avenue (N)											
8	T1	791	3.7	0.694	12.1	LOS A	17.6	126.8	0.61	0.54	49.0
9	R2	19	0.0	0.694	21.6	LOS B	17.6	126.8	0.75	0.67	27.6
Approach		809	3.6	0.694	12.3	LOS A	17.6	126.8	0.61	0.55	48.4
West: Military Access 1 (W)											
10	L2	2	0.0	0.023	48.3	LOS D	0.1	0.9	0.94	0.63	25.5
12	R2	1	0.0	0.023	48.2	LOS D	0.1	0.9	0.94	0.63	22.8
Approach		3	0.0	0.023	48.3	LOS D	0.1	0.9	0.94	0.63	24.6
All Vehicles		2266	3.3	0.973	32.4	LOS C	88.0	632.3	0.84	0.96	37.5

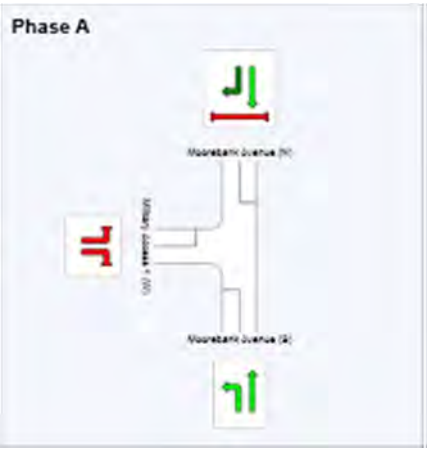
PHASING SUMMARY

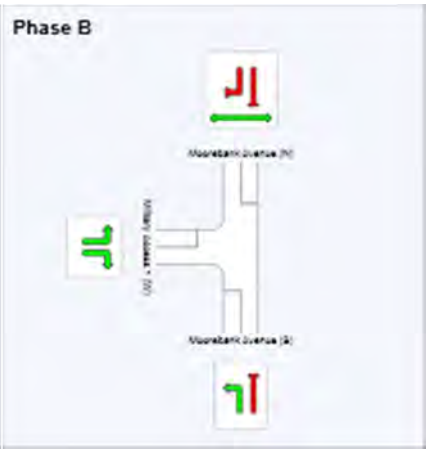
Site: I-03 2023 DN BASE AM

Intersection of Moorebank Avenue and Defence Support Access (Military Access 1)
2023 Do-nothing AM PEAK
Signals - Fixed Time Cycle Time = 90 seconds (Optimum Cycle Time - Minimum Delay)

Phase Timing Results

Phase	A	B
Reference Phase	Yes	No
Phase Change Time (sec)	0	76
Green Time (sec)	70	8
Yellow Time (sec)	4	4
All-Red Time (sec)	2	2
Phase Time (sec)	76	14
Phase Split	84 %	16 %





MOVEMENT SUMMARY

Site: I-03 2023 DN BASE PM

Intersection of Moorebank Avenue and Defence Support Access (Military Access 1)
2023 Do-nothing PM PEAK
Signals - Fixed Time Cycle Time = 90 seconds (Optimum Cycle Time - Minimum Delay)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Moorebank Avenue (S)											
1	L2	1	0.0	0.001	6.0	LOS A	0.0	0.0	0.14	0.58	46.8
2	T1	476	2.4	0.319	3.1	LOS A	6.1	43.3	0.32	0.28	56.8
Approach		477	2.4	0.319	3.1	LOS A	6.1	43.3	0.32	0.28	56.7
North: Moorebank Avenue (N)											
8	T1	1686	2.5	1.076	96.4	LOS F	128.3	917.0	0.85	1.45	21.7
9	R2	1	0.0	1.076	127.6	LOS F	128.3	917.0	1.00	1.77	11.8
Approach		1687	2.5	1.076	96.4	LOS F	128.3	917.0	0.85	1.45	21.7
West: Military Access 1 (W)											
10	L2	11	0.0	0.109	49.3	LOS D	0.6	4.4	0.96	0.69	25.2
12	R2	4	0.0	0.109	49.3	LOS D	0.6	4.4	0.96	0.69	22.5
Approach		15	0.0	0.109	49.3	LOS D	0.6	4.4	0.96	0.69	24.5
All Vehicles		2179	2.5	1.076	75.7	LOS F	128.3	917.0	0.73	1.19	25.1

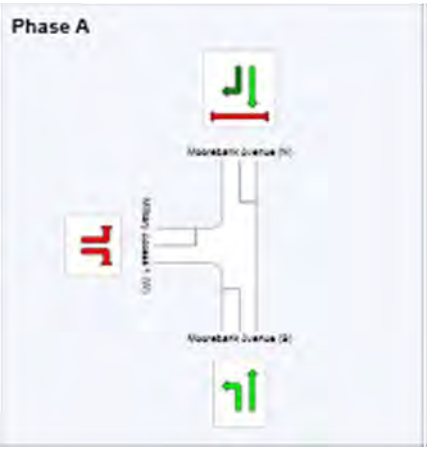
PHASING SUMMARY

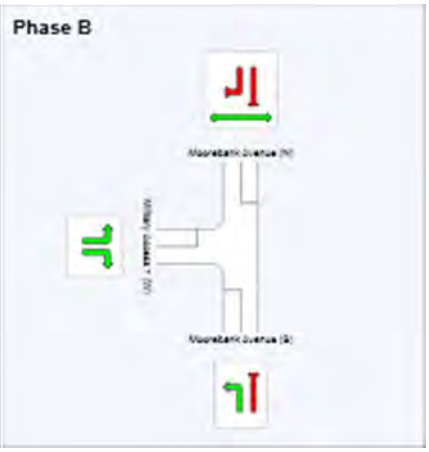
Site: I-03 2023 DN BASE PM

Intersection of Moorebank Avenue and Defence Support Access (Military Access 1)
2023 Do-nothing PM PEAK
Signals - Fixed Time Cycle Time = 90 seconds (Optimum Cycle Time - Minimum Delay)

Phase Timing Results

Phase	A	B
Reference Phase	Yes	No
Phase Change Time (sec)	0	76
Green Time (sec)	70	8
Yellow Time (sec)	4	4
All-Red Time (sec)	2	2
Phase Time (sec)	76	14
Phase Split	84 %	16 %





I-04 Intersection of Moorebank Avenue and DNSDC Access

MOVEMENT SUMMARY

Site: I-04 2023 DN BASE AM

Intersection of Moorebank Avenue and DNSDC Access (Military Access 2)
2023 Do-nothing AM PEAK
Signals - Fixed Time Cycle Time = 80 seconds (Optimum Cycle Time - Minimum Delay)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Moorebank Avenue (S)											
2	T1	1488	2.6	0.890	14.2	LOS A	34.9	249.8	0.56	0.61	47.6
3	R2	24	0.0	0.890	24.5	LOS B	34.9	249.8	0.65	0.74	44.7
Approach		1513	2.6	0.890	14.4	LOS A	34.9	249.8	0.56	0.61	47.5
East: DNSDC Access (W)											
4	L2	5	20.0	0.043	44.8	LOS D	0.2	1.7	0.95	0.65	33.8
6	R2	7	14.3	0.042	42.0	LOS C	0.3	2.1	0.93	0.66	33.0
Approach		13	16.7	0.043	43.2	LOS D	0.3	2.1	0.94	0.65	33.4
North: Moorebank Avenue (N)											
7	L2	111	6.7	0.073	6.1	LOS A	0.4	2.7	0.17	0.61	52.1
8	T1	648	3.4	0.453	4.0	LOS A	9.5	68.2	0.41	0.37	55.9
Approach		759	3.9	0.453	4.3	LOS A	9.5	68.2	0.37	0.41	55.3
West: Carpark Access (W)											
10	L2	1	0.0	0.006	39.4	LOS C	0.0	0.3	0.92	0.59	24.3
12	R2	1	0.0	0.007	41.7	LOS C	0.0	0.3	0.94	0.59	26.0
Approach		2	0.0	0.007	40.5	LOS C	0.0	0.3	0.93	0.59	25.2
All Vehicles		2286	3.1	0.890	11.2	LOS A	34.9	249.8	0.50	0.54	49.7

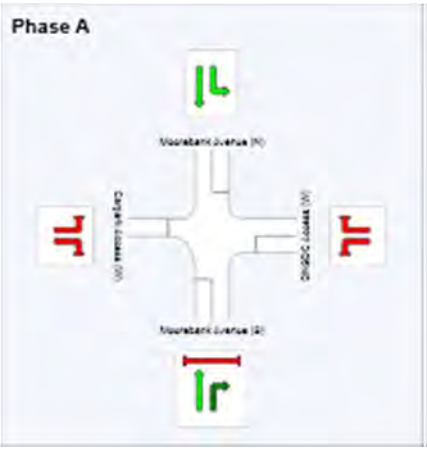
PHASING SUMMARY

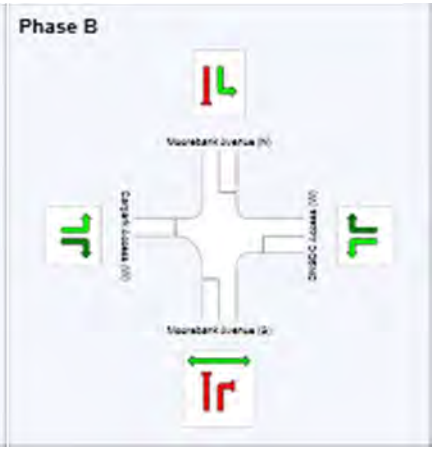
Site: I-04 2023 DN BASE AM

Intersection of Moorebank Avenue and DNSDC Access (Military Access 2)
2023 Do-nothing AM PEAK
Signals - Fixed Time Cycle Time = 80 seconds (Optimum Cycle Time - Minimum Delay)

Phase Timing Results

Phase	A	B
Reference Phase	Yes	No
Phase Change Time (sec)	0	66
Green Time (sec)	60	8
Yellow Time (sec)	4	4
All-Red Time (sec)	2	2
Phase Time (sec)	66	14
Phase Split	83 %	18 %





MOVEMENT SUMMARY

Site: I-04 2023 DN BASE PM

Intersection of Moorebank Avenue and DNSDC Access (Military Access 2)
2023 Do-nothing PM PEAK
Signals - Fixed Time Cycle Time = 110 seconds (Optimum Cycle Time - Minimum Delay)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Moorebank Avenue (S)											
2	T1	441	2.1	0.219	3.4	LOS A	4.8	33.9	0.28	0.24	56.5
3	R2	1	0.0	0.219	9.4	LOS A	4.8	33.9	0.30	0.27	54.9
Approach		442	2.1	0.219	3.4	LOS A	4.8	33.9	0.28	0.24	56.5
East: DNSDC Access (W)											
4	L2	4	0.0	0.050	62.6	LOS E	0.2	1.6	0.98	0.64	29.2
6	R2	23	9.1	0.185	59.9	LOS E	1.2	9.3	0.97	0.71	28.1
Approach		27	7.7	0.185	60.3	LOS E	1.2	9.3	0.97	0.70	28.3
North: Moorebank Avenue (N)											
7	L2	6	16.7	0.004	6.1	LOS A	0.0	0.2	0.11	0.59	51.9
8	T1	1655	2.2	1.056	98.8	LOS F	162.9	1161.2	1.00	1.51	21.4
Approach		1661	2.2	1.056	98.4	LOS F	162.9	1161.2	1.00	1.50	21.5
West: Carpark Access (W)											
10	L2	6	0.0	0.047	56.7	LOS E	0.3	2.3	0.95	0.65	19.4
12	R2	3	0.0	0.036	60.5	LOS E	0.2	1.2	0.98	0.62	21.0
Approach		9	0.0	0.047	57.9	LOS E	0.3	2.3	0.96	0.64	20.0
All Vehicles		2140	2.3	1.056	78.1	LOS F	162.9	1161.2	0.85	1.23	24.7

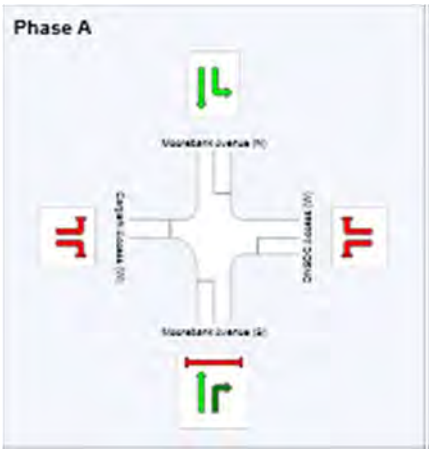
PHASING SUMMARY

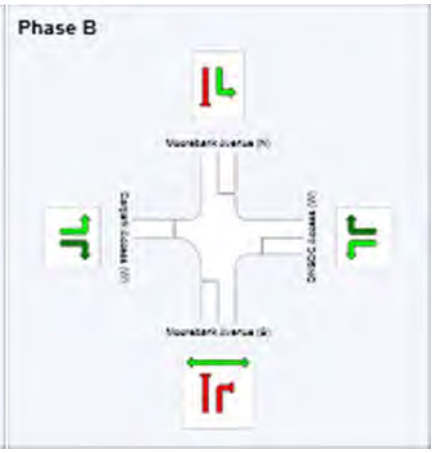
Site: I-04 2023 DN BASE PM

Intersection of Moorebank Avenue and DNSDC Access (Military Access 2)
2023 Do-nothing PM PEAK
Signals - Fixed Time Cycle Time = 110 seconds (Optimum Cycle Time - Minimum Delay)

Phase Timing Results

Phase	A	B
Reference Phase	Yes	No
Phase Change Time (sec)	0	96
Green Time (sec)	90	8
Yellow Time (sec)	4	4
All-Red Time (sec)	2	2
Phase Time (sec)	96	14
Phase Split	87 %	13 %





I-05 Intersection of Moorebank Avenue and Chatham Avenue

MOVEMENT SUMMARY

Site: I-05 2023 DN BASE AM

Intersection of Moorebank Avenue and Chatham Avenue
2023 Do-nothing AM PEAK
Signals - Fixed Time Cycle Time = 110 seconds (Optimum Cycle Time - Minimum Delay)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Moorebank Avenue (S)											
1	L2	46	0.0	0.030	7.1	LOS A	0.4	2.8	0.18	0.61	51.7
2	T1	1497	2.5	1.134	171.7	LOS F	182.5	1304.9	1.00	1.89	15.6
Approach		1543	2.5	1.134	166.8	LOS F	182.5	1304.9	0.98	1.85	16.0
North: Moorebank Avenue (N)											
8	T1	479	4.6	0.363	2.6	LOS A	6.1	44.4	0.26	0.23	57.6
9	R2	143	0.7	0.829	65.2	LOS E	8.1	56.8	1.00	1.00	26.8
Approach		622	3.7	0.829	17.0	LOS B	8.1	56.8	0.43	0.41	46.3
West: Chatham Avenue (W)											
10	L2	18	5.9	0.182	56.4	LOS D	1.6	12.2	0.95	0.72	29.1
12	R2	13	25.0	0.182	56.6	LOS E	1.6	12.2	0.95	0.72	28.7
Approach		31	13.8	0.182	56.4	LOS D	1.6	12.2	0.95	0.72	28.9
All Vehicles		2196	3.0	1.134	122.8	LOS F	182.5	1304.9	0.82	1.43	19.7

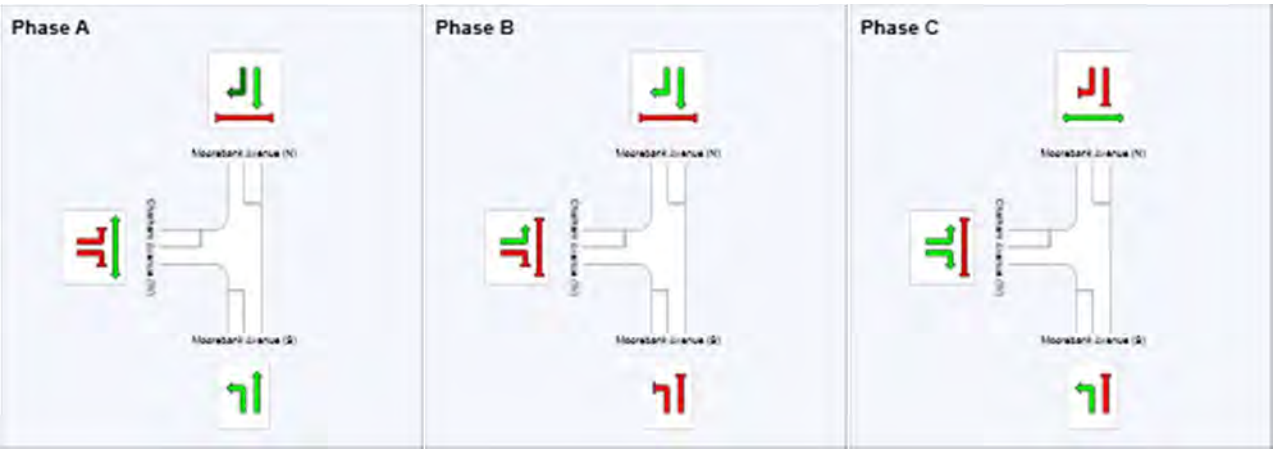
PHASING SUMMARY

Site: I-05 2023 DN BASE AM

Intersection of Moorebank Avenue and Chatham Avenue
2023 Do-nothing AM PEAK
Signals - Fixed Time Cycle Time = 110 seconds (Optimum Cycle Time - Minimum Delay)

Phase Timing Results

Phase	A	B	C
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	84	96
Green Time (sec)	78	6	8
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	84	12	14
Phase Split	76 %	11 %	13 %



MOVEMENT SUMMARY

Site: I-05 2023 DN BASE PM

Intersection of Moorebank Avenue and Chatham Avenue
2023 Do-nothing PM PEAK
Signals - Fixed Time Cycle Time = 100 seconds (Optimum Cycle Time - Minimum Delay)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Moorebank Avenue (S)											
1	L2	11	0.0	0.007	7.2	LOS A	0.1	0.6	0.19	0.60	51.6
2	T1	393	1.9	0.310	7.2	LOS A	7.8	55.5	0.44	0.39	53.6
Approach		403	1.8	0.310	7.2	LOS A	7.8	55.5	0.44	0.40	53.6
North: Moorebank Avenue (N)											
8	T1	1628	2.1	1.105	140.9	LOS F	177.0	1261.9	1.00	1.83	18.0
9	R2	28	0.0	0.041	10.3	LOS A	0.4	2.9	0.38	0.66	48.7
Approach		1657	2.1	1.105	138.7	LOS F	177.0	1261.9	0.99	1.81	18.2
West: Chatham Avenue (W)											
10	L2	43	2.4	0.196	46.6	LOS D	2.3	16.7	0.91	0.74	31.9
12	R2	11	0.0	0.196	46.5	LOS D	2.3	16.7	0.91	0.74	31.8
Approach		54	2.0	0.196	46.6	LOS D	2.3	16.7	0.91	0.74	31.9
All Vehicles		2114	2.0	1.105	111.3	LOS F	177.0	1261.9	0.88	1.51	21.1

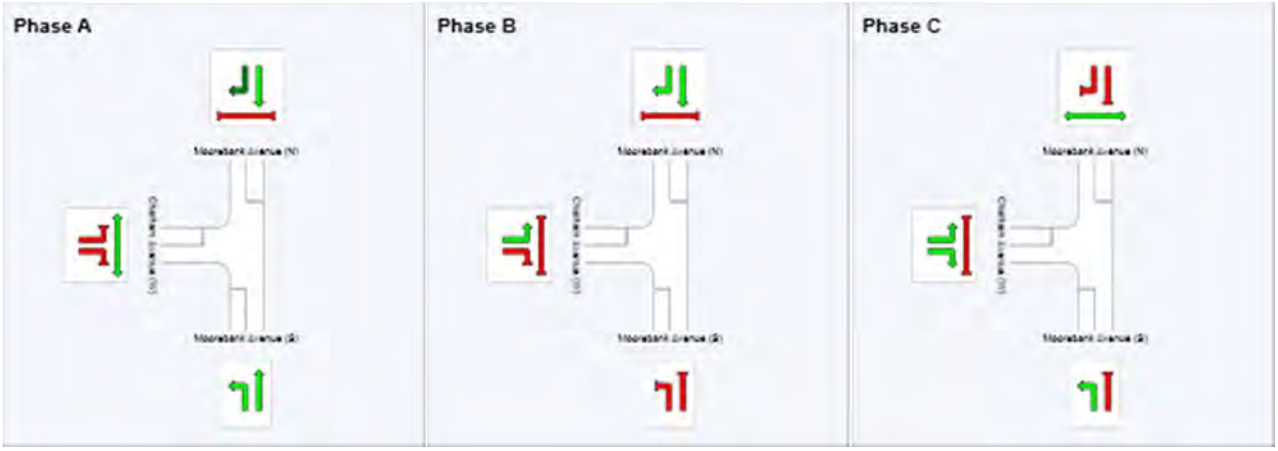
PHASING SUMMARY

Site: I-05 2023 DN BASE PM

Intersection of Moorebank Avenue and Chatham Avenue
2023 Do-nothing PM PEAK
Signals - Fixed Time Cycle Time = 100 seconds (Optimum Cycle Time - Minimum Delay)

Phase Timing Results

Phase	A	B	C
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	73	85
Green Time (sec)	67	6	9
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	73	12	15
Phase Split	73 %	12 %	15 %



Appendix G

2028 SIDRA results with and without Moorebank IMT

1. 2028 Future traffic with Moorebank IMT development (Phase C)

I-01 Intersection of Moorebank Avenue, Anzac Road and Bapaume Road

MOVEMENT SUMMARY

Site: I-01 2028 FU MINT AM

Intersection of Moorebank Avenue, Anzac Road and Bapaume Road
2028 Future with MINT AM PEAK
Signals - Fixed Time Cycle Time = 110 seconds (Optimum Cycle Time - Minimum Delay)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Moorebank Avenue (S)											
1	L2	37	0.0	0.766	31.1	LOS C	24.7	190.9	0.81	0.74	34.4
2	T1	1188	12.9	0.766	23.5	LOS B	24.7	190.9	0.81	0.73	34.7
3	R2	463	3.2	0.748	20.8	LOS B	11.2	80.2	0.85	0.86	38.1
Approach		1688	10.0	0.766	23.0	LOS B	24.7	191.0	0.82	0.77	35.5
East: Anzac Road (E)											
4	L2	216	3.9	0.350	34.9	LOS C	8.7	62.8	0.77	0.80	30.6
5	T1	9	0.0	0.350	27.9	LOS B	8.7	62.8	0.77	0.80	30.6
6	R2	216	13.7	0.782	60.0	LOS E	12.1	94.4	1.00	0.90	22.7
Approach		441	8.6	0.782	47.0	LOS D	12.1	94.4	0.88	0.85	26.1
North: Moorebank Avenue (N)											
7	L2	375	9.8	0.216	7.6	LOS A	0.0	0.0	0.00	0.57	48.5
8	T1	673	19.6	0.436	18.9	LOS B	9.8	80.4	0.59	0.51	36.0
9	R2	139	7.6	0.312	22.0	LOS B	3.4	25.2	0.79	0.79	34.1
Approach		1186	15.1	0.436	15.7	LOS B	9.8	80.4	0.42	0.56	39.0
West: Bapaume Road (W)											
10	L2	13	83.3	0.032	14.8	LOS B	0.2	2.7	0.51	0.56	34.1
11	T1	1	0.0	0.010	45.4	LOS D	0.1	0.7	0.89	0.60	18.4
12	R2	1	0.0	0.010	52.5	LOS D	0.1	0.7	0.89	0.60	18.4
Approach		15	71.4	0.032	19.7	LOS B	0.2	2.7	0.57	0.57	30.5
All Vehicles		3331	11.9	0.782	23.6	LOS B	24.7	191.0	0.68	0.70	34.8

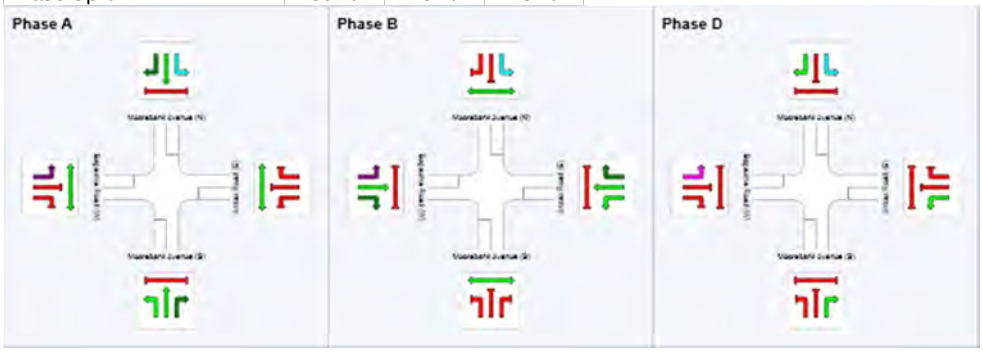
PHASING SUMMARY

Site: I-01 2028 FU MINT AM

Intersection of Moorebank Avenue, Anzac Road and Bapaume Road
2028 Future with MINT AM PEAK
Signals - Fixed Time Cycle Time = 110 seconds (Optimum Cycle Time - Minimum Delay)

Phase Timing Results

Phase	A	B	D
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	55	83
Green Time (sec)	49	22	21
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	55	28	27
Phase Split	50 %	25 %	25 %



MOVEMENT SUMMARY

Site: I-01 2028 FU MINT PM

Intersection of Moorebank Avenue, Anzac Road and Bapaume Road
2028 Future with MINT PM PEAK
Signals - Fixed Time Cycle Time = 105 seconds (Optimum Cycle Time - Minimum Delay)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Moorebank Avenue (S)											
1	L2	1	0.0	0.244	13.5	LOS A	3.1	26.3	0.27	0.23	50.3
2	T1	485	26.5	0.244	6.0	LOS A	3.1	26.3	0.27	0.23	50.3
3	R2	212	1.0	0.927	81.6	LOS F	13.9	98.3	1.00	1.19	18.5
Approach		698	18.7	0.927	28.9	LOS C	13.9	98.3	0.49	0.52	33.1
East: Anzac Road (E)											
4	L2	562	2.2	0.754	37.1	LOS C	24.9	177.5	0.92	0.88	29.7
5	T1	1	0.0	0.754	30.1	LOS C	24.9	177.5	0.92	0.88	29.7
6	R2	386	5.4	0.929	71.0	LOS F	25.1	183.7	1.00	1.06	20.4
Approach		949	3.5	0.929	50.9	LOS D	25.1	183.7	0.95	0.95	25.0
North: Moorebank Avenue (N)											
7	L2	343	4.0	0.190	7.6	LOS A	0.0	0.0	0.00	0.59	48.5
8	T1	1364	10.8	0.896	31.1	LOS C	35.3	269.8	0.80	0.84	28.9
9	R2	31	37.9	0.098	25.8	LOS B	0.9	8.5	0.60	0.68	31.7
Approach		1738	9.9	0.896	26.3	LOS B	35.3	269.8	0.64	0.79	31.5
West: Bapaume Road (W)											
10	L2	148	8.5	0.225	12.7	LOS A	2.5	19.1	0.43	0.67	35.9
11	T1	13	0.0	0.210	42.8	LOS D	1.9	13.0	0.90	0.73	18.9
12	R2	27	0.0	0.210	49.9	LOS D	1.9	13.0	0.90	0.73	18.9
Approach		188	6.7	0.225	20.1	LOS B	2.5	19.1	0.53	0.68	30.2
All Vehicles		3574	9.8	0.929	33.0	LOS C	35.3	269.8	0.69	0.77	29.5

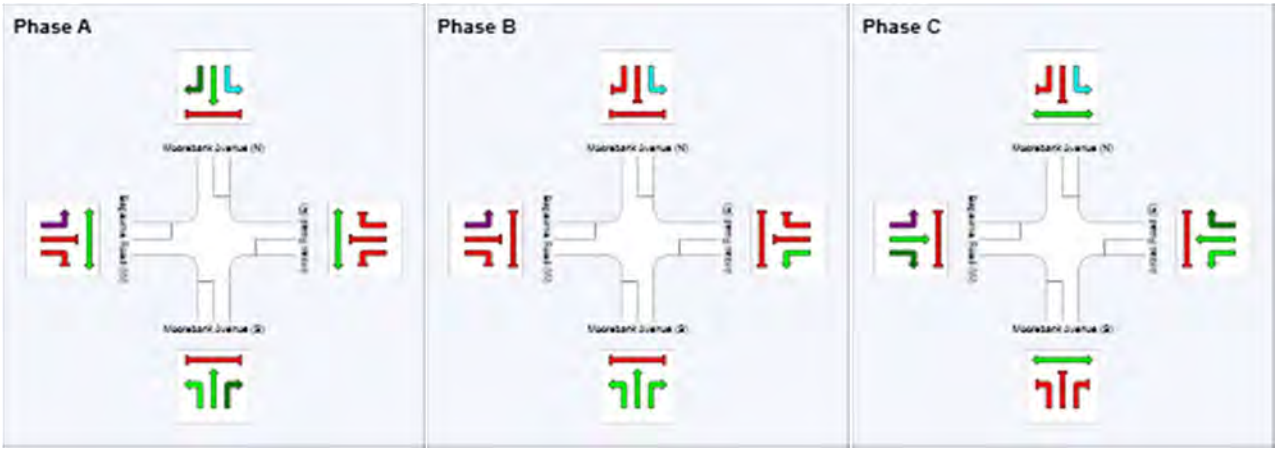
PHASING SUMMARY

Site: I-01 2028 FU MINT PM

Intersection of Moorebank Avenue, Anzac Road and Bapaume Road
2028 Future with MINT PM PEAK
Signals - Fixed Time Cycle Time = 105 seconds (Optimum Cycle Time - Minimum Delay)

Phase Timing Results

Phase	A	B	C
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	56	69
Green Time (sec)	50	7	30
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	56	13	36
Phase Split	53 %	12 %	34 %



I-02 Intersection of Moorebank Avenue, Warehouse Access 1 and DNSDC Access

MOVEMENT SUMMARY

Site: I-02 2028 FU MINT AM

Intersection of Moorebank Avenue, Warehouse Access 1 and DNSDC Access
2028 Future with MINT AM PEAK
Signals - Fixed Time Cycle Time = 100 seconds (Optimum Cycle Time - Minimum Delay)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Moorebank Avenue (S)											
1	L2	1	0.0	0.691	10.1	LOS A	12.4	93.9	0.33	0.31	45.1
2	T1	1674	9.6	0.691	4.6	LOS A	12.4	93.9	0.33	0.31	52.4
3	R2	25	0.0	0.227	56.9	LOS E	1.3	8.8	0.98	0.71	12.3
Approach		1700	9.4	0.691	5.4	LOS A	12.4	93.9	0.34	0.31	50.8
East: DNSDC Access (E)											
4	L2	5	20.0	0.094	52.7	LOS D	0.6	4.7	0.95	0.69	15.7
6	R2	7	14.3	0.094	52.7	LOS D	0.6	4.7	0.95	0.69	18.7
Approach		13	16.7	0.094	52.7	LOS D	0.6	4.7	0.95	0.69	17.5
North: Moorebank Avenue (N)											
7	L2	116	6.4	0.380	13.8	LOS A	9.5	74.6	0.49	0.51	29.3
8	T1	762	16.4	0.380	8.2	LOS A	9.6	77.0	0.49	0.47	46.9
9	R2	11	70.0	0.142	58.6	LOS E	0.5	5.9	0.98	0.68	16.8
Approach		888	15.8	0.380	9.5	LOS A	9.6	77.0	0.49	0.48	43.5
West: Warehouse Access 1 (W)											
10	L2	8	87.5	0.051	43.9	LOS D	0.4	4.7	0.86	0.67	19.7
12	R2	1	0.0	0.051	43.1	LOS D	0.4	4.7	0.86	0.67	18.3
Approach		9	77.8	0.051	43.8	LOS D	0.4	4.7	0.86	0.67	19.6
All Vehicles		2611	11.9	0.691	7.2	LOS A	12.4	93.9	0.40	0.37	47.6

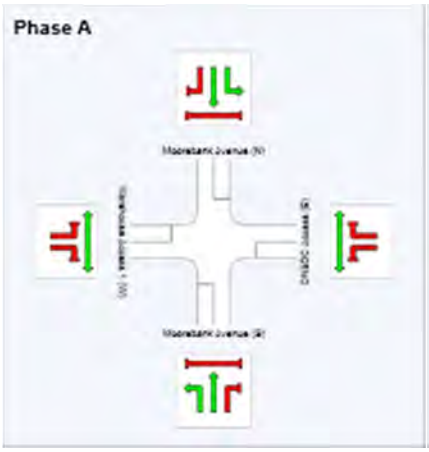
PHASING SUMMARY

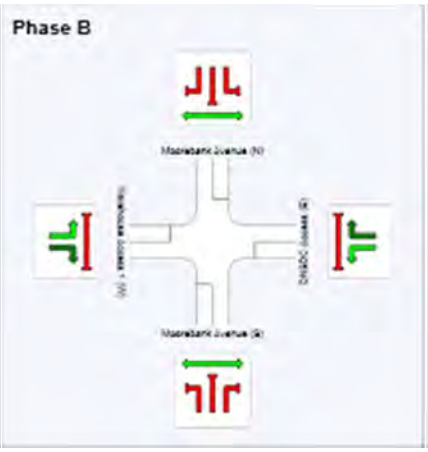
Site: I-02 2028 FU MINT AM

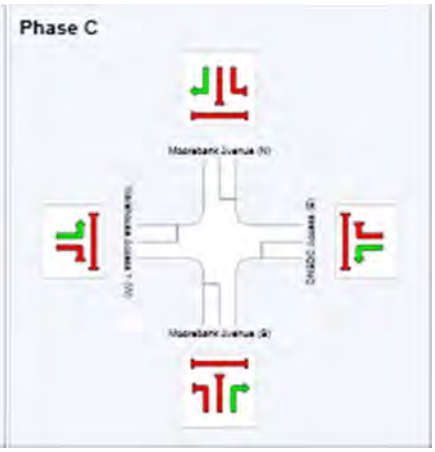
Intersection of Moorebank Avenue, Warehouse Access 1 and DNSDC Access
2028 Future with MINT AM PEAK
Signals - Fixed Time Cycle Time = 100 seconds (Optimum Cycle Time - Minimum Delay)

Phase Timing Results

Phase	A	B	C
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	72	88
Green Time (sec)	66	10	6
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	72	16	12
Phase Split	72 %	16 %	12 %







MOVEMENT SUMMARY

Site: I-02 2028 FU MINT PM

Intersection of Moorebank Avenue, Warehouse Access 1 and DNSDC Access
2028 Future with MINT PM PEAK
Signals - Fixed Time Cycle Time = 100 seconds (Optimum Cycle Time - Minimum Delay)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Moorebank Avenue (S)											
1	L2	1	0.0	0.288	8.6	LOS A	2.6	20.9	0.17	0.15	47.8
2	T1	662	18.3	0.288	3.1	LOS A	2.6	20.9	0.17	0.15	54.7
3	R2	1	0.0	0.009	17.5	LOS B	0.0	0.2	0.47	0.63	20.6
Approach		664	18.2	0.288	3.1	LOS A	2.6	20.9	0.17	0.15	54.6
East: DNSDC Access (E)											
4	L2	4	0.0	0.245	56.1	LOS D	1.4	10.4	0.98	0.72	15.5
6	R2	24	8.7	0.245	56.1	LOS D	1.4	10.4	0.98	0.72	18.0
Approach		28	7.4	0.245	56.1	LOS D	1.4	10.4	0.98	0.72	17.7
North: Moorebank Avenue (N)											
7	L2	6	16.7	0.676	11.2	LOS A	21.9	163.4	0.51	0.47	31.8
8	T1	1940	7.8	0.676	5.4	LOS A	21.9	163.4	0.50	0.47	51.3
9	R2	8	87.5	0.123	58.9	LOS E	0.4	5.2	0.97	0.68	16.6
Approach		1955	8.2	0.676	5.6	LOS A	21.9	163.4	0.51	0.47	50.8
West: Warehouse Access 1 (W)											
10	L2	11	70.0	0.056	43.6	LOS D	0.5	5.3	0.87	0.68	20.0
12	R2	1	0.0	0.056	43.0	LOS D	0.5	5.3	0.87	0.68	18.3
Approach		12	63.6	0.056	43.6	LOS D	0.5	5.3	0.87	0.68	19.9
All Vehicles		2659	10.9	0.676	5.7	LOS A	21.9	163.4	0.43	0.40	50.7

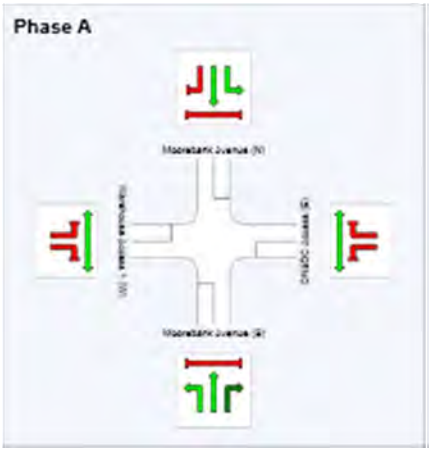
PHASING SUMMARY

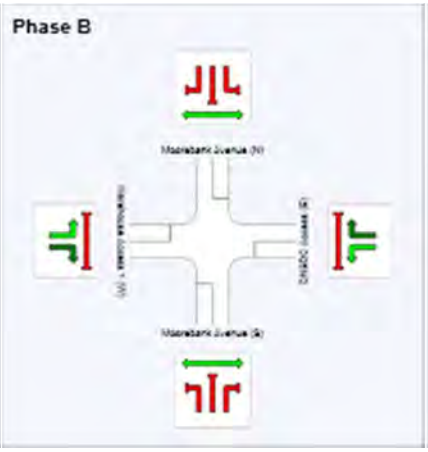
Site: I-02 2028 FU MINT PM

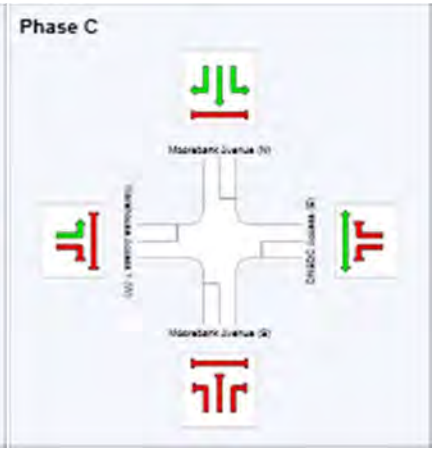
Intersection of Moorebank Avenue, Warehouse Access 1 and DNSDC Access
2028 Future with MINT PM PEAK
Signals - Fixed Time Cycle Time = 100 seconds (Optimum Cycle Time - Minimum Delay)

Phase Timing Results

Phase	A	B	C
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	72	88
Green Time (sec)	66	10	6
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	72	16	12
Phase Split	72 %	16 %	12 %







I-03 Intersection of Moorebank Avenue and Warehouse Access 2

MOVEMENT SUMMARY

Site: I-03 2028 FU MINT AM

Intersection of Moorebank Avenue and Warehouse Access 2
2028 Future with MINT AM PEAK
Signals - Fixed Time Cycle Time = 90 seconds (Optimum Cycle Time - Minimum Delay)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Moorebank Avenue (S)											
1	L2	1	0.0	0.738	20.1	LOS B	25.8	194.4	0.76	0.70	43.3
2	T1	1692	9.0	0.738	12.7	LOS A	25.8	194.4	0.76	0.70	43.3
Approach		1693	9.0	0.738	12.7	LOS A	25.8	194.4	0.76	0.70	43.3
North: Moorebank Avenue (N)											
8	T1	756	15.6	0.282	0.9	LOS A	1.1	8.9	0.07	0.06	56.8
9	R2	12	72.7	0.071	18.9	LOS B	0.2	2.6	0.67	0.64	28.5
Approach		767	16.5	0.282	1.1	LOS A	1.1	8.9	0.08	0.07	56.0
West: Warehouse Access 2 (W)											
10	L2	9	88.9	0.047	39.3	LOS C	0.4	4.5	0.83	0.66	13.8
12	R2	1	0.0	0.047	39.5	LOS C	0.4	4.5	0.83	0.66	13.8
Approach		11	80.0	0.047	39.4	LOS C	0.4	4.5	0.83	0.66	13.8
All Vehicles		2471	11.6	0.738	9.2	LOS A	25.8	194.4	0.55	0.50	45.0

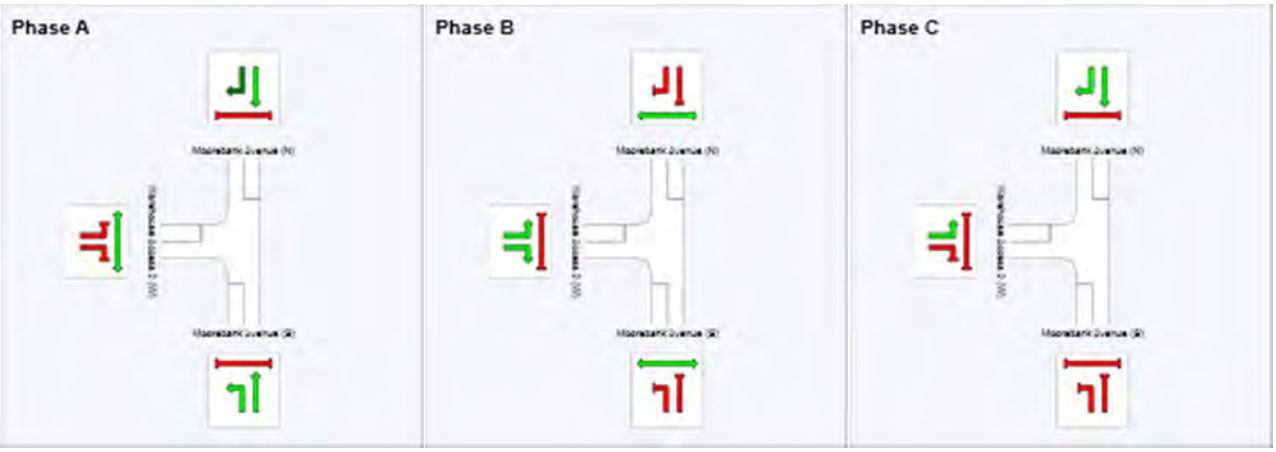
PHASING SUMMARY

Site: I-03 2028 FU MINT AM

Intersection of Moorebank Avenue and Warehouse Access 2
2028 Future with MINT AM PEAK
Signals - Fixed Time Cycle Time = 90 seconds (Optimum Cycle Time - Minimum Delay)

Phase Timing Results

Phase	A	B	C
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	62	78
Green Time (sec)	56	10	6
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	62	16	12
Phase Split	69 %	18 %	13 %



MOVEMENT SUMMARY

Site: I-03 2028 FU MINT PM

Intersection of Moorebank Avenue and Warehouse Access 2
2028 Future with MINT PM PEAK
Signals - Fixed Time Cycle Time = 90 seconds (Optimum Cycle Time - Minimum Delay)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Moorebank Avenue (S)											
1	L2	1	0.0	0.299	15.8	LOS B	6.6	52.8	0.50	0.43	47.8
2	T1	651	17.3	0.299	8.4	LOS A	6.6	52.8	0.50	0.43	47.8
Approach		652	17.3	0.299	8.4	LOS A	6.6	52.8	0.50	0.43	47.8
North: Moorebank Avenue (N)											
8	T1	1937	7.4	0.689	1.4	LOS A	6.1	45.2	0.16	0.15	54.5
9	R2	9	88.9	0.030	11.8	LOS A	0.1	1.4	0.41	0.55	35.1
Approach		1946	7.8	0.689	1.5	LOS A	6.1	45.2	0.16	0.15	54.4
West: Warehouse Access 2 (W)											
10	L2	12	72.7	0.052	39.3	LOS C	0.5	5.1	0.84	0.66	13.9
12	R2	1	0.0	0.052	39.4	LOS C	0.5	5.1	0.84	0.66	13.9
Approach		13	66.7	0.052	39.3	LOS C	0.5	5.1	0.84	0.66	13.9
All Vehicles		2611	10.4	0.689	3.4	LOS A	6.6	52.8	0.25	0.22	51.2

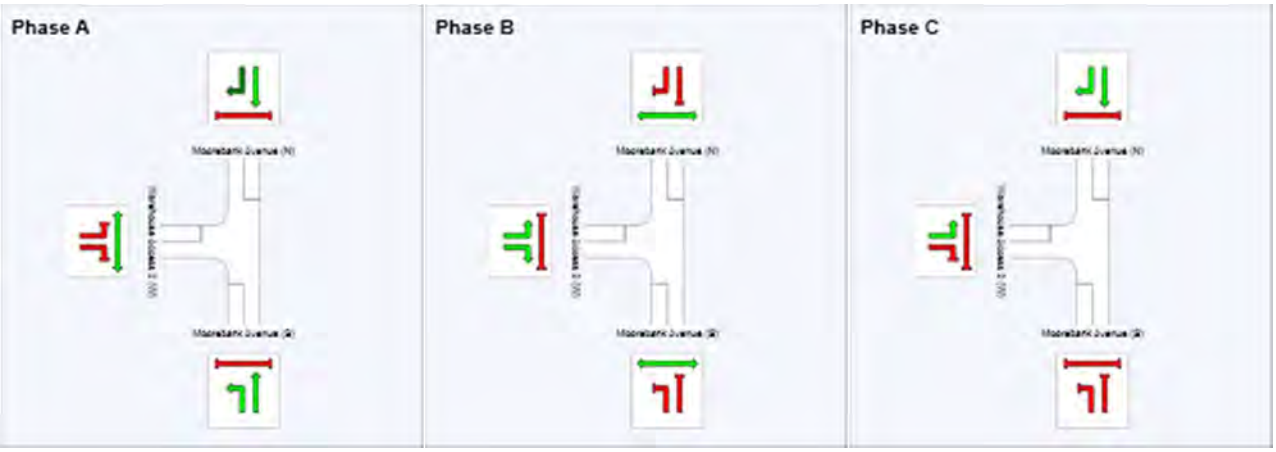
PHASING SUMMARY

Site: I-03 2028 FU MINT PM

Intersection of Moorebank Avenue and Warehouse Access 2
2028 Future with MINT PM PEAK
Signals - Fixed Time Cycle Time = 90 seconds (Optimum Cycle Time - Minimum Delay)

Phase Timing Results

Phase	A	B	C
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	62	78
Green Time (sec)	56	10	6
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	62	16	12
Phase Split	69 %	18 %	13 %



I-04 Intersection of Moorebank Avenue and Warehouse Access 3

MOVEMENT SUMMARY

Site: I-04 2028 FU MINT AM

Intersection of Moorebank Avenue and Warehouse Access 3
2028 Future with MINT AM PEAK
Signals - Fixed Time Cycle Time = 90 seconds (Optimum Cycle Time - Minimum Delay)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Moorebank Avenue (S)											
1	L2	2	0.0	0.729	20.0	LOS B	25.3	189.6	0.75	0.69	42.3
2	T1	1678	8.2	0.729	12.6	LOS A	25.3	189.7	0.75	0.69	42.3
Approach		1680	8.1	0.729	12.6	LOS A	25.3	189.7	0.75	0.69	42.3
North: Moorebank Avenue (N)											
8	T1	735	14.0	0.272	3.6	LOS A	4.9	38.3	0.33	0.29	53.6
9	R2	21	70.0	0.126	19.3	LOS B	0.4	4.8	0.69	0.67	39.4
Approach		756	15.6	0.272	4.0	LOS A	4.9	38.3	0.34	0.30	53.1
West: Warehouse Access 3 (W)											
10	L2	16	93.3	0.073	38.8	LOS C	0.6	7.5	0.83	0.67	14.0
12	R2	1	0.0	0.073	38.9	LOS C	0.6	7.5	0.83	0.67	14.0
Approach		17	87.5	0.073	38.8	LOS C	0.6	7.5	0.83	0.67	14.0
All Vehicles		2453	11.0	0.729	10.1	LOS A	25.3	189.7	0.62	0.57	45.1

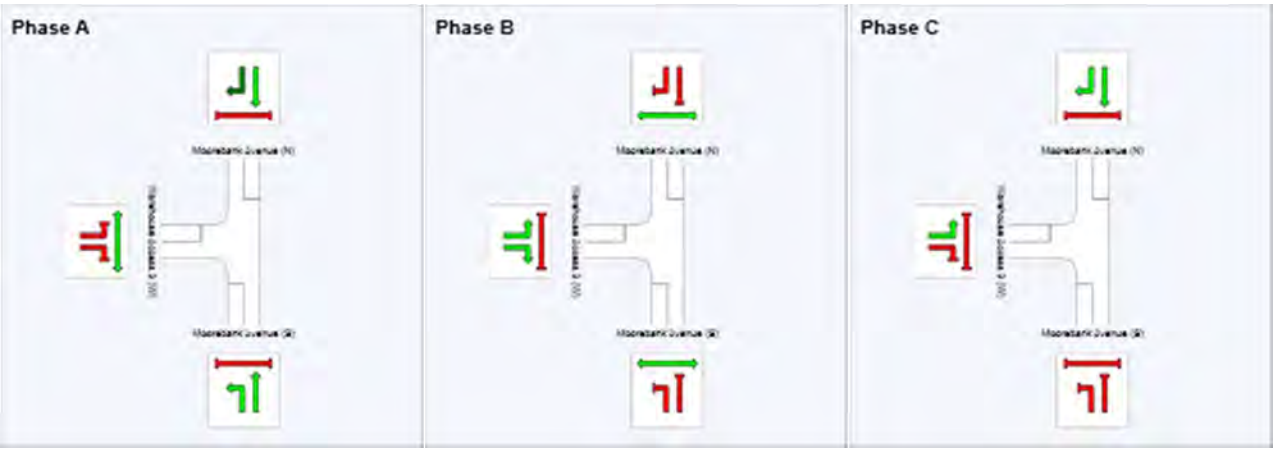
PHASING SUMMARY

Site: I-04 2028 FU MINT AM

Intersection of Moorebank Avenue and Warehouse Access 3
2028 Future with MINT AM PEAK
Signals - Fixed Time Cycle Time = 90 seconds (Optimum Cycle Time - Minimum Delay)

Phase Timing Results

Phase	A	B	C
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	62	78
Green Time (sec)	56	10	6
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	62	16	12
Phase Split	69 %	18 %	13 %



MOVEMENT SUMMARY

Site: I-04 2028 FU MINT PM

Intersection of Moorebank Avenue and Warehouse Access 3
2028 Future with MINT PM PEAK
Signals - Fixed Time Cycle Time = 90 seconds (Optimum Cycle Time - Minimum Delay)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Moorebank Avenue (S)											
1	L2	1	0.0	0.286	15.8	LOS B	6.3	49.9	0.49	0.43	47.0
2	T1	629	15.6	0.286	8.3	LOS A	6.3	49.9	0.49	0.43	47.0
Approach		631	15.5	0.286	8.3	LOS A	6.3	49.9	0.49	0.43	47.0
North: Moorebank Avenue (N)											
8	T1	1923	6.7	0.689	5.9	LOS A	21.5	159.0	0.55	0.51	50.2
9	R2	16	93.3	0.049	11.9	LOS A	0.2	2.4	0.41	0.56	45.1
Approach		1939	7.4	0.689	5.9	LOS A	21.5	159.0	0.55	0.51	50.1
West: Warehouse Access 3 (W)											
10	L2	21	70.0	0.095	39.7	LOS C	0.9	9.2	0.85	0.69	13.7
12	R2	2	0.0	0.095	39.9	LOS C	0.9	9.2	0.85	0.69	13.7
Approach		23	63.6	0.095	39.8	LOS C	0.9	9.2	0.85	0.69	13.7
All Vehicles		2593	9.9	0.689	6.8	LOS A	21.5	159.0	0.54	0.49	49.0

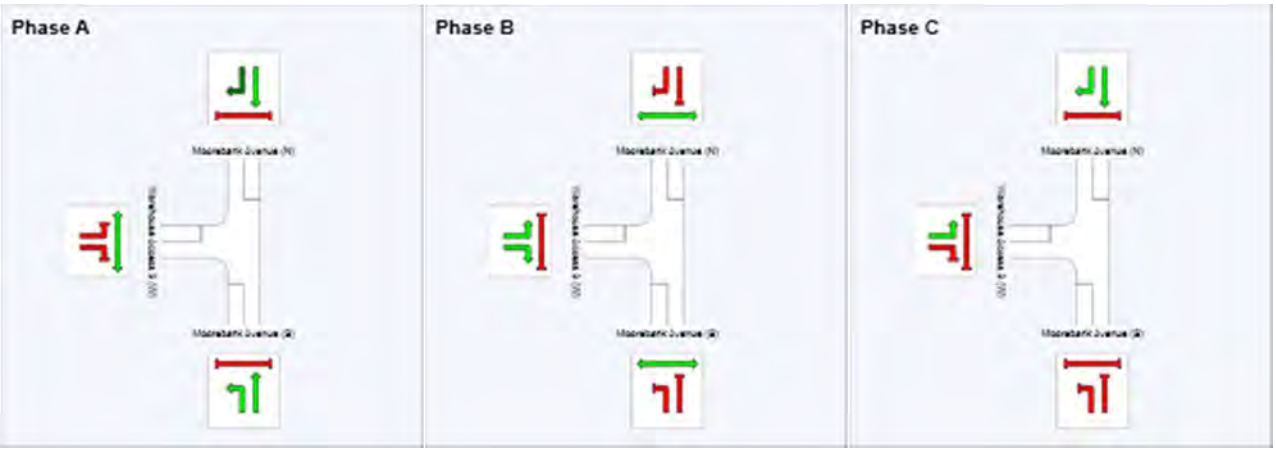
PHASING SUMMARY

Site: I-04 2028 FU MINT PM

Intersection of Moorebank Avenue and Warehouse Access 3
2028 Future with MINT PM PEAK
Signals - Fixed Time Cycle Time = 90 seconds (Optimum Cycle Time - Minimum Delay)

Phase Timing Results

Phase	A	B	C
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	62	78
Green Time (sec)	56	10	6
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	62	16	12
Phase Split	69 %	18 %	13 %



I-05 Intersection of Moorebank Avenue and Main Access

MOVEMENT SUMMARY

Site: I-05 2028 FU MINT AM

Intersection of Moorebank Avenue and Main Access
2028 Future with MINT AM PEAK
Signals - Fixed Time Cycle Time = 85 seconds (Optimum Cycle Time - Minimum Delay)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Moorebank Avenue (S)											
1	L2	19	0.0	0.734	21.6	LOS B	24.5	175.9	0.79	0.73	40.8
2	T1	1596	3.2	0.734	14.2	LOS A	24.5	176.3	0.79	0.73	40.8
Approach		1615	3.2	0.734	14.3	LOS A	24.5	176.3	0.79	0.73	40.8
North: Moorebank Avenue (N)											
8	T1	604	3.0	0.245	4.3	LOS A	4.7	33.7	0.36	0.31	52.7
9	R2	131	65.3	0.736	30.8	LOS C	4.6	50.0	1.00	0.94	32.9
Approach		735	14.0	0.736	9.0	LOS A	4.7	50.0	0.47	0.42	47.8
West: Main Access (W)											
10	L2	86	98.8	0.157	34.3	LOS C	1.5	18.9	0.81	0.69	15.3
12	R2	1	0.0	0.157	34.4	LOS C	1.4	18.3	0.81	0.69	15.3
Approach		87	97.6	0.157	34.3	LOS C	1.5	18.9	0.81	0.69	15.3
All Vehicles		2437	9.8	0.736	13.4	LOS A	24.5	176.3	0.70	0.63	42.0

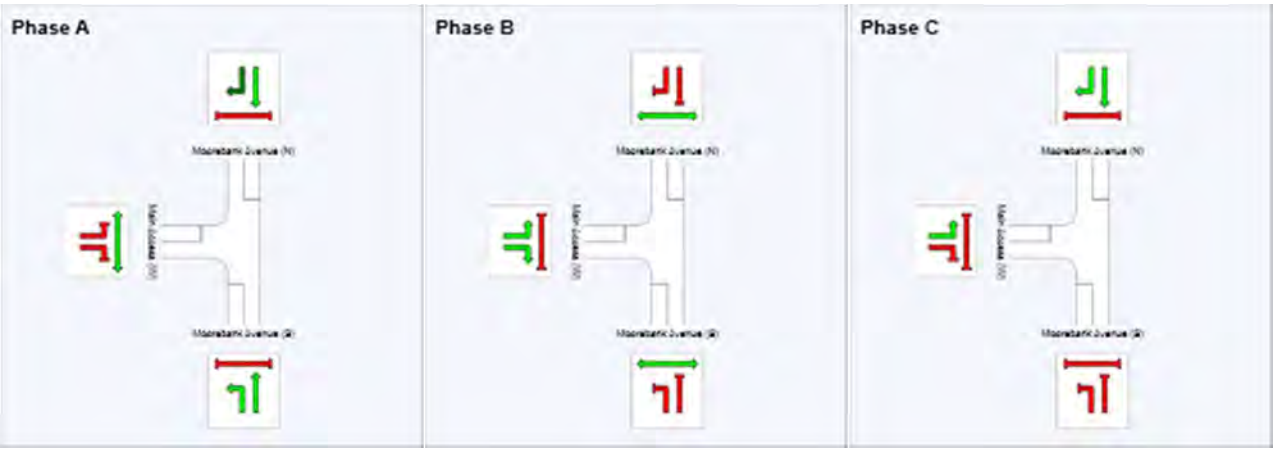
PHASING SUMMARY

Site: I-05 2028 FU MINT AM

Intersection of Moorebank Avenue and Main Access
2028 Future with MINT AM PEAK
Signals - Fixed Time Cycle Time = 85 seconds (Optimum Cycle Time - Minimum Delay)

Phase Timing Results

Phase	A	B	C
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	55	73
Green Time (sec)	49	12	6
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	55	18	12
Phase Split	65 %	21 %	14 %



MOVEMENT SUMMARY

Site: I-05 2028 FU MINT PM

Intersection of Moorebank Avenue and Main Access
2028 Future with MINT PM PEAK
Signals - Fixed Time Cycle Time = 90 seconds (Optimum Cycle Time - Minimum Delay)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Moorebank Avenue (S)											
1	L2	1	0.0	0.317	26.7	LOS B	7.4	53.0	0.72	0.61	37.5
2	T1	499	2.5	0.317	19.3	LOS B	7.4	53.0	0.72	0.61	37.5
Approach		500	2.5	0.317	19.3	LOS B	7.4	53.0	0.72	0.61	37.5
North: Moorebank Avenue (N)											
8	T1	1841	2.3	0.766	6.6	LOS A	23.2	165.5	0.56	0.52	49.4
9	R2	86	98.8	0.183	12.6	LOS A	1.1	14.7	0.48	0.61	44.5
Approach		1927	6.7	0.766	6.8	LOS A	23.2	165.5	0.56	0.52	49.2
West: Main Access (W)											
10	L2	131	65.3	0.196	27.8	LOS B	3.0	32.2	0.70	0.69	17.7
12	R2	19	0.0	0.196	44.5	LOS D	1.7	15.2	0.91	0.73	12.6
Approach		149	57.0	0.196	29.9	LOS C	3.0	32.2	0.72	0.70	16.9
All Vehicles		2577	8.8	0.766	10.6	LOS A	23.2	165.5	0.60	0.55	44.9

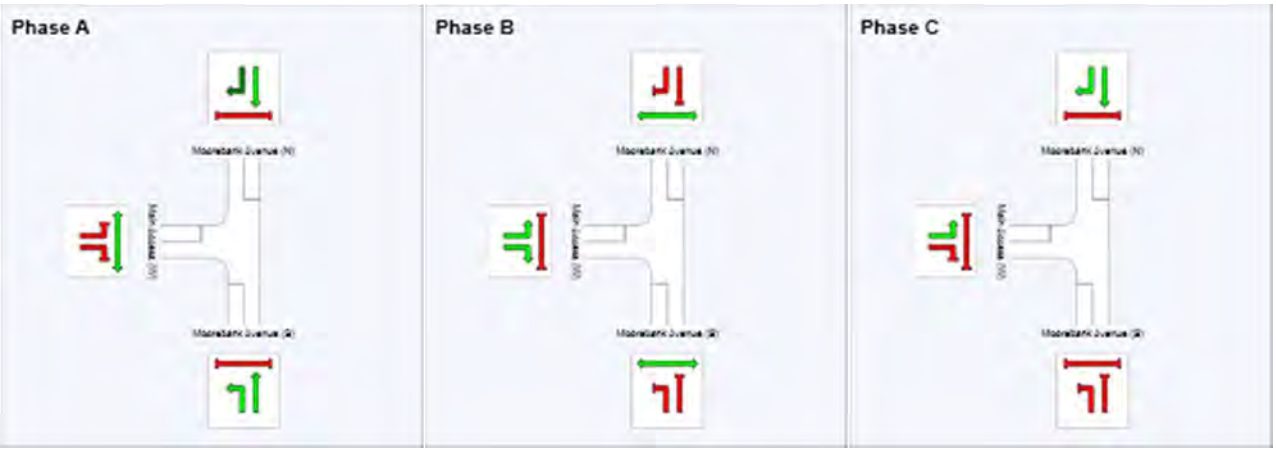
PHASING SUMMARY

Site: I-05 2028 FU MINT PM

Intersection of Moorebank Avenue and Main Access
2028 Future with MINT PM PEAK
Signals - Fixed Time Cycle Time = 90 seconds (Optimum Cycle Time - Minimum Delay)

Phase Timing Results

Phase	A	B	C
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	43	61
Green Time (sec)	37	12	23
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	43	18	29
Phase Split	48 %	20 %	32 %



2. 2028 Future traffic without Moorebank IMT development (Do-nothing scenario)

I-01 Intersection of Moorebank Avenue and Bapaume Road

MOVEMENT SUMMARY

Site: I-01 2028 DN BASE AM

Intersection of Moorebank Avenue and Bapaume Road
2028 Do-nothing AM PEAK
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Moorebank Avenue (S)											
1	L2	21	0.0	0.011	5.5	LOS A	0.0	0.0	0.00	0.58	45.1
2	T1	1272	5.2	0.674	0.0	LOS A	0.0	0.0	0.00	0.00	59.7
Approach		1293	5.1	0.674	0.1	NA	0.0	0.0	0.00	0.01	59.4
North: Moorebank Avenue (S)											
8	T1	991	5.4	0.478	2.8	LOS A	3.7	26.4	0.09	0.05	54.1
9	R2	93	1.1	0.478	35.5	LOS C	3.7	26.4	1.00	0.59	30.9
Approach		1083	5.1	0.478	5.6	NA	3.7	26.4	0.17	0.10	50.0
West: Bapaume Road (W)											
10	L2	3	33.3	0.037	45.3	LOS D	0.1	0.9	0.92	0.97	26.0
12	R2	1	0.0	0.222	760.5	LOS F	0.5	3.7	1.00	1.00	1.7
Approach		4	25.0	0.222	224.1	LOS F	0.5	3.7	0.94	0.97	7.6
All Vehicles		2380	5.1	0.674	3.0	NA	3.7	26.4	0.08	0.05	53.9

MOVEMENT SUMMARY

Site: I-01 2028 DN BASE PM

Intersection of Moorebank Avenue and Bapaume Road
2028 Do-nothing PM PEAK
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Moorebank Avenue (S)											
1	L2	1	0.0	0.001	5.5	LOS A	0.0	0.0	0.00	0.58	45.1
2	T1	668	4.6	0.353	0.0	LOS A	0.0	0.0	0.00	0.00	59.9
Approach		669	4.6	0.353	0.0	NA	0.0	0.0	0.00	0.00	59.9
North: Moorebank Avenue (S)											
8	T1	1612	2.8	0.438	4.3	LOS A	9.2	66.2	0.48	0.01	51.8
9	R2	21	10.0	0.438	14.7	LOS B	9.2	66.2	1.00	0.03	44.9
Approach		1633	2.9	0.438	4.5	NA	9.2	66.2	0.49	0.01	51.6
West: Bapaume Road (W)											
10	L2	102	3.1	0.194	11.2	LOS A	0.7	5.3	0.61	0.83	44.4
12	R2	15	0.0	1.000	558.0	LOS F	3.5	24.6	1.00	1.14	2.2
Approach		117	2.7	1.000	80.1	LOS F	3.5	24.6	0.66	0.87	17.9
All Vehicles		2419	3.4	1.000	6.9	NA	9.2	66.2	0.36	0.05	48.0

I-02 Intersection of Moorebank Avenue and Anzac Road

MOVEMENT SUMMARY

Site: I-02 2028 DN BASE AM

Intersection of Moorebank Avenue and Anzac Road
2028 Do-nothing AM PEAK
Signals - Fixed Time Cycle Time = 103 seconds (User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Moorebank Avenue (S)											
2	T1	1091	3.5	1.038	103.0	LOS F	101.5	732.0	1.00	1.51	15.9
3	R2	463	3.2	0.754	35.1	LOS C	18.8	135.1	0.95	0.98	37.3
Approach		1554	3.4	1.038	82.7	LOS F	101.5	732.0	0.99	1.35	20.8
East: Anzac Road (E)											
4	L2	249	3.4	0.301	24.4	LOS B	7.8	56.5	0.67	0.76	41.9
6	R2	219	13.5	0.832	58.8	LOS E	12.0	94.0	1.00	0.94	20.1
Approach		468	8.1	0.832	40.5	LOS C	12.0	94.0	0.82	0.84	30.4
North: Moorebank Avenue (N)											
7	L2	375	9.8	0.244	6.1	LOS A	1.4	10.6	0.16	0.59	49.8
8	T1	638	3.3	0.590	23.1	LOS B	18.4	132.7	0.78	0.68	36.9
Approach		1013	5.7	0.590	16.8	LOS B	18.4	132.7	0.55	0.65	40.9
All Vehicles		3035	4.9	1.038	54.2	LOS D	101.5	732.0	0.82	1.04	26.0

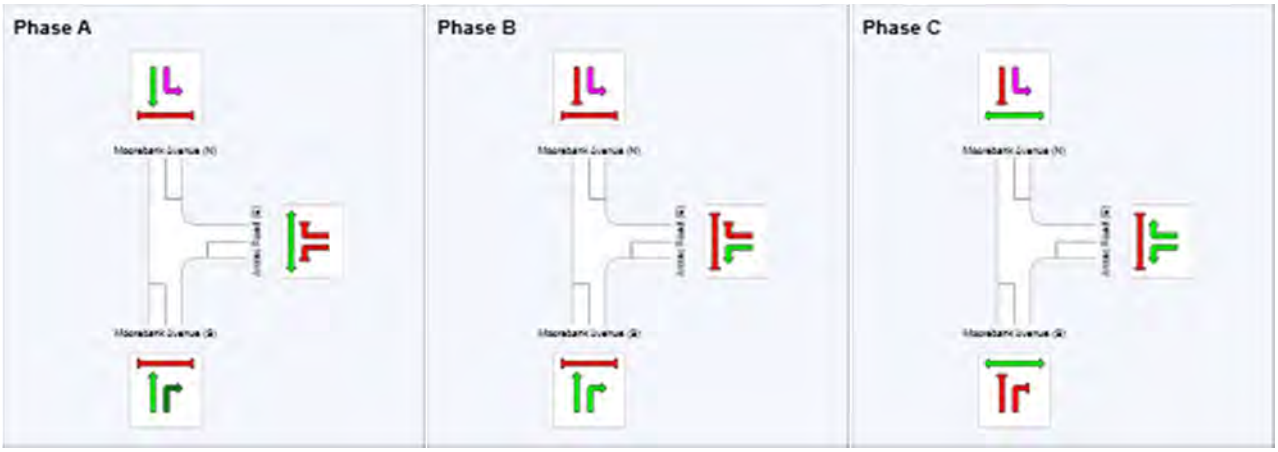
PHASING SUMMARY

Site: I-02 2028 DN BASE AM

Intersection of Moorebank Avenue and Anzac Road
2028 Do-nothing AM PEAK
Signals - Fixed Time Cycle Time = 103 seconds (User-Given Phase Times)

Phase Timing Results

Phase	A	B	C
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	50	78
Green Time (sec)	44	22	19
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	50	28	25
Phase Split	49 %	27 %	24 %



MOVEMENT SUMMARY

Site: I-02 2028 DN BASE PM

Intersection of Moorebank Avenue and Anzac Road
2028 Do-nothing PM PEAK
Signals - Fixed Time Cycle Time = 110 seconds (User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Moorebank Avenue (S)											
2	T1	320	3.9	0.268	9.7	LOS A	7.5	54.6	0.48	0.42	47.5
3	R2	203	1.0	1.183	208.2	LOS F	24.8	175.0	1.00	1.34	13.5
Approach		523	2.8	1.183	86.8	LOS F	24.8	175.0	0.68	0.77	20.8
East: Anzac Road (E)											
4	L2	572	2.2	0.839	45.0	LOS D	30.7	218.8	0.98	0.93	33.9
6	R2	386	5.4	0.914	66.8	LOS E	24.9	182.3	1.00	1.01	18.7
Approach		958	3.5	0.914	53.8	LOS D	30.7	218.8	0.99	0.96	27.4
North: Moorebank Avenue (N)											
7	L2	349	3.9	0.217	6.0	LOS A	1.3	9.2	0.14	0.59	50.2
8	T1	1287	2.5	0.976	52.6	LOS D	73.0	521.8	0.91	1.05	24.8
Approach		1637	2.8	0.976	42.7	LOS D	73.0	521.8	0.74	0.95	27.8
All Vehicles		3118	3.0	1.183	53.5	LOS D	73.0	521.8	0.81	0.93	26.1

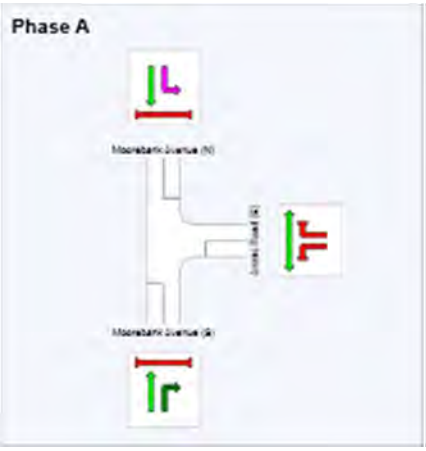
PHASING SUMMARY

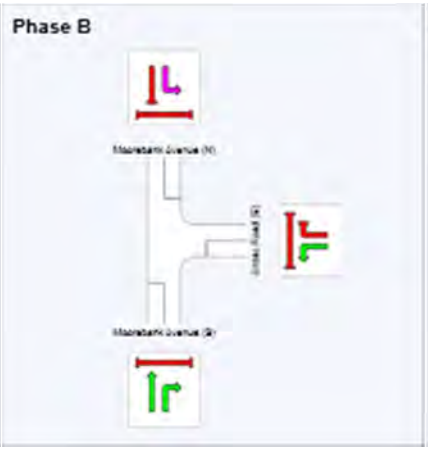
Site: I-02 2028 DN BASE PM

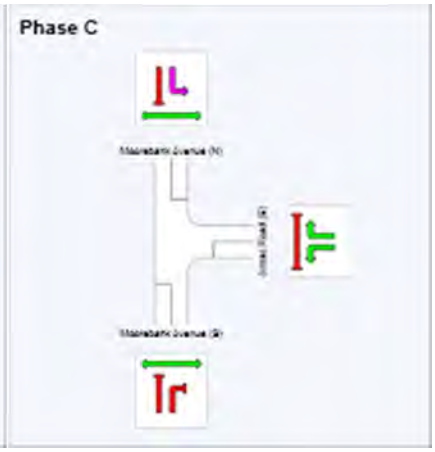
Intersection of Moorebank Avenue and Anzac Road
2028 Do-nothing PM PEAK
Signals - Fixed Time Cycle Time = 110 seconds (User-Given Phase Times)

Phase Timing Results

Phase	A	B	C
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	63	75
Green Time (sec)	57	6	29
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	63	12	35
Phase Split	57 %	11 %	32 %







I-03 Intersection of Moorebank Avenue and Defence Support Access

MOVEMENT SUMMARY

Site: I-03 2028 DN BASE AM

Intersection of Moorebank Avenue and Defence Support Access (Military Access 1)
2028 Do-nothing AM PEAK
Signals - Fixed Time Cycle Time = 90 seconds (Optimum Cycle Time - Minimum Delay)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Moorebank Avenue (S)											
1	L2	18	0.0	0.011	6.0	LOS A	0.1	0.4	0.14	0.60	46.8
2	T1	1536	3.1	1.040	87.9	LOS F	129.6	931.5	1.00	1.55	23.0
Approach		1554	3.0	1.040	87.0	LOS F	129.6	931.5	0.99	1.54	23.1
North: Moorebank Avenue (N)											
8	T1	822	3.7	0.827	18.7	LOS B	22.3	160.6	0.65	0.64	44.6
9	R2	20	0.0	0.827	32.3	LOS C	22.3	160.6	0.84	0.85	24.3
Approach		842	3.6	0.827	19.0	LOS B	22.3	160.6	0.65	0.65	44.0
West: Military Access 1 (W)											
10	L2	2	0.0	0.023	48.3	LOS D	0.1	0.9	0.94	0.63	25.5
12	R2	1	0.0	0.023	48.2	LOS D	0.1	0.9	0.94	0.63	22.8
Approach		3	0.0	0.023	48.3	LOS D	0.1	0.9	0.94	0.63	24.6
All Vehicles		2399	3.2	1.040	63.1	LOS E	129.6	931.5	0.87	1.22	27.7

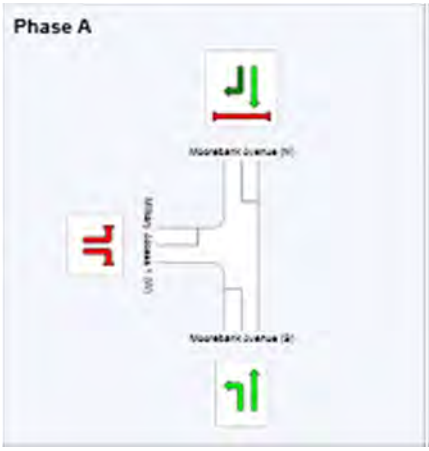
PHASING SUMMARY

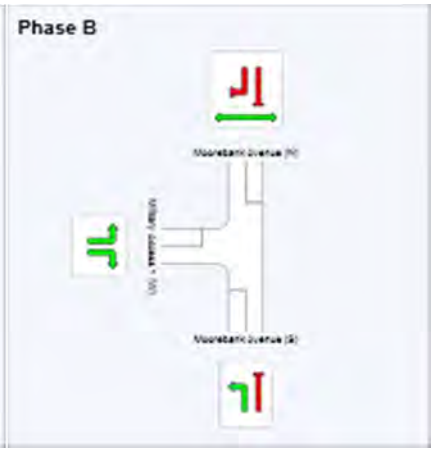
Site: I-03 2028 DN BASE AM

Intersection of Moorebank Avenue and Defence Support Access (Military Access 1)
2028 Do-nothing AM PEAK
Signals - Fixed Time Cycle Time = 90 seconds (Optimum Cycle Time - Minimum Delay)

Phase Timing Results

Phase	A	B
Reference Phase	Yes	No
Phase Change Time (sec)	0	76
Green Time (sec)	70	8
Yellow Time (sec)	4	4
All-Red Time (sec)	2	2
Phase Time (sec)	76	14
Phase Split	84 %	16 %





MOVEMENT SUMMARY

Site: I-03 2028 DN BASE PM

Intersection of Moorebank Avenue and Defence Support Access (Military Access 1)
2028 Do-nothing PM PEAK
Signals - Fixed Time Cycle Time = 90 seconds (Optimum Cycle Time - Minimum Delay)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Moorebank Avenue (S)											
1	L2	1	0.0	0.001	6.0	LOS A	0.0	0.0	0.14	0.58	46.8
2	T1	501	2.5	0.336	3.2	LOS A	6.5	46.5	0.32	0.29	56.7
Approach		502	2.5	0.336	3.2	LOS A	6.5	46.5	0.32	0.29	56.7
North: Moorebank Avenue (N)											
8	T1	1822	2.5	1.162	152.7	LOS F	173.0	1237.0	0.85	1.82	15.8
9	R2	1	0.0	1.162	199.4	LOS F	173.0	1237.0	1.00	2.25	8.5
Approach		1823	2.5	1.162	152.7	LOS F	173.0	1237.0	0.85	1.82	15.8
West: Military Access 1 (W)											
10	L2	12	0.0	0.117	49.4	LOS D	0.7	4.8	0.96	0.69	25.2
12	R2	4	0.0	0.117	49.4	LOS D	0.7	4.8	0.96	0.69	22.5
Approach		16	0.0	0.117	49.4	LOS D	0.7	4.8	0.96	0.69	24.5
All Vehicles		2341	2.5	1.162	119.9	LOS F	173.0	1237.0	0.74	1.49	18.7

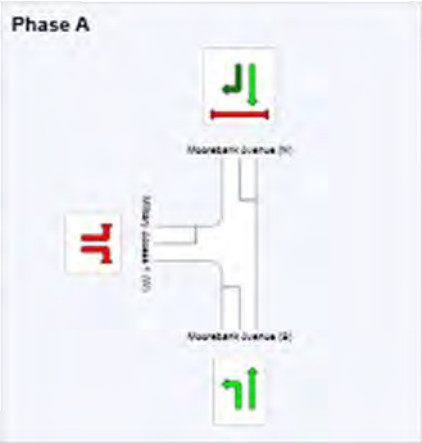
PHASING SUMMARY

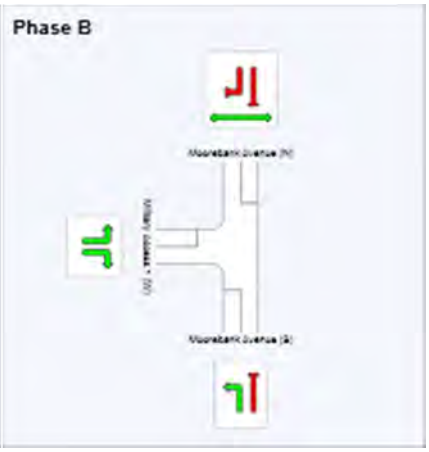
Site: I-03 2028 DN BASE PM

Intersection of Moorebank Avenue and Defence Support Access (Military Access 1)
2028 Do-nothing PM PEAK
Signals - Fixed Time Cycle Time = 90 seconds (Optimum Cycle Time - Minimum Delay)

Phase Timing Results

Phase	A	B
Reference Phase	Yes	No
Phase Change Time (sec)	0	76
Green Time (sec)	70	8
Yellow Time (sec)	4	4
All-Red Time (sec)	2	2
Phase Time (sec)	76	14
Phase Split	84 %	16 %





I-04 Intersection of Moorebank Avenue and DNSDC Access

MOVEMENT SUMMARY

Site: I-04 2028 DN BASE AM

Intersection of Moorebank Avenue and DNSDC Access (Military Access 2)
2028 Do-nothing AM PEAK
Signals - Fixed Time Cycle Time = 80 seconds (Optimum Cycle Time - Minimum Delay)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Moorebank Avenue (S)											
2	T1	1592	2.6	1.004	50.2	LOS D	80.1	573.1	0.80	1.10	31.3
3	R2	25	0.0	1.004	77.9	LOS F	80.1	573.1	1.00	1.47	27.0
Approach		1617	2.6	1.004	50.7	LOS D	80.1	573.1	0.80	1.10	31.2
East: DNSDC Access (W)											
4	L2	5	20.0	0.043	44.8	LOS D	0.2	1.7	0.95	0.65	33.8
6	R2	7	14.3	0.042	42.0	LOS C	0.3	2.1	0.93	0.66	33.0
Approach		13	16.7	0.043	43.2	LOS D	0.3	2.1	0.94	0.65	33.4
North: Moorebank Avenue (N)											
7	L2	116	6.4	0.077	6.1	LOS A	0.4	2.9	0.17	0.61	52.1
8	T1	675	3.4	0.472	4.1	LOS A	10.1	72.6	0.42	0.38	55.8
Approach		791	3.9	0.472	4.4	LOS A	10.1	72.6	0.38	0.41	55.2
West: Carpark Access (W)											
10	L2	1	0.0	0.006	39.4	LOS C	0.0	0.3	0.92	0.59	24.3
12	R2	1	0.0	0.007	41.7	LOS C	0.0	0.3	0.94	0.59	26.0
Approach		2	0.0	0.007	40.5	LOS C	0.0	0.3	0.93	0.59	25.2
All Vehicles		2422	3.1	1.004	35.5	LOS C	80.1	573.1	0.66	0.88	36.4

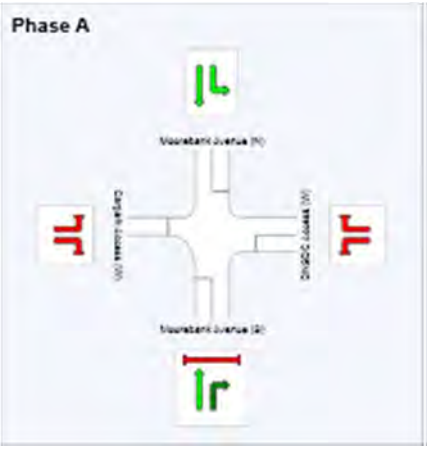
PHASING SUMMARY

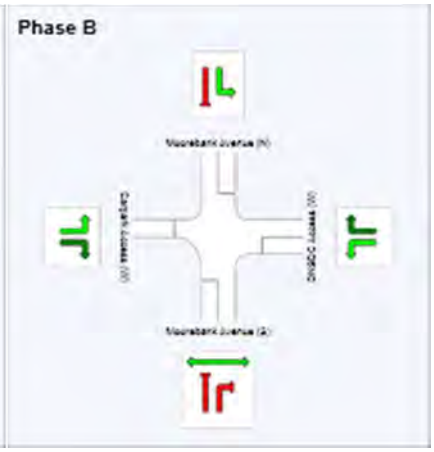
Site: I-04 2028 DN BASE AM

Intersection of Moorebank Avenue and DNSDC Access (Military Access 2)
2028 Do-nothing AM PEAK
Signals - Fixed Time Cycle Time = 80 seconds (Optimum Cycle Time - Minimum Delay)

Phase Timing Results

Phase	A	B
Reference Phase	Yes	No
Phase Change Time (sec)	0	66
Green Time (sec)	60	8
Yellow Time (sec)	4	4
All-Red Time (sec)	2	2
Phase Time (sec)	66	14
Phase Split	83 %	18 %





MOVEMENT SUMMARY

Site: I-04 2028 DN BASE PM

Intersection of Moorebank Avenue and DNSDC Access (Military Access 2)
2028 Do-nothing PM PEAK
Signals - Fixed Time Cycle Time = 110 seconds (Optimum Cycle Time - Minimum Delay)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Moorebank Avenue (S)											
2	T1	464	2.0	0.230	3.4	LOS A	5.1	36.0	0.28	0.24	56.5
3	R2	1	0.0	0.230	9.5	LOS A	5.1	36.0	0.31	0.27	54.9
Approach		465	2.0	0.230	3.4	LOS A	5.1	36.0	0.28	0.24	56.5
East: DNSDC Access (W)											
4	L2	4	0.0	0.050	62.6	LOS E	0.2	1.6	0.98	0.64	29.2
6	R2	24	8.7	0.193	60.0	LOS E	1.3	9.7	0.97	0.71	28.1
Approach		28	7.4	0.193	60.3	LOS E	1.3	9.7	0.97	0.70	28.2
North: Moorebank Avenue (N)											
7	L2	6	16.7	0.004	6.1	LOS A	0.0	0.2	0.11	0.59	51.9
8	T1	1788	2.2	1.141	170.3	LOS F	221.6	1580.2	1.00	1.91	14.6
Approach		1795	2.2	1.141	169.7	LOS F	221.6	1580.2	1.00	1.91	14.6
West: Carpark Access (W)											
10	L2	6	0.0	0.047	56.7	LOS E	0.3	2.3	0.95	0.65	19.4
12	R2	3	0.0	0.036	60.5	LOS E	0.2	1.2	0.98	0.62	21.0
Approach		9	0.0	0.047	57.9	LOS E	0.3	2.3	0.96	0.64	20.0
All Vehicles		2298	2.2	1.141	134.2	LOS F	221.6	1580.2	0.85	1.55	17.4

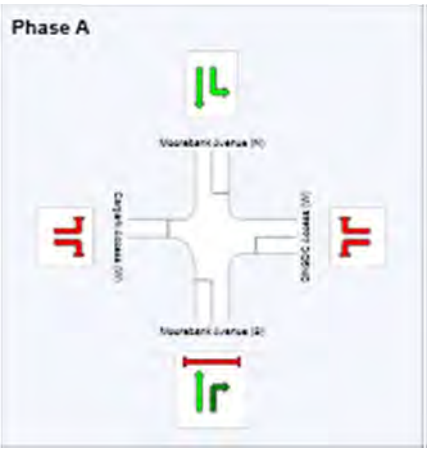
PHASING SUMMARY

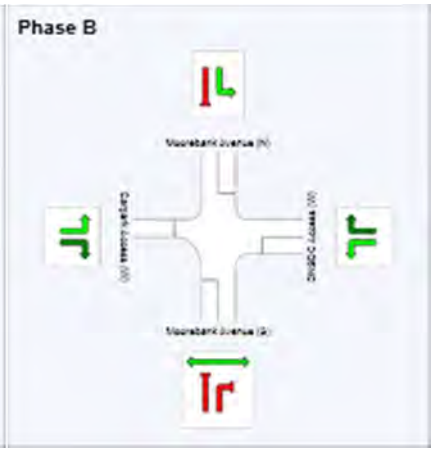
Site: I-04 2028 DN BASE PM

Intersection of Moorebank Avenue and DNSDC Access (Military Access 2)
2028 Do-nothing PM PEAK
Signals - Fixed Time Cycle Time = 110 seconds (Optimum Cycle Time - Minimum Delay)

Phase Timing Results

Phase	A	B
Reference Phase	Yes	No
Phase Change Time (sec)	0	96
Green Time (sec)	90	8
Yellow Time (sec)	4	4
All-Red Time (sec)	2	2
Phase Time (sec)	96	14
Phase Split	87 %	13 %





I-05 Intersection of Moorebank Avenue and Chatham Avenue

MOVEMENT SUMMARY

Site: I-05 2028 DN BASE AM

Intersection of Moorebank Avenue and Chatham Avenue
2028 Do-nothing AM PEAK
Signals - Fixed Time Cycle Time = 110 seconds (Optimum Cycle Time - Minimum Delay)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Moorebank Avenue (S)											
1	L2	48	0.0	0.031	7.1	LOS A	0.4	3.0	0.18	0.61	51.7
2	T1	1599	2.5	1.211	238.4	LOS F	228.1	1630.7	1.00	2.23	12.2
Approach		1647	2.4	1.211	231.6	LOS F	228.1	1630.7	0.98	2.18	12.4
North: Moorebank Avenue (N)											
8	T1	499	4.6	0.386	2.6	LOS A	6.5	47.0	0.27	0.24	57.5
9	R2	151	0.7	0.872	68.1	LOS E	8.7	61.3	1.00	1.05	26.2
Approach		649	3.7	0.872	17.8	LOS B	8.7	61.3	0.44	0.43	45.8
West: Chatham Avenue (W)											
10	L2	19	5.6	0.186	56.3	LOS D	1.6	12.6	0.95	0.72	29.1
12	R2	13	25.0	0.186	56.5	LOS E	1.6	12.6	0.95	0.72	28.7
Approach		32	13.3	0.186	56.4	LOS D	1.6	12.6	0.95	0.72	29.0
All Vehicles		2328	2.9	1.211	169.6	LOS F	228.1	1630.7	0.83	1.67	15.7

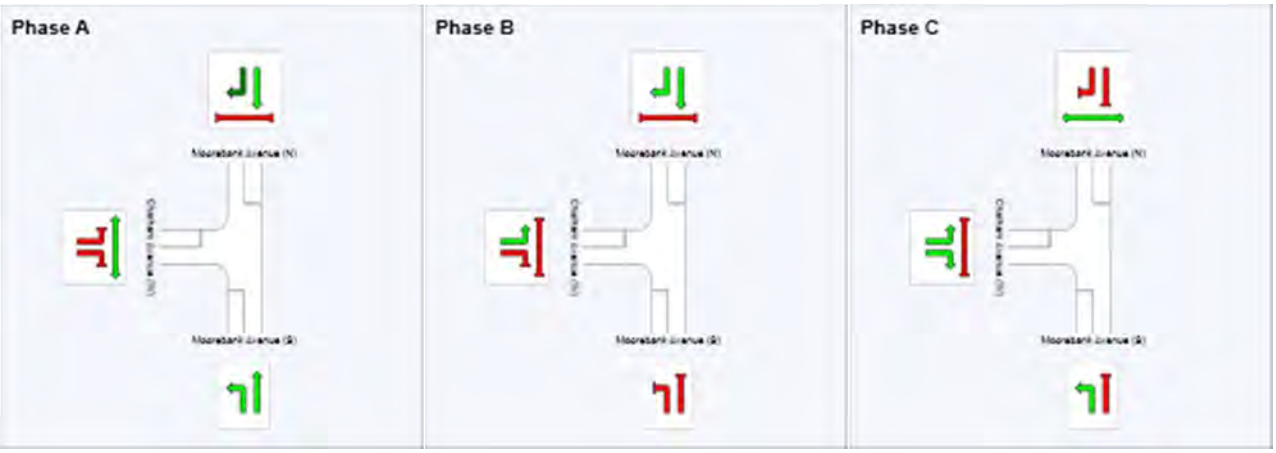
PHASING SUMMARY

Site: I-05 2028 DN BASE AM

Intersection of Moorebank Avenue and Chatham Avenue
2028 Do-nothing AM PEAK
Signals - Fixed Time Cycle Time = 110 seconds (Optimum Cycle Time - Minimum Delay)

Phase Timing Results

Phase	A	B	C
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	84	96
Green Time (sec)	78	6	8
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	84	12	14
Phase Split	76 %	11 %	13 %



MOVEMENT SUMMARY

Site: I-05 2028 DN BASE PM

Intersection of Moorebank Avenue and Chatham Avenue
2028 Do-nothing PM PEAK
Signals - Fixed Time Cycle Time = 100 seconds (Optimum Cycle Time - Minimum Delay)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Moorebank Avenue (S)											
1	L2	12	0.0	0.008	7.2	LOS A	0.1	0.7	0.19	0.60	51.6
2	T1	413	1.8	0.326	7.3	LOS A	8.3	59.0	0.45	0.40	53.5
Approach		424	1.7	0.326	7.3	LOS A	8.3	59.0	0.44	0.40	53.5
North: Moorebank Avenue (N)											
8	T1	1760	2.2	1.194	217.8	LOS F	235.1	1675.9	1.00	2.27	13.1
9	R2	29	0.0	0.044	10.3	LOS A	0.4	3.0	0.38	0.66	48.7
Approach		1789	2.1	1.194	214.4	LOS F	235.1	1675.9	0.99	2.24	13.2
West: Chatham Avenue (W)											
10	L2	45	2.3	0.210	46.7	LOS D	2.5	17.7	0.92	0.75	31.9
12	R2	12	0.0	0.210	46.7	LOS D	2.5	17.7	0.92	0.75	31.8
Approach		57	1.9	0.210	46.7	LOS D	2.5	17.7	0.92	0.75	31.8
All Vehicles		2271	2.0	1.194	171.5	LOS F	235.1	1675.9	0.89	1.86	15.6

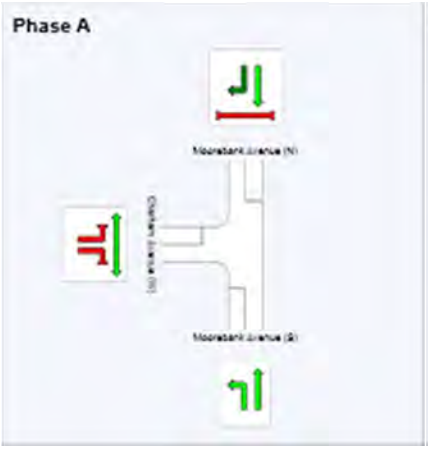
PHASING SUMMARY

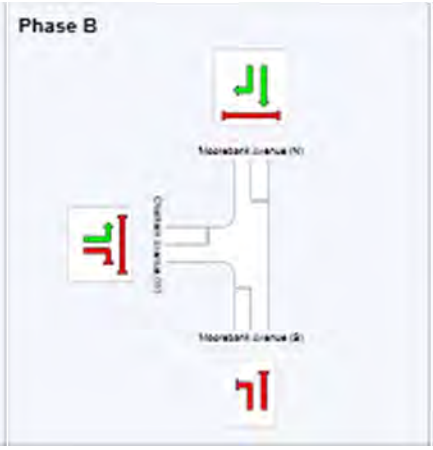
Site: I-05 2028 DN BASE PM

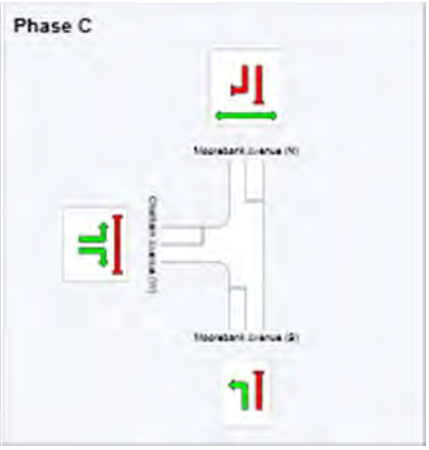
Intersection of Moorebank Avenue and Chatham Avenue
2028 Do-nothing PM PEAK
Signals - Fixed Time Cycle Time = 100 seconds (Optimum Cycle Time - Minimum Delay)

Phase Timing Results

Phase	A	B	C
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	73	85
Green Time (sec)	67	6	9
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	73	12	15
Phase Split	73 %	12 %	15 %







Appendix H

2030 SIDRA results with and without Moorebank IMT

1. Moorebank Avenue – 2030 Future traffic without Moorebank IMT development (Do-nothing scenario)

I-01 Intersection of Moorebank Avenue and Bapaume Road

MOVEMENT SUMMARY

Site: I-01 2030 DN BASE AM

Intersection of Moorebank Avenue and Bapaume Road
2030 Do-nothing AM PEAK
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Moorebank Avenue (S)											
1	L2	21	0.0	0.011	5.5	LOS A	0.0	0.0	0.00	0.58	45.1
2	T1	1283	5.3	0.680	0.0	LOS A	0.0	0.0	0.00	0.00	59.6
Approach		1304	5.2	0.680	0.1	NA	0.0	0.0	0.00	0.01	59.4
North: Moorebank Avenue (S)											
8	T1	1001	5.5	0.491	2.4	LOS A	3.5	25.4	0.08	0.05	54.8
9	R2	95	1.1	0.491	36.1	LOS C	3.5	25.4	1.00	0.65	30.5
Approach		1096	5.1	0.491	5.3	NA	3.5	25.4	0.16	0.10	50.4
West: Bapaume Road (W)											
10	L2	3	33.3	0.038	47.0	LOS D	0.1	1.0	0.92	0.97	25.5
12	R2	1	0.0	0.243	853.7	LOS F	0.6	4.0	1.00	1.00	1.5
Approach		4	25.0	0.243	248.6	LOS F	0.6	4.0	0.94	0.98	7.0
All Vehicles		2404	5.2	0.680	2.9	NA	3.5	25.4	0.07	0.05	54.1

MOVEMENT SUMMARY

Site: I-01 2030 DN BASE PM

Intersection of Moorebank Avenue and Bapaume Road
2030 Do-nothing PM PEAK
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Moorebank Avenue (S)											
1	L2	1	0.0	0.001	5.5	LOS A	0.0	0.0	0.00	0.58	45.1
2	T1	674	4.5	0.356	0.0	LOS A	0.0	0.0	0.00	0.00	59.9
Approach		675	4.5	0.356	0.0	NA	0.0	0.0	0.00	0.00	59.9
North: Moorebank Avenue (S)											
8	T1	1638	2.8	0.445	4.5	LOS A	9.4	67.7	0.48	0.01	51.6
9	R2	21	10.0	0.445	14.9	LOS B	9.4	67.7	1.00	0.03	44.6
Approach		1659	2.9	0.445	4.6	NA	9.4	67.7	0.49	0.01	51.4
West: Bapaume Road (W)											
10	L2	104	3.0	0.199	11.2	LOS A	0.8	5.5	0.61	0.84	44.3
12	R2	15	0.0	1.000	553.3	LOS F	3.5	24.4	1.00	1.14	2.3
Approach		119	2.7	1.000	78.4	LOS F	3.5	24.4	0.66	0.87	18.2
All Vehicles		2453	3.3	1.000	6.9	NA	9.4	67.7	0.36	0.05	48.0

I-02 Intersection of Moorebank Avenue and Anzac Road

MOVEMENT SUMMARY

Site: I-02 2030 DN BASE AM

Intersection of Moorebank Avenue and Anzac Road
2030 Do-nothing AM PEAK
Signals - Fixed Time Cycle Time = 103 seconds (User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Moorebank Avenue (S)											
2	T1	1101	3.4	1.044	107.2	LOS F	104.4	752.0	1.00	1.53	15.4
3	R2	473	3.1	0.773	36.9	LOS C	19.6	140.6	0.96	1.00	36.7
Approach		1574	3.3	1.044	86.1	LOS F	104.4	752.0	0.99	1.37	20.3
East: Anzac Road (E)											
4	L2	258	3.3	0.311	24.5	LOS B	8.1	58.6	0.67	0.76	41.9
6	R2	227	13.4	0.864	61.5	LOS E	12.9	100.8	1.00	0.97	19.6
Approach		485	8.0	0.864	41.9	LOS C	12.9	100.8	0.83	0.86	30.0
North: Moorebank Avenue (N)											
7	L2	383	9.9	0.250	6.1	LOS A	1.4	10.9	0.16	0.59	49.8
8	T1	644	3.3	0.595	23.1	LOS B	18.7	134.4	0.78	0.68	36.9
Approach		1027	5.7	0.595	16.8	LOS B	18.7	134.4	0.55	0.65	40.9
All Vehicles		3086	4.9	1.044	56.1	LOS D	104.4	752.0	0.82	1.05	25.5

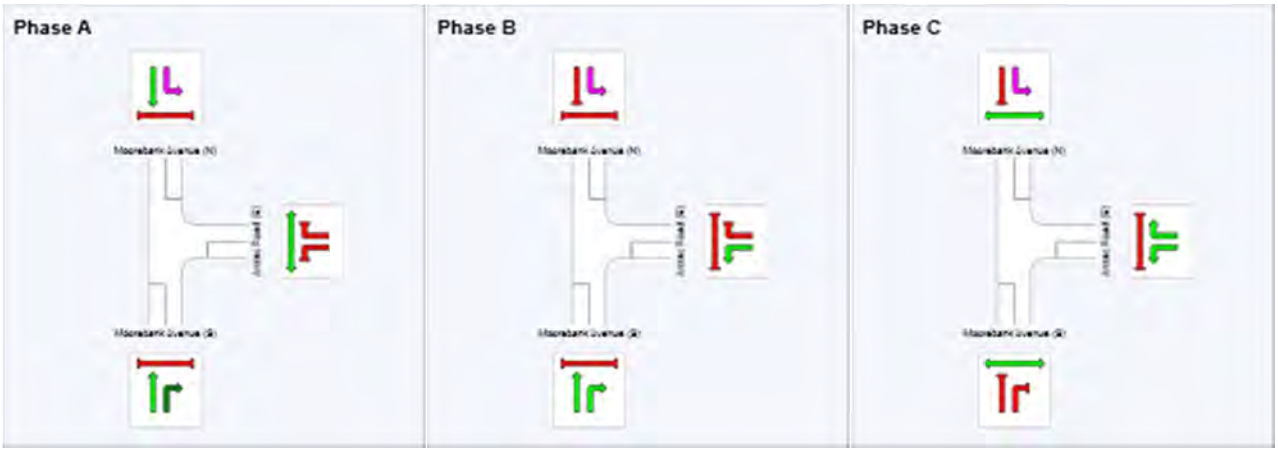
PHASING SUMMARY

Site: I-02 2030 DN BASE AM

Intersection of Moorebank Avenue and Anzac Road
2030 Do-nothing AM PEAK
Signals - Fixed Time Cycle Time = 103 seconds (User-Given Phase Times)

Phase Timing Results

Phase	A	B	C
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	50	78
Green Time (sec)	44	22	19
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	50	28	25
Phase Split	49 %	27 %	24 %



MOVEMENT SUMMARY

Site: I-02 2030 DN BASE PM

Intersection of Moorebank Avenue and Anzac Road
2030 Do-nothing PM PEAK
Signals - Fixed Time Cycle Time = 110 seconds (User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Moorebank Avenue (S)											
2	T1	323	3.9	0.271	9.7	LOS A	7.6	55.3	0.48	0.42	47.5
3	R2	208	1.0	1.210	231.3	LOS F	26.9	189.8	1.00	1.38	12.4
Approach		532	2.8	1.210	96.6	LOS F	26.9	189.8	0.68	0.79	19.4
East: Anzac Road (E)											
4	L2	578	2.2	0.848	46.1	LOS D	31.5	224.9	0.99	0.94	33.6
6	R2	391	5.4	0.924	69.1	LOS E	25.7	188.0	1.00	1.02	18.4
Approach		968	3.5	0.924	55.3	LOS D	31.5	224.9	0.99	0.97	27.1
North: Moorebank Avenue (N)											
7	L2	359	3.8	0.223	6.1	LOS A	1.3	9.5	0.15	0.59	50.2
8	T1	1307	2.4	0.997	61.7	LOS E	80.8	577.3	0.91	1.11	22.5
Approach		1666	2.7	0.997	49.8	LOS D	80.8	577.3	0.74	1.00	25.5
All Vehicles		3166	3.0	1.210	59.3	LOS E	80.8	577.3	0.81	0.96	24.6

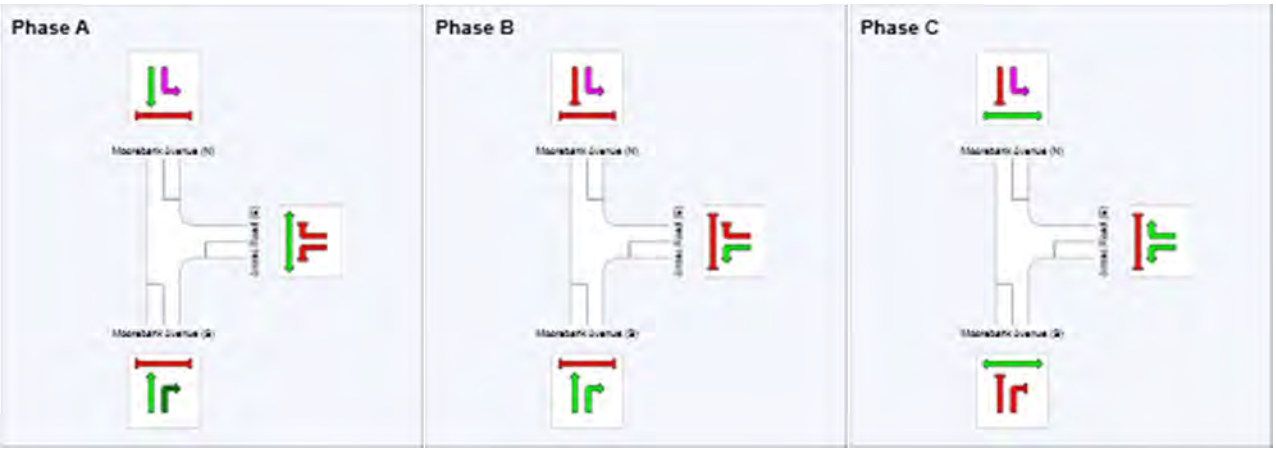
PHASING SUMMARY

Site: I-02 2030 DN BASE PM

Intersection of Moorebank Avenue and Anzac Road
2030 Do-nothing PM PEAK
Signals - Fixed Time Cycle Time = 110 seconds (User-Given Phase Times)

Phase Timing Results

Phase	A	B	C
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	63	75
Green Time (sec)	57	6	29
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	63	12	35
Phase Split	57 %	11 %	32 %



I-03 Intersection of Moorebank Avenue and Defence Support Access

MOVEMENT SUMMARY

Site: I-03 2030 DN BASE AM

Intersection of Moorebank Avenue and Defence Support Access (Military Access 1)
2030 Do-nothing AM PEAK
Signals - Fixed Time Cycle Time = 90 seconds (Optimum Cycle Time - Minimum Delay)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Moorebank Avenue (S)											
1	L2	18	0.0	0.011	6.0	LOS A	0.1	0.4	0.14	0.60	46.8
2	T1	1551	3.1	1.050	95.2	LOS F	135.3	971.6	1.00	1.60	21.9
Approach		1568	3.0	1.050	94.2	LOS F	135.3	971.6	0.99	1.59	21.9
North: Moorebank Avenue (N)											
8	T1	835	3.7	0.837	19.4	LOS B	23.1	166.3	0.65	0.65	44.2
9	R2	20	0.0	0.837	33.3	LOS C	23.1	166.3	0.84	0.86	24.0
Approach		855	3.6	0.837	19.7	LOS B	23.1	166.3	0.66	0.66	43.6
West: Military Access 1 (W)											
10	L2	2	0.0	0.023	48.3	LOS D	0.1	0.9	0.94	0.63	25.5
12	R2	1	0.0	0.023	48.2	LOS D	0.1	0.9	0.94	0.63	22.8
Approach		3	0.0	0.023	48.3	LOS D	0.1	0.9	0.94	0.63	24.6
All Vehicles		2426	3.2	1.050	67.9	LOS E	135.3	971.6	0.87	1.26	26.6

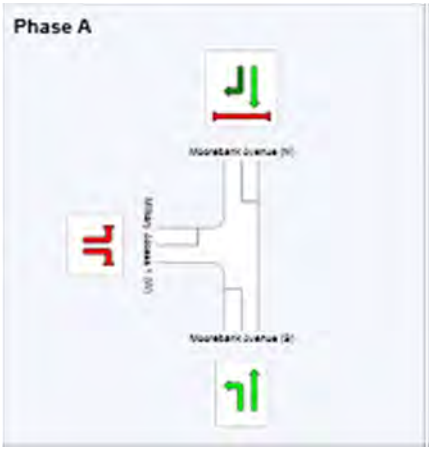
PHASING SUMMARY

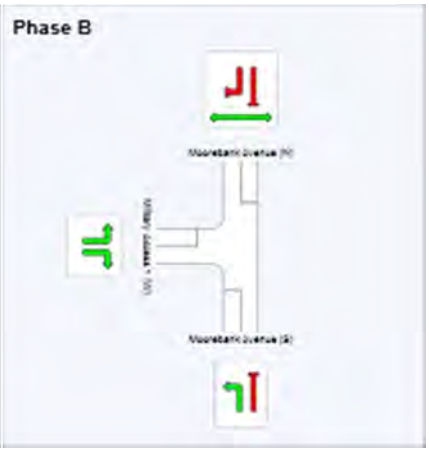
Site: I-03 2030 DN BASE AM

Intersection of Moorebank Avenue and Defence Support Access (Military Access 1)
2030 Do-nothing AM PEAK
Signals - Fixed Time Cycle Time = 90 seconds (Optimum Cycle Time - Minimum Delay)

Phase Timing Results

Phase	A	B
Reference Phase	Yes	No
Phase Change Time (sec)	0	76
Green Time (sec)	70	8
Yellow Time (sec)	4	4
All-Red Time (sec)	2	2
Phase Time (sec)	76	14
Phase Split	84 %	16 %





MOVEMENT SUMMARY

Site: I-03 2030 DN BASE PM

Intersection of Moorebank Avenue and Defence Support Access (Military Access 1)
2030 Do-nothing PM PEAK
Signals - Fixed Time Cycle Time = 90 seconds (Optimum Cycle Time - Minimum Delay)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Moorebank Avenue (S)											
1	L2	1	0.0	0.001	6.0	LOS A	0.0	0.0	0.14	0.58	46.8
2	T1	506	2.5	0.339	3.2	LOS A	6.6	47.1	0.33	0.29	56.7
Approach		507	2.5	0.339	3.2	LOS A	6.6	47.1	0.32	0.29	56.7
North: Moorebank Avenue (N)											
8	T1	1844	2.5	1.177	162.4	LOS F	180.6	1291.7	0.85	1.88	15.1
9	R2	1	0.0	1.177	211.7	LOS F	180.6	1291.7	1.00	2.33	8.1
Approach		1845	2.5	1.177	162.4	LOS F	180.6	1291.7	0.85	1.88	15.1
West: Military Access 1 (W)											
10	L2	12	0.0	0.117	49.4	LOS D	0.7	4.8	0.96	0.69	25.2
12	R2	4	0.0	0.117	49.4	LOS D	0.7	4.8	0.96	0.69	22.5
Approach		16	0.0	0.117	49.4	LOS D	0.7	4.8	0.96	0.69	24.5
All Vehicles		2368	2.5	1.177	127.5	LOS F	180.6	1291.7	0.74	1.53	18.0

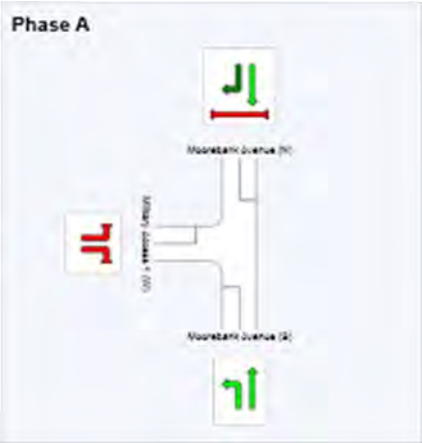
PHASING SUMMARY

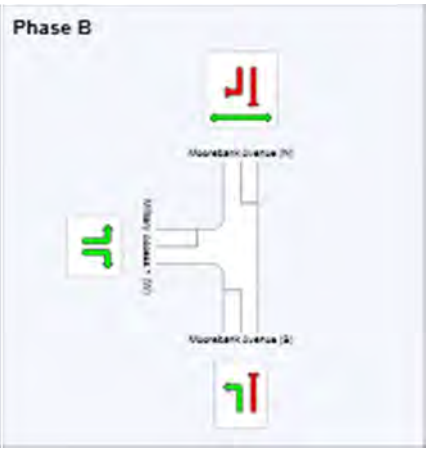
Site: I-03 2030 DN BASE PM

Intersection of Moorebank Avenue and Defence Support Access (Military Access 1)
2030 Do-nothing PM PEAK
Signals - Fixed Time Cycle Time = 90 seconds (Optimum Cycle Time - Minimum Delay)

Phase Timing Results

Phase	A	B
Reference Phase	Yes	No
Phase Change Time (sec)	0	76
Green Time (sec)	70	8
Yellow Time (sec)	4	4
All-Red Time (sec)	2	2
Phase Time (sec)	76	14
Phase Split	84 %	16 %





I-04 Intersection of Moorebank Avenue and DNSDC Access

MOVEMENT SUMMARY

Site: I-04 2030 DN BASE AM

Intersection of Moorebank Avenue and DNSDC Access (Military Access 2)
2030 Do-nothing AM PEAK
Signals - Fixed Time Cycle Time = 80 seconds (Optimum Cycle Time - Minimum Delay)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Moorebank Avenue (S)											
2	T1	1607	2.6	1.014	54.6	LOS D	83.8	599.8	0.80	1.14	30.0
3	R2	25	0.0	1.014	84.3	LOS F	83.8	599.8	1.00	1.52	25.8
Approach		1633	2.6	1.014	55.0	LOS D	83.8	599.8	0.80	1.14	29.9
East: DNSDC Access (W)											
4	L2	5	20.0	0.043	44.8	LOS D	0.2	1.7	0.95	0.65	33.8
6	R2	7	14.3	0.042	42.0	LOS C	0.3	2.1	0.93	0.66	33.0
Approach		13	16.7	0.043	43.2	LOS D	0.3	2.1	0.94	0.65	33.4
North: Moorebank Avenue (N)											
7	L2	118	6.3	0.078	6.1	LOS A	0.4	2.9	0.17	0.61	52.1
8	T1	685	3.4	0.479	4.2	LOS A	10.3	74.3	0.42	0.38	55.8
Approach		803	3.8	0.479	4.4	LOS A	10.3	74.3	0.38	0.42	55.2
West: Carpark Access (W)											
10	L2	1	0.0	0.006	39.4	LOS C	0.0	0.3	0.92	0.59	24.3
12	R2	1	0.0	0.007	41.7	LOS C	0.0	0.3	0.94	0.59	26.0
Approach		2	0.0	0.007	40.5	LOS C	0.0	0.3	0.93	0.59	25.2
All Vehicles		2451	3.0	1.014	38.4	LOS C	83.8	599.8	0.66	0.90	35.2

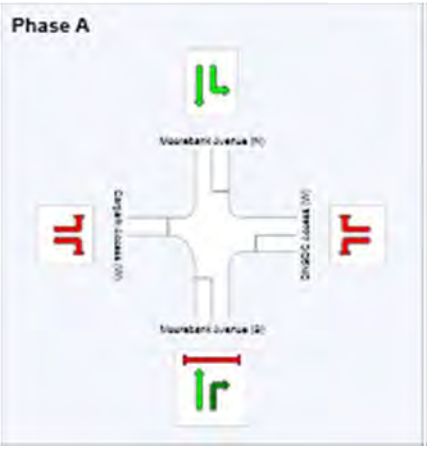
PHASING SUMMARY

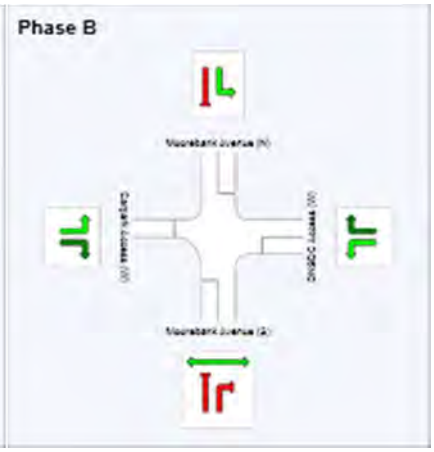
Site: I-04 2030 DN BASE AM

Intersection of Moorebank Avenue and DNSDC Access (Military Access 2)
2030 Do-nothing AM PEAK
Signals - Fixed Time Cycle Time = 80 seconds (Optimum Cycle Time - Minimum Delay)

Phase Timing Results

Phase	A	B
Reference Phase	Yes	No
Phase Change Time (sec)	0	66
Green Time (sec)	60	8
Yellow Time (sec)	4	4
All-Red Time (sec)	2	2
Phase Time (sec)	66	14
Phase Split	83 %	18 %





MOVEMENT SUMMARY

Site: I-04 2030 DN BASE PM

Intersection of Moorebank Avenue and DNSDC Access (Military Access 2)
2030 Do-nothing PM PEAK
Signals - Fixed Time Cycle Time = 110 seconds (Optimum Cycle Time - Minimum Delay)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Moorebank Avenue (S)											
2	T1	468	2.0	0.232	3.4	LOS A	5.1	36.4	0.28	0.24	56.5
3	R2	1	0.0	0.232	9.5	LOS A	5.1	36.4	0.31	0.27	54.9
Approach		469	2.0	0.232	3.4	LOS A	5.1	36.4	0.28	0.24	56.5
East: DNSDC Access (W)											
4	L2	4	0.0	0.050	62.6	LOS E	0.2	1.6	0.98	0.64	29.2
6	R2	24	8.7	0.193	60.0	LOS E	1.3	9.7	0.97	0.71	28.1
Approach		28	7.4	0.193	60.3	LOS E	1.3	9.7	0.97	0.70	28.2
North: Moorebank Avenue (N)											
7	L2	6	16.7	0.004	6.1	LOS A	0.0	0.2	0.11	0.59	51.9
8	T1	1809	2.2	1.154	181.8	LOS F	231.0	1647.0	1.00	1.97	13.9
Approach		1816	2.2	1.154	181.2	LOS F	231.0	1647.0	1.00	1.97	13.9
West: Carpark Access (W)											
10	L2	6	0.0	0.047	56.7	LOS E	0.3	2.3	0.95	0.65	19.4
12	R2	3	0.0	0.036	60.5	LOS E	0.2	1.2	0.98	0.62	21.0
Approach		9	0.0	0.047	57.9	LOS E	0.3	2.3	0.96	0.64	20.0
All Vehicles		2323	2.2	1.154	143.3	LOS F	231.0	1647.0	0.85	1.60	16.6

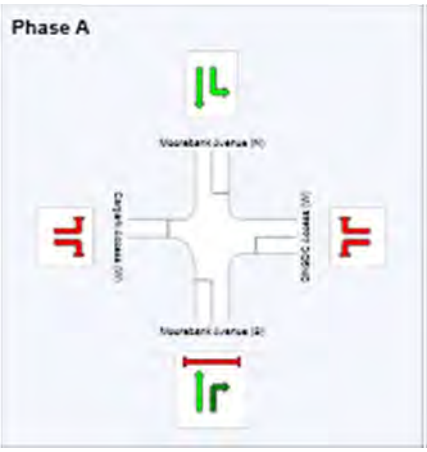
PHASING SUMMARY

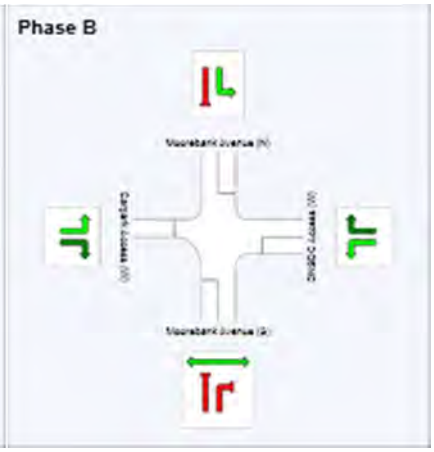
Site: I-04 2030 DN BASE PM

Intersection of Moorebank Avenue and DNSDC Access (Military Access 2)
2030 Do-nothing PM PEAK
Signals - Fixed Time Cycle Time = 110 seconds (Optimum Cycle Time - Minimum Delay)

Phase Timing Results

Phase	A	B
Reference Phase	Yes	No
Phase Change Time (sec)	0	96
Green Time (sec)	90	8
Yellow Time (sec)	4	4
All-Red Time (sec)	2	2
Phase Time (sec)	96	14
Phase Split	87 %	13 %





I-05 Intersection of Moorebank Avenue and Chatham Avenue

MOVEMENT SUMMARY

Site: I-05 2030 DN BASE AM

Intersection of Moorebank Avenue and Chatham Avenue
2030 Do-nothing AM PEAK
Signals - Fixed Time Cycle Time = 110 seconds (Optimum Cycle Time - Minimum Delay)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Moorebank Avenue (S)											
1	L2	49	0.0	0.032	7.1	LOS A	0.4	3.0	0.18	0.61	51.7
2	T1	1615	2.5	1.223	249.2	LOS F	235.4	1682.6	1.00	2.28	11.7
Approach		1664	2.4	1.223	242.0	LOS F	235.4	1682.6	0.98	2.23	12.0
North: Moorebank Avenue (N)											
8	T1	506	4.6	0.392	2.6	LOS A	6.6	47.9	0.27	0.24	57.5
9	R2	154	0.7	0.890	69.8	LOS E	9.0	63.5	1.00	1.07	25.8
Approach		660	3.7	0.890	18.3	LOS B	9.0	63.5	0.44	0.43	45.5
West: Chatham Avenue (W)											
10	L2	19	5.6	0.186	56.3	LOS D	1.6	12.6	0.95	0.72	29.1
12	R2	13	25.0	0.186	56.5	LOS E	1.6	12.6	0.95	0.72	28.7
Approach		32	13.3	0.186	56.4	LOS D	1.6	12.6	0.95	0.72	29.0
All Vehicles		2356	2.9	1.223	176.8	LOS F	235.4	1682.6	0.82	1.70	15.2

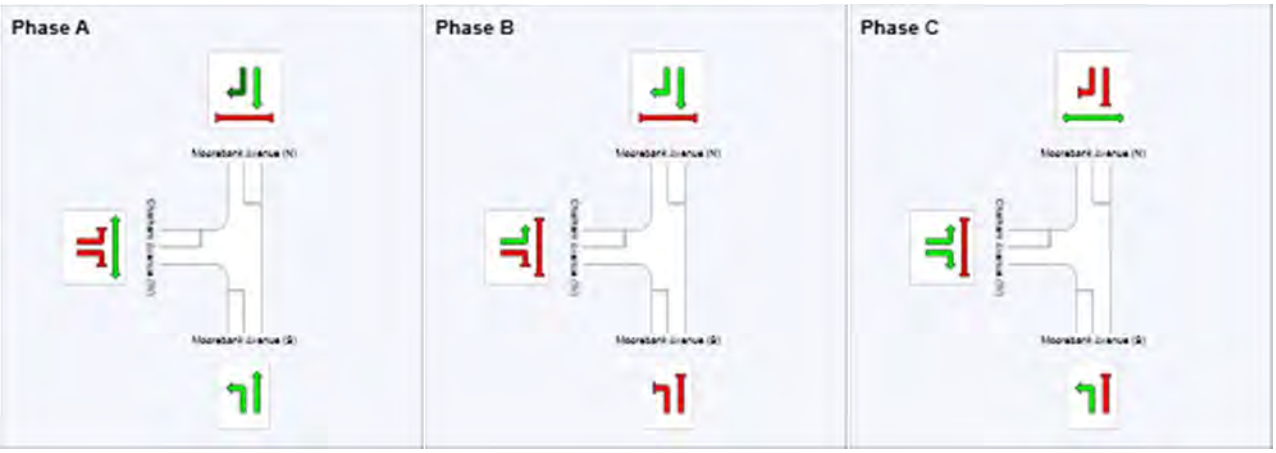
PHASING SUMMARY

Site: I-05 2030 DN BASE AM

Intersection of Moorebank Avenue and Chatham Avenue
2030 Do-nothing AM PEAK
Signals - Fixed Time Cycle Time = 110 seconds (Optimum Cycle Time - Minimum Delay)

Phase Timing Results

Phase	A	B	C
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	84	96
Green Time (sec)	78	6	8
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	84	12	14
Phase Split	76 %	11 %	13 %



MOVEMENT SUMMARY

Site: I-05 2030 DN BASE PM

Intersection of Moorebank Avenue and Chatham Avenue
2030 Do-nothing PM PEAK
Signals - Fixed Time Cycle Time = 100 seconds (Optimum Cycle Time - Minimum Delay)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Moorebank Avenue (S)											
1	L2	12	0.0	0.008	7.2	LOS A	0.1	0.7	0.19	0.60	51.6
2	T1	417	1.8	0.329	7.3	LOS A	8.4	59.8	0.45	0.40	53.5
Approach		428	1.7	0.329	7.3	LOS A	8.4	59.8	0.44	0.40	53.5
North: Moorebank Avenue (N)											
8	T1	1781	2.1	1.209	230.6	LOS F	244.7	1744.1	1.00	2.34	12.5
9	R2	31	0.0	0.045	10.6	LOS A	0.5	3.2	0.39	0.66	48.4
Approach		1812	2.1	1.209	226.9	LOS F	244.7	1744.1	0.99	2.31	12.6
West: Chatham Avenue (W)											
10	L2	46	2.3	0.213	46.7	LOS D	2.5	18.1	0.92	0.75	31.9
12	R2	12	0.0	0.213	46.7	LOS D	2.5	18.1	0.92	0.75	31.8
Approach		58	1.8	0.213	46.7	LOS D	2.5	18.1	0.92	0.75	31.8
All Vehicles		2298	2.0	1.209	181.5	LOS F	244.7	1744.1	0.89	1.92	15.0

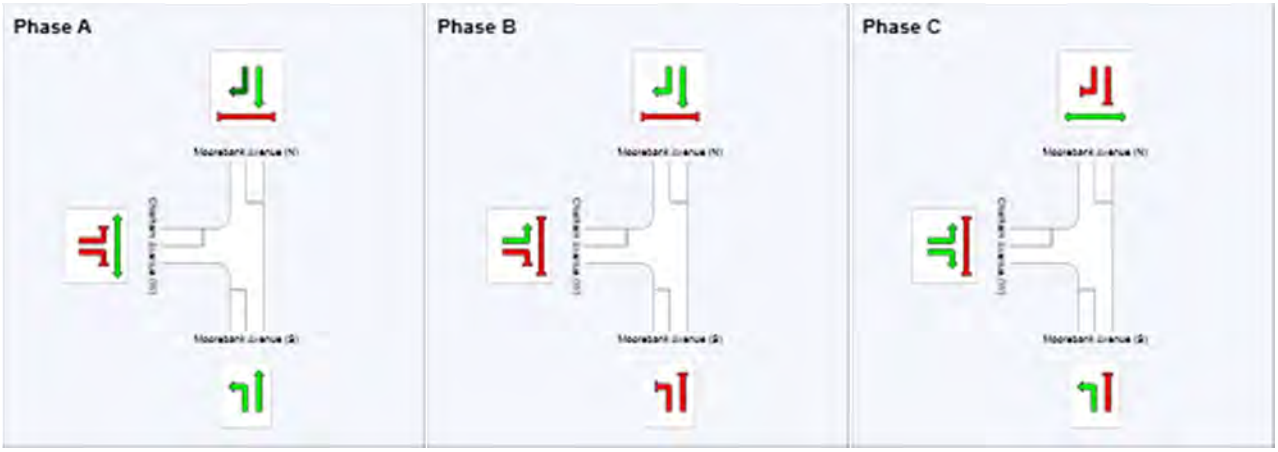
PHASING SUMMARY

Site: I-05 2030 DN BASE PM

Intersection of Moorebank Avenue and Chatham Avenue
2030 Do-nothing PM PEAK
Signals - Fixed Time Cycle Time = 100 seconds (Optimum Cycle Time - Minimum Delay)

Phase Timing Results

Phase	A	B	C
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	73	85
Green Time (sec)	67	6	9
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	73	12	15
Phase Split	73 %	12 %	15 %



2. Moorebank Avenue – 2030 Future traffic with Moorebank IMT development (Full Build)

I-01 Intersection of Moorebank Avenue, Anzac Road and Bapaume Road

MOVEMENT SUMMARY

Site: I-01 2030 FU MINT AM

Intersection of Moorebank Avenue, Anzac Road and Bapaume Road
2030 Future with MINT AM PEAK
Signals - Fixed Time Cycle Time = 100 seconds (Optimum Cycle Time - Minimum Delay)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Moorebank Avenue (S)											
1	L2	37	0.0	0.799	30.0	LOS C	25.1	199.6	0.82	0.78	35.1
2	T1	1255	16.7	0.799	22.4	LOS B	25.1	199.6	0.82	0.77	35.3
3	R2	473	3.1	0.838	30.0	LOS C	14.2	102.1	0.93	0.94	32.8
Approach		1764	12.7	0.838	24.6	LOS B	25.1	199.8	0.85	0.82	34.6
East: Anzac Road (E)											
4	L2	217	3.9	0.365	33.6	LOS C	8.2	58.9	0.78	0.80	31.2
5	T1	9	0.0	0.365	26.6	LOS B	8.2	58.9	0.78	0.80	31.2
6	R2	224	13.6	0.820	58.2	LOS E	11.9	92.9	1.00	0.94	23.1
Approach		451	8.6	0.820	45.7	LOS D	11.9	92.9	0.89	0.87	26.6
North: Moorebank Avenue (N)											
7	L2	383	9.9	0.221	7.6	LOS A	0.0	0.0	0.00	0.57	48.5
8	T1	691	27.1	0.453	16.3	LOS B	9.0	77.7	0.57	0.50	38.0
9	R2	142	5.2	0.360	22.7	LOS B	3.4	25.2	0.84	0.79	33.6
Approach		1216	19.1	0.453	14.3	LOS A	9.0	77.7	0.42	0.55	40.2
West: Bapaume Road (W)											
10	L2	9	77.8	0.025	15.3	LOS B	0.2	2.0	0.55	0.57	33.7
11	T1	1	0.0	0.010	41.1	LOS C	0.1	0.6	0.89	0.60	19.5
12	R2	1	0.0	0.010	48.3	LOS D	0.1	0.6	0.89	0.60	19.5
Approach		12	63.6	0.025	20.7	LOS B	0.2	2.0	0.61	0.57	29.8
All Vehicles		3442	14.6	0.838	23.7	LOS B	25.1	199.8	0.70	0.73	34.7

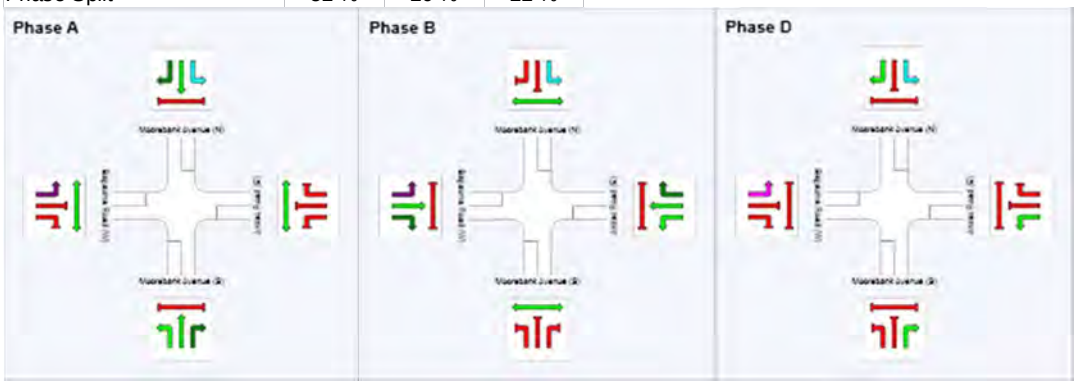
PHASING SUMMARY

Site: I-01 2030 FU MINT AM

Intersection of Moorebank Avenue, Anzac Road and Bapaume Road
2030 Future with MINT AM PEAK
Signals - Fixed Time Cycle Time = 100 seconds (Optimum Cycle Time - Minimum Delay)

Phase Timing Results

Phase	A	B	D
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	52	78
Green Time (sec)	46	20	16
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	52	26	22
Phase Split	52 %	26 %	22 %



MOVEMENT SUMMARY

Site: I-01 2030 FU MINT PM

Intersection of Moorebank Avenue, Anzac Road and Bapaume Road
2030 Future with MINT PM PEAK
Signals - Fixed Time Cycle Time = 120 seconds (Optimum Cycle Time - Minimum Delay)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Moorebank Avenue (S)											
1	L2	1	0.0	0.254	12.4	LOS A	2.9	26.7	0.21	0.19	51.8
2	T1	506	36.4	0.254	5.0	LOS A	2.9	26.7	0.21	0.19	51.8
3	R2	211	1.0	0.956	103.5	LOS F	17.1	120.5	1.00	1.25	15.6
Approach		718	26.0	0.956	33.9	LOS C	17.1	120.5	0.44	0.50	30.8
East: Anzac Road (E)											
4	L2	568	2.2	0.814	47.0	LOS D	31.4	224.0	0.96	0.91	26.1
5	T1	1	0.0	0.814	40.0	LOS C	31.4	224.0	0.96	0.91	26.1
6	R2	391	5.4	0.973	93.4	LOS F	31.4	230.0	1.00	1.10	16.9
Approach		960	3.5	0.973	65.9	LOS E	31.4	230.0	0.98	0.99	21.3
North: Moorebank Avenue (N)											
7	L2	353	3.9	0.195	7.6	LOS A	0.0	0.0	0.00	0.59	48.5
8	T1	1436	14.2	0.896	29.5	LOS C	39.7	311.9	0.74	0.77	29.7
9	R2	27	30.8	0.084	25.0	LOS B	0.9	7.6	0.56	0.68	32.2
Approach		1816	12.5	0.896	25.2	LOS B	39.7	311.9	0.59	0.73	32.2
West: Bapaume Road (W)											
10	L2	152	6.3	0.237	13.0	LOS A	2.9	21.3	0.41	0.67	35.6
11	T1	13	0.0	0.278	54.6	LOS D	2.2	15.7	0.95	0.74	16.4
12	R2	27	0.0	0.278	61.8	LOS E	2.2	15.7	0.95	0.74	16.4
Approach		192	4.9	0.278	22.8	LOS B	2.9	21.3	0.52	0.68	28.6
All Vehicles		3685	12.4	0.973	37.3	LOS C	39.7	311.9	0.66	0.75	27.8

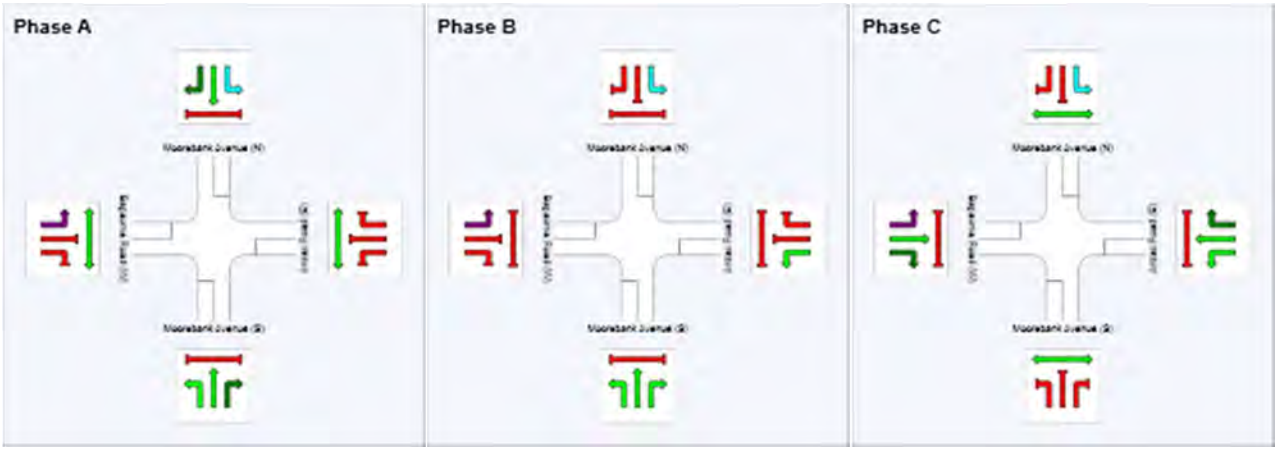
PHASING SUMMARY

Site: I-01 2030 FU MINT PM

Intersection of Moorebank Avenue, Anzac Road and Bapaume Road
2030 Future with MINT PM PEAK
Signals - Fixed Time Cycle Time = 120 seconds (Optimum Cycle Time - Minimum Delay)

Phase Timing Results

Phase	A	B	C
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	68	82
Green Time (sec)	62	8	32
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	68	14	38
Phase Split	57 %	12 %	32 %



I-02 Intersection of Moorebank Avenue, Warehouse Access 1 and DNSDC Access

MOVEMENT SUMMARY

Site: I-02 2030 FU MINT AM

Intersection of Moorebank Avenue, Warehouse Access 1 and DNSDC Access
2030 Future with MINT AM PEAK
Signals - Fixed Time Cycle Time = 100 seconds (Optimum Cycle Time - Minimum Delay)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total	Demand Flows HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	95% Back of Queue Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Moorebank Avenue (S)											
1	L2	1	0.0	0.735	10.4	LOS A	14.4	111.5	0.37	0.34	44.7
2	T1	1743	12.0	0.735	4.8	LOS A	14.4	111.5	0.37	0.34	52.1
3	R2	25	0.0	0.227	56.9	LOS E	1.3	8.8	0.98	0.71	12.3
Approach		1769	11.8	0.735	5.6	LOS A	14.4	111.5	0.37	0.34	50.6
East: DNSDC Access (E)											
4	L2	5	20.0	0.092	52.6	LOS D	0.6	4.7	0.95	0.69	15.7
6	R2	7	14.3	0.092	52.6	LOS D	0.6	4.7	0.95	0.69	18.7
Approach		13	16.7	0.092	52.6	LOS D	0.6	4.7	0.95	0.69	17.5
North: Moorebank Avenue (N)											
7	L2	118	6.3	0.398	13.9	LOS A	9.9	80.0	0.50	0.52	29.2
8	T1	774	22.6	0.398	8.3	LOS A	9.9	82.8	0.50	0.47	46.7
9	R2	16	86.7	0.229	59.8	LOS E	0.8	9.9	0.98	0.70	16.5
Approach		907	21.6	0.398	10.0	LOS A	9.9	82.8	0.50	0.48	42.9
West: Warehouse Access 1 (W)											
10	L2	15	92.9	0.082	43.4	LOS D	0.7	8.1	0.86	0.69	19.8
12	R2	1	0.0	0.082	42.5	LOS D	0.7	8.1	0.86	0.69	18.4
Approach		16	86.7	0.082	43.3	LOS D	0.7	8.1	0.86	0.69	19.7
All Vehicles		2705	15.6	0.735	7.5	LOS A	14.4	111.5	0.42	0.39	47.2

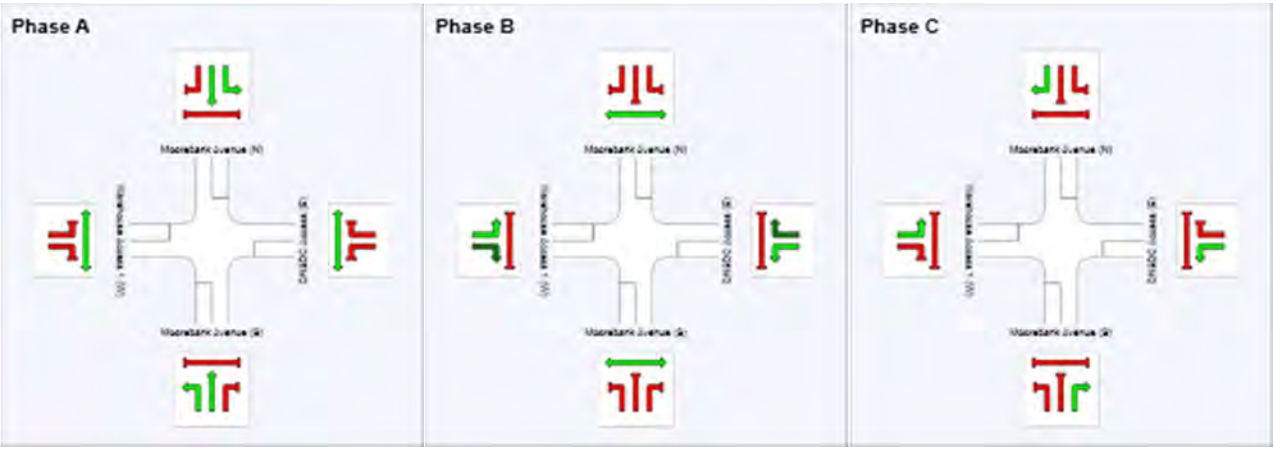
PHASING SUMMARY

Site: I-02 2030 FU MINT AM

Intersection of Moorebank Avenue, Warehouse Access 1 and DNSDC Access
2030 Future with MINT AM PEAK
Signals - Fixed Time Cycle Time = 100 seconds (Optimum Cycle Time - Minimum Delay)

Phase Timing Results

Phase	A	B	C
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	72	88
Green Time (sec)	66	10	6
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	72	16	12
Phase Split	72 %	16 %	12 %



MOVEMENT SUMMARY

Site: I-02 2030 FU MINT PM

Intersection of Moorebank Avenue, Warehouse Access 1 and DNSDC Access
2030 Future with MINT PM PEAK
Signals - Fixed Time Cycle Time = 100 seconds (Optimum Cycle Time - Minimum Delay)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Moorebank Avenue (S)											
1	L2	1	0.0	0.306	8.7	LOS A	2.7	23.0	0.18	0.16	47.7
2	T1	677	25.2	0.306	3.1	LOS A	2.7	23.0	0.18	0.16	54.6
3	R2	1	0.0	0.010	19.2	LOS B	0.0	0.2	0.51	0.63	20.0
Approach		679	25.1	0.306	3.2	LOS A	2.7	23.0	0.18	0.16	54.5
East: DNSDC Access (E)											
4	L2	4	0.0	0.232	55.8	LOS D	1.4	10.4	0.98	0.72	15.6
6	R2	24	8.7	0.232	55.8	LOS D	1.4	10.4	0.98	0.72	18.1
Approach		28	7.4	0.232	55.8	LOS D	1.4	10.4	0.98	0.72	17.7
North: Moorebank Avenue (N)											
7	L2	6	16.7	0.714	11.5	LOS A	24.3	184.6	0.54	0.51	31.5
8	T1	2012	10.0	0.714	5.7	LOS A	24.3	184.6	0.53	0.50	50.8
9	R2	15	92.9	0.220	59.9	LOS E	0.8	9.5	0.98	0.70	16.4
Approach		2033	10.7	0.714	6.1	LOS A	24.3	184.6	0.54	0.50	50.2
West: Warehouse Access 1 (W)											
10	L2	16	86.7	0.084	43.3	LOS D	0.7	8.4	0.86	0.70	19.9
12	R2	1	0.0	0.084	42.5	LOS D	0.7	8.4	0.86	0.70	18.4
Approach		17	81.3	0.084	43.2	LOS D	0.7	8.4	0.86	0.70	19.8
All Vehicles		2757	14.6	0.714	6.1	LOS A	24.3	184.6	0.46	0.42	50.1

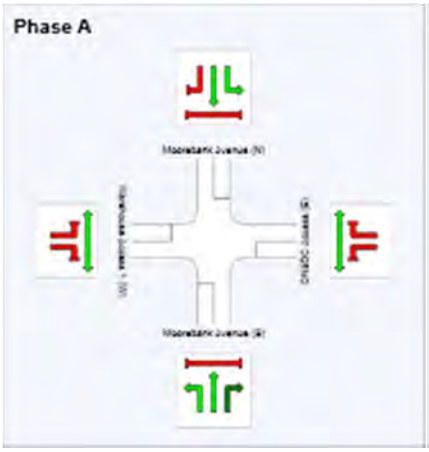
PHASING SUMMARY

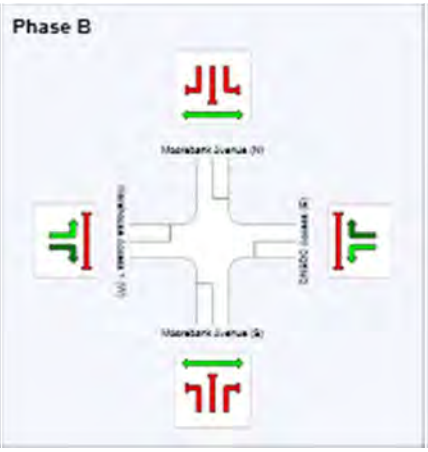
Site: I-02 2030 FU MINT PM

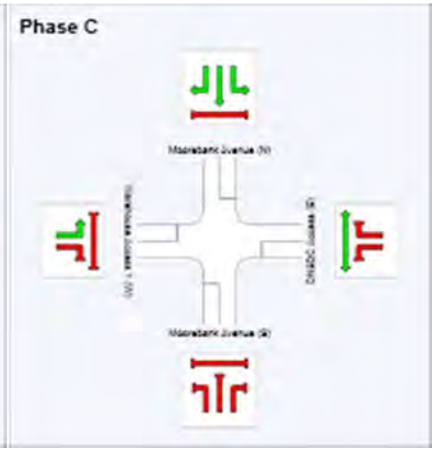
Intersection of Moorebank Avenue, Warehouse Access 1 and DNSDC Access
2030 Future with MINT PM PEAK
Signals - Fixed Time Cycle Time = 100 seconds (Optimum Cycle Time - Minimum Delay)

Phase Timing Results

Phase	A	B	C
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	72	88
Green Time (sec)	66	10	6
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	72	16	12
Phase Split	72 %	16 %	12 %







I-03 Intersection of Moorebank Avenue and Warehouse Access 2

MOVEMENT SUMMARY

Site: I-03 2030 FU MINT AM

Intersection of Moorebank Avenue and Warehouse Access 2
2030 Future with MINT AM PEAK
Signals - Fixed Time Cycle Time = 90 seconds (Optimum Cycle Time - Minimum Delay)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Moorebank Avenue (S)											
1	L2	1	0.0	0.774	20.7	LOS B	27.9	213.7	0.79	0.73	42.8
2	T1	1753	11.0	0.774	13.3	LOS A	27.9	213.7	0.79	0.73	42.8
Approach		1754	11.0	0.774	13.3	LOS A	27.9	213.7	0.79	0.73	42.8
North: Moorebank Avenue (N)											
8	T1	759	20.9	0.293	0.9	LOS A	1.1	9.4	0.07	0.07	56.7
9	R2	20	84.2	0.130	20.9	LOS B	0.4	5.3	0.72	0.67	27.1
Approach		779	22.6	0.293	1.4	LOS A	1.1	9.4	0.09	0.08	55.3
West: Warehouse Access 2 (W)											
10	L2	18	94.1	0.082	38.8	LOS C	0.7	8.5	0.83	0.67	14.0
12	R2	1	0.0	0.082	39.0	LOS C	0.7	8.5	0.83	0.67	14.0
Approach		19	88.9	0.082	38.9	LOS C	0.7	8.5	0.83	0.67	14.0
All Vehicles		2552	15.1	0.774	9.8	LOS A	27.9	213.7	0.58	0.53	44.3

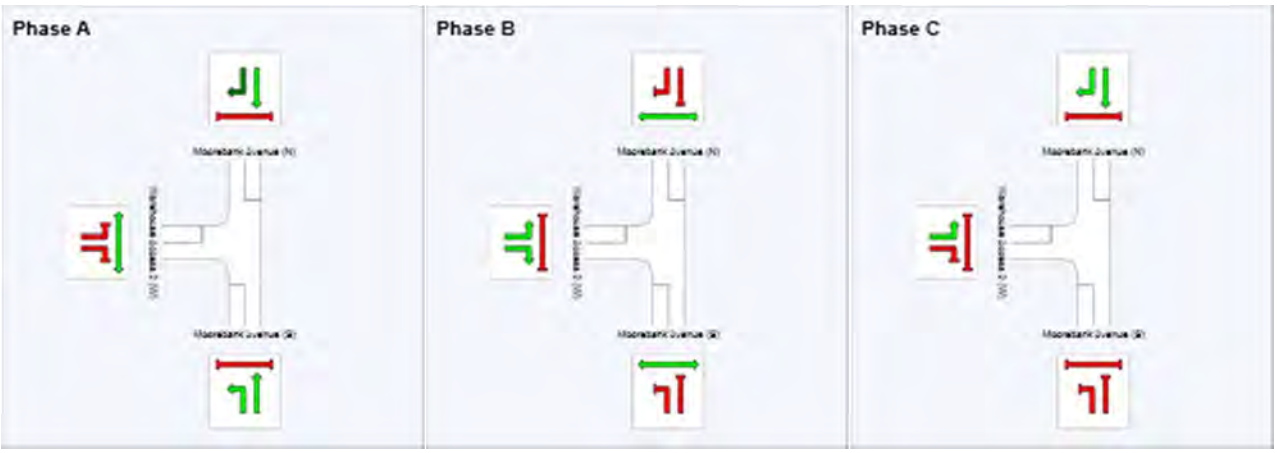
PHASING SUMMARY

Site: I-03 2030 FU MINT AM

Intersection of Moorebank Avenue and Warehouse Access 2
2030 Future with MINT AM PEAK
Signals - Fixed Time Cycle Time = 90 seconds (Optimum Cycle Time - Minimum Delay)

Phase Timing Results

Phase	A	B	C
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	62	78
Green Time (sec)	56	10	6
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	62	16	12
Phase Split	69 %	18 %	13 %



MOVEMENT SUMMARY

Site: I-03 2030 FU MINT PM

Intersection of Moorebank Avenue and Warehouse Access 2
2030 Future with MINT PM PEAK
Signals - Fixed Time Cycle Time = 90 seconds (Optimum Cycle Time - Minimum Delay)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Moorebank Avenue (S)											
1	L2	1	0.0	0.312	15.9	LOS B	6.7	56.4	0.50	0.44	47.7
2	T1	657	23.4	0.312	8.5	LOS A	6.7	56.4	0.50	0.44	47.7
Approach		658	23.4	0.312	8.5	LOS A	6.7	56.4	0.50	0.44	47.7
North: Moorebank Avenue (N)											
8	T1	2000	9.3	0.720	1.5	LOS A	6.9	51.8	0.17	0.16	54.2
9	R2	18	94.1	0.059	12.1	LOS A	0.2	2.7	0.43	0.56	34.8
Approach		2018	10.0	0.720	1.6	LOS A	6.9	51.8	0.17	0.16	54.0
West: Warehouse Access 2 (W)											
10	L2	20	84.2	0.087	38.8	LOS C	0.8	9.0	0.83	0.68	14.0
12	R2	1	0.0	0.087	39.0	LOS C	0.8	9.0	0.83	0.68	14.0
Approach		21	80.0	0.087	38.8	LOS C	0.8	9.0	0.83	0.68	14.0
All Vehicles		2697	13.8	0.720	3.6	LOS A	6.9	56.4	0.26	0.23	50.8

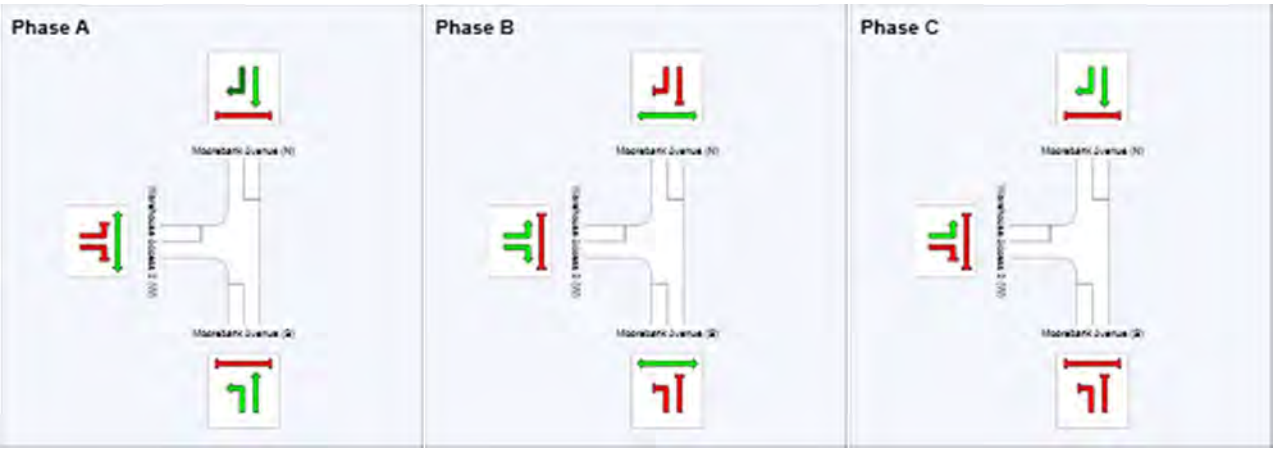
PHASING SUMMARY

Site: I-03 2030 FU MINT PM

Intersection of Moorebank Avenue and Warehouse Access 2
2030 Future with MINT PM PEAK
Signals - Fixed Time Cycle Time = 90 seconds (Optimum Cycle Time - Minimum Delay)

Phase Timing Results

Phase	A	B	C
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	62	78
Green Time (sec)	56	10	6
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	62	16	12
Phase Split	69 %	18 %	13 %



I-04 Intersection of Moorebank Avenue and Warehouse Access 3

MOVEMENT SUMMARY

Site: I-04 2030 FU MINT AM

Intersection of Moorebank Avenue and Warehouse Access 3
2030 Future with MINT AM PEAK
Signals - Fixed Time Cycle Time = 90 seconds (Optimum Cycle Time - Minimum Delay)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Moorebank Avenue (S)											
1	L2	2	0.0	0.756	20.4	LOS B	26.9	203.7	0.77	0.71	41.9
2	T1	1726	9.5	0.756	13.0	LOS A	26.9	203.7	0.77	0.71	41.9
Approach		1728	9.5	0.756	13.0	LOS A	26.9	203.7	0.77	0.71	41.9
North: Moorebank Avenue (N)											
8	T1	725	18.0	0.275	3.6	LOS A	4.8	39.1	0.33	0.29	53.6
9	R2	34	84.4	0.217	21.1	LOS B	0.8	9.3	0.74	0.70	38.2
Approach		759	20.9	0.275	4.4	LOS A	4.8	39.1	0.35	0.31	52.7
West: Warehouse Access 3 (W)											
10	L2	29	96.4	0.130	38.5	LOS C	1.1	14.0	0.83	0.69	14.1
12	R2	1	0.0	0.130	38.6	LOS C	1.1	14.0	0.83	0.69	14.1
Approach		31	93.1	0.130	38.5	LOS C	1.1	14.0	0.83	0.69	14.1
All Vehicles		2518	14.0	0.756	10.7	LOS A	26.9	203.7	0.65	0.59	44.5

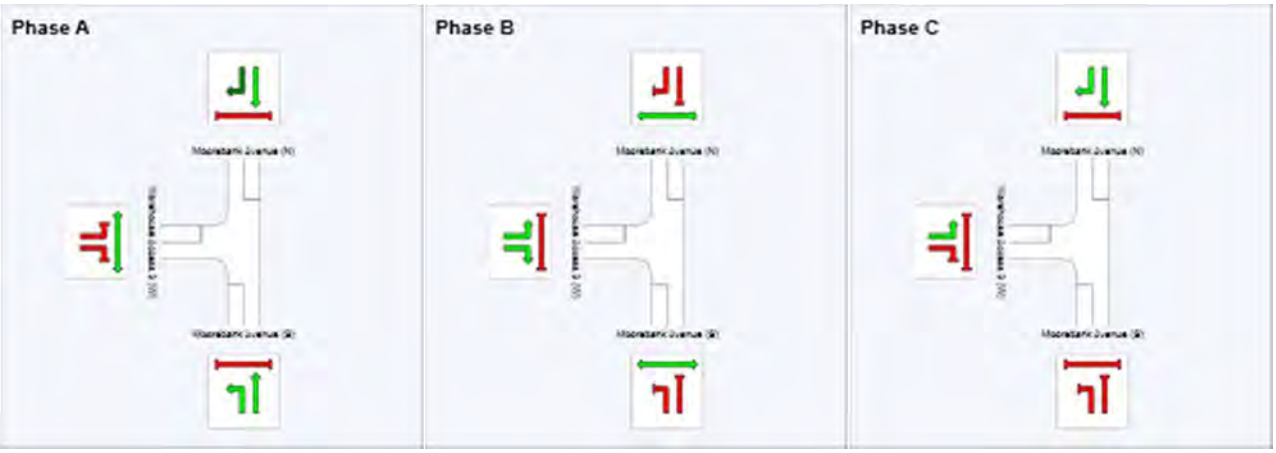
PHASING SUMMARY

Site: I-04 2030 FU MINT AM

Intersection of Moorebank Avenue and Warehouse Access 3
2030 Future with MINT AM PEAK
Signals - Fixed Time Cycle Time = 90 seconds (Optimum Cycle Time - Minimum Delay)

Phase Timing Results

Phase	A	B	C
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	62	78
Green Time (sec)	56	10	6
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	62	16	12
Phase Split	69 %	18 %	13 %



MOVEMENT SUMMARY

Site: I-04 2030 FU MINT PM

Intersection of Moorebank Avenue and Warehouse Access 3
2030 Future with MINT PM PEAK
Signals - Fixed Time Cycle Time = 90 seconds (Optimum Cycle Time - Minimum Delay)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Moorebank Avenue (S)											
1	L2	1	0.0	0.302	16.8	LOS B	6.6	54.4	0.52	0.45	45.8
2	T1	623	20.1	0.302	9.4	LOS A	6.6	54.4	0.52	0.45	45.8
Approach		624	20.1	0.302	9.4	LOS A	6.6	54.4	0.52	0.45	45.8
North: Moorebank Avenue (N)											
8	T1	1974	7.9	0.721	6.1	LOS A	23.5	176.0	0.57	0.53	49.8
9	R2	29	96.4	0.089	12.0	LOS A	0.4	4.5	0.42	0.57	45.1
Approach		2003	9.2	0.721	6.2	LOS A	23.5	176.0	0.57	0.53	49.8
West: Warehouse Access 3 (W)											
10	L2	34	84.4	0.138	38.4	LOS C	1.3	15.3	0.84	0.70	14.1
12	R2	2	0.0	0.138	38.5	LOS C	1.3	15.3	0.84	0.70	14.1
Approach		36	79.4	0.138	38.4	LOS C	1.3	15.3	0.84	0.70	14.1
All Vehicles		2663	12.7	0.721	7.4	LOS A	23.5	176.0	0.56	0.51	48.3

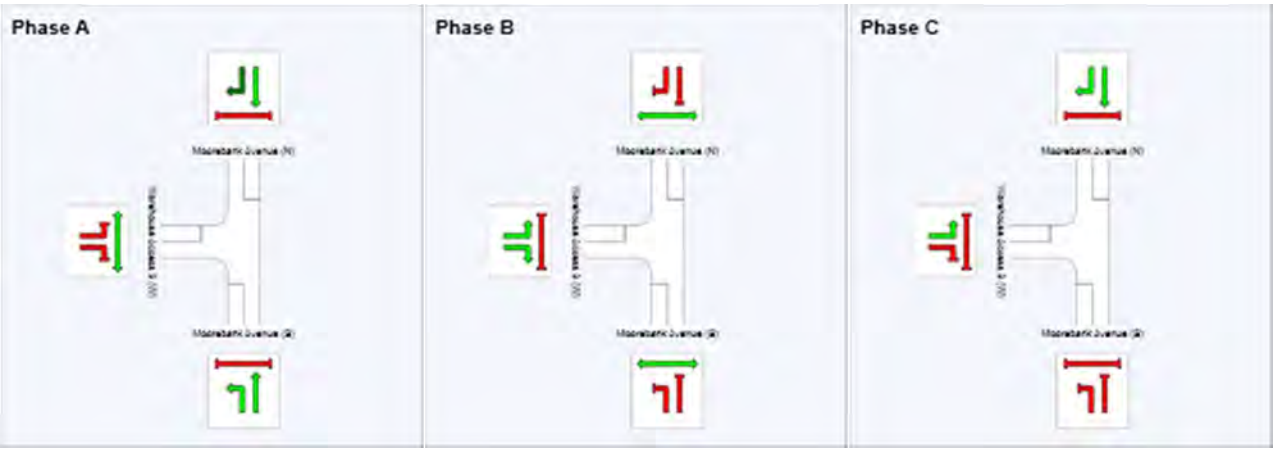
PHASING SUMMARY

Site: I-04 2030 FU MINT PM

Intersection of Moorebank Avenue and Warehouse Access 3
2030 Future with MINT PM PEAK
Signals - Fixed Time Cycle Time = 90 seconds (Optimum Cycle Time - Minimum Delay)

Phase Timing Results

Phase	A	B	C
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	60	76
Green Time (sec)	54	10	8
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	60	16	14
Phase Split	67 %	18 %	16 %



I-05 Intersection of Moorebank Avenue and Main Access

MOVEMENT SUMMARY

Site: I-05 2030 FU MINT AM

Intersection of Moorebank Avenue and Main Access
2030 Future with MINT AM PEAK
Signals - Fixed Time Cycle Time = 90 seconds (Optimum Cycle Time - Minimum Delay)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Moorebank Avenue (S)											
1	L2	1	0.0	0.747	23.1	LOS B	26.5	190.8	0.81	0.74	39.7
2	T1	1616	3.2	0.747	15.7	LOS B	26.5	190.8	0.81	0.74	39.7
Approach		1617	3.2	0.747	15.7	LOS B	26.5	190.8	0.81	0.74	39.7
North: Moorebank Avenue (N)											
8	T1	609	2.9	0.249	4.7	LOS A	5.1	36.9	0.37	0.32	52.1
9	R2	116	97.3	0.723	31.9	LOS C	4.3	54.7	1.00	0.93	32.4
Approach		725	18.0	0.723	9.1	LOS A	5.1	54.7	0.47	0.42	47.7
West: Main Access (W)											
10	L2	114	99.1	0.192	34.7	LOS C	2.0	25.9	0.80	0.70	15.2
12	R2	1	0.0	0.192	34.8	LOS C	2.0	25.2	0.80	0.70	15.2
Approach		115	98.2	0.192	34.7	LOS C	2.0	25.9	0.80	0.70	15.2
All Vehicles		2457	12.0	0.747	14.6	LOS B	26.5	190.8	0.71	0.64	40.9

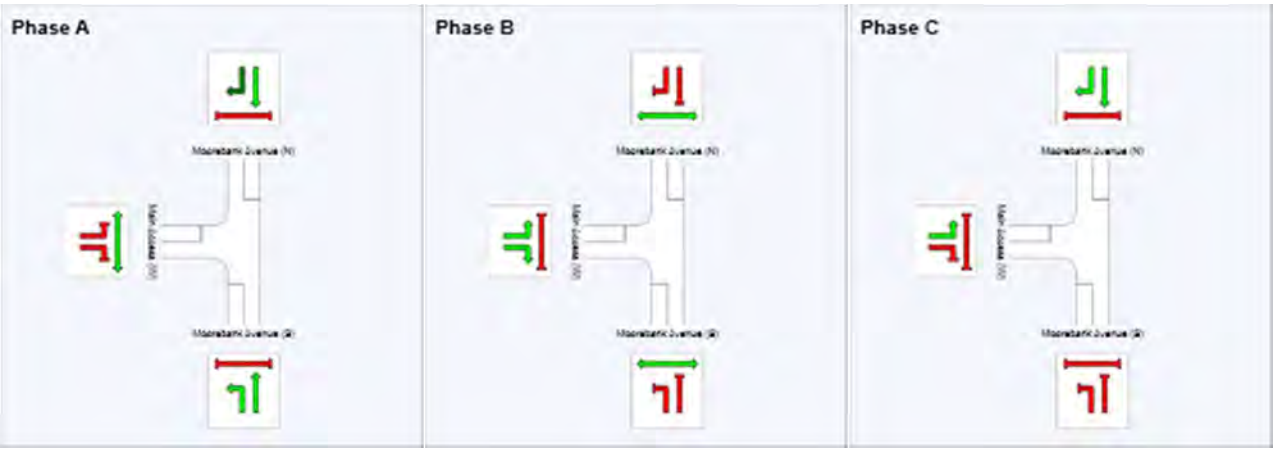
PHASING SUMMARY

Site: I-05 2030 FU MINT AM

Intersection of Moorebank Avenue and Main Access
2030 Future with MINT AM PEAK
Signals - Fixed Time Cycle Time = 90 seconds (Optimum Cycle Time - Minimum Delay)

Phase Timing Results

Phase	A	B	C
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	57	77
Green Time (sec)	51	14	7
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	57	20	13
Phase Split	63 %	22 %	14 %



MOVEMENT SUMMARY

Site: I-05 2030 FU MINT PM

Intersection of Moorebank Avenue and Main Access
2030 Future with MINT PM PEAK
Signals - Fixed Time Cycle Time = 90 seconds (Optimum Cycle Time - Minimum Delay)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Moorebank Avenue (S)											
1	L2	1	0.0	0.373	30.7	LOS C	8.3	59.4	0.79	0.67	35.0
2	T1	507	2.5	0.373	23.2	LOS B	8.3	59.5	0.79	0.67	35.0
Approach		508	2.5	0.373	23.3	LOS B	8.3	59.5	0.79	0.67	35.0
North: Moorebank Avenue (N)											
8	T1	1863	2.4	0.820	8.9	LOS A	26.6	189.7	0.61	0.58	47.0
9	R2	114	99.1	0.238	13.7	LOS A	1.7	21.6	0.54	0.64	43.6
Approach		1977	7.9	0.820	9.2	LOS A	26.6	189.7	0.61	0.58	46.8
West: Main Access (W)											
10	L2	116	97.3	0.113	21.5	LOS B	1.4	18.5	0.58	0.62	20.9
12	R2	1	0.0	0.113	22.6	LOS B	1.4	18.2	0.60	0.63	20.3
Approach		117	96.4	0.113	21.5	LOS B	1.4	18.5	0.58	0.62	20.9
All Vehicles		2602	10.8	0.820	12.5	LOS A	26.6	189.7	0.64	0.60	43.2

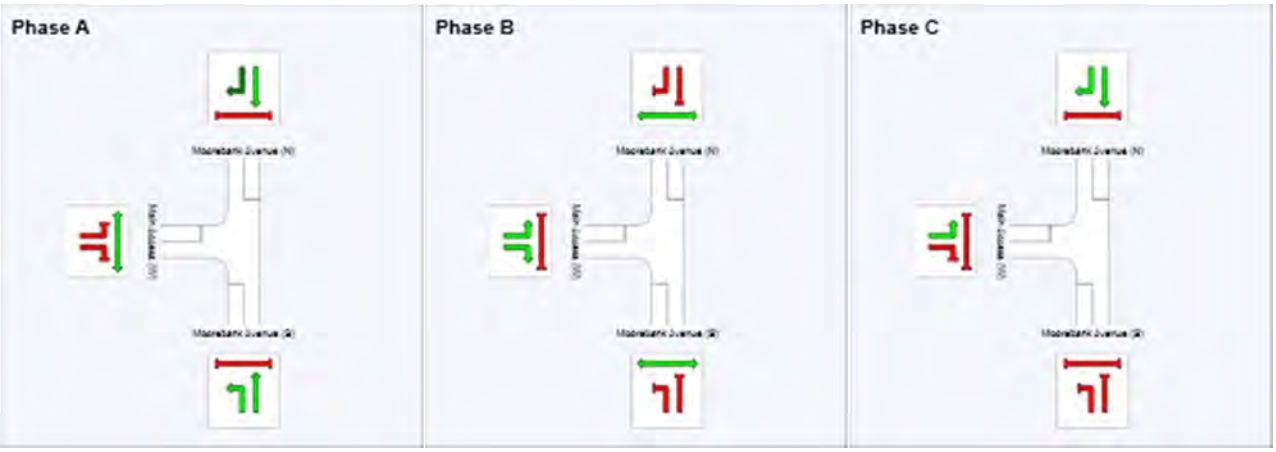
PHASING SUMMARY

Site: I-05 2030 FU MINT PM

Intersection of Moorebank Avenue and Main Access
2030 Future with MINT PM PEAK
Signals - Fixed Time Cycle Time = 90 seconds (Optimum Cycle Time - Minimum Delay)

Phase Timing Results

Phase	A	B	C
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	38	58
Green Time (sec)	32	14	26
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	38	20	32
Phase Split	42 %	22 %	36 %



3. On the wider road network – 2030 Future traffic without Moorebank IMT development (Do-nothing scenario)

I-01 Intersection of the Hume Highway and Orange Grove Road

MOVEMENT SUMMARY

Site: I-01 2030 BASE AM

Hume Highway / Orange Grove Road
2030 BASE AM PEAK 7:45 am - 8:45 am
Signals - Fixed Time Cycle Time = 150 seconds (User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	v/c	sec		veh	m		per veh	km/h
NorthEast: Hume Highway (NE)											
25	T1	953	11.3	0.683	24.2	LOS B	19.5	150.0	0.84	0.76	35.9
26	R2	389	10.0	0.907	86.6	LOS F	17.0	128.8	1.00	0.94	23.8
Approach		1342	10.9	0.907	42.3	LOS C	19.5	150.0	0.89	0.82	30.0
NorthWest: Orange Grove Road (NW)											
27	L2	603	6.6	0.715	18.9	LOS B	19.6	145.2	0.54	0.81	44.7
29	R2	1312	6.6	0.940	75.3	LOS F	38.2	282.7	1.00	0.94	23.0
Approach		1915	6.6	0.940	57.6	LOS E	38.2	282.7	0.86	0.90	27.7
SouthWest: Hume Highway (SW)											
30	L2	1252	6.5	0.441	11.5	LOS A	13.8	101.7	0.34	0.70	52.2
31	T1	2187	5.0	0.806	22.9	LOS B	39.5	288.4	0.71	0.65	40.1
Approach		3439	5.5	0.806	18.7	LOS B	39.5	288.4	0.57	0.67	44.6
All Vehicles		6696	6.9	0.940	34.6	LOS C	39.5	288.4	0.72	0.76	34.4

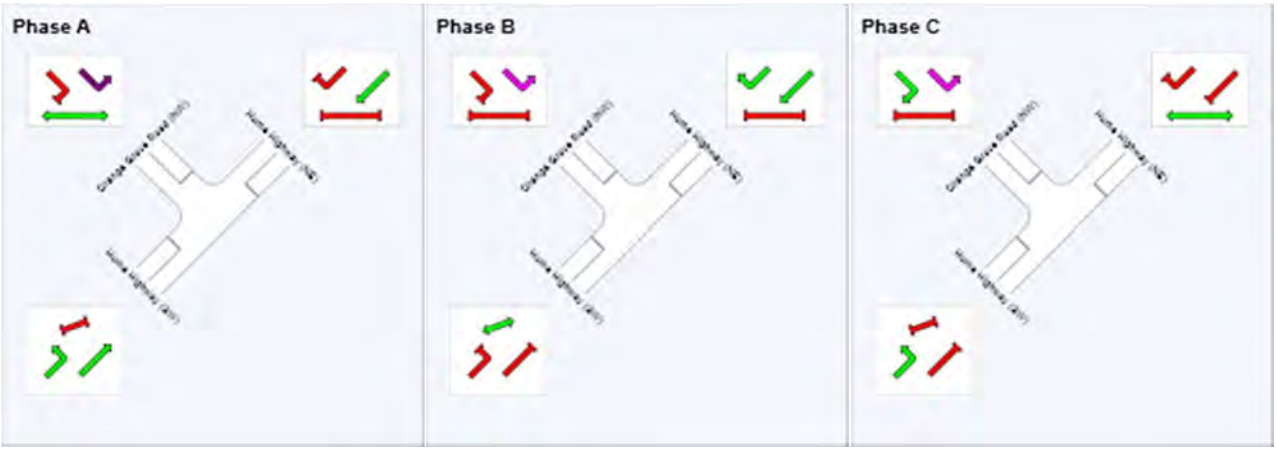
PHASING SUMMARY

Site: I-01 2030 BASE AM

Hume Highway / Orange Grove Road
2030 BASE AM PEAK 7:45 am - 8:45 am
Signals - Fixed Time Cycle Time = 150 seconds (User-Given Phase Times)

Phase Timing Results

Phase	A	B	C
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	84	108
Green Time (sec)	77	17	36
Yellow Time (sec)	5	4	5
All-Red Time (sec)	2	2	2
Phase Time (sec)	84	23	43
Phase Split	56 %	15 %	29 %



MOVEMENT SUMMARY

Site: I-01 2030 BASE PM

Hume Highway / Orange Grove Road
2030 BASE PM PEAK 4:30 pm - 5:30 pm
Signals - Fixed Time Cycle Time = 150 seconds (User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
NorthEast: Hume Highway (NE)											
25	T1	1762	3.3	0.918	44.0	LOS D	49.8	358.6	0.91	0.97	27.0
26	R2	816	2.8	0.958	68.1	LOS E	24.7	176.9	1.00	1.04	27.6
Approach		2578	3.1	0.958	51.6	LOS D	49.8	358.6	0.94	0.99	27.2
NorthWest: Orange Grove Road (NW)											
27	L2	391	4.3	0.365	12.4	LOS A	6.7	48.6	0.27	0.64	49.3
29	R2	1358	3.1	1.040	119.8	LOS F	51.7	371.7	1.00	1.10	17.0
Approach		1748	3.4	1.040	95.8	LOS F	51.7	371.7	0.84	1.00	20.3
SouthWest: Hume Highway (SW)											
30	L2	1278	3.0	0.745	19.2	LOS B	19.5	139.7	0.77	0.83	46.0
31	T1	1085	5.3	0.975	88.0	LOS F	37.6	275.5	1.00	1.12	18.1
Approach		2363	4.1	0.975	50.8	LOS D	37.6	275.5	0.88	0.97	28.8
All Vehicles		6689	3.5	1.040	62.9	LOS E	51.7	371.7	0.89	0.98	25.2

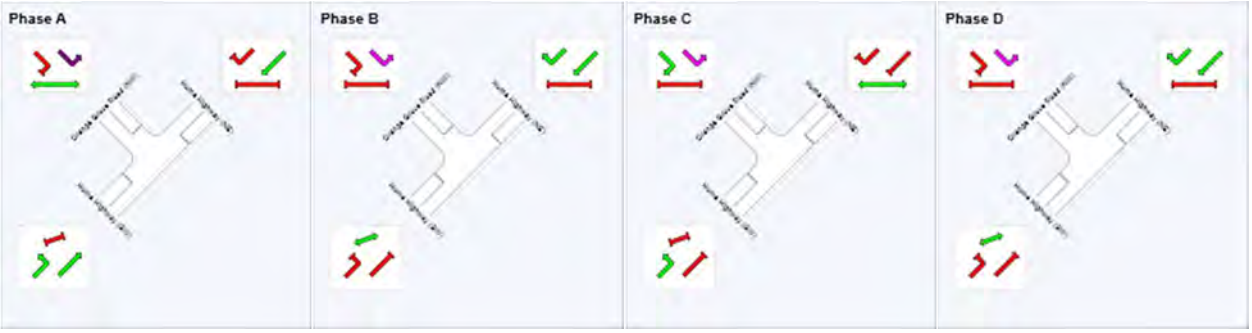
PHASING SUMMARY

Site: I-01 2030 BASE PM

Hume Highway / Orange Grove Road
2030 BASE PM PEAK 4:30 pm - 5:30 pm
Signals - Fixed Time Cycle Time = 150 seconds (User-Given Phase Times)

Phase Timing Results

Phase	A	B	C	D
Reference Phase	Yes	No	No	No
Phase Change Time (sec)	0	53	80	124
Green Time (sec)	47	20	38	19
Yellow Time (sec)	5	4	5	4
All-Red Time (sec)	2	2	2	2
Phase Time (sec)	54	26	45	25
Phase Split	36 %	17 %	30 %	17 %



I-02 Intersection of the Hume Highway and Elizabeth Drive

MOVEMENT SUMMARY

Site: I-02 2030 BASE AM

Hume Highway / Elizabeth Drive
2030 BASE AM PEAK 7:45 am - 8:45 am
Signals - Fixed Time Cycle Time = 150 seconds (User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Hume Highway (S)											
1	L2	137	5.4	0.155	22.6	LOS B	3.7	27.3	0.40	0.68	36.5
2	T1	2352	6.3	0.942	57.2	LOS E	64.3	474.4	0.98	1.01	20.6
Approach		2488	6.2	0.962	55.3	LOS D	64.3	474.4	0.95	0.99	21.2
East: Elizabeth Drive (E)											
4	L2	39	5.4	0.427	59.7	LOS E	10.6	77.7	0.92	0.82	18.6
5	T1	503	5.9	0.427	55.9	LOS D	11.9	87.5	0.90	0.83	23.7
6	R2	156	2.7	0.754	78.2	LOS F	11.7	83.5	1.00	0.87	14.8
Approach		698	5.1	0.754	61.1	LOS E	11.9	87.5	0.92	0.84	21.1
North: Hume Highway (N)											
7	L2	82	2.6	0.624	26.2	LOS B	23.1	172.9	0.60	0.57	31.4
8	T1	1715	8.7	0.624	19.6	LOS B	23.1	172.9	0.58	0.53	36.1
9	R2	353	9.6	1.170	248.6	LOS F	25.1	189.8	1.00	1.38	7.6
Approach		2149	8.6	1.170	57.4	LOS E	25.1	189.8	0.65	0.67	20.9
West: Elizabeth Drive (W)											
10	L2	628	5.4	1.014	110.4	LOS F	63.2	462.6	1.00	1.07	14.4
11	T1	1091	3.1	1.052	136.6	LOS F	59.7	429.3	1.00	1.35	11.8
12	R2	512	6.6	1.120	358.8	LOS F	58.3	431.0	1.00	1.57	5.6
Approach		2231	4.5	1.120	180.2	LOS F	63.2	462.6	1.00	1.32	9.7
All Vehicles		7566	6.3	1.170	93.2	LOS F	64.3	474.4	0.88	0.98	15.3

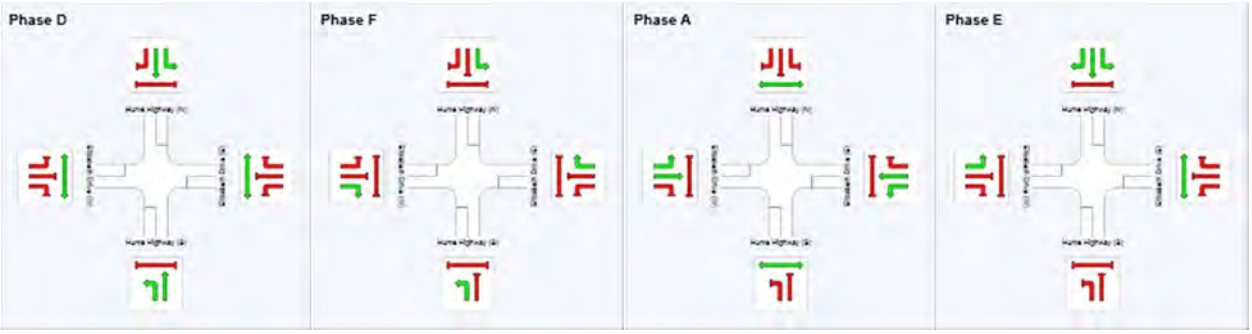
PHASING SUMMARY

Site: I-02 2030 BASE AM

Hume Highway / Elizabeth Drive
2030 BASE AM PEAK 7:45 am - 8:45 am
Signals - Fixed Time Cycle Time = 150 seconds (User-Given Phase Times)

Phase Timing Results

Phase	D	F	A	E
Reference Phase	Yes	No	No	No
Phase Change Time (sec)	0	66	89	131
Green Time (sec)	60	17	36	13
Yellow Time (sec)	4	4	4	4
All-Red Time (sec)	2	2	2	2
Phase Time (sec)	66	23	42	19
Phase Split	44 %	15 %	28 %	13 %



MOVEMENT SUMMARY

Site: I-02 2030 BASE PM

Hume Highway / Elizabeth Drive
2030 BASE PM PEAK 4:30 pm - 5:30 pm
Signals - Fixed Time Cycle Time = 150 seconds (User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Hume Highway (S)											
1	L2	316	4.3	0.461	39.6	LOS C	14.7	106.7	0.69	0.78	28.5
2	T1	1496	4.9	0.868	56.4	LOS D	36.7	267.7	0.97	0.93	20.8
Approach		1812	4.8	0.868	53.5	LOS D	36.7	267.7	0.92	0.90	22.0
East: Elizabeth Drive (E)											
4	L2	128	0.8	0.985	108.6	LOS F	33.8	240.3	1.00	1.17	12.0
5	T1	1083	2.4	0.985	104.7	LOS F	43.0	307.3	1.00	1.20	15.1
6	R2	172	0.0	1.066	165.1	LOS F	19.6	137.4	1.00	1.29	8.2
Approach		1383	2.0	1.066	112.6	LOS F	43.0	307.3	1.00	1.21	13.7
North: Hume Highway (N)											
7	L2	66	4.8	0.854	22.7	LOS B	39.2	281.8	0.70	0.68	33.9
8	T1	2444	2.9	0.854	16.9	LOS B	39.9	286.3	0.70	0.66	38.3
9	R2	961	3.0	0.917	76.9	LOS F	37.9	271.9	1.00	0.96	19.4
Approach		3472	2.9	0.917	33.6	LOS C	39.9	286.3	0.78	0.75	29.2
West: Elizabeth Drive (W)											
10	L2	327	6.4	0.439	34.2	LOS C	13.8	101.8	0.62	0.76	29.6
11	T1	532	4.8	0.703	61.9	LOS E	17.7	128.9	0.96	0.82	20.9
12	R2	311	2.7	0.983	115.3	LOS F	14.6	104.6	1.00	1.09	14.4
Approach		1169	4.7	0.983	68.3	LOS E	17.7	128.9	0.88	0.87	20.0
All Vehicles		7836	3.5	1.066	57.3	LOS E	43.0	307.3	0.87	0.88	21.6

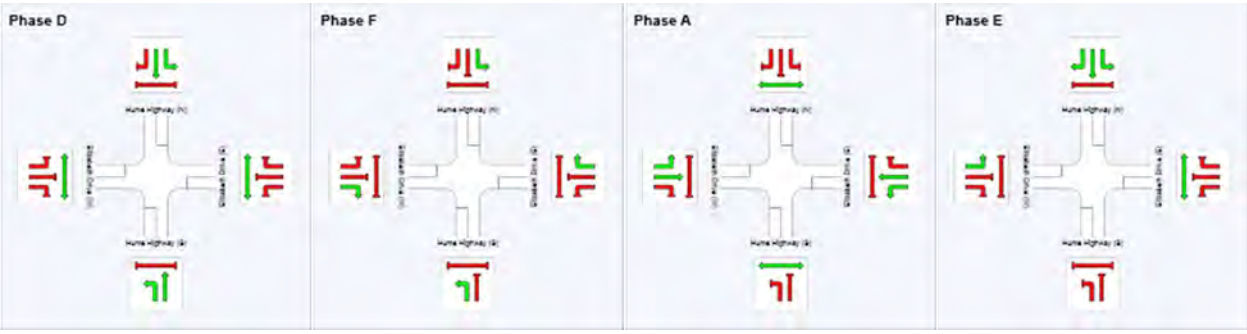
PHASING SUMMARY

Site: I-02 2030 BASE PM

Hume Highway / Elizabeth Drive
2030 BASE PM PEAK 4:30 pm - 5:30 pm
Signals - Fixed Time Cycle Time = 150 seconds (User-Given Phase Times)

Phase Timing Results

Phase	D	F	A	E
Reference Phase	Yes	No	No	No
Phase Change Time (sec)	0	53	72	108
Green Time (sec)	47	13	30	36
Yellow Time (sec)	4	4	4	4
All-Red Time (sec)	2	2	2	2
Phase Time (sec)	53	19	36	42
Phase Split	35 %	13 %	24 %	28 %



I-03 Intersection of the Hume Highway and Memorial Avenue

MOVEMENT SUMMARY

Site: I-03 2030 BASE AM

Hume Highway / Memorial Avenue
2030 BASE AM PEAK 7:45 am - 8:45 am
Signals - Fixed Time Cycle Time = 150 seconds (User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Hume Highway (S)											
1	L2	157	1.3	0.955	65.8	LOS E	66.8	491.9	1.00	1.06	27.4
2	T1	2104	7.3	0.955	57.6	LOS E	67.8	504.3	0.93	1.01	25.7
3	R2	267	0.0	1.137	222.0	LOS F	36.2	253.5	1.00	1.30	9.4
Approach		2528	6.1	1.137	75.5	LOS F	67.8	504.3	0.94	1.04	22.0
East: Memorial Avenue (E)											
4	L2	26	20.0	1.170	251.7	LOS F	23.5	175.1	1.00	1.53	8.6
5	T1	160	5.3	1.170	247.0	LOS F	23.5	175.1	1.00	1.53	8.4
6	R2	125	12.6	1.170	251.8	LOS F	21.4	164.2	1.00	1.52	6.0
Approach		312	9.5	1.170	249.3	LOS F	23.5	175.1	1.00	1.52	7.5
North: Hume Highway (N)											
7	L2	121	6.1	0.103	12.4	LOS A	2.6	19.4	0.36	0.64	39.4
8	T1	1715	11.1	0.725	27.9	LOS B	30.5	233.5	0.72	0.65	36.6
9	R2	101	3.1	0.439	72.0	LOS F	7.0	50.1	0.97	0.79	21.4
Approach		1937	10.4	0.725	29.2	LOS C	30.5	233.5	0.71	0.66	35.4
West: Memorial Avenue (W)											
10	L2	128	3.3	1.178	239.1	LOS F	47.3	337.1	1.00	1.56	9.1
11	T1	460	1.6	1.178	242.0	LOS F	58.9	420.6	1.00	1.62	8.5
12	R2	163	3.2	1.178	253.8	LOS F	58.9	420.6	1.00	1.67	10.9
Approach		752	2.2	1.178	244.1	LOS F	58.9	420.6	1.00	1.62	9.2
All Vehicles		5528	7.3	1.178	92.0	LOS F	67.8	504.3	0.87	1.01	19.0

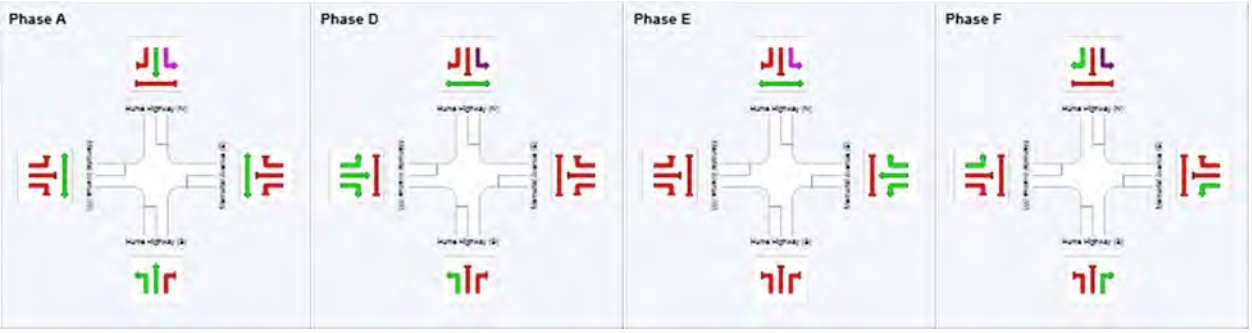
PHASING SUMMARY

Site: I-03 2030 BASE AM

Hume Highway / Memorial Avenue
2030 BASE AM PEAK 7:45 am - 8:45 am
Signals - Fixed Time Cycle Time = 150 seconds (User-Given Phase Times)

Phase Timing Results

Phase	A	D	E	F
Reference Phase	Yes	No	No	No
Phase Change Time (sec)	0	75	108	125
Green Time (sec)	69	27	11	19
Yellow Time (sec)	4	4	4	4
All-Red Time (sec)	2	2	2	2
Phase Time (sec)	75	33	17	25
Phase Split	50 %	22 %	11 %	17 %



MOVEMENT SUMMARY

Site: I-03 2030 BASE PM

Hume Highway / Memorial Avenue
2030 BASE PM PEAK 4:30 pm - 5:30 pm
Signals - Fixed Time Cycle Time = 150 seconds (User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Hume Highway (S)											
1	L2	119	0.9	0.793	44.9	LOS D	34.3	249.8	0.89	0.83	32.9
2	T1	1604	5.6	0.793	37.1	LOS C	35.2	258.5	0.85	0.77	32.3
3	R2	116	0.0	0.779	84.5	LOS F	8.9	62.5	1.00	0.87	19.4
Approach		1839	5.0	0.793	40.5	LOS C	35.2	258.5	0.86	0.78	31.1
East: Memorial Avenue (E)											
4	L2	55	0.0	1.235	306.0	LOS F	46.8	333.1	1.00	1.84	7.3
5	T1	291	2.5	1.235	301.5	LOS F	46.8	333.1	1.00	1.81	7.1
6	R2	212	6.5	1.235	306.5	LOS F	43.2	316.9	1.00	1.69	5.1
Approach		557	3.8	1.235	303.8	LOS F	46.8	333.1	1.00	1.77	6.4
North: Hume Highway (N)											
7	L2	152	2.8	0.090	8.4	LOS A	2.0	14.7	0.24	0.61	43.5
8	T1	2933	3.0	0.922	17.5	LOS B	58.7	421.7	0.65	0.64	42.8
9	R2	214	2.0	0.729	42.6	LOS D	9.2	65.3	1.00	0.83	28.2
Approach		3298	2.9	0.922	18.7	LOS B	58.7	421.7	0.66	0.65	41.5
West: Memorial Avenue (W)											
10	L2	82	1.3	0.947	94.0	LOS F	17.8	125.8	1.00	1.14	18.3
11	T1	209	1.0	0.947	90.9	LOS F	22.1	155.1	1.00	1.12	17.5
12	R2	171	0.0	0.947	98.0	LOS F	22.1	155.1	1.00	1.09	21.4
Approach		462	0.7	0.947	94.1	LOS F	22.1	155.1	1.00	1.11	19.2
All Vehicles		6156	3.5	1.235	56.7	LOS E	58.7	421.7	0.78	0.83	25.5

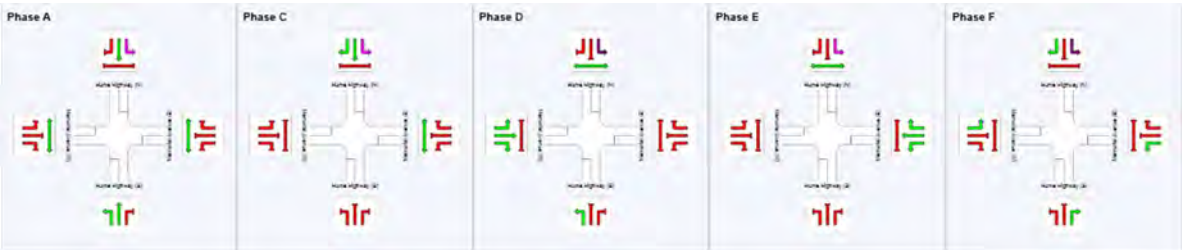
PHASING SUMMARY

Site: I-03 2030 BASE PM

Hume Highway / Memorial Avenue
2030 BASE PM PEAK 4:30 pm - 5:30 pm
Signals - Fixed Time Cycle Time = 150 seconds (User-Given Phase Times)

Phase Timing Results

Phase	A	C	D	E	F
Reference Phase	Yes	No	No	No	No
Phase Change Time (sec)	0	67	81	108	132
Green Time (sec)	61	8	21	18	12
Yellow Time (sec)	4	4	4	4	4
All-Red Time (sec)	2	2	2	2	2
Phase Time (sec)	67	14	27	24	18
Phase Split	45 %	9 %	18 %	16 %	12 %



I-04 Intersection of the Hume Highway and Hoxton Park Drive

MOVEMENT SUMMARY

Site: I-04 2030 BASE AM

Hume Highway / Hoxton Park Road / Macquarie Street
2030 BASE AM PEAK 7:45 am - 8:45 am
Signals - Fixed Time Cycle Time = 150 seconds (User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Hume Highway (S)											
1	L2	102	7.2	0.085	8.7	LOS A	0.8	6.2	0.12	0.57	50.9
2	T1	2126	5.1	0.822	28.8	LOS C	40.6	296.7	0.80	0.74	39.1
3	R2	1213	1.9	1.079	138.0	LOS F	52.5	373.6	1.00	1.22	13.8
Approach		3441	4.0	1.079	66.7	LOS E	52.5	373.6	0.85	0.90	25.5
East: Macquarie Street (E)											
4	L2	361	5.8	0.230	21.3	LOS B	5.5	40.4	0.66	0.73	39.0
5	T1	545	4.6	1.080	170.2	LOS F	32.6	237.6	1.00	1.38	13.2
Approach		906	5.1	1.080	110.9	LOS F	32.6	237.6	0.86	1.12	17.4
North: Hume Highway (N)											
7	L2	236	15.6	0.965	89.2	LOS F	50.1	384.1	1.00	1.22	20.5
8	T1	1428	8.1	0.965	81.3	LOS F	51.3	384.4	0.98	1.12	23.8
9	R2	247	19.6	1.265	334.8	LOS F	41.9	342.5	1.00	1.61	9.1
Approach		1912	10.5	1.265	115.1	LOS F	51.3	384.4	0.98	1.19	19.0
West: Hoxton Park Road (W)											
10	L2	338	16.2	0.564	46.9	LOS D	19.7	157.1	0.86	0.83	32.6
11	T1	1363	4.2	1.117	216.5	LOS F	66.9	485.3	1.00	1.60	10.9
12	R2	384	3.3	1.096	150.7	LOS F	25.5	183.5	1.00	1.17	16.1
Approach		2085	6.0	1.117	176.9	LOS F	66.9	485.3	0.98	1.40	13.4
All Vehicles		8344	6.1	1.265	110.1	LOS F	66.9	485.3	0.92	1.12	18.8

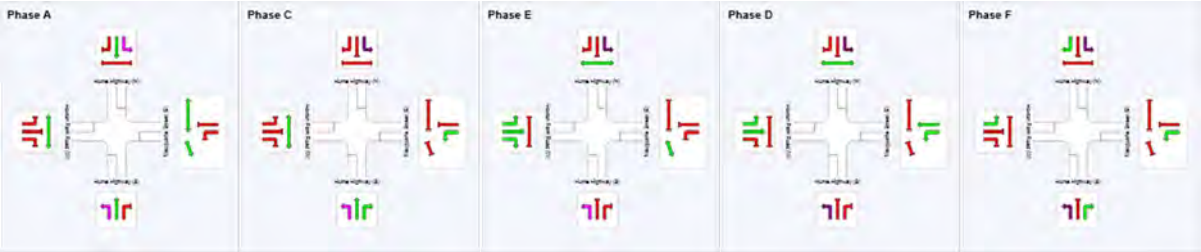
PHASING SUMMARY

Site: I-04 2030 BASE AM

Hume Highway / Hoxton Park Road / Macquarie Street
2030 BASE AM PEAK 7:45 am - 8:45 am
Signals - Fixed Time Cycle Time = 150 seconds (User-Given Phase Times)

Phase Timing Results

Phase	A	C	E	D	F
Reference Phase	Yes	No	No	No	No
Phase Change Time (sec)	0	49	77	100	126
Green Time (sec)	43	22	17	20	18
Yellow Time (sec)	4	4	4	4	4
All-Red Time (sec)	2	2	2	2	2
Phase Time (sec)	49	28	23	26	24
Phase Split	33 %	19 %	15 %	17 %	16 %



MOVEMENT SUMMARY

Site: I-04 2030 BASE PM

Hume Highway / Hoxton Park Road / Macquarie Street
2030 BASE PM PEAK 4:30 pm - 5:30 pm
Signals - Fixed Time Cycle Time = 150 seconds (User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Hume Highway (S)											
1	L2	196	5.4	0.164	9.5	LOS A	2.0	14.6	0.15	0.59	50.3
2	T1	1549	5.2	0.607	23.6	LOS B	23.3	170.0	0.62	0.55	41.7
3	R2	448	1.2	0.934	95.5	LOS F	19.1	135.2	1.00	1.00	18.1
Approach		2194	4.4	0.934	37.1	LOS C	23.3	170.0	0.65	0.65	34.8
East: Macquarie Street (E)											
4	L2	785	1.5	1.024	163.1	LOS F	39.7	281.3	0.98	1.11	12.1
5	T1	706	3.3	1.087	167.6	LOS F	41.8	300.7	1.00	1.39	13.3
Approach		1492	2.3	1.087	165.2	LOS F	41.8	300.7	0.99	1.24	12.7
North: Hume Highway (N)											
7	L2	101	5.2	0.950	31.1	LOS C	69.1	495.9	0.88	0.92	37.5
8	T1	2813	2.7	0.950	26.1	LOS B	70.9	507.4	0.79	0.82	40.3
9	R2	284	6.7	1.414	467.1	LOS F	57.2	423.6	1.00	1.83	6.8
Approach		3198	3.1	1.414	65.5	LOS E	70.9	507.4	0.81	0.91	27.2
West: Hoxton Park Road (W)											
10	L2	251	3.8	0.392	44.3	LOS D	13.6	98.3	0.80	0.80	33.6
11	T1	714	3.8	0.436	46.6	LOS D	14.1	101.9	0.87	0.73	30.4
12	R2	380	1.7	1.207	217.5	LOS F	31.6	224.2	1.00	1.34	12.2
Approach		1344	3.2	1.207	94.5	LOS F	31.6	224.2	0.89	0.92	21.2
All Vehicles		8227	3.3	1.414	80.7	LOS F	70.9	507.4	0.81	0.90	23.3

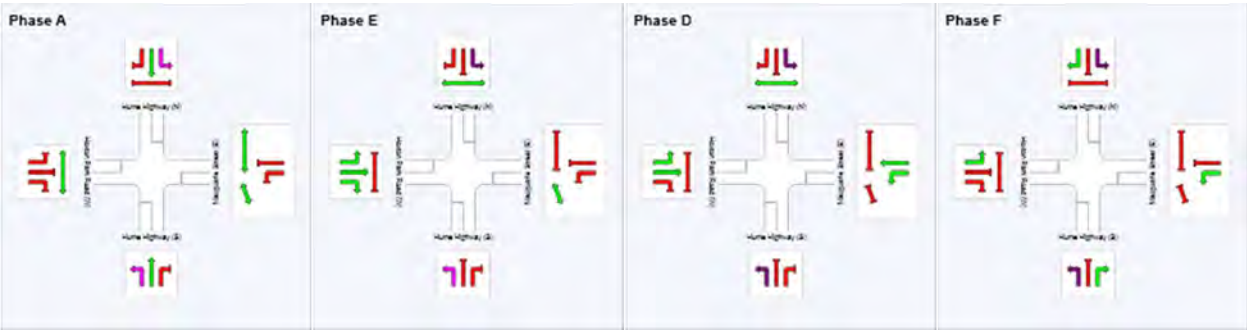
PHASING SUMMARY

Site: I-04 2030 BASE PM

Hume Highway / Hoxton Park Road / Macquarie Street
2030 BASE PM PEAK 4:30 pm - 5:30 pm
Signals - Fixed Time Cycle Time = 150 seconds (User-Given Phase Times)

Phase Timing Results

Phase	A	E	D	F
Reference Phase	Yes	No	No	No
Phase Change Time (sec)	0	78	98	127
Green Time (sec)	72	14	23	17
Yellow Time (sec)	4	4	4	4
All-Red Time (sec)	2	2	2	2
Phase Time (sec)	78	20	29	23
Phase Split	52 %	13 %	19 %	15 %



I-05 Intersection of the Hume Highway and Reilly Street

MOVEMENT SUMMARY

Site: I-05 2030 BASE AM

Hume Highway / Reilly Street
2030 BASE AM PEAK 7:45 am - 8:45 am
Signals - Fixed Time Cycle Time = 150 seconds (User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Hume Hignway (S)											
1	L2	80	2.6	0.922	27.7	LOS B	64.3	464.0	0.80	0.80	38.2
2	T1	3145	3.6	0.922	21.5	LOS B	64.3	464.0	0.74	0.75	38.5
3	R2	14	7.7	0.099	22.4	LOS B	0.5	3.6	0.48	0.67	37.1
Approach		3239	3.6	0.922	21.6	LOS B	64.3	464.0	0.74	0.75	38.4
East: Congressional Drive (E)											
4	L2	49	2.1	0.263	59.1	LOS E	5.9	42.6	0.89	0.74	24.5
5	T1	46	4.5	0.263	54.5	LOS D	5.9	42.6	0.89	0.74	24.0
6	R2	91	4.7	0.430	67.3	LOS E	6.1	44.6	0.95	0.79	18.7
Approach		186	4.0	0.430	61.9	LOS E	6.1	44.6	0.92	0.76	21.6
North: Hume Hignway (N)											
7	L2	32	3.3	0.547	17.8	LOS B	21.3	158.2	0.52	0.56	39.5
8	T1	1809	7.2	0.547	11.0	LOS A	24.5	182.4	0.49	0.48	46.6
9	R2	99	1.1	0.767	58.8	LOS E	6.2	43.8	1.00	0.94	22.9
Approach		1940	6.8	0.767	13.5	LOS A	24.5	182.4	0.52	0.51	44.1
West: Reilly Street (W)											
10	L2	121	4.3	0.277	50.4	LOS D	7.7	56.1	0.83	0.76	24.4
11	T1	14	7.7	0.277	45.8	LOS D	7.7	56.1	0.83	0.76	25.6
12	R2	235	1.8	1.033	151.3	LOS F	26.1	185.6	1.00	1.22	14.4
Approach		369	2.8	1.033	114.3	LOS F	26.1	185.6	0.94	1.05	16.5
All Vehicles		5735	4.7	1.033	26.2	LOS B	64.3	464.0	0.69	0.69	35.5

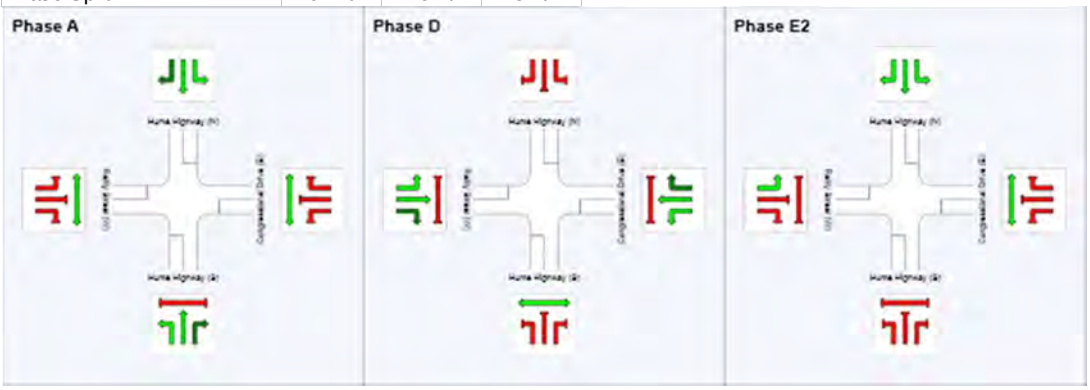
PHASING SUMMARY

Site: I-05 2030 BASE AM

Hume Highway / Reilly Street
2030 BASE AM PEAK 7:45 am - 8:45 am
Signals - Fixed Time Cycle Time = 150 seconds (User-Given Phase Times)

Phase Timing Results

Phase	A	D	E2
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	100	138
Green Time (sec)	94	32	6
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	100	38	12
Phase Split	67 %	25 %	8 %



MOVEMENT SUMMARY

Site: I-05 2030 BASE PM

Hume Highway / Reilly Street
2030 BASE PM PEAK 4:30 pm - 5:30 pm
Signals - Fixed Time Cycle Time = 150 seconds (User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Hume Hignway (S)											
1	L2	223	0.5	0.645	19.5	LOS B	24.9	179.0	0.52	0.56	41.9
2	T1	2007	4.5	0.645	11.4	LOS A	24.9	179.0	0.44	0.43	45.9
3	R2	21	5.0	0.388	28.4	LOS B	1.0	7.2	0.59	0.73	34.2
Approach		2252	4.1	0.645	12.4	LOS A	24.9	179.0	0.45	0.45	45.2
East: Congressional Drive (E)											
4	L2	42	2.5	0.205	61.9	LOS E	4.2	29.6	0.90	0.73	23.8
5	T1	24	0.0	0.205	57.3	LOS E	4.2	29.6	0.90	0.73	23.3
6	R2	52	0.0	0.236	65.6	LOS E	3.4	23.6	0.92	0.75	19.1
Approach		118	0.9	0.236	62.6	LOS E	4.2	29.6	0.91	0.74	21.7
North: Hume Hignway (N)											
7	L2	67	0.0	0.961	25.5	LOS B	61.6	439.1	0.52	0.59	34.2
8	T1	3665	2.2	0.961	21.5	LOS B	61.6	439.1	0.40	0.47	38.5
9	R2	178	1.2	0.780	49.7	LOS D	11.2	79.0	1.00	0.99	25.1
Approach		3911	2.2	0.961	22.9	LOS B	61.6	439.1	0.43	0.50	37.5
West: Reilly Street (W)											
10	L2	65	0.0	0.235	56.1	LOS D	5.8	40.6	0.86	0.74	23.5
11	T1	32	0.0	0.235	51.6	LOS D	5.8	40.6	0.86	0.74	24.5
12	R2	262	2.0	1.127	219.6	LOS F	35.6	253.4	1.00	1.39	10.8
Approach		359	1.5	1.127	175.1	LOS F	35.6	253.4	0.96	1.21	12.4
All Vehicles		6639	2.8	1.127	28.2	LOS B	61.6	439.1	0.47	0.52	34.5

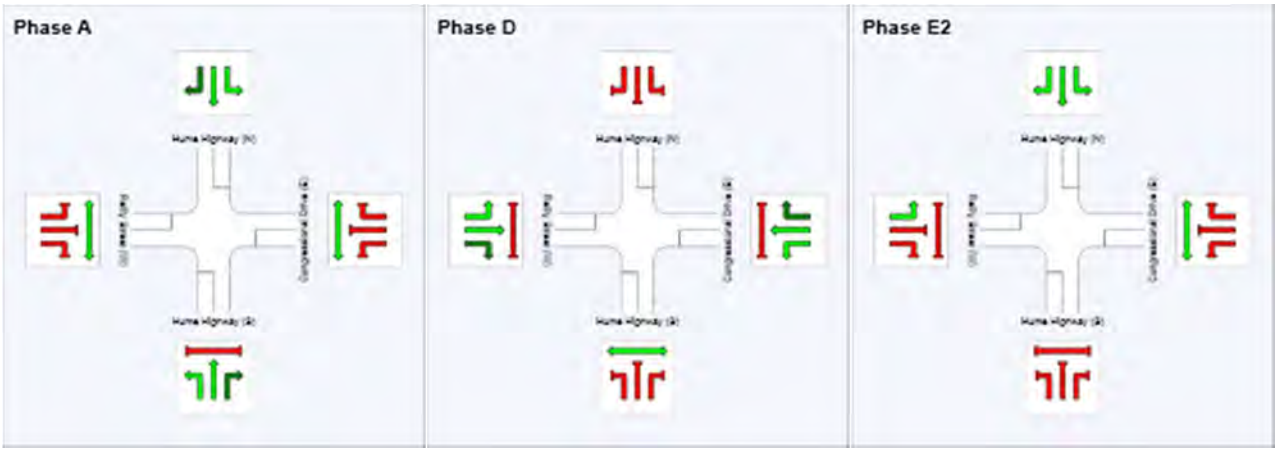
PHASING SUMMARY

Site: I-05 2030 BASE PM

Hume Highway / Reilly Street
2030 BASE PM PEAK 4:30 pm - 5:30 pm
Signals - Fixed Time Cycle Time = 150 seconds (User-Given Phase Times)

Phase Timing Results

Phase	A	D	E2
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	98	133
Green Time (sec)	92	29	11
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	98	35	17
Phase Split	65 %	23 %	11 %



I-06 Intersection of Newbridge Road and Moorebank Avenue

MOVEMENT SUMMARY

Site: I-06 2030 BASE AM

Network: 2030 BASE AM

Newbridge Road / Moorebank Avenue
2030 BASE AM PEAK 7:45 am - 8:45 am
Signals - Fixed Time Cycle Time = 133 seconds (User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total veh/h	Demand Flows HV %	Arrival Flows Total veh/h	Arrival Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Moorebank Avenue (S)													
1	L2	1535	3.2	1279	3.2	0.660	19.5	LOS B	15.0	108.2	0.58	0.83	41.9
3	R2	1365	9.0	1138	9.1	0.669	15.1	LOS B	14.1	106.4	0.42	0.69	52.7
Approach		2900	5.9	2417 N1	5.9	0.669	17.4	LOS B	15.0	108.2	0.51	0.76	47.7
East: Newbridge Road (E)													
4	L2	687	19.8	687	19.8	0.563	18.5	LOS B	8.3	68.3	0.71	0.80	51.9
5	T1	966	5.2	966	5.2	1.262	313.4	LOS F	77.6	567.9	1.00	1.91	14.6
Approach		1654	11.3	1654	11.3	1.262	190.8	LOS F	77.6	567.9	0.88	1.45	18.8
West: Newbridge Road (W)													
11	T1	1579	6.4	1579	6.4	0.850	12.2	LOS A	30.6	225.7	0.63	0.59	61.0
12	R2	867	7.4	867	7.4	1.577	575.4	LOS F	87.3	650.0	1.00	1.90	3.6
Approach		2446	6.8	2446	6.8	1.577	211.9	LOS F	87.3	650.0	0.76	1.06	16.3
All Vehicles		7000	7.5	6517 N1	8.0	1.577	134.4	LOS F	87.3	650.0	0.70	1.05	21.1

PHASING SUMMARY

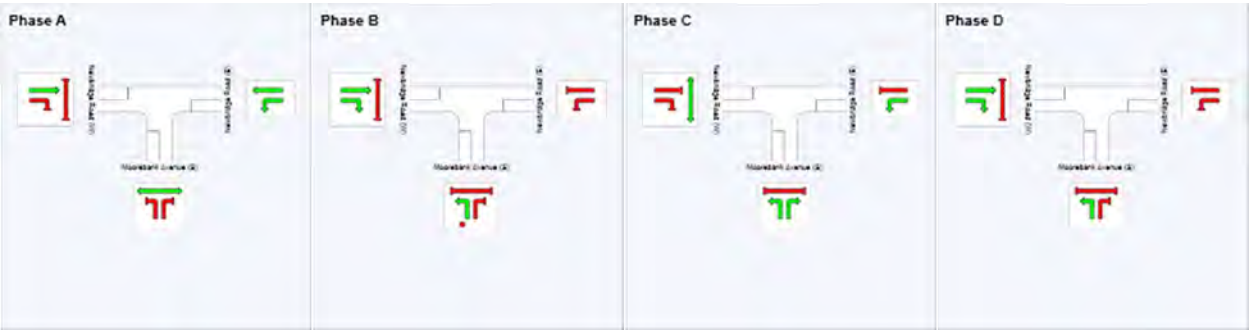
Network: 2030 BASE AM

Site: I-06 2030 BASE AM

Newbridge Road / Moorebank Avenue
2030 BASE AM PEAK 7:45 am - 8:45 am
Signals - Fixed Time Cycle Time = 133 seconds (User-Given Phase Times)

Phase Timing Results

Phase	A	B	C	D
Reference Phase	Yes	No	No	No
Phase Change Time (sec)	0	33	55	116
Green Time (sec)	27	16	55	11
Yellow Time (sec)	4	4	4	4
All-Red Time (sec)	2	2	2	2
Phase Time (sec)	33	22	61	17
Phase Split	25 %	17 %	46 %	13 %



MOVEMENT SUMMARY

Site: I-06 2030 BASE PM

Network: 2030 BASE PM

Newbridge Road / Moorebank Avenue
2030 BASE PM PEAK 4:30 pm - 5:30 pm
Signals - Fixed Time Cycle Time = 116 seconds (User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total veh/h	Demand Flows HV %	Arrival Flows Total veh/h	Arrival Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Moorebank Avenue (S)													
1	L2	1001	3.3	887	3.4	0.507	22.5	LOS B	13.1	94.7	0.57	0.75	39.8
3	R2	953	10.7	847	11.1	1.097	148.5	LOS F	17.0	130.6	1.00	1.30	19.0
Approach		1954	6.9	1734 N1	7.1	1.097	84.0	LOS F	17.0	130.6	0.78	1.02	23.9
East: Newbridge Road (E)													
4	L2	1243	5.1	1243	5.1	1.047	144.1	LOS F	66.2	483.9	1.00	1.19	18.6
5	T1	1371	4.7	1371	4.7	0.921	50.6	LOS D	42.4	308.7	1.00	1.03	43.4
Approach		2614	4.9	2614	4.9	1.047	95.1	LOS F	66.2	483.9	1.00	1.11	29.2
West: Newbridge Road (W)													
11	T1	1127	3.8	1127	3.8	0.441	9.3	LOS A	14.6	105.3	0.50	0.45	62.9
12	R2	1118	2.6	1118	2.6	1.188	222.8	LOS F	72.6	519.7	1.00	1.44	8.5
Approach		2245	3.2	2245	3.2	1.188	115.6	LOS F	72.6	519.7	0.75	0.95	23.1
All Vehicles		6813	4.9	6593 N1	5.1	1.188	99.2	LOS F	72.6	519.7	0.86	1.03	25.8

PHASING SUMMARY

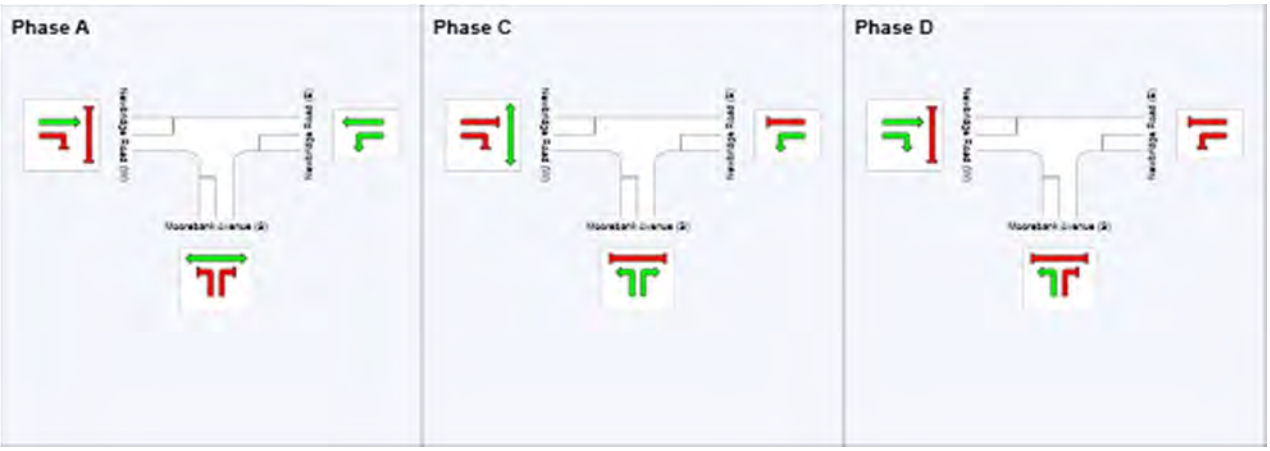
Site: I-06 2030 BASE PM

Network: 2030 BASE PM

Newbridge Road / Moorebank Avenue
2030 BASE PM PEAK 4:30 pm - 5:30 pm
Signals - Fixed Time Cycle Time = 116 seconds (User-Given Phase Times)

Phase Timing Results

Phase	A	C	D
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	44	76
Green Time (sec)	38	26	34
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	44	32	40
Phase Split	38 %	28 %	34 %



I-07 Intersection of Moorebank Avenue and Heathcote Road

MOVEMENT SUMMARY

Site: I-07 2030 BASE AM

Network: 2030 BASE AM

Moorebank Avenue / Heathcote Road
2030 BASE AM PEAK 7:45 am - 8:45 am
Signals - Fixed Time Cycle Time = 133 seconds (User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total veh/h	Demand Flows HV %	Arrival Flows Total veh/h	Arrival Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Moorebank Avenue (S)													
2	T1	1920	5.6	1834	5.7	1.192	219.3	LOS F	60.0	440.6	1.00	1.95	4.4
3	R2	24	21.7	23	21.9	0.213	72.1	LOS F	1.5	12.4	0.98	0.71	30.5
Approach		1944	5.8	1857 N1	5.9	1.192	217.5	LOS F	60.0	440.6	1.00	1.93	4.6
East: Heathcote Road (E)													
4	L2	29	57.1	29	57.1	1.385	431.6	LOS F	92.8	700.6	1.00	1.86	7.5
6	R2	953	6.0	953	6.0	1.385	430.9	LOS F	95.9	705.9	1.00	1.87	7.5
Approach		982	7.5	982	7.5	1.385	430.9	LOS F	95.9	705.9	1.00	1.87	7.5
North: Moorebank Avenue (N)													
7	L2	794	7.8	632	8.7	0.393	10.7	LOS A	12.7	95.4	0.54	0.71	51.4
8	T1	783	16.9	631	18.6	0.360	21.2	LOS B	12.2	99.1	0.65	0.57	13.2
Approach		1577	12.3	1263 N1	13.6	0.393	15.9	LOS B	12.7	99.1	0.59	0.64	41.5
All Vehicles		4503	8.5	4102 N1	9.3	1.385	206.5	LOS F	95.9	705.9	0.88	1.52	8.5

PHASING SUMMARY

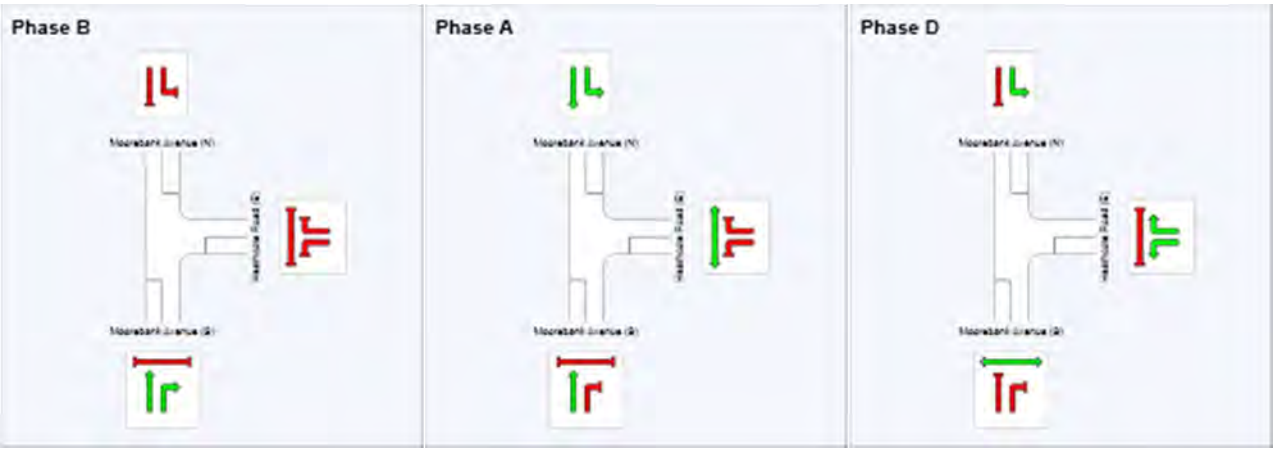
Network: 2030 BASE AM

Site: I-07 2030 BASE AM

Moorebank Avenue / Heathcote Road
2030 BASE AM PEAK 7:45 am - 8:45 am
Signals - Fixed Time Cycle Time = 133 seconds (User-Given Phase Times)

Phase Timing Results

Phase	B	A	D
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	15	88
Green Time (sec)	9	67	39
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	15	73	45
Phase Split	11 %	55 %	34 %



MOVEMENT SUMMARY

Site: I-07 2030 BASE PM

Network: 2030 BASE PM

Moorebank Avenue / Heathcote Road
2030 BASE PM PEAK 4:30 pm - 5:30 pm
Signals - Fixed Time Cycle Time = 116 seconds (User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total	Demand Flows HV	Arrival Flows Total	Arrival Flows HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	95% Back of Queue Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Moorebank Avenue (S)													
2	T1	1163	8.3	1163	8.3	0.910	45.1	LOS D	42.9	321.6	0.91	1.05	16.7
3	R2	48	8.7	48	8.7	0.401	64.7	LOS E	2.8	20.9	1.00	0.74	32.2
Approach		1212	8.3	1212	8.3	0.910	45.9	LOS D	42.9	321.6	0.92	1.04	18.0
East: Heathcote Road (E)													
4	L2	76	19.4	76	19.4	1.415	430.1	LOS F	92.9	690.4	1.00	1.99	7.5
6	R2	811	5.1	811	5.1	1.415	429.4	LOS F	92.9	690.4	1.00	1.99	7.5
Approach		886	6.3	886	6.3	1.415	429.5	LOS F	92.9	690.4	1.00	1.99	7.5
North: Moorebank Avenue (N)													
7	L2	883	3.6	796	3.6	0.389	7.5	LOS A	5.4	39.0	0.24	0.61	53.8
8	T1	1454	4.1	1310	4.2	0.667	6.3	LOS A	11.9	86.2	0.35	0.32	29.3
Approach		2337	3.9	2106 N1	4.0	0.667	6.7	LOS A	11.9	86.2	0.31	0.43	48.6
All Vehicles		4435	5.6	4204 N1	5.9	1.415	107.1	LOS F	92.9	690.4	0.63	0.93	14.2

PHASING SUMMARY

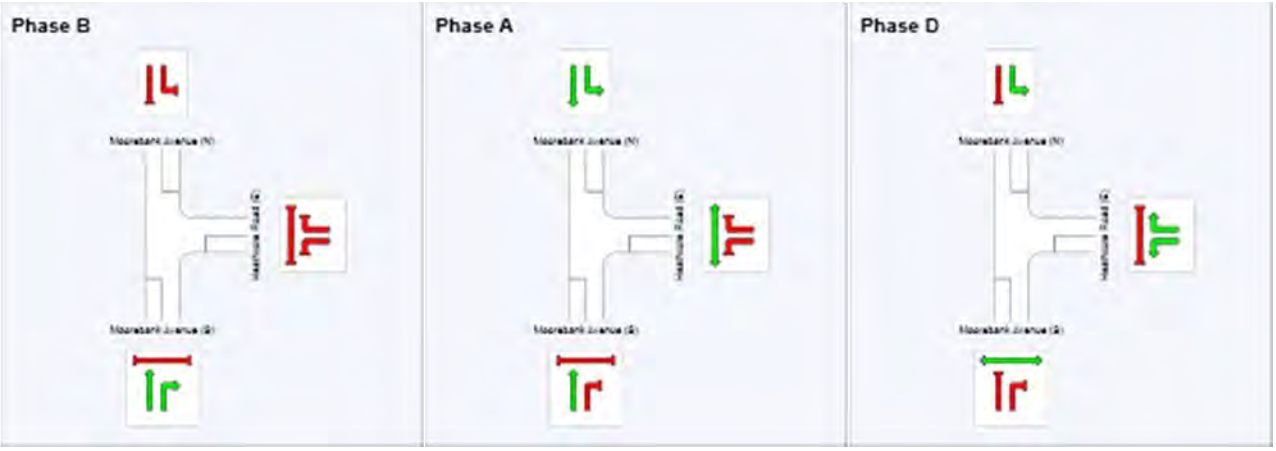
Site: I-07 2030 BASE PM

Network: 2030 BASE PM

Moorebank Avenue / Heathcote Road
2030 BASE PM PEAK 4:30 pm - 5:30 pm
Signals - Fixed Time Cycle Time = 116 seconds (User-Given Phase Times)

Phase Timing Results

Phase	B	A	D
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	14	80
Green Time (sec)	8	60	30
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	14	66	36
Phase Split	12 %	57 %	31 %



I-08 Intersection of Moorebank Avenue and Industry Park Access

MOVEMENT SUMMARY

Site: I-08 2030 BASE AM

Network: 2030 BASE AM

Moorebank Avenue / Industry Park Access
2030 BASE AM PEAK 7:45 am - 8:45 am
Signals - Fixed Time Cycle Time = 133 seconds (User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total veh/h	Demand Flows HV %	Arrival Flows Total veh/h	Arrival Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Moorebank Avenue (S)													
1	L2	88	1.2	88	1.2	0.053	6.1	LOS A	0.4	2.8	0.12	0.58	43.1
2	T1	1899	4.9	1899	4.9	1.215	256.5	LOS F	156.8	1144.3	1.00	2.09	6.2
Approach		1987	4.8	1987	4.8	1.215	245.3	LOS F	156.8	1144.3	0.96	2.02	6.6
North: Moorebank Avenue (N)													
8	T1	695	16.2	558	17.6	0.193	2.5	LOS A	3.6	29.1	0.22	0.19	56.9
9	R2	65	38.7	54	41.1	1.017	119.3	LOS F	4.7	44.9	1.00	1.06	11.5
Approach		760	18.1	612 N1	19.6	1.017	12.7	LOS A	4.7	44.9	0.29	0.27	45.9
West: Industry Park Access (W)													
10	L2	34	62.5	34	62.5	0.415	64.9	LOS E	2.3	24.3	0.95	0.73	9.6
12	R2	56	71.7	56	71.7	0.392	67.8	LOS E	2.6	29.5	0.98	0.73	19.9
Approach		89	68.2	89	68.2	0.415	66.7	LOS E	2.6	29.5	0.97	0.73	16.7
All Vehicles		2837	10.4	2688 N1	10.9	1.215	186.5	LOS F	156.8	1144.3	0.81	1.58	9.1

PHASING SUMMARY

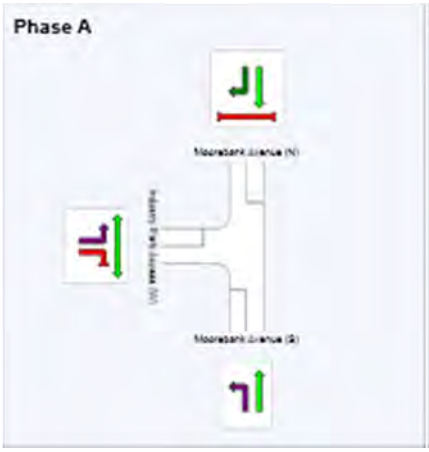
Site: I-08 2030 BASE AM

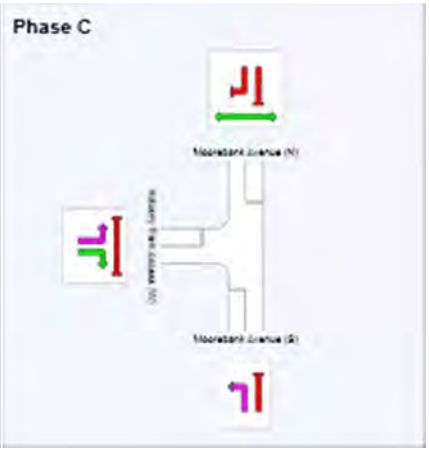
Network: 2030 BASE AM

Moorebank Avenue / Industry Park Access
2030 BASE AM PEAK 7:45 am - 8:45 am
Signals - Fixed Time Cycle Time = 133 seconds (User-Given Phase Times)

Phase Timing Results

Phase	A	C
Reference Phase	Yes	No
Phase Change Time (sec)	0	116
Green Time (sec)	110	11
Yellow Time (sec)	4	4
All-Red Time (sec)	2	2
Phase Time (sec)	116	17
Phase Split	87 %	13 %





MOVEMENT SUMMARY

Site: I-08 2030 BASE PM

Network: 2030 BASE PM

Moorebank Avenue / Industry Park Access
2030 BASE PM PEAK 4:30 pm - 5:30 pm
Signals - Fixed Time Cycle Time = 65 seconds (User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total	HV	Arrival Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Moorebank Avenue (S)													
1	L2	8	12.5	8	12.5	0.007	6.6	LOS A	0.0	0.3	0.22	0.58	42.7
2	T1	1133	7.6	1133	7.6	0.440	4.8	LOS A	7.9	59.1	0.48	0.42	51.7
Approach		1141	7.7	1141	7.7	0.440	4.8	LOS A	7.9	59.1	0.47	0.43	51.6
North: Moorebank Avenue (N)													
8	T1	1527	3.9	1366	3.8	0.518	5.2	LOS A	10.4	75.0	0.52	0.47	54.0
9	R2	25	62.5	22	62.1	0.124	13.9	LOS A	0.4	3.8	0.48	0.67	33.2
Approach		1553	4.8	1388 N1	4.7	0.518	5.3	LOS A	10.4	75.0	0.52	0.47	53.6
West: Industry Park Access (W)													
10	L2	34	15.6	34	15.6	0.065	3.6	LOS A	0.3	2.0	0.34	0.42	26.7
12	R2	187	9.0	187	9.0	0.436	32.4	LOS C	2.9	22.2	0.97	0.76	28.2
Approach		221	10.0	221	10.0	0.436	28.0	LOS B	2.9	22.2	0.87	0.71	28.1
All Vehicles		2915	6.3	2750 N1	6.7	0.518	6.9	LOS A	10.4	75.0	0.53	0.47	49.3

PHASING SUMMARY

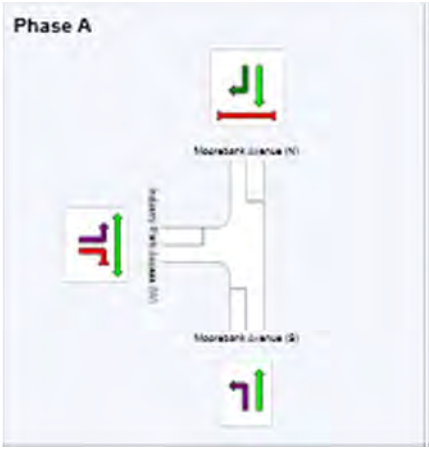
Site: I-08 2030 BASE PM

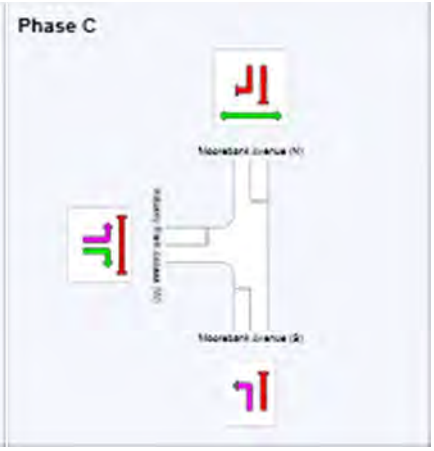
Network: 2030 BASE PM

Moorebank Avenue / Industry Park Access
2030 BASE PM PEAK 4:30 pm - 5:30 pm
Signals - Fixed Time Cycle Time = 65 seconds (User-Given Phase Times)

Phase Timing Results

Phase	A	C
Reference Phase	Yes	No
Phase Change Time (sec)	0	51
Green Time (sec)	45	8
Yellow Time (sec)	4	4
All-Red Time (sec)	2	2
Phase Time (sec)	51	14
Phase Split	78 %	22 %





I-09 Intersection of Moorebank Avenue and Church Road

MOVEMENT SUMMARY

Site: I-09 2030 BASE AM

Moorebank Avenue / Church Road
2030 BASE AM PEAK 7:45 am - 8:45 am
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Moorebank Avenue (S)											
2	T1	2101	6.4	0.737	4.3	LOS A	11.1	82.6	0.18	0.11	55.5
3	R2	282	7.8	0.737	25.5	LOS B	11.1	82.6	1.00	0.60	40.4
Approach		2383	6.6	0.921	6.8	NA	11.1	82.6	0.28	0.17	53.1
East: Church Road (E)											
4	L2	200	14.2	0.243	7.1	LOS A	1.0	7.6	0.48	0.70	47.6
6	R2	7	0.0	0.945	845.2	LOS F	2.5	17.2	1.00	1.07	4.0
Approach		207	13.7	0.945	36.9	LOS C	2.5	17.2	0.50	0.71	34.2
North: Moorebank Avenue (N)											
7	L2	37	0.0	0.219	5.6	LOS A	0.0	0.0	0.00	0.06	57.7
8	T1	717	21.1	0.219	0.0	LOS A	0.0	0.0	0.00	0.03	59.6
Approach		754	20.1	0.219	0.3	NA	0.0	0.0	0.00	0.03	59.5
All Vehicles		3344	10.1	0.945	7.2	NA	11.1	82.6	0.23	0.17	52.5

MOVEMENT SUMMARY

Site: I-09 2030 BASE PM

Moorebank Avenue / Church Road
2030 BASE PM PEAK 4:30 pm - 5:30 pm
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Moorebank Avenue (S)											
2	T1	1177	11.9	0.598	3.2	LOS A	5.8	44.3	0.08	0.05	56.7
3	R2	108	11.7	0.598	44.4	LOS D	5.8	44.3	1.00	0.68	33.1
Approach		1285	11.9	0.598	6.7	NA	5.8	44.3	0.16	0.11	53.4
East: Church Road (E)											
4	L2	424	4.5	1.291	324.8	LOS F	78.0	566.9	1.00	4.91	9.2
6	R2	1	0.0	0.124	374.1	LOS F	0.3	2.1	0.99	1.00	8.2
Approach		425	4.5	1.291	324.9	LOS F	78.0	566.9	1.00	4.90	9.2
North: Moorebank Avenue (N)											
7	L2	14	7.7	0.899	6.8	LOS A	0.0	0.0	0.00	0.01	55.6
8	T1	1687	4.6	0.899	1.4	LOS A	0.0	0.0	0.00	0.00	57.2
Approach		1701	4.6	0.899	1.5	NA	0.0	0.0	0.00	0.00	57.2
All Vehicles		3412	7.3	1.291	43.7	NA	78.0	566.9	0.18	0.65	33.7

I-10 Intersection of Heathcote Road and Nuwarra Road

MOVEMENT SUMMARY

Site: I-10 2030 BASE AM

Heathcote Road / Nuwarra Road / Wattle Grove Drive
2030 BASE AM PEAK 7:45 am - 8:45 am
Signals - Fixed Time Cycle Time = 131 seconds (User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	v/c	sec		veh	m		per veh	km/h
SouthEast: Heathcote Road (SE)											
4	L2	249	1.3	0.173	8.2	LOS A	3.3	23.3	0.27	0.63	48.3
5	T1	2074	5.3	1.255	285.8	LOS F	161.5	1181.8	1.00	2.14	10.3
6	R2	647	3.3	1.268	267.3	LOS F	42.9	308.4	1.00	1.54	11.2
Approach		2971	4.5	1.268	258.4	LOS F	161.5	1181.8	0.94	1.88	11.1
NorthEast: Nuwarra Road (NE)											
7	L2	416	4.8	0.485	24.6	LOS B	16.5	120.4	0.71	0.78	42.4
8	T1	246	8.5	0.397	53.0	LOS D	7.1	53.4	0.94	0.75	26.2
9	R2	508	5.8	1.436	477.0	LOS F	49.8	365.8	1.00	1.93	6.6
Approach		1171	6.0	1.436	227.1	LOS F	49.8	365.8	0.88	1.27	11.9
NorthWest: Heathcote Road (NW)											
10	L2	255	12.0	0.336	21.5	LOS B	7.9	60.6	0.70	0.76	42.7
11	T1	1047	11.6	0.963	56.6	LOS E	44.0	338.3	0.91	0.98	30.7
12	R2	236	6.7	0.792	75.7	LOS F	8.1	59.7	1.00	0.89	19.9
Approach		1538	10.9	0.963	53.7	LOS D	44.0	338.3	0.89	0.93	30.5
SouthWest: Wattle Grove Drive (SW)											
1	L2	639	2.1	0.849	51.8	LOS D	31.9	227.1	0.99	1.15	24.8
2	T1	543	4.5	0.817	61.8	LOS E	19.6	142.7	1.00	0.94	23.7
3	R2	263	4.0	1.277	332.6	LOS F	42.3	306.5	1.00	1.80	6.6
Approach		1445	3.4	1.277	106.7	LOS F	42.3	306.5	0.99	1.19	16.1
All Vehicles		7124	5.9	1.436	178.3	LOS F	161.5	1181.8	0.93	1.44	13.9

PHASING SUMMARY

Site: I-10 2030 BASE AM

Heathcote Road / Nuwarra Road / Wattle Grove Drive
2030 BASE AM PEAK 7:45 am - 8:45 am
Signals - Fixed Time Cycle Time = 131 seconds (User-Given Phase Times)

Phase Timing Results

Phase	A	B	D	E	G
Reference Phase	Yes	No	No	No	No
Phase Change Time (sec)	0	54	67	86	114
Green Time (sec)	48	7	13	22	11
Yellow Time (sec)	4	4	4	4	4
All-Red Time (sec)	2	2	2	2	2
Phase Time (sec)	54	13	19	28	17
Phase Split	41 %	10 %	15 %	21 %	13 %

MOVEMENT SUMMARY

Site: I-10 2030 BASE PM

Heathcote Road / Nuwarra Road / Wattle Grove Drive
2030 BASE PM PEAK 4:30 pm - 5:30 pm
Signals - Fixed Time Cycle Time = 139 seconds (User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
SouthEast: Heathcote Road (SE)											
4	L2	337	2.5	0.282	15.4	LOS B	8.9	63.6	0.45	0.70	42.4
5	T1	1332	5.5	0.993	78.0	LOS F	59.6	436.7	0.93	1.13	26.0
6	R2	469	3.1	1.197	269.1	LOS F	34.2	246.1	1.00	1.49	11.2
Approach		2138	4.5	1.197	110.1	LOS F	59.6	436.7	0.87	1.14	20.4
NorthEast: Nuwarra Road (NE)											
7	L2	644	2.5	0.945	77.5	LOS F	46.1	329.7	1.00	1.21	26.4
8	T1	620	1.2	0.993	95.2	LOS F	29.3	207.2	1.00	1.17	18.1
9	R2	551	6.1	1.103	168.0	LOS F	34.2	251.7	1.00	1.27	15.5
Approach		1815	3.1	1.103	111.0	LOS F	46.1	329.7	1.00	1.21	19.5
NorthWest: Heathcote Road (NW)											
10	L2	258	6.1	0.232	21.3	LOS B	8.5	62.5	0.53	0.73	43.0
11	T1	1701	2.7	1.169	221.8	LOS F	119.2	853.6	1.00	1.79	12.7
12	R2	467	2.0	1.103	167.2	LOS F	28.6	203.5	1.00	1.24	11.1
Approach		2426	3.0	1.169	190.0	LOS F	119.2	853.6	0.95	1.57	13.5
SouthWest: Wattle Grove Drive (SW)											
1	L2	305	1.7	0.387	33.9	LOS C	14.1	100.1	0.76	0.85	30.6
2	T1	325	1.3	0.462	57.5	LOS E	10.0	71.0	0.95	0.78	24.7
3	R2	357	1.2	1.323	381.7	LOS F	63.0	445.2	1.00	1.84	5.8
Approach		987	1.4	1.323	167.4	LOS F	63.0	445.2	0.91	1.18	11.5
All Vehicles		7366	3.2	1.323	144.3	LOS F	119.2	853.6	0.93	1.31	16.2

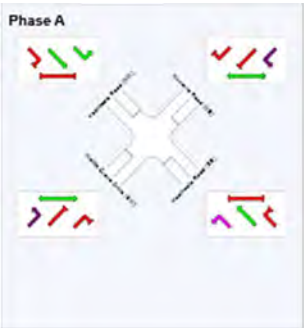
PHASING SUMMARY

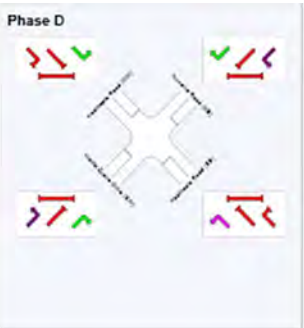
Site: I-10 2030 BASE PM

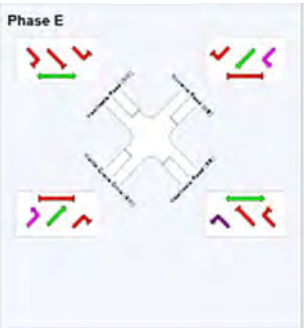
Heathcote Road / Nuwarra Road / Wattle Grove Drive
2030 BASE PM PEAK 4:30 pm - 5:30 pm
Signals - Fixed Time Cycle Time = 139 seconds (User-Given Phase Times)

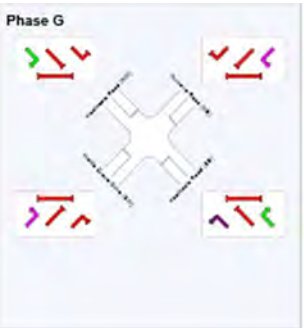
Phase Timing Results

Phase	A	D	E	G
Reference Phase	Yes	No	No	No
Phase Change Time (sec)	0	63	89	118
Green Time (sec)	57	20	23	15
Yellow Time (sec)	4	4	4	4
All-Red Time (sec)	2	2	2	2
Phase Time (sec)	63	26	29	21
Phase Split	45 %	19 %	21 %	15 %









I-11 Intersection of Newbridge Road and Nuwarra Road

MOVEMENT SUMMARY

Site: I-11 2030 BASE AM

Newbridge Road / Nuwarra Road
2030 BASE AM PEAK 7:45 am - 8:45 am
Signals - Fixed Time Cycle Time = 140 seconds (User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Nuwarra Road (S)											
1	L2	37	8.6	0.900	67.1	LOS E	27.7	197.7	0.92	0.99	32.6
2	T1	353	1.8	0.900	64.1	LOS E	27.7	197.7	0.92	0.99	27.5
3	R2	857	6.8	1.245	312.8	LOS F	74.3	549.9	1.00	1.55	10.8
Approach		1246	5.4	1.245	235.2	LOS F	74.3	549.9	0.97	1.38	13.4
East: Newbridge Road (E)											
4	L2	347	17.9	0.636	27.8	LOS B	21.9	173.4	0.73	0.78	45.0
5	T1	1281	11.3	0.636	23.5	LOS B	22.7	174.2	0.68	0.63	51.1
Approach		1628	12.7	0.636	24.4	LOS B	22.7	174.2	0.69	0.66	49.8
North: Nuwarra Road (N)											
7	L2	8	0.0	0.981	108.4	LOS F	11.3	79.5	1.00	1.23	22.4
8	T1	153	0.7	1.227	149.0	LOS F	26.9	195.3	1.00	1.34	17.8
9	R2	141	5.2	1.227	293.8	LOS F	26.9	195.3	1.00	1.76	12.0
Approach		302	2.8	1.227	215.5	LOS F	26.9	195.3	1.00	1.53	14.4
West: Newbridge Road (W)											
10	L2	306	2.4	1.139	197.1	LOS F	113.0	835.4	1.00	1.57	16.4
11	T1	2284	8.9	1.212	222.8	LOS F	137.7	1037.8	1.00	1.82	15.8
Approach		2591	8.2	1.212	219.7	LOS F	137.7	1037.8	1.00	1.79	15.9
All Vehicles		5767	8.6	1.245	167.7	LOS F	137.7	1037.8	0.91	1.37	18.7

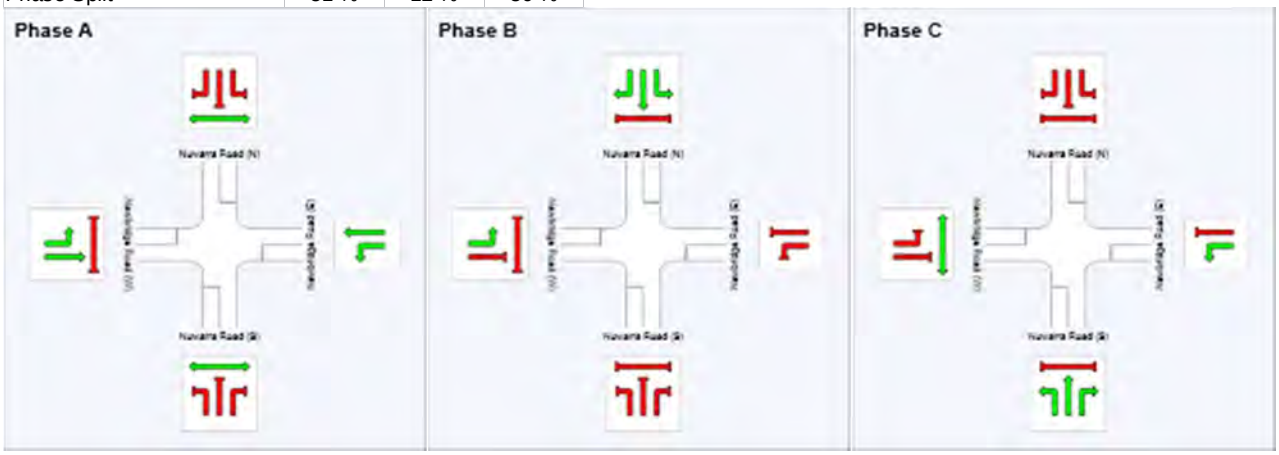
PHASING SUMMARY

Site: I-11 2030 BASE AM

Newbridge Road / Nuwarra Road
2030 BASE AM PEAK 7:45 am - 8:45 am
Signals - Fixed Time Cycle Time = 140 seconds (User-Given Phase Times)

Phase Timing Results

Phase	A	B	C
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	72	89
Green Time (sec)	66	11	45
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	72	17	51
Phase Split	51 %	12 %	36 %



MOVEMENT SUMMARY

Site: I-11 2030 BASE PM

Newbridge Road / Nuwarra Road
2030 BASE PM PEAK 4:30 pm - 5:30 pm
Signals - Fixed Time Cycle Time = 140 seconds (User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Nuwarra Road (S)											
1	L2	58	7.3	0.771	71.1	LOS F	14.8	105.7	1.00	0.89	31.8
2	T1	156	0.7	0.771	66.7	LOS E	14.8	105.7	1.00	0.89	28.9
3	R2	564	6.2	1.009	122.0	LOS F	27.4	201.9	1.00	1.12	21.8
Approach		778	5.1	1.009	107.2	LOS F	27.4	201.9	1.00	1.06	23.5
East: Newbridge Road (E)											
4	L2	772	4.5	0.784	18.1	LOS B	32.5	236.7	0.58	0.79	50.2
5	T1	2224	5.8	0.784	16.5	LOS B	40.5	297.9	0.66	0.64	55.5
Approach		2996	5.4	0.784	16.9	LOS B	40.5	297.9	0.64	0.68	54.1
North: Nuwarra Road (N)											
7	L2	18	0.0	0.867	75.8	LOS F	17.8	125.6	1.00	1.01	29.1
8	T1	295	0.7	1.084	97.2	LOS F	32.9	231.9	1.00	1.09	24.0
9	R2	212	1.0	1.084	181.8	LOS F	32.9	231.9	1.00	1.37	17.7
Approach		524	0.8	1.084	130.6	LOS F	32.9	231.9	1.00	1.20	20.9
West: Newbridge Road (W)											
10	L2	102	0.0	0.539	21.5	LOS B	17.3	127.8	0.50	0.51	48.5
11	T1	1674	7.8	0.613	14.6	LOS B	20.1	149.8	0.50	0.47	56.9
Approach		1776	7.4	0.613	15.0	LOS B	20.1	149.8	0.50	0.47	56.4
All Vehicles		6074	5.6	1.084	37.7	LOS C	40.5	297.9	0.68	0.71	42.3

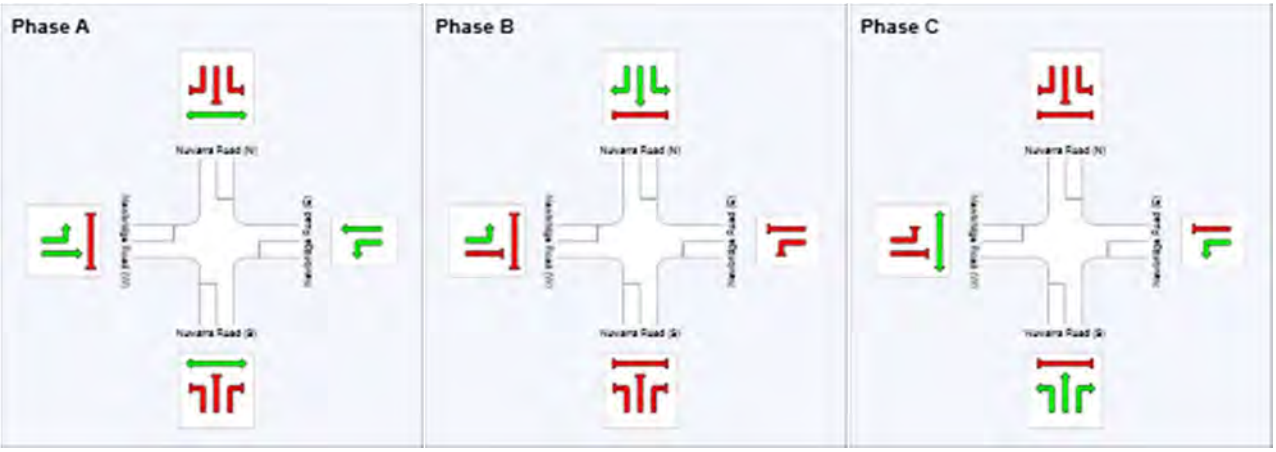
PHASING SUMMARY

Site: I-11 2030 BASE PM

Newbridge Road / Nuwarra Road
2030 BASE PM PEAK 4:30 pm - 5:30 pm
Signals - Fixed Time Cycle Time = 140 seconds (User-Given Phase Times)

Phase Timing Results

Phase	A	B	C
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	84	112
Green Time (sec)	78	22	22
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	84	28	28
Phase Split	60 %	20 %	20 %



I-12 Intersection of Newbridge Road and Governor Macquarie Drive

MOVEMENT SUMMARY

Site: I-12 2030 BASE AM

Newbridge Road / Governor Macquarie Drive
2030 BASE AM PEAK 7:45 am - 8:45 am
Signals - Fixed Time Cycle Time = 140 seconds (User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Brickmakers Drive (S)											
1	L2	14	0.0	0.909	84.6	LOS F	17.3	122.1	1.00	1.07	24.1
2	T1	207	1.0	0.909	80.3	LOS F	17.3	122.1	1.00	1.07	23.8
3	R2	720	1.2	1.239	301.6	LOS F	55.9	395.6	1.00	1.68	12.6
Approach		941	1.1	1.239	249.7	LOS F	55.9	395.6	1.00	1.53	13.8
East: Newbridge Road (E)											
4	L2	242	3.0	0.178	7.9	LOS A	2.2	15.7	0.19	0.64	58.1
5	T1	1459	11.0	0.425	13.9	LOS A	16.5	126.1	0.55	0.49	59.9
6	R2	686	10.3	1.058	160.0	LOS F	37.1	282.3	1.00	1.17	23.3
Approach		2387	10.0	1.058	55.3	LOS D	37.1	282.3	0.64	0.70	40.9
North: Governor Macquarie Drive (N)											
7	L2	775	9.0	0.740	53.4	LOS D	23.9	180.2	0.96	0.86	40.0
8	T1	136	3.1	0.553	64.3	LOS E	8.9	63.9	0.99	0.80	27.0
9	R2	186	35.0	1.097	187.9	LOS F	22.4	204.1	1.00	1.30	16.5
Approach		1097	12.7	1.097	77.6	LOS F	23.9	204.1	0.97	0.93	32.3
West: Newbridge Road (W)											
10	L2	135	31.3	1.206	252.1	LOS F	154.7	1175.7	1.00	1.85	13.6
11	T1	2987	6.8	1.206	244.6	LOS F	159.4	1180.2	1.00	1.89	17.6
12	R2	5	20.0	0.043	32.9	LOS C	0.2	1.8	0.60	0.67	37.8
Approach		3127	7.8	1.206	244.6	LOS F	159.4	1180.2	1.00	1.89	17.5
All Vehicles		7553	8.4	1.239	161.1	LOS F	159.4	1180.2	0.88	1.33	22.5

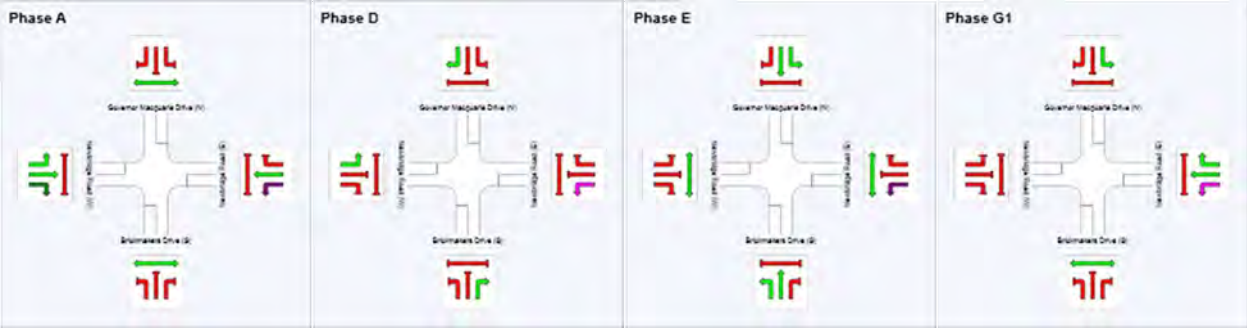
PHASING SUMMARY

Site: I-12 2030 BASE AM

Newbridge Road / Governor Macquarie Drive
2030 BASE AM PEAK 7:45 am - 8:45 am
Signals - Fixed Time Cycle Time = 140 seconds (User-Given Phase Times)

Phase Timing Results

Phase	A	D	E	G1
Reference Phase	Yes	No	No	No
Phase Change Time (sec)	0	66	88	112
Green Time (sec)	60	16	18	22
Yellow Time (sec)	4	4	4	4
All-Red Time (sec)	2	2	2	2
Phase Time (sec)	66	22	24	28
Phase Split	47 %	16 %	17 %	20 %



MOVEMENT SUMMARY

Site: I-12 2030 BASE PM

Newbridge Road / Governor Macquarie Drive
2030 BASE PM PEAK 4:30 pm - 5:30 pm
Signals - Fixed Time Cycle Time = 140 seconds (User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Brickmakers Drive (S)											
1	L2	11	0.0	0.554	70.4	LOS E	7.2	52.4	1.00	0.79	26.8
2	T1	97	5.4	0.554	66.3	LOS E	7.2	52.4	1.00	0.79	26.5
3	R2	271	0.8	0.641	70.4	LOS E	9.1	64.3	1.00	0.81	32.5
Approach		378	1.9	0.641	69.3	LOS E	9.1	64.3	1.00	0.81	31.0
East: Newbridge Road (E)											
4	L2	689	1.5	0.487	9.5	LOS A	8.3	59.1	0.29	0.70	57.0
5	T1	2751	4.4	0.923	30.0	LOS C	52.5	381.4	0.75	0.77	51.3
6	R2	752	11.2	1.142	229.6	LOS F	50.7	389.2	1.00	1.32	18.2
Approach		4192	5.2	1.142	62.4	LOS E	52.5	389.2	0.72	0.86	38.8
North: Governor Macquarie Drive (N)											
7	L2	586	3.6	0.429	46.0	LOS D	15.7	113.2	0.84	0.81	42.3
8	T1	311	0.7	1.031	128.1	LOS F	30.2	212.7	1.00	1.27	17.8
9	R2	242	19.1	1.147	226.2	LOS F	32.2	262.1	1.00	1.37	14.5
Approach		1139	6.1	1.147	106.7	LOS F	32.2	262.1	0.92	1.05	26.0
West: Newbridge Road (W)											
10	L2	177	16.7	0.857	45.7	LOS D	44.9	337.5	0.93	0.88	39.2
11	T1	2064	6.1	0.857	37.7	LOS C	45.6	336.0	0.91	0.86	47.9
12	R2	4	0.0	0.070	54.4	LOS D	0.2	1.7	0.80	0.69	30.3
Approach		2245	6.9	0.857	38.4	LOS C	45.6	337.5	0.91	0.86	47.2
All Vehicles		7954	5.6	1.147	62.3	LOS E	52.5	389.2	0.82	0.88	38.1

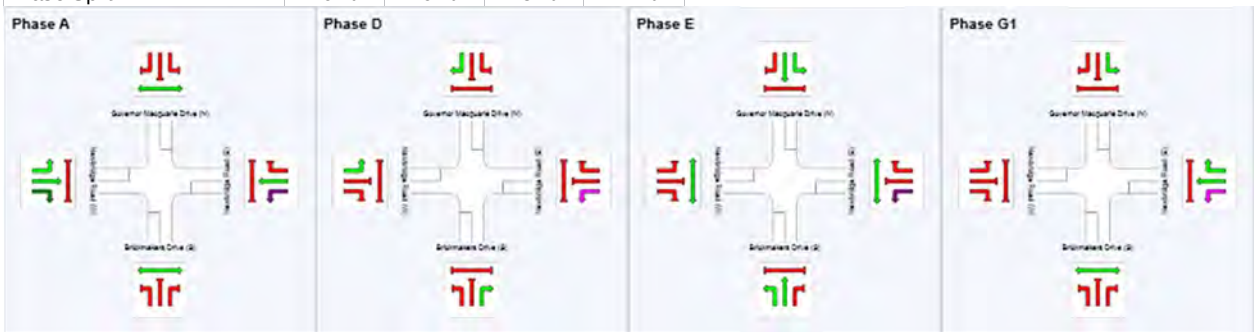
PHASING SUMMARY

Site: I-12 2030 BASE PM

Newbridge Road / Governor Macquarie Drive
2030 BASE PM PEAK 4:30 pm - 5:30 pm
Signals - Fixed Time Cycle Time = 140 seconds (User-Given Phase Times)

Phase Timing Results

Phase	A	D	E	G1
Reference Phase	Yes	No	No	No
Phase Change Time (sec)	0	64	86	107
Green Time (sec)	58	16	15	27
Yellow Time (sec)	4	4	4	4
All-Red Time (sec)	2	2	2	2
Phase Time (sec)	64	22	21	33
Phase Split	46 %	16 %	15 %	24 %



I-13 Intersection of Moorebank Avenue and M5 Motorway

MOVEMENT SUMMARY

Site: I-13 2030 BASE AM

Moorebank Avenue / the M5 Motorway
2030 BASE AM PEAK 7:45 am - 8:45 am
Signals - Fixed Time Cycle Time = 74 seconds (User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total	Demand Flows HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	95% Back of Queue Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Moorebank Avenue (S)											
1	L2	285	11.1	0.247	9.2	LOS A	3.3	25.1	0.42	0.66	50.3
2	T1	669	4.2	0.768	32.3	LOS C	12.4	89.9	0.99	0.92	37.9
3	R2	307	2.7	0.428	33.2	LOS C	5.4	38.8	0.90	0.79	36.8
Approach		1262	5.4	0.768	27.3	LOS B	12.4	89.9	0.84	0.83	39.8
East: M5 Motorway on&off ramp (E)											
4	L2	231	7.3	0.231	8.1	LOS A	1.8	13.1	0.39	0.66	51.5
6	R2	237	6.2	0.246	28.8	LOS C	3.4	25.1	0.82	0.76	40.4
Approach		467	6.8	0.246	18.6	LOS B	3.4	25.1	0.61	0.71	44.9
North: Moorebank Avenue (N)											
7	L2	52	49.0	0.051	7.7	LOS A	0.3	3.3	0.28	0.60	51.2
8	T1	192	12.6	0.231	25.6	LOS B	2.9	22.4	0.85	0.67	41.0
9	R2	458	26.2	0.782	38.1	LOS C	10.2	87.3	0.98	0.88	36.2
Approach		701	24.2	0.782	32.4	LOS C	10.2	87.3	0.89	0.80	38.2
West: M5 Motorway on&off ramp (W)											
10	L2	1736	8.2	0.989	9.4	LOS A	0.0	0.0	0.00	0.48	49.5
12	R2	384	4.1	0.394	29.9	LOS C	5.8	42.0	0.86	0.79	38.6
Approach		2120	7.4	0.989	13.1	LOS A	5.8	42.0	0.16	0.54	47.3
All Vehicles		4551	9.4	0.989	20.6	LOS B	12.4	89.9	0.51	0.68	43.3

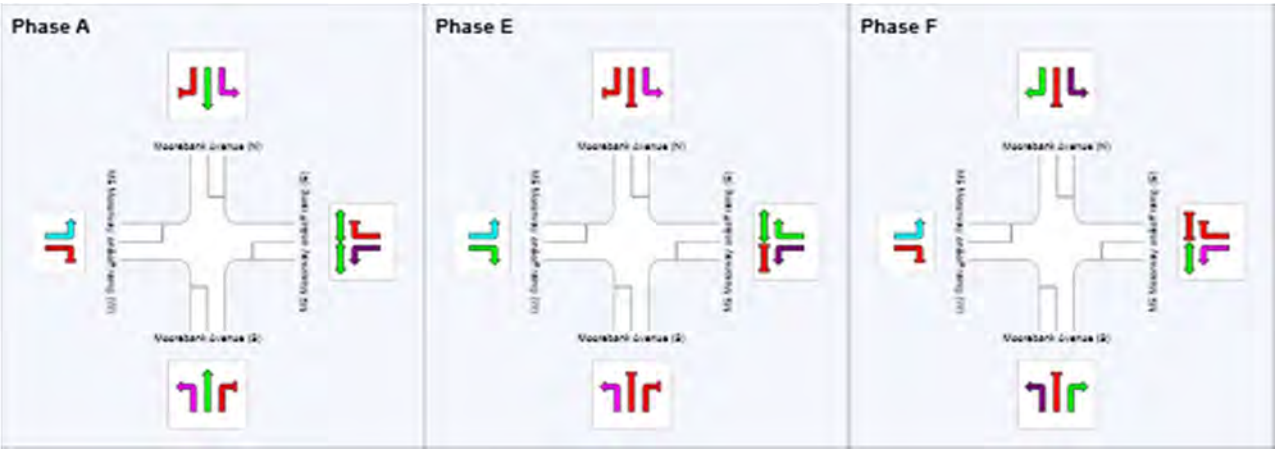
PHASING SUMMARY

Site: I-13 2030 BASE AM

Moorebank Avenue / the M5 Motorway
2030 BASE AM PEAK 7:45 am - 8:45 am
Signals - Fixed Time Cycle Time = 74 seconds (User-Given Phase Times)

Phase Timing Results

Phase	A	E	F
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	24	51
Green Time (sec)	17	20	16
Yellow Time (sec)	4	4	4
All-Red Time (sec)	3	3	3
Phase Time (sec)	24	27	23
Phase Split	32 %	36 %	31 %



MOVEMENT SUMMARY

Site: I-13 2030 BASE PM

Moorebank Avenue / the M5 Motorway
2030 BASE PM PEAK 4:30 pm - 5:30 pm
Signals - Fixed Time Cycle Time = 94 seconds (User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Moorebank Avenue (S)											
1	L2	306	3.1	0.396	19.7	LOS B	8.1	58.2	0.71	0.77	43.7
2	T1	180	7.6	0.650	49.6	LOS D	4.4	32.5	1.00	0.82	31.6
3	R2	298	2.1	0.247	28.0	LOS B	5.2	37.4	0.73	0.75	39.1
Approach		784	3.8	0.650	29.7	LOS C	8.1	58.2	0.78	0.77	38.6
East: M5 Motorway on&off ramp (E)											
4	L2	439	2.9	0.466	12.3	LOS A	7.2	51.3	0.55	0.74	48.4
6	R2	97	21.7	0.177	42.7	LOS D	2.0	16.2	0.89	0.73	34.9
Approach		536	6.3	0.466	17.8	LOS B	7.2	51.3	0.62	0.74	45.0
North: Moorebank Avenue (N)											
7	L2	140	6.8	0.111	6.9	LOS A	0.9	7.0	0.24	0.61	53.0
8	T1	726	3.6	0.779	39.2	LOS C	16.7	120.6	0.99	0.92	35.1
9	R2	1495	7.4	0.926	45.0	LOS D	35.4	263.7	1.00	1.07	34.1
Approach		2361	6.2	0.926	40.9	LOS C	35.4	263.7	0.95	1.00	35.2
West: M5 Motorway on&off ramp (W)											
10	L2	631	15.2	0.376	5.8	LOS A	0.0	0.0	0.00	0.52	54.3
12	R2	255	3.7	0.414	44.2	LOS D	5.4	38.8	0.94	0.78	33.1
Approach		885	11.9	0.414	16.9	LOS B	5.4	38.8	0.27	0.60	46.4
All Vehicles		4566	6.9	0.926	31.6	LOS C	35.4	263.7	0.75	0.85	38.5

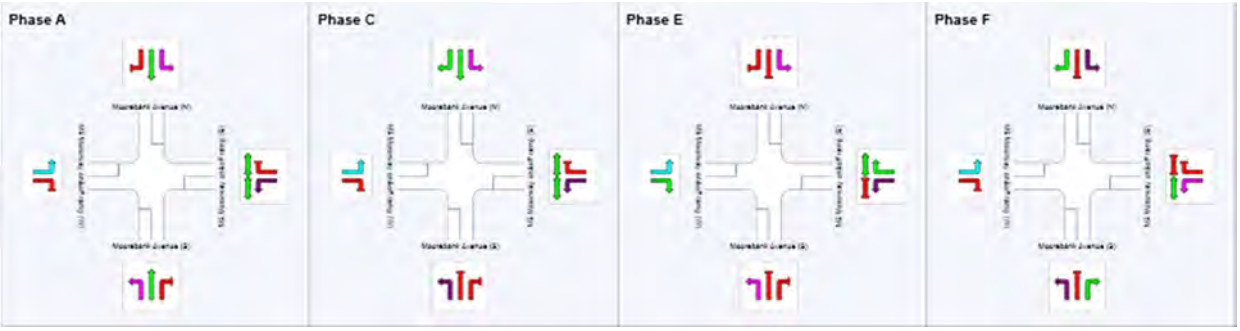
PHASING SUMMARY

Site: I-13 2030 BASE PM

Moorebank Avenue / the M5 Motorway
2030 BASE PM PEAK 4:30 pm - 5:30 pm
Signals - Fixed Time Cycle Time = 94 seconds (User-Given Phase Times)

Phase Timing Results

Phase	A	C	E	F
Reference Phase	Yes	No	No	No
Phase Change Time (sec)	0	14	30	53
Green Time (sec)	7	9	16	34
Yellow Time (sec)	4	4	4	4
All-Red Time (sec)	3	3	3	3
Phase Time (sec)	14	16	23	41
Phase Split	15 %	17 %	24 %	44 %



I-14 Intersection of M5 Motorway and Hume Highway

MOVEMENT SUMMARY

Site: I-14 2030 BASE AM

M5 Motorway / Hume Highway
2030 BASE AM PEAK 7:45 am - 8:45 am
Signals - Fixed Time Cycle Time = 159 seconds (User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Hume Highway (S)											
2	T1	4252	4.5	1.025	58.2	LOS E	151.4	1100.9	1.00	1.20	33.5
3	R2	640	4.1	0.881	42.9	LOS D	17.4	125.8	1.00	0.90	37.8
Approach		4892	4.5	1.025	56.2	LOS D	151.4	1100.9	1.00	1.16	34.1
East: M5 Motorway on&off-ramp (E)											
4	L2	340	6.5	0.135	30.6	LOS C	4.8	35.8	0.60	0.71	41.9
6	R2	1180	3.9	1.214	292.5	LOS F	64.9	469.4	1.00	1.43	8.6
Approach		1520	4.5	1.214	233.9	LOS F	64.9	469.4	0.91	1.27	11.3
North: Hume Highway (N)											
7	L2	699	5.9	0.530	12.1	LOS A	18.8	138.4	0.45	0.71	47.3
8	T1	1213	7.0	0.492	28.5	LOS C	17.9	132.8	0.62	0.55	43.3
Approach		1912	6.6	0.530	22.5	LOS B	18.8	138.4	0.56	0.61	44.3
All Vehicles		8323	5.0	1.214	80.9	LOS F	151.4	1100.9	0.88	1.06	27.4

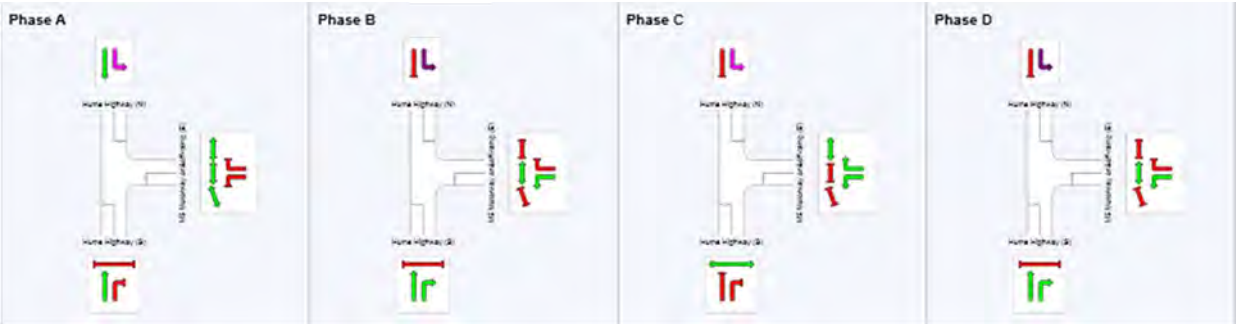
PHASING SUMMARY

Site: I-14 2030 BASE AM

M5 Motorway / Hume Highway
2030 BASE AM PEAK 7:45 am - 8:45 am
Signals - Fixed Time Cycle Time = 159 seconds (User-Given Phase Times)

Phase Timing Results

Phase	A	B	C	D
Reference Phase	No	No	No	Yes
Phase Change Time (sec)	20	97	123	0
Green Time (sec)	70	19	29	13
Yellow Time (sec)	4	4	4	4
All-Red Time (sec)	3	3	3	3
Phase Time (sec)	77	26	36	20
Phase Split	48 %	16 %	23 %	13 %



MOVEMENT SUMMARY

Site: I-14 2030 BASE PM

M5 Motorway / Hume Highway
2030 BASE PM PEAK 4:30 pm - 5:30 pm
Signals - Fixed Time Cycle Time = 159 seconds (User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Hume Highway (S)											
2	T1	2552	3.8	0.623	2.2	LOS A	7.0	50.8	0.12	0.11	58.3
3	R2	401	1.8	1.023	122.1	LOS F	20.4	145.1	1.00	1.07	22.6
Approach		2953	3.5	1.023	18.5	LOS B	20.4	145.1	0.24	0.24	48.0
East: M5 Motorway on&off-ramp (E)											
4	L2	1465	3.6	1.104	217.9	LOS F	88.9	641.3	1.00	1.28	15.1
6	R2	1175	3.6	1.152	240.1	LOS F	59.4	428.7	1.00	1.33	10.2
Approach		2640	3.6	1.152	227.8	LOS F	88.9	641.3	1.00	1.30	12.9
North: Hume Highway (N)											
7	L2	852	2.1	0.643	13.1	LOS A	26.5	189.0	0.56	0.78	46.8
8	T1	2844	2.7	0.889	23.0	LOS B	56.7	405.9	0.79	0.75	45.7
Approach		3696	2.6	0.889	20.8	LOS B	56.7	405.9	0.74	0.76	45.9
All Vehicles		9288	3.2	1.152	78.9	LOS F	88.9	641.3	0.65	0.75	27.8

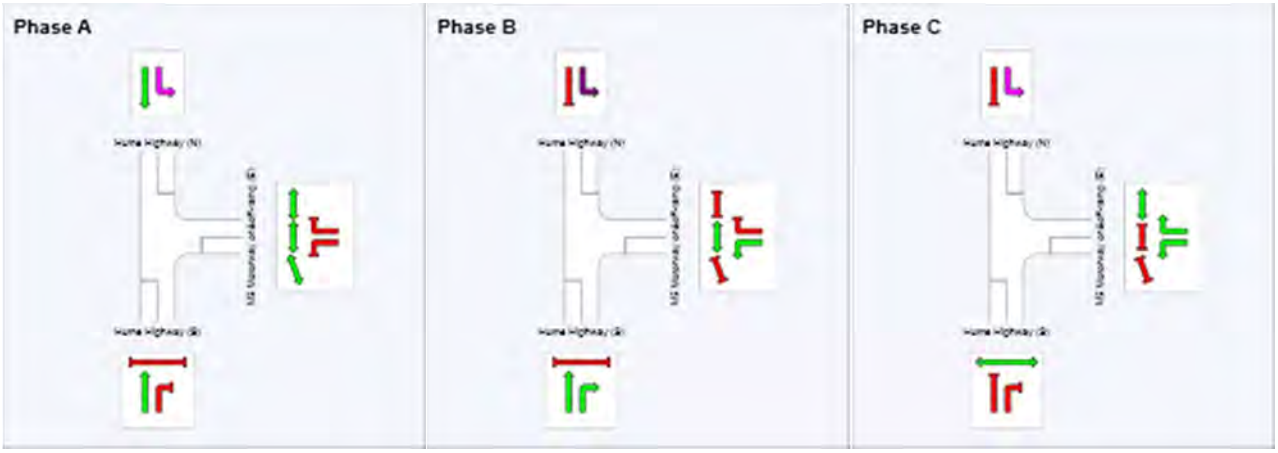
PHASING SUMMARY

Site: I-14 2030 BASE PM

M5 Motorway / Hume Highway
2030 BASE PM PEAK 4:30 pm - 5:30 pm
Signals - Fixed Time Cycle Time = 159 seconds (User-Given Phase Times)

Phase Timing Results

Phase	A	B	C
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	97	121
Green Time (sec)	90	17	31
Yellow Time (sec)	4	4	4
All-Red Time (sec)	3	3	3
Phase Time (sec)	97	24	38
Phase Split	61 %	15 %	24 %



I-15 Intersection of Cambridge Avenue and Canterbury Road

MOVEMENT SUMMARY

Site: I-15 2030 BASE AM

Canterbury Road / Cambridge Avenue / Glenfield Road
2030 BASE AM PEAK 7:45 am - 8:45 am
Roundabout

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Canterbury Road (S)											
1	L2	449	3.5	0.498	6.1	LOS A	3.1	22.6	0.61	0.70	52.9
2	T1	8	0.0	0.827	8.6	LOS A	11.9	84.6	0.86	0.89	50.3
3	R2	999	2.1	0.827	14.0	LOS A	11.9	84.6	0.86	0.89	50.4
Approach		1457	2.5	0.827	11.6	LOS A	11.9	84.6	0.78	0.83	51.0
East: Cambridge Avenue (E)											
4	L2	307	3.1	0.163	3.5	LOS A	0.0	0.0	0.00	0.43	56.5
5	T1	81	7.8	0.088	5.5	LOS A	0.5	3.9	0.56	0.59	53.2
6	R2	54	9.8	0.088	10.7	LOS A	0.5	3.9	0.57	0.61	53.5
Approach		442	4.8	0.163	4.7	LOS A	0.5	3.9	0.17	0.48	55.5
North: Railway Parade (N)											
7	L2	319	3.0	0.747	33.0	LOS C	8.5	60.8	1.00	1.30	38.7
8	T1	4	25.0	0.613	28.7	LOS C	4.7	35.6	0.97	1.16	39.7
9	R2	181	8.7	0.613	34.0	LOS C	4.7	35.6	0.97	1.16	37.9
Approach		504	5.2	0.747	33.3	LOS C	8.5	60.8	0.99	1.25	38.5
West: Glenfield Road (W)											
10	L2	395	5.3	1.135	105.8	LOS F	39.1	287.1	1.00	2.26	20.0
11	T1	200	6.8	1.135	106.6	LOS F	39.1	287.1	1.00	2.21	20.1
12	R2	363	5.8	1.135	113.8	LOS F	32.6	239.6	1.00	2.12	19.9
Approach		958	5.8	1.135	109.0	LOS F	39.1	287.1	1.00	2.20	20.0
All Vehicles		3361	4.2	1.135	41.7	LOS C	39.1	287.1	0.80	1.24	35.2

MOVEMENT SUMMARY

Site: I-15 2030 BASE PM

Canterbury Road / Cambridge Avenue / Glenfield Road
2030 BASE PM PEAK 4:30 pm - 5:30 pm
Roundabout

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Canterbury Road (S)											
1	L2	338	2.2	0.467	8.7	LOS A	3.0	21.3	0.78	0.92	51.1
2	T1	6	0.0	0.399	7.1	LOS A	2.4	17.2	0.75	0.90	51.3
3	R2	334	1.3	0.399	12.5	LOS A	2.4	17.2	0.75	0.90	51.4
Approach		678	1.7	0.467	10.6	LOS A	3.0	21.3	0.77	0.91	51.3
East: Cambridge Avenue (E)											
4	L2	1111	2.3	0.586	3.6	LOS A	0.0	0.0	0.00	0.43	56.3
5	T1	291	8.0	0.444	7.2	LOS A	3.5	24.8	0.75	0.75	52.0
6	R2	323	1.0	0.444	12.3	LOS A	3.5	24.8	0.80	0.78	52.3
Approach		1724	3.0	0.586	5.8	LOS A	3.5	24.8	0.28	0.55	54.8
North: Railway Parade (N)											
7	L2	125	1.7	0.191	7.9	LOS A	1.0	6.8	0.69	0.80	52.8
8	T1	0	0.0	0.000	0.0	NA	0.0	0.0	0.00	0.00	0.0
9	R2	240	8.3	0.294	12.7	LOS A	1.7	12.6	0.72	0.86	50.0
Approach		365	6.1	0.294	11.0	LOS A	1.7	12.6	0.71	0.84	51.0
West: Glenfield Road (W)											
10	L2	271	4.7	0.425	8.4	LOS A	2.8	19.9	0.75	0.84	51.3
11	T1	54	0.0	0.425	8.3	LOS A	2.8	19.9	0.75	0.84	53.2
12	R2	451	3.7	0.495	13.6	LOS A	3.8	27.5	0.78	0.90	49.5
Approach		775	3.8	0.495	11.4	LOS A	3.8	27.5	0.77	0.87	50.3
All Vehicles		3542	3.2	0.586	8.5	LOS A	3.8	27.5	0.52	0.72	52.7

4. On the wider road network – 2030 Future traffic with Moorebank IMT development (Full Build)

I-01 Intersection of the Hume Highway and Orange Grove Road

MOVEMENT SUMMARY

Site: I-01 2030 MIMT AM

Hume Highway / Orange Grove Road
2030 MIMT AM PEAK 7:45 am - 8:45 am
Signals - Fixed Time Cycle Time = 150 seconds (User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	v/c	sec		veh	m		per veh	km/h
NorthEast: Hume Highway (NE)											
25	T1	956	11.2	0.686	24.2	LOS B	19.7	150.8	0.84	0.77	35.8
26	R2	389	10.0	0.907	86.6	LOS F	17.0	128.8	1.00	0.94	23.8
Approach		1346	10.9	0.907	42.3	LOS C	19.7	150.8	0.89	0.82	30.0
NorthWest: Orange Grove Road (NW)											
27	L2	602	6.5	0.712	18.8	LOS B	19.5	144.4	0.54	0.81	44.8
29	R2	1342	8.5	1.000	116.3	LOS F	46.3	352.8	1.00	1.07	17.3
Approach		1945	7.9	1.052	86.1	LOS F	46.3	352.8	0.86	0.99	21.9
SouthWest: Hume Highway (SW)											
30	L2	1280	8.6	0.461	11.7	LOS A	14.5	110.3	0.34	0.70	50.1
31	T1	2186	4.9	0.805	22.9	LOS B	39.5	287.9	0.71	0.65	40.2
Approach		3466	6.3	0.805	18.7	LOS B	39.5	287.9	0.57	0.67	44.0
All Vehicles		6757	7.6	1.052	42.8	LOS D	46.3	352.8	0.72	0.79	30.8

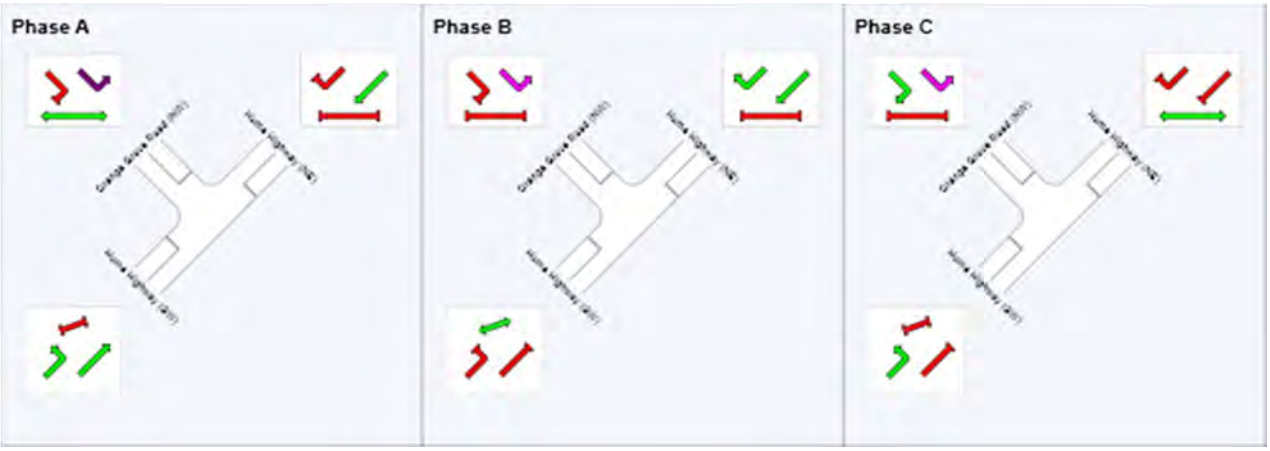
PHASING SUMMARY

Site: I-01 2030 MIMT AM

Hume Highway / Orange Grove Road
2030 MIMT AM PEAK 7:45 am - 8:45 am
Signals - Fixed Time Cycle Time = 150 seconds (User-Given Phase Times)

Phase Timing Results

Phase	A	B	C
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	84	108
Green Time (sec)	77	17	36
Yellow Time (sec)	5	4	5
All-Red Time (sec)	2	2	2
Phase Time (sec)	84	23	43
Phase Split	56 %	15 %	29 %



MOVEMENT SUMMARY

Site: I-01 2030 MIMT PM

Hume Highway / Orange Grove Road
2030 MIMT PM PEAK 4:30 pm - 5:30 pm
Signals - Fixed Time Cycle Time = 150 seconds (User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	v/c	sec		veh	m		per veh	km/h
NorthEast: Hume Highway (NE)											
25	T1	1766	3.5	0.922	45.3	LOS D	50.7	365.8	0.91	0.98	26.5
26	R2	816	2.8	0.958	68.1	LOS E	24.7	176.9	1.00	1.04	27.6
Approach		2582	3.3	0.958	52.5	LOS D	50.7	365.8	0.94	1.00	27.0
NorthWest: Orange Grove Road (NW)											
27	L2	391	4.3	0.366	12.4	LOS A	6.7	48.7	0.27	0.64	49.3
29	R2	1387	5.1	1.087	151.4	LOS F	59.4	440.3	1.00	1.18	14.3
Approach		1777	4.9	1.087	120.9	LOS F	59.4	440.3	0.84	1.06	17.3
SouthWest: Hume Highway (SW)											
30	L2	1308	5.0	0.780	19.7	LOS B	20.6	152.9	0.80	0.84	44.7
31	T1	1091	5.5	0.982	90.8	LOS F	38.5	282.8	1.00	1.14	17.7
Approach		2399	5.2	0.982	52.0	LOS D	38.5	282.8	0.89	0.98	28.1
All Vehicles		6758	4.4	1.087	70.3	LOS E	59.4	440.3	0.90	1.01	23.4

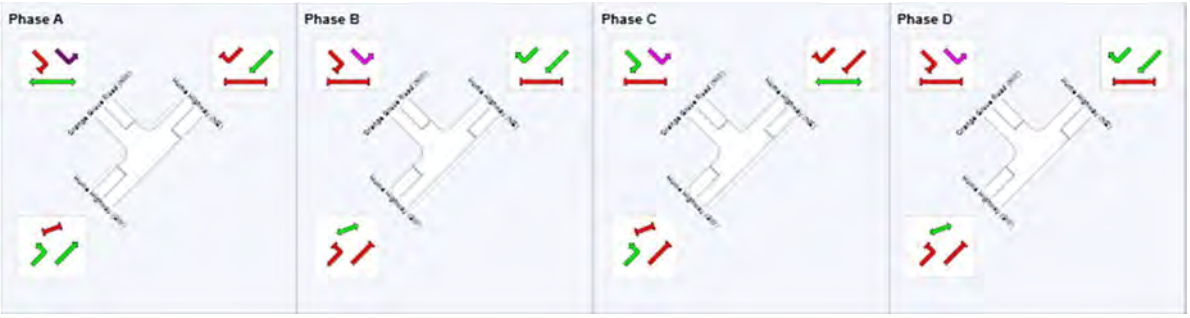
PHASING SUMMARY

Site: I-01 2030 MIMT PM

Hume Highway / Orange Grove Road
2030 MIMT PM PEAK 4:30 pm - 5:30 pm
Signals - Fixed Time Cycle Time = 150 seconds (User-Given Phase Times)

Phase Timing Results

Phase	A	B	C	D
Reference Phase	Yes	No	No	No
Phase Change Time (sec)	0	53	80	124
Green Time (sec)	47	20	38	19
Yellow Time (sec)	5	4	5	4
All-Red Time (sec)	2	2	2	2
Phase Time (sec)	54	26	45	25
Phase Split	36 %	17 %	30 %	17 %



I-02 Intersection of the Hume Highway and Elizabeth Drive

MOVEMENT SUMMARY

Site: I-02 2030 MIMT AM

Hume Highway / Elizabeth Drive
2030 MIMT AM PEAK 7:45 am - 8:45 am
Signals - Fixed Time Cycle Time = 150 seconds (User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Hume Highway (S)											
1	L2	137	5.4	0.155	22.6	LOS B	3.7	27.3	0.40	0.68	36.5
2	T1	2384	7.6	0.968	67.4	LOS E	71.2	534.9	0.99	1.07	18.5
Approach		2521	7.4	0.988	65.0	LOS E	71.2	534.9	0.95	1.05	19.1
East: Elizabeth Drive (E)											
4	L2	39	5.4	0.426	59.6	LOS E	10.5	77.4	0.91	0.82	18.6
5	T1	502	5.7	0.426	55.8	LOS D	11.9	87.2	0.90	0.82	23.7
6	R2	156	2.7	0.754	78.2	LOS F	11.7	83.5	1.00	0.87	14.8
Approach		697	5.0	0.754	61.0	LOS E	11.9	87.2	0.92	0.83	21.1
North: Hume Highway (N)											
7	L2	82	2.6	0.645	25.8	LOS B	23.8	181.6	0.60	0.58	31.6
8	T1	1749	10.1	0.645	19.7	LOS B	24.1	185.8	0.59	0.55	36.0
9	R2	353	9.6	1.170	248.6	LOS F	25.1	189.8	1.00	1.38	7.6
Approach		2184	9.8	1.170	56.9	LOS E	25.1	189.8	0.66	0.68	21.1
West: Elizabeth Drive (W)											
10	L2	627	5.2	1.011	108.6	LOS F	62.6	457.9	1.00	1.06	14.6
11	T1	1089	3.0	1.050	135.4	LOS F	59.4	426.7	1.00	1.34	11.9
12	R2	515	7.0	1.126	374.7	LOS F	60.4	450.4	1.00	1.59	5.3
Approach		2232	4.5	1.126	183.1	LOS F	62.6	457.9	1.00	1.32	9.6
All Vehicles		7634	7.0	1.170	96.8	LOS F	71.2	534.9	0.88	1.01	14.9

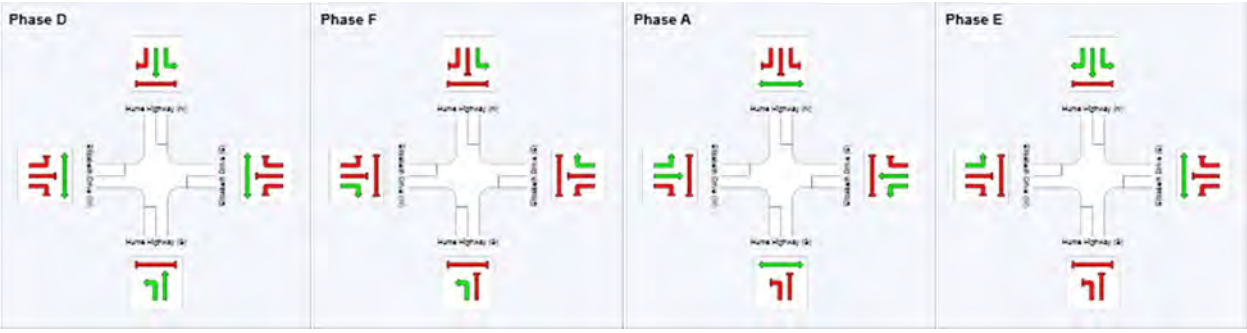
PHASING SUMMARY

Site: I-02 2030 MIMT AM

Hume Highway / Elizabeth Drive
2030 MIMT AM PEAK 7:45 am - 8:45 am
Signals - Fixed Time Cycle Time = 150 seconds (User-Given Phase Times)

Phase Timing Results

Phase	D	F	A	E
Reference Phase	Yes	No	No	No
Phase Change Time (sec)	0	66	89	131
Green Time (sec)	60	17	36	13
Yellow Time (sec)	4	4	4	4
All-Red Time (sec)	2	2	2	2
Phase Time (sec)	66	23	42	19
Phase Split	44 %	15 %	28 %	13 %



MOVEMENT SUMMARY

Site: I-02 2030 MIMT PM

Hume Highway / Elizabeth Drive
2030 MIMT PM PEAK 4:30 pm - 5:30 pm
Signals - Fixed Time Cycle Time = 150 seconds (User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Hume Highway (S)											
1	L2	320	5.4	0.473	39.8	LOS C	15.0	110.9	0.69	0.78	28.3
2	T1	1533	6.7	0.924	66.5	LOS E	42.8	321.2	0.98	1.01	18.7
Approach		1853	6.5	0.924	61.9	LOS E	42.8	321.2	0.93	0.97	20.0
East: Elizabeth Drive (E)											
4	L2	128	0.8	0.984	107.9	LOS F	33.6	239.2	1.00	1.16	12.0
5	T1	1082	2.3	0.984	104.0	LOS F	42.8	305.9	1.00	1.19	15.2
6	R2	172	0.0	1.066	165.1	LOS F	19.6	137.4	1.00	1.29	8.2
Approach		1382	1.9	1.066	112.0	LOS F	42.8	305.9	1.00	1.20	13.7
North: Hume Highway (N)											
7	L2	66	4.8	0.876	25.9	LOS B	43.9	321.2	0.74	0.73	31.8
8	T1	2477	4.2	0.876	20.0	LOS B	44.6	326.5	0.74	0.72	35.9
9	R2	961	3.0	0.917	76.9	LOS F	37.9	271.9	1.00	0.96	19.4
Approach		3504	3.8	0.917	35.7	LOS C	44.6	326.5	0.81	0.78	28.3
West: Elizabeth Drive (W)											
10	L2	325	5.8	0.434	34.2	LOS C	13.6	100.2	0.62	0.76	29.6
11	T1	529	4.4	0.698	61.8	LOS E	17.6	127.6	0.96	0.82	20.9
12	R2	309	2.4	0.978	112.9	LOS F	14.4	102.8	1.00	1.08	14.6
Approach		1164	4.2	0.978	67.6	LOS E	17.6	127.6	0.88	0.87	20.2
All Vehicles		7903	4.2	1.066	59.9	LOS E	44.6	326.5	0.88	0.91	21.0

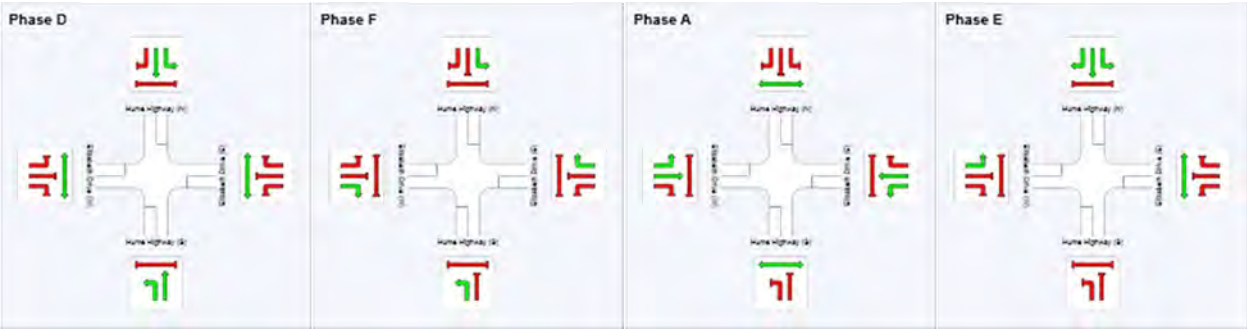
PHASING SUMMARY

Site: I-02 2030 MIMT PM

Hume Highway / Elizabeth Drive
2030 MIMT PM PEAK 4:30 pm - 5:30 pm
Signals - Fixed Time Cycle Time = 150 seconds (User-Given Phase Times)

Phase Timing Results

Phase	D	F	A	E
Reference Phase	Yes	No	No	No
Phase Change Time (sec)	0	53	72	108
Green Time (sec)	47	13	30	36
Yellow Time (sec)	4	4	4	4
All-Red Time (sec)	2	2	2	2
Phase Time (sec)	53	19	36	42
Phase Split	35 %	13 %	24 %	28 %



I-03 Intersection of the Hume Highway and Memorial Avenue

MOVEMENT SUMMARY

Site: I-03 2030 MIMT AM

Hume Highway / Memorial Avenue
2030 MIMT AM PEAK 7:45 am - 8:45 am
Signals - Fixed Time Cycle Time = 150 seconds (User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Hume Highway (S)											
1	L2	157	1.3	0.975	75.2	LOS F	72.7	543.0	1.00	1.10	25.5
2	T1	2128	8.3	0.975	67.0	LOS E	73.9	559.0	0.94	1.06	23.6
3	R2	267	0.0	1.137	222.0	LOS F	36.2	253.5	1.00	1.30	9.4
Approach		2553	7.0	1.137	83.7	LOS F	73.9	559.0	0.95	1.09	20.6
East: Memorial Avenue (E)											
4	L2	29	28.6	1.264	333.5	LOS F	29.0	222.7	1.00	1.72	6.7
5	T1	164	7.7	1.264	328.8	LOS F	29.0	222.7	1.00	1.71	6.6
6	R2	134	18.1	1.264	333.8	LOS F	26.0	208.4	1.00	1.69	4.7
Approach		327	13.8	1.264	331.2	LOS F	29.0	222.7	1.00	1.71	5.8
North: Hume Highway (N)											
7	L2	121	6.1	0.103	12.4	LOS A	2.6	19.4	0.36	0.64	39.4
8	T1	1756	12.8	0.756	28.5	LOS B	32.4	254.3	0.74	0.67	36.3
9	R2	101	3.1	0.439	72.0	LOS F	7.0	50.1	0.97	0.79	21.4
Approach		1978	11.9	0.756	29.7	LOS C	32.4	254.3	0.73	0.68	35.1
West: Memorial Avenue (W)											
10	L2	128	3.3	1.179	239.8	LOS F	47.4	337.9	1.00	1.57	9.0
11	T1	460	1.6	1.179	242.8	LOS F	59.1	421.5	1.00	1.62	8.5
12	R2	164	3.2	1.179	254.5	LOS F	59.1	421.5	1.00	1.68	10.9
Approach		752	2.2	1.179	244.8	LOS F	59.1	421.5	1.00	1.62	9.1
All Vehicles		5610	8.5	1.264	100.7	LOS F	73.9	559.0	0.88	1.05	17.8

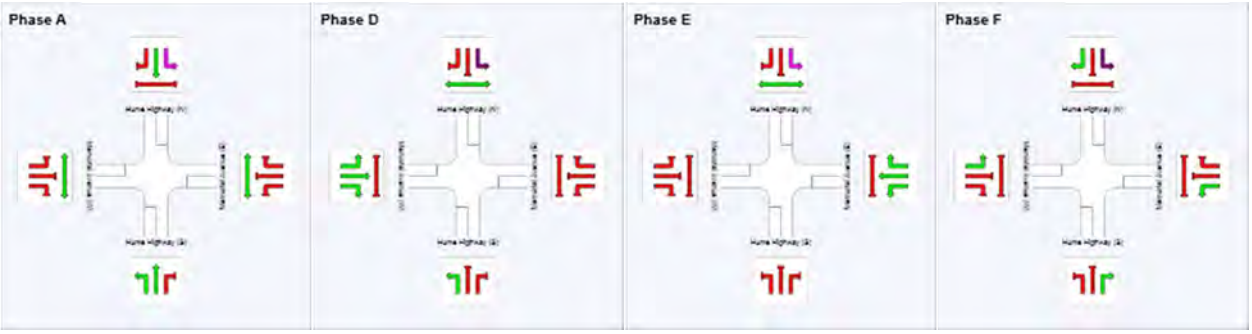
PHASING SUMMARY

Site: I-03 2030 MIMT AM

Hume Highway / Memorial Avenue
2030 MIMT AM PEAK 7:45 am - 8:45 am
Signals - Fixed Time Cycle Time = 150 seconds (User-Given Phase Times)

Phase Timing Results

Phase	A	D	E	F
Reference Phase	Yes	No	No	No
Phase Change Time (sec)	0	75	108	125
Green Time (sec)	69	27	11	19
Yellow Time (sec)	4	4	4	4
All-Red Time (sec)	2	2	2	2
Phase Time (sec)	75	33	17	25
Phase Split	50 %	22 %	11 %	17 %



MOVEMENT SUMMARY

Site: I-03 2030 MIMT PM

Hume Highway / Memorial Avenue
2030 MIMT PM PEAK 4:30 pm - 5:30 pm
Signals - Fixed Time Cycle Time = 150 seconds (User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Hume Highway (S)											
1	L2	119	0.9	0.822	47.2	LOS D	36.9	274.1	0.91	0.86	32.2
2	T1	1639	7.2	0.822	39.2	LOS C	37.6	283.2	0.87	0.81	31.5
3	R2	116	0.0	0.779	84.5	LOS F	8.9	62.5	1.00	0.87	19.4
Approach		1874	6.4	0.822	42.5	LOS D	37.6	283.2	0.88	0.82	30.4
East: Memorial Avenue (E)											
4	L2	55	0.0	1.228	299.2	LOS F	46.0	326.8	1.00	1.82	7.4
5	T1	289	2.2	1.228	294.7	LOS F	46.0	326.8	1.00	1.79	7.2
6	R2	211	6.0	1.228	299.7	LOS F	42.5	310.9	1.00	1.68	5.2
Approach		555	3.4	1.228	297.1	LOS F	46.0	326.8	1.00	1.75	6.5
North: Hume Highway (N)											
7	L2	152	2.8	0.090	8.4	LOS A	2.0	14.7	0.24	0.61	43.5
8	T1	2958	3.8	0.939	20.9	LOS B	65.2	474.9	0.69	0.69	40.6
9	R2	214	2.0	0.729	42.6	LOS D	9.2	65.3	1.00	0.83	28.2
Approach		3323	3.7	0.939	21.7	LOS B	65.2	474.9	0.69	0.70	39.5
West: Memorial Avenue (W)											
10	L2	82	1.3	0.947	94.0	LOS F	17.8	125.8	1.00	1.14	18.3
11	T1	209	1.0	0.947	90.9	LOS F	22.1	155.1	1.00	1.12	17.5
12	R2	171	0.0	0.947	98.0	LOS F	22.1	155.1	1.00	1.09	21.4
Approach		462	0.7	0.947	94.1	LOS F	22.1	155.1	1.00	1.11	19.2
All Vehicles		6214	4.2	1.228	57.9	LOS E	65.2	474.9	0.80	0.86	25.2

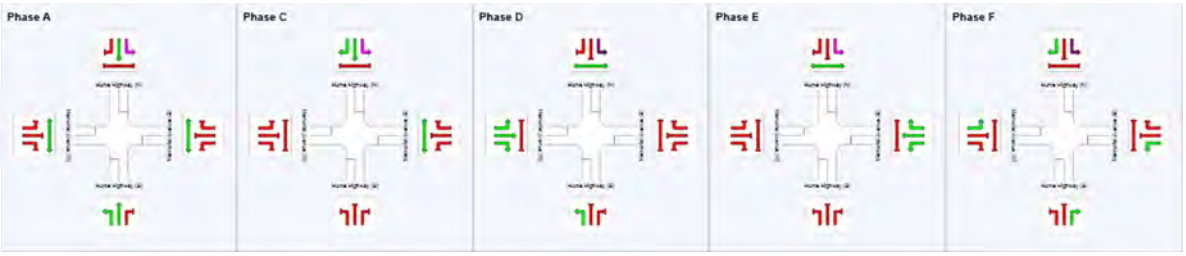
PHASING SUMMARY

Site: I-03 2030 MIMT PM

Hume Highway / Memorial Avenue
2030 MIMT PM PEAK 4:30 pm - 5:30 pm
Signals - Fixed Time Cycle Time = 150 seconds (User-Given Phase Times)

Phase Timing Results

Phase	A	C	D	E	F
Reference Phase	Yes	No	No	No	No
Phase Change Time (sec)	0	67	81	108	132
Green Time (sec)	61	8	21	18	12
Yellow Time (sec)	4	4	4	4	4
All-Red Time (sec)	2	2	2	2	2
Phase Time (sec)	67	14	27	24	18
Phase Split	45 %	9 %	18 %	16 %	12 %



I-04 Intersection of the Hume Highway and Hoxton Park Drive

MOVEMENT SUMMARY

Site: I-04 2030 MIMT AM

Hume Highway / Hoxton Park Road / Macquarie Street
2030 MIMT AM PEAK 7:45 am - 8:45 am
Signals - Fixed Time Cycle Time = 150 seconds (User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Hume Highway (S)											
1	L2	109	12.7	0.096	8.8	LOS A	0.9	7.2	0.13	0.57	50.6
2	T1	2153	6.3	0.847	31.0	LOS C	43.8	326.0	0.83	0.77	38.1
3	R2	1213	1.9	1.079	138.0	LOS F	52.5	373.6	1.00	1.22	13.8
Approach		3474	4.9	1.079	67.7	LOS E	52.5	373.6	0.87	0.92	25.3
East: Macquarie Street (E)											
4	L2	361	5.8	0.230	21.3	LOS B	5.5	40.4	0.66	0.73	39.0
5	T1	545	4.6	1.080	170.2	LOS F	32.6	237.6	1.00	1.38	13.2
Approach		906	5.1	1.080	110.9	LOS F	32.6	237.6	0.86	1.12	17.4
North: Hume Highway (N)											
7	L2	236	15.6	1.004	61.0	LOS E	47.8	373.0	1.00	1.05	25.9
8	T1	1468	10.0	1.004	94.7	LOS F	58.7	452.7	1.00	1.16	21.7
9	R2	246	19.2	1.257	327.7	LOS F	41.2	336.2	1.00	1.59	9.2
Approach		1950	11.9	1.257	120.1	LOS F	58.7	452.7	1.00	1.20	18.5
West: Hoxton Park Road (W)											
10	L2	345	18.0	0.583	47.3	LOS D	20.3	164.2	0.87	0.83	32.5
11	T1	1372	4.8	1.131	228.0	LOS F	69.0	502.7	1.00	1.64	10.4
12	R2	390	4.6	1.138	175.3	LOS F	28.7	209.7	1.00	1.24	14.4
Approach		2107	6.9	1.138	188.6	LOS F	69.0	502.7	0.98	1.44	12.8
All Vehicles		8437	7.1	1.257	114.6	LOS F	69.0	502.7	0.92	1.14	18.3

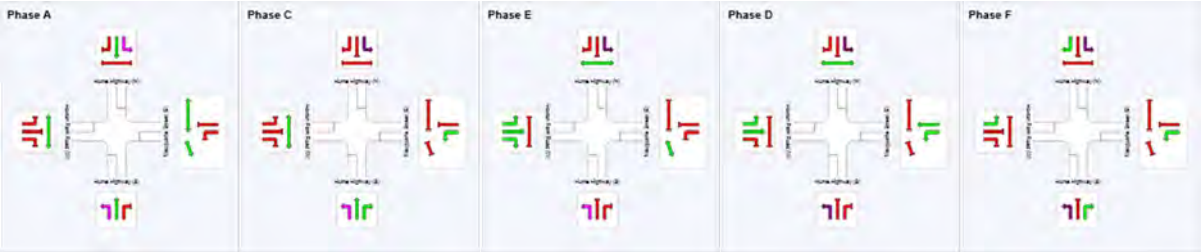
PHASING SUMMARY

Site: I-04 2030 MIMT AM

Hume Highway / Hoxton Park Road / Macquarie Street
2030 MIMT AM PEAK 7:45 am - 8:45 am
Signals - Fixed Time Cycle Time = 150 seconds (User-Given Phase Times)

Phase Timing Results

Phase	A	C	E	D	F
Reference Phase	Yes	No	No	No	No
Phase Change Time (sec)	0	49	77	100	126
Green Time (sec)	43	22	17	20	18
Yellow Time (sec)	4	4	4	4	4
All-Red Time (sec)	2	2	2	2	2
Phase Time (sec)	49	28	23	26	24
Phase Split	33 %	19 %	15 %	17 %	16 %



MOVEMENT SUMMARY

Site: I-04 2030 MIMT PM

Hume Highway / Hoxton Park Road / Macquarie Street
2030 MIMT PM PEAK 4:30 pm - 5:30 pm
Signals - Fixed Time Cycle Time = 150 seconds (User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Hume Highway (S)											
1	L2	199	6.7	0.170	9.6	LOS A	2.0	15.3	0.16	0.59	50.2
2	T1	1592	7.2	0.639	24.1	LOS B	24.9	187.5	0.64	0.57	41.5
3	R2	448	1.2	0.934	95.5	LOS F	19.1	135.2	1.00	1.00	18.1
Approach		2240	6.0	0.934	37.1	LOS C	24.9	187.5	0.67	0.66	34.8
East: Macquarie Street (E)											
4	L2	785	1.5	1.024	163.1	LOS F	39.7	281.3	0.98	1.11	12.1
5	T1	706	3.3	1.087	167.6	LOS F	41.8	300.7	1.00	1.39	13.3
Approach		1492	2.3	1.087	165.2	LOS F	41.8	300.7	0.99	1.24	12.7
North: Hume Highway (N)											
7	L2	101	5.2	0.967	36.9	LOS C	77.7	565.2	0.95	1.01	34.8
8	T1	2841	3.6	0.967	32.1	LOS C	78.9	574.2	0.84	0.89	37.6
9	R2	283	6.3	1.406	459.4	LOS F	56.5	417.3	1.00	1.82	6.9
Approach		3225	3.9	1.406	69.7	LOS E	78.9	574.2	0.85	0.98	26.2
West: Hoxton Park Road (W)											
10	L2	252	4.2	0.395	44.4	LOS D	13.7	99.2	0.80	0.80	33.6
11	T1	717	4.3	0.439	46.6	LOS D	14.2	102.8	0.87	0.73	30.4
12	R2	388	3.6	1.262	259.3	LOS F	35.2	256.7	1.00	1.43	10.5
Approach		1356	4.1	1.262	107.0	LOS F	35.2	256.7	0.89	0.94	19.6
All Vehicles		8312	4.2	1.406	84.2	LOS F	78.9	574.2	0.83	0.93	22.7

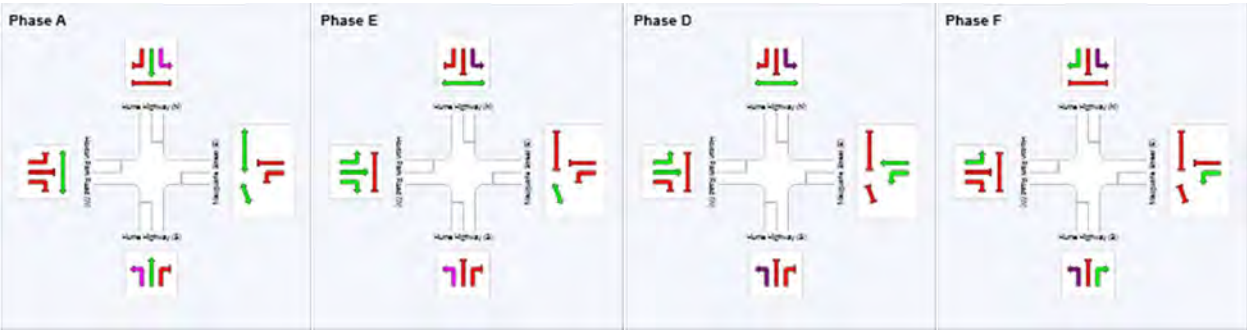
PHASING SUMMARY

Site: I-04 2030 MIMT PM

Hume Highway / Hoxton Park Road / Macquarie Street
2030 MIMT PM PEAK 4:30 pm - 5:30 pm
Signals - Fixed Time Cycle Time = 150 seconds (User-Given Phase Times)

Phase Timing Results

Phase	A	E	D	F
Reference Phase	Yes	No	No	No
Phase Change Time (sec)	0	78	98	127
Green Time (sec)	72	14	23	17
Yellow Time (sec)	4	4	4	4
All-Red Time (sec)	2	2	2	2
Phase Time (sec)	78	20	29	23
Phase Split	52 %	13 %	19 %	15 %



I-05 Intersection of the Hume Highway and Reilly Street

MOVEMENT SUMMARY

Site: I-05 2030 MIMT AM

Hume Highway / Reilly Street
2030 MIMT AM PEAK 7:45 am - 8:45 am
Signals - Fixed Time Cycle Time = 150 seconds (User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Hume Hignway (S)											
1	L2	80	2.6	0.942	33.9	LOS C	73.7	538.9	0.86	0.88	35.3
2	T1	3174	4.5	0.942	27.7	LOS B	73.7	538.9	0.79	0.82	34.9
3	R2	14	7.7	0.108	23.7	LOS B	0.5	3.7	0.50	0.67	36.5
Approach		3267	4.5	0.942	27.8	LOS B	73.7	538.9	0.79	0.82	34.9
East: Congressional Drive (E)											
4	L2	49	2.1	0.263	59.1	LOS E	5.9	42.6	0.89	0.74	24.5
5	T1	46	4.5	0.263	54.5	LOS D	5.9	42.6	0.89	0.74	24.0
6	R2	91	4.7	0.428	67.2	LOS E	6.1	44.6	0.95	0.79	18.7
Approach		186	4.0	0.428	61.9	LOS E	6.1	44.6	0.92	0.76	21.6
North: Hume Hignway (N)											
7	L2	32	3.3	0.560	18.0	LOS B	21.9	167.2	0.53	0.57	39.3
8	T1	1856	9.1	0.560	11.1	LOS A	25.1	191.8	0.50	0.49	46.5
9	R2	99	1.1	0.772	60.4	LOS E	6.1	43.2	1.00	0.93	22.5
Approach		1986	8.6	0.772	13.7	LOS A	25.1	191.8	0.53	0.51	44.0
West: Reilly Street (W)											
10	L2	120	3.5	0.274	50.3	LOS D	7.6	55.2	0.83	0.76	24.5
11	T1	14	7.7	0.274	45.7	LOS D	7.6	55.2	0.83	0.76	25.6
12	R2	234	1.3	1.028	147.6	LOS F	25.7	182.2	1.00	1.21	14.7
Approach		368	2.3	1.028	112.1	LOS F	25.7	182.2	0.94	1.04	16.8
All Vehicles		5808	5.7	1.028	29.4	LOS C	73.7	538.9	0.71	0.73	33.9

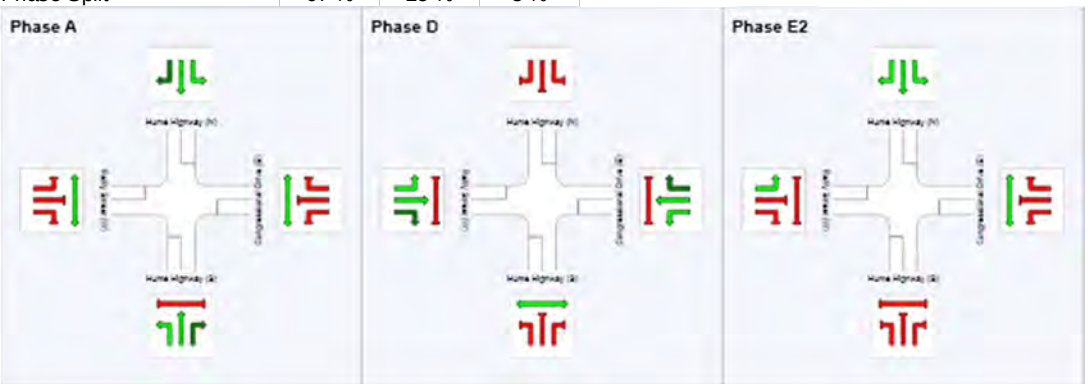
PHASING SUMMARY

Site: I-05 2030 MIMT AM

Hume Highway / Reilly Street
2030 MIMT AM PEAK 7:45 am - 8:45 am
Signals - Fixed Time Cycle Time = 150 seconds (User-Given Phase Times)

Phase Timing Results

Phase	A	D	E2
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	100	138
Green Time (sec)	94	32	6
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	100	38	12
Phase Split	67 %	25 %	8 %



MOVEMENT SUMMARY

Site: I-05 2030 MIMT PM

Hume Highway / Reilly Street
2030 MIMT PM PEAK 4:30 pm - 5:30 pm
Signals - Fixed Time Cycle Time = 150 seconds (User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Hume Hignway (S)											
1	L2	224	0.5	0.670	19.8	LOS B	26.3	193.0	0.53	0.57	41.8
2	T1	2053	6.2	0.670	11.7	LOS A	26.3	193.0	0.46	0.45	45.6
3	R2	21	5.0	0.392	30.4	LOS C	1.0	7.5	0.62	0.73	33.4
Approach		2298	5.7	0.670	12.7	LOS A	26.3	193.0	0.47	0.46	45.0
East: Congressional Drive (E)											
4	L2	42	2.5	0.205	61.9	LOS E	4.2	29.6	0.90	0.73	23.8
5	T1	24	0.0	0.205	57.3	LOS E	4.2	29.6	0.90	0.73	23.3
6	R2	52	0.0	0.236	65.6	LOS E	3.4	23.6	0.92	0.75	19.1
Approach		118	0.9	0.236	62.6	LOS E	4.2	29.6	0.91	0.74	21.7
North: Hume Hignway (N)											
7	L2	67	0.0	0.989	40.8	LOS C	100.8	728.5	0.82	0.94	27.0
8	T1	3699	3.1	0.989	36.9	LOS C	100.8	728.5	0.62	0.76	30.6
9	R2	178	1.2	0.802	57.1	LOS E	11.6	82.2	1.00	1.01	23.3
Approach		3944	3.0	0.989	37.9	LOS C	100.8	728.5	0.64	0.77	30.1
West: Reilly Street (W)											
10	L2	65	0.0	0.235	56.1	LOS D	5.8	40.6	0.86	0.74	23.5
11	T1	32	0.0	0.235	51.6	LOS D	5.8	40.6	0.86	0.74	24.5
12	R2	261	1.6	1.120	214.2	LOS F	35.0	248.2	1.00	1.37	11.0
Approach		358	1.2	1.120	171.0	LOS F	35.0	248.2	0.96	1.20	12.6
All Vehicles		6718	3.8	1.120	36.8	LOS C	100.8	728.5	0.61	0.69	30.7

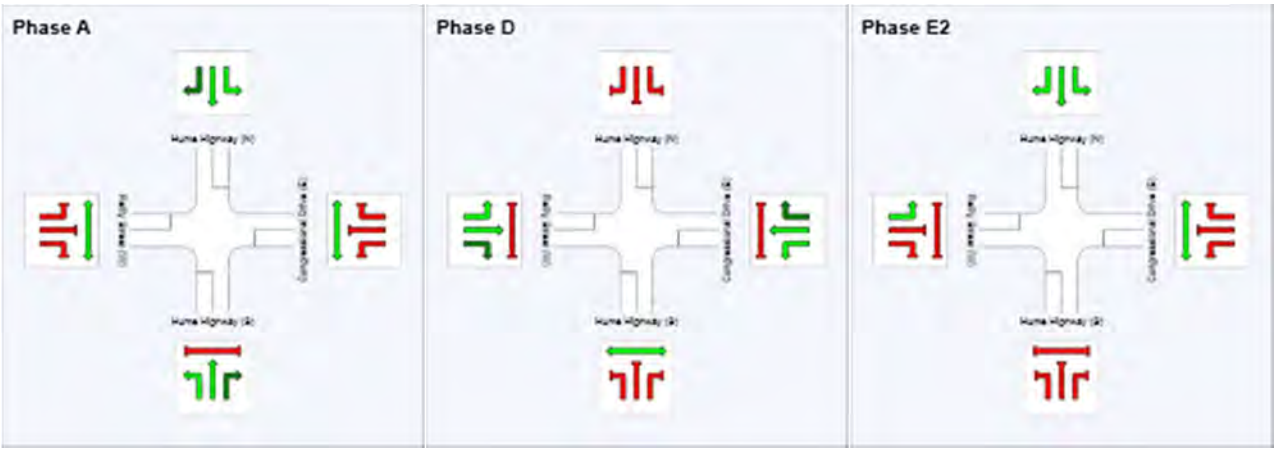
PHASING SUMMARY

Site: I-05 2030 MIMT PM

Hume Highway / Reilly Street
2030 MIMT PM PEAK 4:30 pm - 5:30 pm
Signals - Fixed Time Cycle Time = 150 seconds (User-Given Phase Times)

Phase Timing Results

Phase	A	D	E2
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	98	133
Green Time (sec)	92	29	11
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	98	35	17
Phase Split	65 %	23 %	11 %



I-06 Intersection of Newbridge Road and Moorebank Avenue

MOVEMENT SUMMARY

Site: I-06 2030 MIMT AM

Network: 2030 MIMT AM

Newbridge Road / Moorebank Avenue
2030 MIMT AM PEAK 7:45 am - 8:45 am
Signals - Fixed Time Cycle Time = 133 seconds (User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total veh/h	Demand Flows HV %	Arrival Flows Total veh/h	Arrival Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Moorebank Avenue (S)													
1	L2	1534	3.1	1233	3.2	0.637	19.0	LOS B	13.7	98.5	0.57	0.82	42.2
3	R2	1401	11.3	1129	11.6	0.683	15.2	LOS B	14.4	112.9	0.43	0.69	52.4
Approach		2935	7.0	2362 N1	7.2	0.683	17.2	LOS B	14.4	112.9	0.50	0.76	47.8
East: Newbridge Road (E)													
4	L2	707	21.6	707	21.6	0.637	19.2	LOS B	9.3	78.2	0.75	0.81	51.4
5	T1	965	5.1	965	5.1	1.260	311.5	LOS F	77.3	564.9	1.00	1.91	14.7
Approach		1673	12.1	1673	12.1	1.260	187.9	LOS F	77.3	564.9	0.90	1.44	19.0
West: Newbridge Road (W)													
11	T1	1581	6.5	1581	6.5	0.852	12.4	LOS A	30.8	227.8	0.63	0.60	60.9
12	R2	874	7.7	874	7.7	1.671	660.9	LOS F	98.1	732.8	1.00	1.98	3.1
Approach		2455	6.9	2455	6.9	1.671	243.2	LOS F	98.1	732.8	0.76	1.09	14.6
All Vehicles		7062	8.2	6489 N1	8.9	1.671	146.7	LOS F	98.1	732.8	0.70	1.06	19.9

PHASING SUMMARY

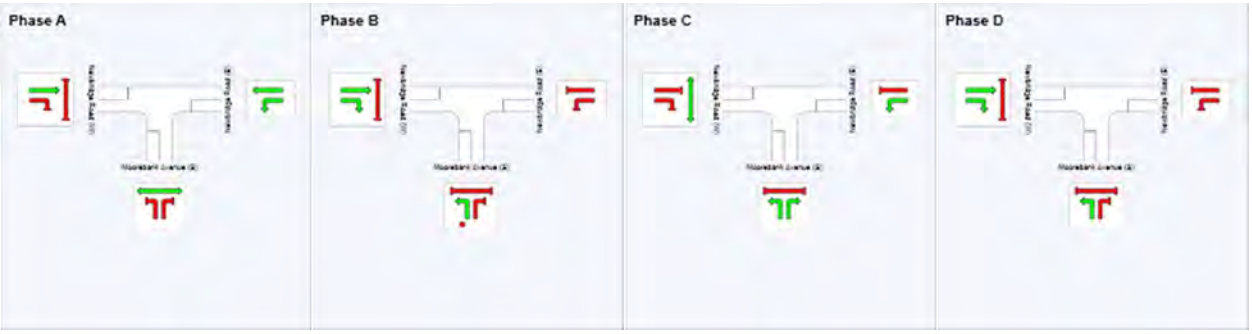
Network: 2030 MIMT AM

Site: I-06 2030 MIMT AM

Newbridge Road / Moorebank Avenue
2030 MIMT AM PEAK 7:45 am - 8:45 am
Signals - Fixed Time Cycle Time = 133 seconds (User-Given Phase Times)

Phase Timing Results

Phase	A	B	C	D
Reference Phase	Yes	No	No	No
Phase Change Time (sec)	0	33	55	116
Green Time (sec)	27	16	55	11
Yellow Time (sec)	4	4	4	4
All-Red Time (sec)	2	2	2	2
Phase Time (sec)	33	22	61	17
Phase Split	25 %	17 %	46 %	13 %



MOVEMENT SUMMARY

Site: I-06 2030 MIMT PM

Network: 2030 MIMT PM

Newbridge Road / Moorebank Avenue
2030 MIMT PM PEAK 4:30 pm - 5:30 pm
Signals - Fixed Time Cycle Time = 116 seconds (User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total	HV	Arrival Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Moorebank Avenue (S)													
1	L2	1002	2.9	888	3.1	0.506	22.5	LOS B	13.2	94.5	0.57	0.75	39.9
3	R2	965	11.5	859	12.0	1.130	176.4	LOS F	16.7	130.6	1.00	1.39	16.8
Approach		1966	7.1	1747 N1	7.4	1.130	98.1	LOS F	16.7	130.6	0.78	1.06	21.6
East: Newbridge Road (E)													
4	L2	1274	7.4	1274	7.4	1.114	196.1	LOS F	80.2	605.8	1.00	1.32	14.7
5	T1	1373	4.8	1373	4.8	0.923	51.1	LOS D	42.7	311.4	1.00	1.04	43.3
Approach		2647	6.1	2647	6.1	1.114	120.9	LOS F	80.2	605.8	1.00	1.17	25.2
West: Newbridge Road (W)													
11	T1	1129	4.0	1129	4.0	0.442	9.3	LOS A	14.6	105.8	0.50	0.45	62.9
12	R2	1120	2.8	1120	2.8	1.201	234.1	LOS F	75.0	537.8	1.00	1.47	8.2
Approach		2249	3.4	2249	3.4	1.201	121.3	LOS F	75.0	537.8	0.75	0.96	22.4
All Vehicles		6862	5.5	6643 N1	5.7	1.201	115.0	LOS F	80.2	605.8	0.86	1.07	23.4

PHASING SUMMARY

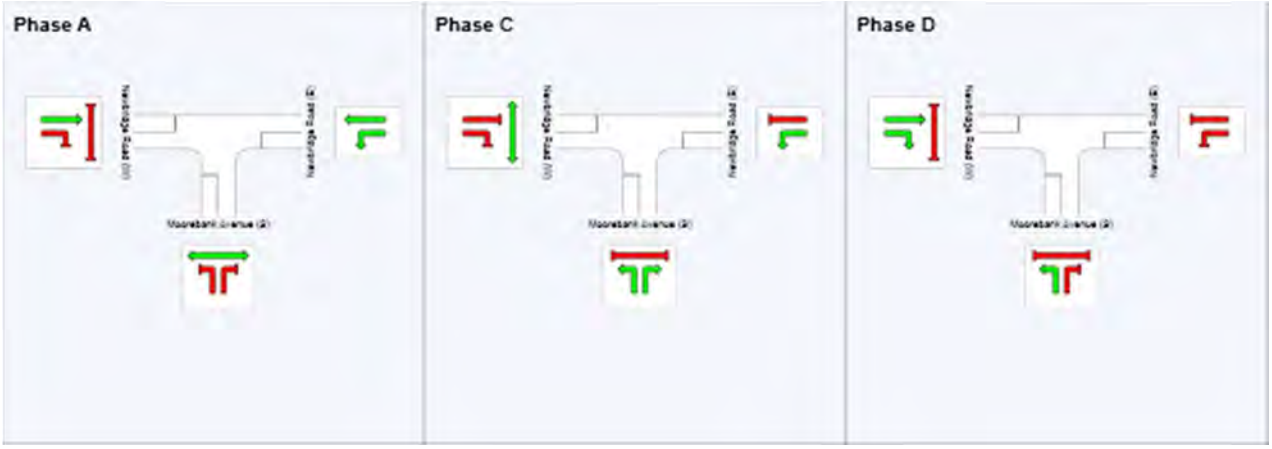
Network: 2030 MIMT PM

Site: I-06 2030 MIMT PM

Newbridge Road / Moorebank Avenue
2030 MIMT PM PEAK 4:30 pm - 5:30 pm
Signals - Fixed Time Cycle Time = 116 seconds (User-Given Phase Times)

Phase Timing Results

Phase	A	C	D
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	44	76
Green Time (sec)	38	26	34
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	44	32	40
Phase Split	38 %	28 %	34 %



I-07 Intersection of Moorebank Avenue and Heathcote Road

MOVEMENT SUMMARY

Site: I-07 2030 MIMT AM

Network: 2030 MIMT AM

Moorebank Avenue / Heathcote Road
2030 MIMT AM PEAK 7:45 am - 8:45 am
Signals - Fixed Time Cycle Time = 133 seconds (User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total veh/h	Demand Flows HV %	Arrival Flows Total veh/h	Arrival Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Moorebank Avenue (S)													
2	T1	1949	7.0	1768	7.1	1.167	197.8	LOS F	58.4	440.6	1.00	1.86	4.8
3	R2	23	18.2	21	18.4	0.190	71.8	LOS F	1.4	11.0	0.98	0.71	30.6
Approach		1972	7.2	1789 N1	7.3	1.167	196.3	LOS F	58.4	440.6	1.00	1.85	5.1
East: Heathcote Road (E)													
4	L2	29	57.1	29	57.1	1.441	481.7	LOS F	102.1	768.9	1.00	1.95	6.8
6	R2	952	5.9	952	5.9	1.441	481.5	LOS F	102.1	768.9	1.00	1.95	6.8
Approach		981	7.4	981	7.4	1.441	481.5	LOS F	102.1	768.9	1.00	1.95	6.8
North: Moorebank Avenue (N)													
7	L2	795	7.9	618	8.9	0.383	10.7	LOS A	12.3	92.8	0.54	0.71	51.4
8	T1	813	19.2	643	21.4	0.377	21.4	LOS B	12.6	106.4	0.66	0.57	13.1
Approach		1608	13.6	1261 N1	15.3	0.383	16.2	LOS B	12.6	106.4	0.60	0.64	41.1
All Vehicles		4561	9.5	4031 N1	10.7	1.441	209.4	LOS F	102.1	768.9	0.87	1.49	8.4

PHASING SUMMARY

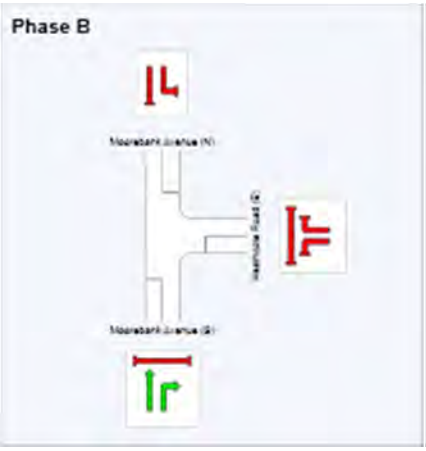
Site: I-07 2030 MIMT AM

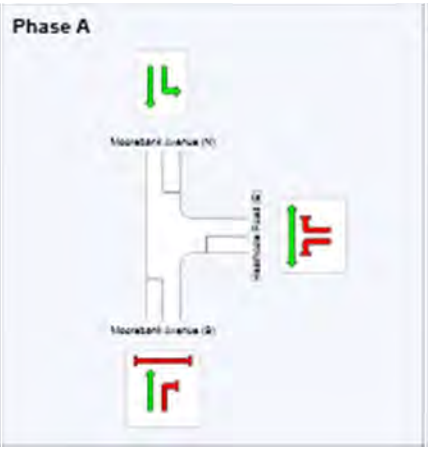
Network: 2030 MIMT AM

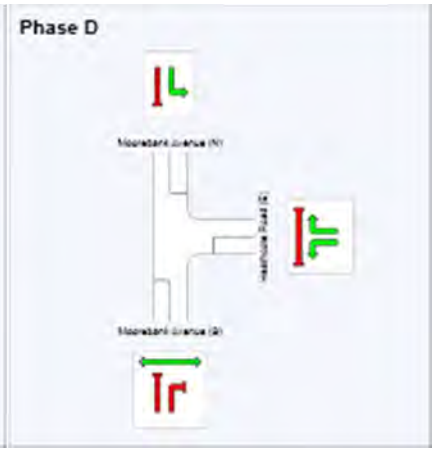
Moorebank Avenue / Heathcote Road
2030 MIMT AM PEAK 7:45 am - 8:45 am
Signals - Fixed Time Cycle Time = 133 seconds (User-Given Phase Times)

Phase Timing Results

Phase	B	A	D
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	15	88
Green Time (sec)	9	67	39
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	15	73	45
Phase Split	11 %	55 %	34 %







MOVEMENT SUMMARY

Site: I-07 2030 MIMT PM

Network: 2030 MIMT PM

Moorebank Avenue / Heathcote Road
2030 MIMT PM PEAK 4:30 pm - 5:30 pm
Signals - Fixed Time Cycle Time = 116 seconds (User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total	HV	Arrival Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Moorebank Avenue (S)													
2	T1	1184	9.4	1184	9.4	0.938	56.1	LOS D	48.7	372.7	0.95	1.16	14.2
3	R2	48	8.7	48	8.7	0.401	64.7	LOS E	2.8	20.9	1.00	0.74	32.2
Approach		1233	9.3	1233	9.3	0.938	56.5	LOS D	48.7	372.7	0.95	1.14	15.5
East: Heathcote Road (E)													
4	L2	76	19.4	76	19.4	1.415	430.1	LOS F	93.1	692.3	1.00	1.99	7.5
6	R2	812	5.2	812	5.2	1.415	429.4	LOS F	93.1	692.3	1.00	1.99	7.5
Approach		887	6.4	887	6.4	1.415	429.4	LOS F	93.1	692.3	1.00	1.99	7.5
North: Moorebank Avenue (N)													
7	L2	884	3.7	767	3.7	0.362	7.5	LOS A	5.1	36.8	0.24	0.61	53.8
8	T1	1484	6.1	1288	6.2	0.670	6.3	LOS A	11.8	87.9	0.35	0.32	29.3
Approach		2369	5.2	2054 N1	5.3	0.670	6.7	LOS A	11.8	87.9	0.31	0.43	48.5
All Vehicles		4489	6.6	4174 N1	7.1	1.415	111.3	LOS F	93.1	692.3	0.65	0.97	13.7

PHASING SUMMARY

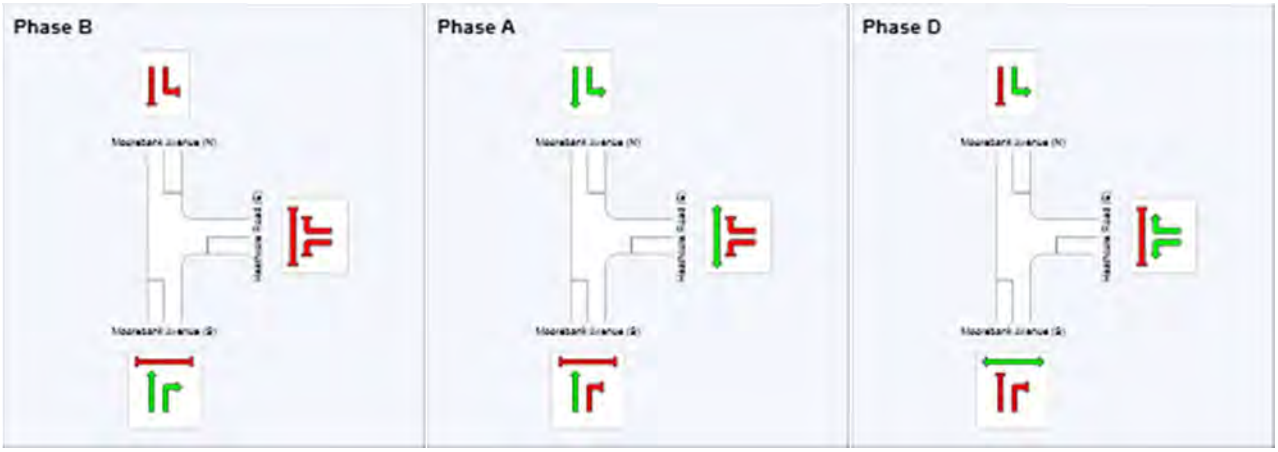
Network: 2030 MIMT PM

Site: I-07 2030 MIMT PM

Moorebank Avenue / Heathcote Road
2030 MIMT PM PEAK 4:30 pm - 5:30 pm
Signals - Fixed Time Cycle Time = 116 seconds (User-Given Phase Times)

Phase Timing Results

Phase	B	A	D
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	14	80
Green Time (sec)	8	60	30
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	14	66	36
Phase Split	12 %	57 %	31 %



I-08 Intersection of Moorebank Avenue and Industry Park Access

MOVEMENT SUMMARY

Site: I-08 2030 MIMT AM

Network: 2030 MIMT AM

Moorebank Avenue / Industry Park Access
2030 MIMT AM PEAK 7:45 am - 8:45 am
Signals - Fixed Time Cycle Time = 133 seconds (User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total veh/h	Demand Flows HV %	Arrival Flows Total veh/h	Arrival Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Moorebank Avenue (S)													
1	L2	90	3.1	90	3.1	0.055	6.1	LOS A	0.4	2.6	0.12	0.58	43.1
2	T1	1930	6.5	1930	6.5	1.259	295.3	LOS F	169.8	1273.9	1.00	2.23	5.5
Approach		2020	6.3	2020	6.3	1.259	282.4	LOS F	169.8	1273.9	0.96	2.16	5.8
North: Moorebank Avenue (N)													
8	T1	725	18.8	572	20.7	0.204	2.5	LOS A	3.8	31.6	0.22	0.20	56.9
9	R2	65	38.7	53	41.4	0.998	109.1	LOS F	4.4	42.0	1.00	1.03	12.3
Approach		790	20.4	624 N1	22.5	0.998	11.5	LOS A	4.4	42.0	0.29	0.27	46.9
West: Industry Park Access (W)													
10	L2	34	62.5	34	62.5	0.415	64.9	LOS E	2.3	24.3	0.95	0.73	9.6
12	R2	58	72.7	58	72.7	0.412	68.0	LOS E	2.7	31.3	0.98	0.73	19.8
Approach		91	68.9	91	68.9	0.415	66.9	LOS E	2.7	31.3	0.97	0.73	16.8
All Vehicles		2902	12.1	2736 N1	12.9	1.259	213.4	LOS F	169.8	1273.9	0.81	1.68	8.2

PHASING SUMMARY

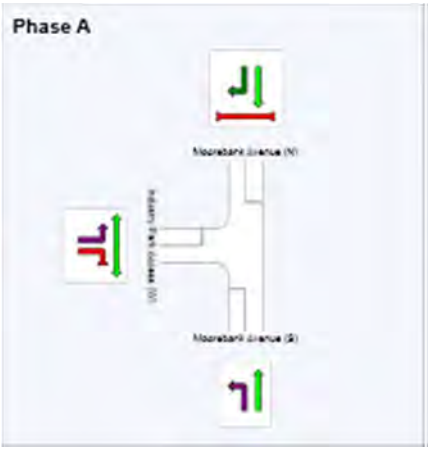
Network: 2030 MIMT AM

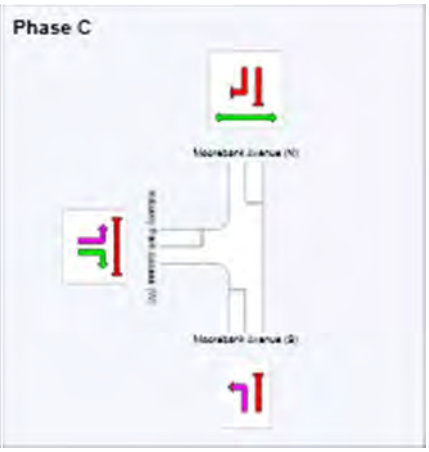
Site: I-08 2030 MIMT AM

Moorebank Avenue / Industry Park Access
2030 MIMT AM PEAK 7:45 am - 8:45 am
Signals - Fixed Time Cycle Time = 133 seconds (User-Given Phase Times)

Phase Timing Results

Phase	A	C
Reference Phase	Yes	No
Phase Change Time (sec)	0	116
Green Time (sec)	110	11
Yellow Time (sec)	4	4
All-Red Time (sec)	2	2
Phase Time (sec)	116	17
Phase Split	87 %	13 %





MOVEMENT SUMMARY

Site: I-08 2030 MIMT PM

Network: 2030 MIMT PM

Moorebank Avenue / Industry Park Access
2030 MIMT PM PEAK 4:30 pm - 5:30 pm
Signals - Fixed Time Cycle Time = 65 seconds (User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total	HV	Arrival Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Moorebank Avenue (S)													
1	L2	10	27.8	10	27.8	0.009	6.8	LOS A	0.0	0.4	0.22	0.57	42.7
2	T1	1154	8.7	1154	8.7	0.473	4.9	LOS A	8.7	66.1	0.49	0.44	51.5
Approach		1164	8.9	1164	8.9	0.473	4.9	LOS A	8.7	66.1	0.49	0.44	51.4
North: Moorebank Avenue (N)													
8	T1	1558	5.8	1344	5.7	0.521	5.2	LOS A	10.2	76.2	0.52	0.47	53.9
9	R2	25	62.5	22	62.3	0.127	14.4	LOS A	0.4	3.9	0.50	0.67	32.8
Approach		1583	6.7	1366 N1	6.6	0.521	5.3	LOS A	10.2	76.2	0.52	0.47	53.6
West: Industry Park Access (W)													
10	L2	34	15.6	34	15.6	0.073	3.9	LOS A	0.3	2.2	0.36	0.43	26.5
12	R2	189	9.9	189	9.9	0.445	32.4	LOS C	3.0	22.8	0.97	0.76	28.1
Approach		223	10.8	223	10.8	0.445	28.1	LOS B	3.0	22.8	0.88	0.71	28.0
All Vehicles		2970	7.8	2753 N1	8.5	0.521	7.0	LOS A	10.2	76.2	0.54	0.48	49.2

PHASING SUMMARY

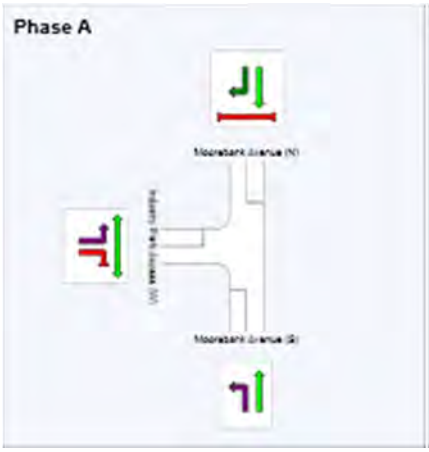
Network: 2030 MIMT PM

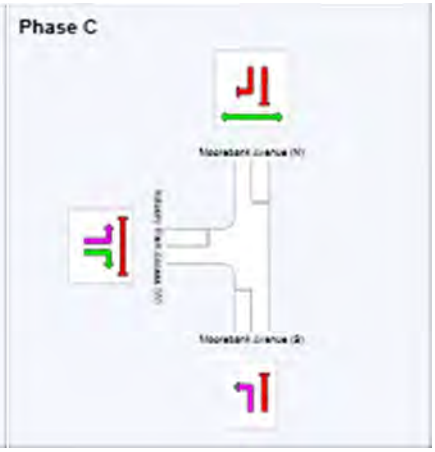
Site: I-08 2030 MIMT PM

Moorebank Avenue / Industry Park Access
2030 MIMT PM PEAK 4:30 pm - 5:30 pm
Signals - Fixed Time Cycle Time = 65 seconds (User-Given Phase Times)

Phase Timing Results

Phase	A	C
Reference Phase	Yes	No
Phase Change Time (sec)	0	51
Green Time (sec)	45	8
Yellow Time (sec)	4	4
All-Red Time (sec)	2	2
Phase Time (sec)	51	14
Phase Split	78 %	22 %





I-09 Intersection of Moorebank Avenue and Church Road

MOVEMENT SUMMARY

Site: I-09 2030 MIMT AM

Moorebank Avenue / Church Road
2030 MIMT AM PEAK 7:45 am - 8:45 am
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Moorebank Avenue (S)											
2	T1	2132	7.8	0.783	6.3	LOS A	12.1	91.8	0.16	0.11	53.8
3	R2	284	8.5	0.783	30.2	LOS C	12.1	91.8	1.00	0.70	38.3
Approach		2416	7.8	0.978	9.1	NA	12.1	91.8	0.25	0.18	51.3
East: Church Road (E)											
4	L2	204	15.8	0.264	7.5	LOS A	1.1	8.5	0.51	0.73	47.2
6	R2	7	0.0	0.945	878.2	LOS F	2.6	17.9	1.00	1.07	3.8
Approach		211	15.2	0.945	37.9	LOS C	2.6	17.9	0.53	0.74	33.8
North: Moorebank Avenue (N)											
7	L2	37	0.0	0.236	5.6	LOS A	0.0	0.0	0.00	0.06	57.7
8	T1	754	24.2	0.236	0.0	LOS A	0.0	0.0	0.00	0.03	59.6
Approach		791	23.0	0.236	0.3	NA	0.0	0.0	0.00	0.03	59.5
All Vehicles		3418	11.8	0.978	8.8	NA	12.1	91.8	0.21	0.18	51.3

MOVEMENT SUMMARY

Site: I-09 2030 MIMT PM

Moorebank Avenue / Church Road
2030 MIMT PM PEAK 4:30 pm - 5:30 pm
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Moorebank Avenue (S)											
2	T1	1190	12.3	0.664	0.2	LOS A	0.0	0.0	0.00	0.00	59.7
3	R2	111	13.6	0.667	48.9	LOS D	3.3	26.4	0.98	1.18	31.1
Approach		1301	12.4	0.667	4.3	NA	3.3	26.4	0.08	0.10	55.2
East: Church Road (E)											
4	L2	427	5.1	1.381	400.7	LOS F	89.9	660.8	1.00	5.35	7.7
6	R2	1	0.0	0.173	565.4	LOS F	0.4	2.9	1.00	1.00	5.7
Approach		428	5.1	1.381	401.1	LOS F	89.9	660.8	1.00	5.34	7.7
North: Moorebank Avenue (N)											
7	L2	14	7.7	0.934	7.4	LOS A	0.0	0.0	0.00	0.01	54.4
8	T1	1721	6.4	0.934	2.2	LOS A	0.0	0.0	0.00	0.00	55.8
Approach		1735	6.4	0.934	2.2	NA	0.0	0.0	0.00	0.00	55.8
All Vehicles		3464	8.5	1.381	52.3	NA	89.9	660.8	0.15	0.70	31.1

I-10 Intersection of Heathcote Road and Nuwarra Road

MOVEMENT SUMMARY

Site: I-10 2030 MIMT AM

Heathcote Road / Nuwarra Road / Wattle Grove Drive
2030 MIMT AM PEAK 7:45 am - 8:45 am
Signals - Fixed Time Cycle Time = 131 seconds (User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	v/c	sec		veh	m		per veh	km/h
SouthEast: Heathcote Road (SE)											
4	L2	253	1.2	0.175	8.2	LOS A	3.4	23.8	0.27	0.63	48.2
5	T1	2073	5.2	1.255	286.2	LOS F	161.7	1183.1	1.00	2.15	10.3
6	R2	647	3.3	1.268	267.3	LOS F	42.9	308.4	1.00	1.54	11.2
Approach		2974	4.5	1.268	258.4	LOS F	161.7	1183.1	0.94	1.88	11.1
NorthEast: Nuwarra Road (NE)											
7	L2	416	4.8	0.484	24.5	LOS B	16.5	120.1	0.71	0.78	42.4
8	T1	252	8.4	0.405	53.1	LOS D	7.3	54.6	0.94	0.76	26.2
9	R2	508	5.8	1.436	477.0	LOS F	49.8	365.8	1.00	1.93	6.6
Approach		1176	6.0	1.436	226.3	LOS F	49.8	365.8	0.88	1.27	11.9
NorthWest: Heathcote Road (NW)											
10	L2	254	11.6	0.334	21.5	LOS B	7.8	60.1	0.70	0.76	42.7
11	T1	1044	11.2	0.957	54.9	LOS D	42.9	329.5	0.90	0.97	31.2
12	R2	235	6.3	0.786	75.4	LOS F	8.0	59.1	1.00	0.89	19.9
Approach		1532	10.5	0.957	52.5	LOS D	42.9	329.5	0.88	0.92	30.8
SouthWest: Wattle Grove Drive (SW)											
1	L2	639	2.1	0.849	51.8	LOS D	31.9	227.1	0.99	1.15	24.8
2	T1	543	4.5	0.817	61.8	LOS E	19.6	142.7	1.00	0.94	23.7
3	R2	263	4.0	1.277	332.6	LOS F	42.3	306.5	1.00	1.80	6.6
Approach		1445	3.4	1.277	106.7	LOS F	42.3	306.5	0.99	1.19	16.1
All Vehicles		7127	5.8	1.436	178.1	LOS F	161.7	1183.1	0.93	1.43	13.9

PHASING SUMMARY

Site: I-10 2030 MIMT AM

Heathcote Road / Nuwarra Road / Wattle Grove Drive
2030 MIMT AM PEAK 7:45 am - 8:45 am
Signals - Fixed Time Cycle Time = 131 seconds (User-Given Phase Times)

Phase Timing Results

Phase	A	B	D	E	G
Reference Phase	Yes	No	No	No	No
Phase Change Time (sec)	0	54	67	86	114
Green Time (sec)	48	7	13	22	11
Yellow Time (sec)	4	4	4	4	4
All-Red Time (sec)	2	2	2	2	2
Phase Time (sec)	54	13	19	28	17
Phase Split	41 %	10 %	15 %	21 %	13 %

MOVEMENT SUMMARY

Site: I-10 2030 MIMT PM

Heathcote Road / Nuwarra Road / Wattle Grove Drive
2030 MIMT PM PEAK 4:30 pm - 5:30 pm
Signals - Fixed Time Cycle Time = 139 seconds (User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
SouthEast: Heathcote Road (SE)											
4	L2	337	2.5	0.282	15.4	LOS B	8.9	63.6	0.45	0.70	42.4
5	T1	1331	5.4	0.992	77.8	LOS F	59.5	435.9	0.93	1.13	26.0
6	R2	469	3.1	1.197	269.1	LOS F	34.2	246.1	1.00	1.49	11.2
Approach		2137	4.5	1.197	110.0	LOS F	59.5	435.9	0.87	1.14	20.5
NorthEast: Nuwarra Road (NE)											
7	L2	646	2.8	0.950	79.5	LOS F	47.1	337.5	1.00	1.22	26.0
8	T1	621	1.4	0.996	96.4	LOS F	29.6	209.3	1.00	1.17	18.0
9	R2	556	7.0	1.120	181.1	LOS F	35.9	266.2	1.00	1.30	14.7
Approach		1823	3.6	1.120	116.3	LOS F	47.1	337.5	1.00	1.23	18.9
NorthWest: Heathcote Road (NW)											
10	L2	258	6.1	0.232	21.3	LOS B	8.5	62.5	0.53	0.73	43.0
11	T1	1701	2.7	1.170	222.2	LOS F	119.3	854.8	1.00	1.79	12.7
12	R2	467	2.0	1.103	167.2	LOS F	28.6	203.5	1.00	1.24	11.1
Approach		2427	3.0	1.170	190.2	LOS F	119.3	854.8	0.95	1.57	13.5
SouthWest: Wattle Grove Drive (SW)											
1	L2	305	1.7	0.387	33.9	LOS C	14.1	100.1	0.76	0.85	30.6
2	T1	331	1.3	0.470	57.6	LOS E	10.2	72.3	0.95	0.78	24.7
3	R2	361	1.2	1.338	395.1	LOS F	64.9	458.6	1.00	1.87	5.6
Approach		997	1.4	1.338	172.5	LOS F	64.9	458.6	0.91	1.20	11.3
All Vehicles		7384	3.3	1.338	146.3	LOS F	119.3	854.8	0.93	1.31	16.0

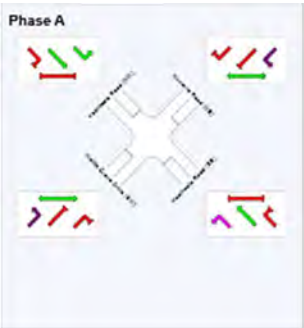
PHASING SUMMARY

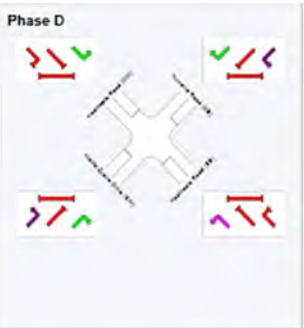
Site: I-10 2030 MIMT PM

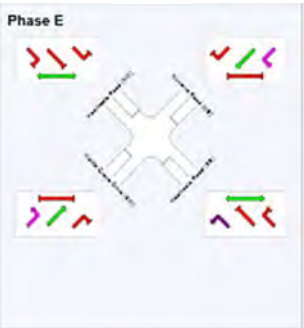
Heathcote Road / Nuwarra Road / Wattle Grove Drive
2030 MIMT PM PEAK 4:30 pm - 5:30 pm
Signals - Fixed Time Cycle Time = 139 seconds (User-Given Phase Times)

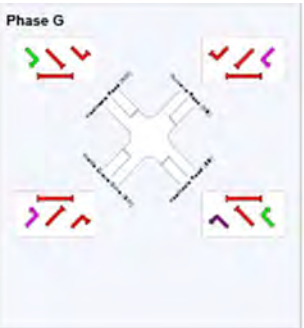
Phase Timing Results

Phase	A	D	E	G
Reference Phase	Yes	No	No	No
Phase Change Time (sec)	0	63	89	118
Green Time (sec)	57	20	23	15
Yellow Time (sec)	4	4	4	4
All-Red Time (sec)	2	2	2	2
Phase Time (sec)	63	26	29	21
Phase Split	45 %	19 %	21 %	15 %









I-11 Intersection of Newbridge Road and Nuwarra Road

MOVEMENT SUMMARY

Site: I-11 2030 MIMT AM

Newbridge Road / Nuwarra Road
2030 MIMT AM PEAK 7:45 am - 8:45 am
Signals - Fixed Time Cycle Time = 140 seconds (User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Nuwarra Road (S)											
1	L2	37	8.6	0.884	63.6	LOS E	26.7	190.6	0.91	0.97	33.5
2	T1	352	1.5	0.884	60.6	LOS E	26.7	190.6	0.91	0.97	28.2
3	R2	852	6.2	1.232	301.9	LOS F	72.5	534.1	1.00	1.53	11.1
Approach		1240	4.9	1.232	226.4	LOS F	72.5	534.1	0.97	1.36	13.8
East: Newbridge Road (E)											
4	L2	347	17.0	0.644	28.2	LOS B	22.4	177.8	0.74	0.78	44.9
5	T1	1292	11.9	0.644	23.7	LOS B	23.0	178.7	0.68	0.63	51.0
Approach		1639	13.0	0.644	24.6	LOS B	23.0	178.7	0.69	0.66	49.7
North: Nuwarra Road (N)											
7	L2	8	0.0	0.986	110.2	LOS F	11.4	80.6	1.00	1.23	22.2
8	T1	154	0.7	1.232	151.9	LOS F	27.3	197.8	1.00	1.36	17.6
9	R2	141	5.2	1.232	298.4	LOS F	27.3	197.8	1.00	1.77	11.9
Approach		303	2.8	1.232	218.9	LOS F	27.3	197.8	1.00	1.54	14.3
West: Newbridge Road (W)											
10	L2	305	2.1	1.161	215.6	LOS F	119.4	892.4	1.00	1.63	15.4
11	T1	2307	9.8	1.235	242.4	LOS F	143.9	1105.1	1.00	1.89	14.8
Approach		2612	8.9	1.235	239.3	LOS F	143.9	1105.1	1.00	1.86	14.9
All Vehicles		5794	8.9	1.235	174.8	LOS F	143.9	1105.1	0.91	1.40	18.2

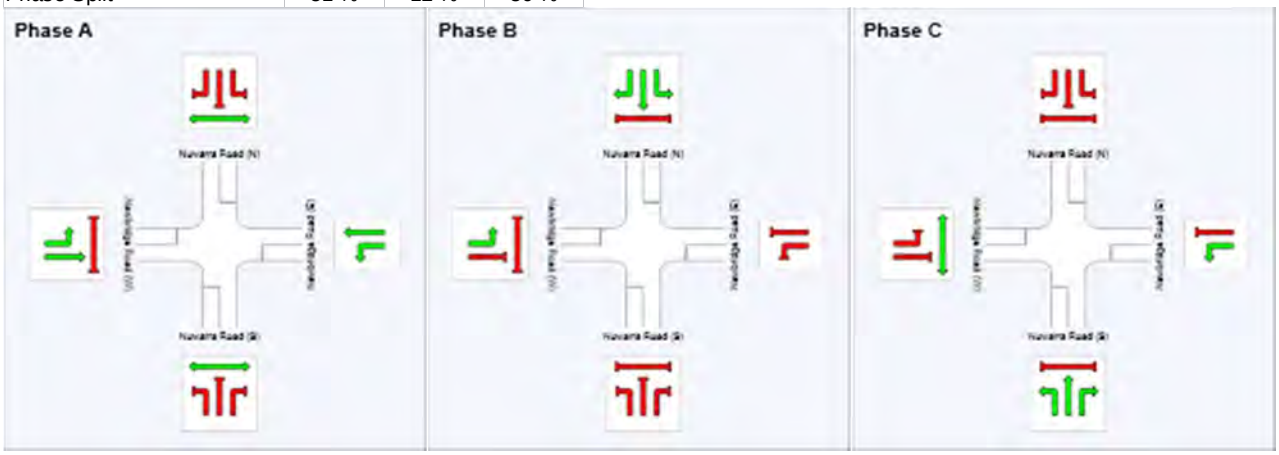
PHASING SUMMARY

Site: I-11 2030 MIMT AM

Newbridge Road / Nuwarra Road
2030 MIMT AM PEAK 7:45 am - 8:45 am
Signals - Fixed Time Cycle Time = 140 seconds (User-Given Phase Times)

Phase Timing Results

Phase	A	B	C
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	72	89
Green Time (sec)	66	11	45
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	72	17	51
Phase Split	51 %	12 %	36 %



MOVEMENT SUMMARY

Site: I-11 2030 MIMT PM

Newbridge Road / Nuwarra Road
2030 MIMT PM PEAK 4:30 pm - 5:30 pm
Signals - Fixed Time Cycle Time = 140 seconds (User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Nuwarra Road (S)											
1	L2	58	7.3	0.774	71.3	LOS F	14.9	106.5	1.00	0.90	31.8
2	T1	157	0.7	0.774	66.9	LOS E	14.9	106.5	1.00	0.90	28.9
3	R2	568	6.3	1.017	126.5	LOS F	28.1	207.3	1.00	1.13	21.3
Approach		783	5.2	1.017	110.5	LOS F	28.1	207.3	1.00	1.07	23.1
East: Newbridge Road (E)											
4	L2	766	3.8	0.789	18.3	LOS B	33.3	242.9	0.59	0.79	50.1
5	T1	2233	6.2	0.789	16.6	LOS B	40.9	304.1	0.67	0.65	55.4
Approach		3000	5.6	0.789	17.0	LOS B	40.9	304.1	0.65	0.68	54.1
North: Nuwarra Road (N)											
7	L2	18	0.0	0.876	76.8	LOS F	18.0	127.2	1.00	1.02	28.9
8	T1	296	1.1	1.094	100.2	LOS F	33.9	240.3	1.00	1.11	23.6
9	R2	213	1.5	1.094	190.2	LOS F	33.9	240.3	1.00	1.39	17.1
Approach		526	1.2	1.094	135.8	LOS F	33.9	240.3	1.00	1.22	20.4
West: Newbridge Road (W)											
10	L2	102	0.0	0.547	21.6	LOS B	17.6	131.3	0.51	0.52	48.4
11	T1	1687	8.4	0.622	14.8	LOS B	20.5	154.7	0.50	0.47	56.9
Approach		1789	7.9	0.622	15.1	LOS B	20.5	154.7	0.50	0.47	56.3
All Vehicles		6098	5.8	1.094	38.7	LOS C	40.9	304.1	0.68	0.72	42.0

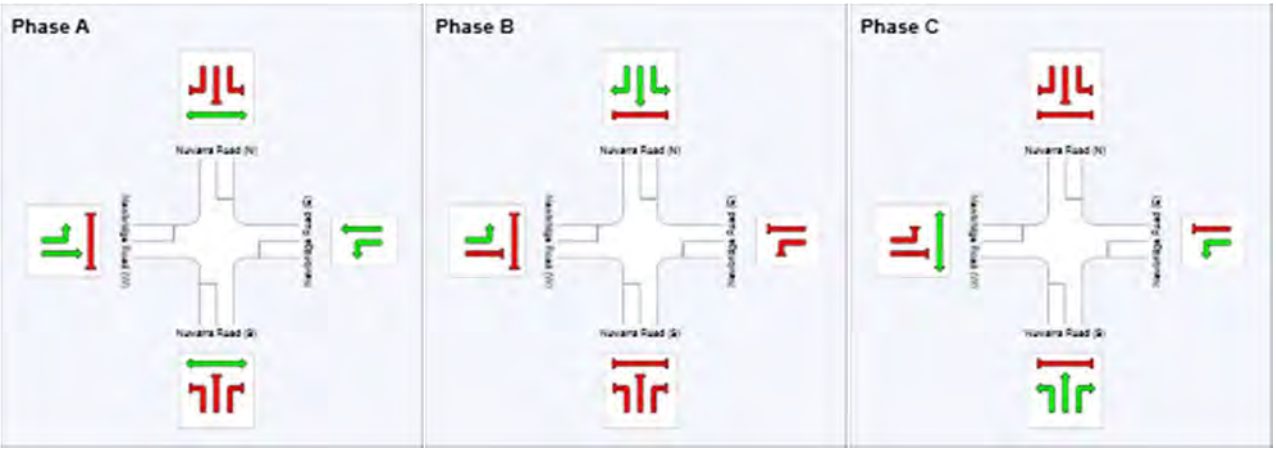
PHASING SUMMARY

Site: I-11 2030 MIMT PM

Newbridge Road / Nuwarra Road
2030 MIMT PM PEAK 4:30 pm - 5:30 pm
Signals - Fixed Time Cycle Time = 140 seconds (User-Given Phase Times)

Phase Timing Results

Phase	A	B	C
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	84	112
Green Time (sec)	78	22	22
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	84	28	28
Phase Split	60 %	20 %	20 %



I-12 Intersection of Newbridge Road and Governor Macquarie Drive

MOVEMENT SUMMARY

Site: I-12 2030 MIMT AM

Newbridge Road / Governor Macquarie Drive
2030 MIMT AM PEAK 7:45 am - 8:45 am
Signals - Fixed Time Cycle Time = 140 seconds (User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Brickmakers Drive (S)											
1	L2	14	0.0	0.909	84.6	LOS F	17.3	122.1	1.00	1.07	24.1
2	T1	207	1.0	0.909	80.3	LOS F	17.3	122.1	1.00	1.07	23.8
3	R2	720	1.2	1.239	301.6	LOS F	55.9	395.6	1.00	1.68	12.6
Approach		941	1.1	1.239	249.7	LOS F	55.9	395.6	1.00	1.53	13.8
East: Newbridge Road (E)											
4	L2	242	3.0	0.178	7.9	LOS A	2.2	15.7	0.19	0.64	58.1
5	T1	1472	11.5	0.432	14.0	LOS A	16.7	129.5	0.55	0.49	59.9
6	R2	683	9.9	1.050	154.1	LOS F	36.1	274.4	1.00	1.16	23.9
Approach		2398	10.2	1.050	53.3	LOS D	36.1	274.4	0.64	0.70	41.5
North: Governor Macquarie Drive (N)											
7	L2	765	7.8	0.725	52.8	LOS D	23.4	174.6	0.96	0.86	40.2
8	T1	135	2.3	0.546	64.2	LOS E	8.8	62.9	0.99	0.79	27.0
9	R2	178	31.9	1.030	138.6	LOS F	18.2	162.2	1.00	1.18	20.4
Approach		1078	11.1	1.030	68.4	LOS E	23.4	174.6	0.97	0.90	34.3
West: Newbridge Road (W)											
10	L2	132	29.9	1.224	268.0	LOS F	160.8	1235.1	1.00	1.91	12.9
11	T1	3009	7.4	1.224	260.5	LOS F	165.2	1241.2	1.00	1.95	16.8
12	R2	5	20.0	0.045	33.0	LOS C	0.2	1.8	0.60	0.68	37.8
Approach		3147	8.4	1.224	260.5	LOS F	165.2	1241.2	1.00	1.95	16.7
All Vehicles		7563	8.4	1.239	166.1	LOS F	165.2	1241.2	0.88	1.35	22.1

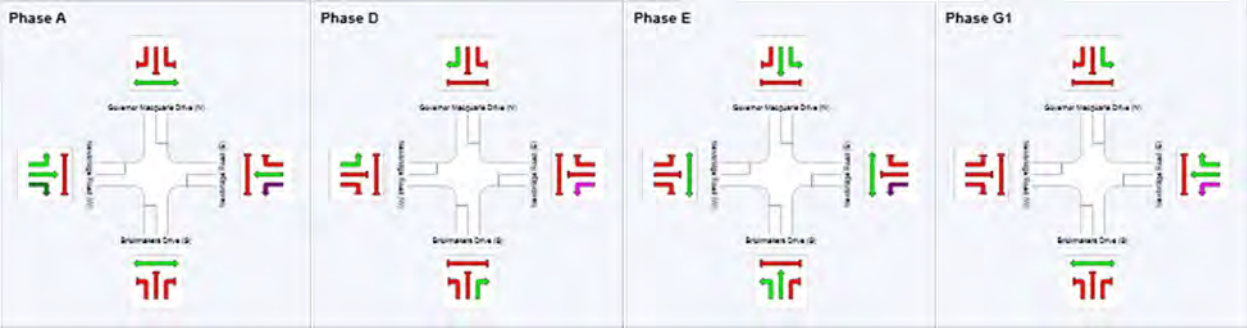
PHASING SUMMARY

Site: I-12 2030 MIMT AM

Newbridge Road / Governor Macquarie Drive
2030 MIMT AM PEAK 7:45 am - 8:45 am
Signals - Fixed Time Cycle Time = 140 seconds (User-Given Phase Times)

Phase Timing Results

Phase	A	D	E	G1
Reference Phase	Yes	No	No	No
Phase Change Time (sec)	0	66	88	112
Green Time (sec)	60	16	18	22
Yellow Time (sec)	4	4	4	4
All-Red Time (sec)	2	2	2	2
Phase Time (sec)	66	22	24	28
Phase Split	47 %	16 %	17 %	20 %



MOVEMENT SUMMARY

Site: I-12 2030 MIMT PM

Newbridge Road / Governor Macquarie Drive
2030 MIMT PM PEAK 4:30 pm - 5:30 pm
Signals - Fixed Time Cycle Time = 140 seconds (User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Brickmakers Drive (S)											
1	L2	11	0.0	0.554	70.4	LOS E	7.2	52.4	1.00	0.79	26.8
2	T1	97	5.4	0.554	66.3	LOS E	7.2	52.4	1.00	0.79	26.5
3	R2	271	0.8	0.641	70.4	LOS E	9.1	64.3	1.00	0.81	32.5
Approach		378	1.9	0.641	69.3	LOS E	9.1	64.3	1.00	0.81	31.0
East: Newbridge Road (E)											
4	L2	688	1.4	0.485	9.5	LOS A	8.3	58.6	0.29	0.70	57.0
5	T1	2766	5.0	0.932	32.3	LOS C	55.3	406.6	0.76	0.79	50.3
6	R2	744	10.3	1.124	214.3	LOS F	48.3	368.3	1.00	1.29	19.1
Approach		4198	5.3	1.124	60.8	LOS E	55.3	406.6	0.73	0.86	39.2
North: Governor Macquarie Drive (N)											
7	L2	614	7.9	0.463	46.7	LOS D	16.6	124.4	0.86	0.81	42.0
8	T1	314	1.7	1.055	145.7	LOS F	32.6	231.3	1.00	1.33	16.2
9	R2	305	35.9	1.604	632.9	LOS F	70.2	645.6	1.00	2.02	6.1
Approach		1233	13.3	1.604	217.1	LOS F	70.2	645.6	0.93	1.24	16.2
West: Newbridge Road (W)											
10	L2	174	15.2	0.856	45.6	LOS D	44.7	336.7	0.93	0.88	39.2
11	T1	2062	5.8	0.856	37.6	LOS C	45.4	335.3	0.91	0.86	47.9
12	R2	4	0.0	0.070	55.3	LOS D	0.2	1.7	0.80	0.69	30.0
Approach		2241	6.5	0.856	38.2	LOS C	45.4	336.7	0.91	0.86	47.3
All Vehicles		8050	6.7	1.604	78.9	LOS F	70.2	645.6	0.82	0.92	34.0

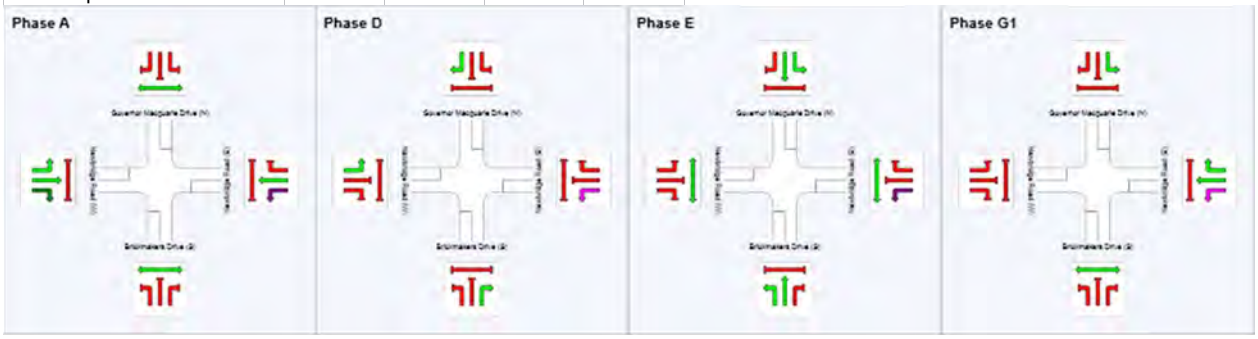
PHASING SUMMARY

Site: I-12 2030 MIMT PM

Newbridge Road / Governor Macquarie Drive
2030 MIMT PM PEAK 4:30 pm - 5:30 pm
Signals - Fixed Time Cycle Time = 140 seconds (User-Given Phase Times)

Phase Timing Results

Phase	A	D	E	G1
Reference Phase	Yes	No	No	No
Phase Change Time (sec)	0	64	86	107
Green Time (sec)	58	16	15	27
Yellow Time (sec)	4	4	4	4
All-Red Time (sec)	2	2	2	2
Phase Time (sec)	64	22	21	33
Phase Split	46 %	16 %	15 %	24 %



I-13 Intersection of Moorebank Avenue and M5 Motorway

MOVEMENT SUMMARY

Site: I-13 2030 MIMT AM

Moorebank Avenue / the M5 Motorway
2030 MIMT AM PEAK 7:45 am - 8:45 am
Signals - Fixed Time Cycle Time = 74 seconds (User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Moorebank Avenue (S)											
1	L2	398	36.2	0.438	10.4	LOS A	5.1	54.2	0.48	0.70	48.6
2	T1	716	10.5	0.878	40.4	LOS C	15.3	122.4	1.00	1.08	34.7
3	R2	319	6.3	0.463	33.5	LOS C	5.7	43.2	0.91	0.79	36.6
Approach		1433	16.7	0.878	30.5	LOS C	15.3	122.4	0.84	0.91	38.2
East: M5 Motorway on&off ramp (E)											
4	L2	273	17.3	0.347	10.4	LOS A	3.3	28.4	0.54	0.71	49.3
6	R2	237	6.2	0.246	28.8	LOS C	3.4	25.1	0.82	0.76	40.4
Approach		509	12.2	0.347	19.0	LOS B	3.4	28.4	0.67	0.73	44.5
North: Moorebank Avenue (N)											
7	L2	51	47.9	0.050	7.9	LOS A	0.4	3.5	0.29	0.60	51.1
8	T1	224	22.4	0.300	26.2	LOS B	3.5	31.0	0.87	0.69	40.7
9	R2	454	25.5	0.772	37.8	LOS C	10.0	85.2	0.97	0.88	36.3
Approach		729	26.1	0.772	32.1	LOS C	10.0	85.2	0.89	0.80	38.3
West: M5 Motorway on&off ramp (W)											
10	L2	1722	7.5	0.977	8.2	LOS A	0.0	0.0	0.00	0.50	51.2
12	R2	536	25.0	0.683	34.0	LOS C	9.3	89.4	0.95	0.86	36.4
Approach		2258	11.6	0.977	14.3	LOS A	9.3	89.4	0.23	0.58	47.0
All Vehicles		4929	15.3	0.977	22.1	LOS B	15.3	122.4	0.55	0.73	42.6

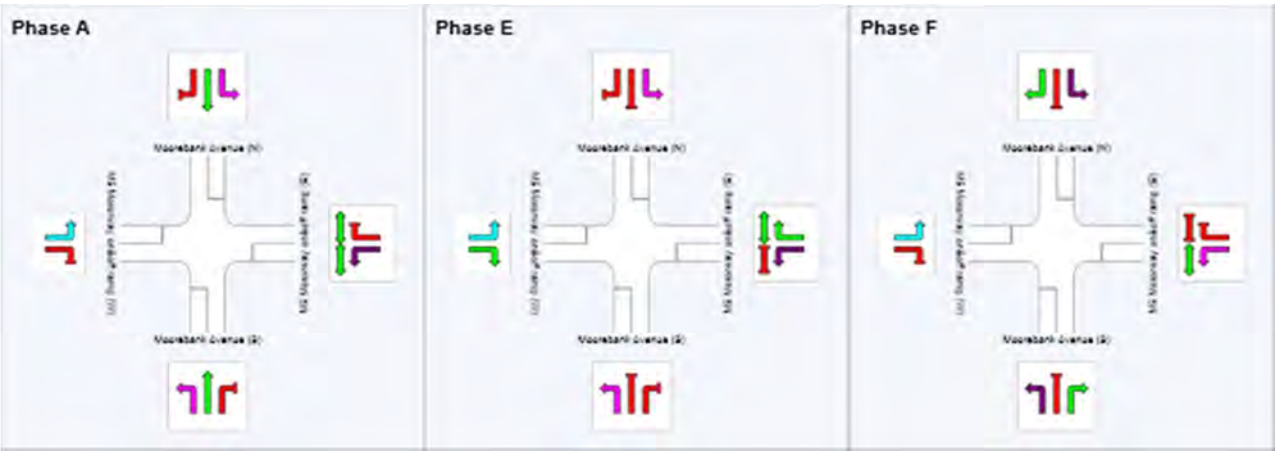
PHASING SUMMARY

Site: I-13 2030 MIMT AM

Moorebank Avenue / the M5 Motorway
2030 MIMT AM PEAK 7:45 am - 8:45 am
Signals - Fixed Time Cycle Time = 74 seconds (User-Given Phase Times)

Phase Timing Results

Phase	A	E	F
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	24	51
Green Time (sec)	17	20	16
Yellow Time (sec)	4	4	4
All-Red Time (sec)	3	3	3
Phase Time (sec)	24	27	23
Phase Split	32 %	36 %	31 %



MOVEMENT SUMMARY

Site: I-13 2030 MIMT PM

Moorebank Avenue / the M5 Motorway
2030 MIMT PM PEAK 4:30 pm - 5:30 pm
Signals - Fixed Time Cycle Time = 94 seconds (User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Moorebank Avenue (S)											
1	L2	456	27.4	0.733	24.6	LOS B	15.6	154.7	0.88	0.85	40.4
2	T1	212	18.2	0.852	55.7	LOS D	5.6	48.4	1.00	0.97	29.9
3	R2	348	12.7	0.323	29.0	LOS C	6.3	52.9	0.76	0.77	38.4
Approach		1015	20.4	0.852	32.6	LOS C	15.6	154.7	0.86	0.85	37.0
East: M5 Motorway on&off ramp (E)											
4	L2	462	7.6	0.581	17.2	LOS B	9.5	73.2	0.71	0.82	45.0
6	R2	97	21.7	0.177	42.7	LOS D	2.0	16.2	0.89	0.73	34.9
Approach		558	10.1	0.581	21.6	LOS B	9.5	73.2	0.74	0.80	42.7
North: Moorebank Avenue (N)											
7	L2	139	6.1	0.114	7.3	LOS A	1.1	8.1	0.26	0.62	52.7
8	T1	760	7.8	0.852	44.7	LOS D	19.1	147.3	1.00	1.01	33.1
9	R2	1488	7.0	0.920	43.0	LOS D	34.3	254.6	1.00	1.06	34.8
Approach		2387	7.2	0.920	41.5	LOS C	34.3	254.6	0.96	1.02	35.0
West: M5 Motorway on&off ramp (W)											
10	L2	620	13.8	0.367	5.8	LOS A	0.0	0.0	0.00	0.52	54.4
12	R2	375	34.5	0.825	55.3	LOS D	9.6	103.2	1.00	0.97	29.4
Approach		995	21.6	0.825	24.4	LOS B	9.6	103.2	0.38	0.69	41.9
All Vehicles		4955	13.1	0.920	34.0	LOS C	34.3	254.6	0.80	0.89	37.4

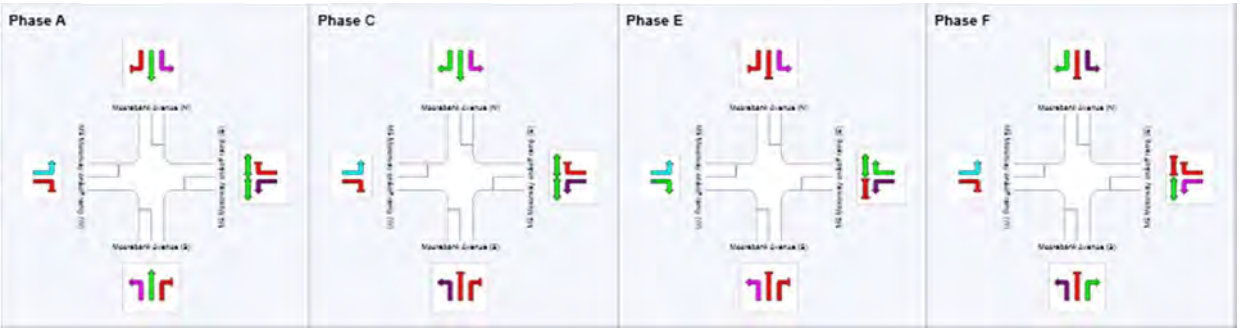
PHASING SUMMARY

Site: I-13 2030 MIMT PM

Moorebank Avenue / the M5 Motorway
2030 MIMT PM PEAK 4:30 pm - 5:30 pm
Signals - Fixed Time Cycle Time = 94 seconds (User-Given Phase Times)

Phase Timing Results

Phase	A	C	E	F
Reference Phase	Yes	No	No	No
Phase Change Time (sec)	0	14	30	53
Green Time (sec)	7	9	16	34
Yellow Time (sec)	4	4	4	4
All-Red Time (sec)	3	3	3	3
Phase Time (sec)	14	16	23	41
Phase Split	15 %	17 %	24 %	44 %



I-14 Intersection of M5 Motorway and Hume Highway

MOVEMENT SUMMARY

Site: I-14 2030 MIMT AM

M5 Motorway / Hume Highway
2030 MIMT AM PEAK 7:45 am - 8:45 am
Signals - Fixed Time Cycle Time = 159 seconds (User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Hume Highway (S)											
2	T1	4256	4.6	1.027	59.4	LOS E	152.3	1108.5	1.00	1.21	33.2
3	R2	648	4.2	0.894	44.1	LOS D	17.9	129.9	1.00	0.91	37.4
Approach		4904	4.6	1.027	57.4	LOS E	152.3	1108.5	1.00	1.17	33.7
East: M5 Motorway on&off-ramp (E)											
4	L2	338	5.9	0.134	30.5	LOS C	4.8	35.4	0.60	0.71	41.9
6	R2	1211	6.4	1.287	357.1	LOS F	74.1	558.3	1.00	1.54	7.3
Approach		1549	6.3	1.287	285.8	LOS F	74.1	558.3	0.91	1.36	9.6
North: Hume Highway (N)											
7	L2	742	10.1	0.590	13.0	LOS A	22.0	172.6	0.50	0.73	46.5
8	T1	1208	6.7	0.490	28.5	LOS B	17.8	131.7	0.62	0.55	43.3
Approach		1950	8.0	0.590	22.6	LOS B	22.0	172.6	0.57	0.62	44.2
All Vehicles		8403	5.7	1.287	91.4	LOS F	152.3	1108.5	0.89	1.08	25.5

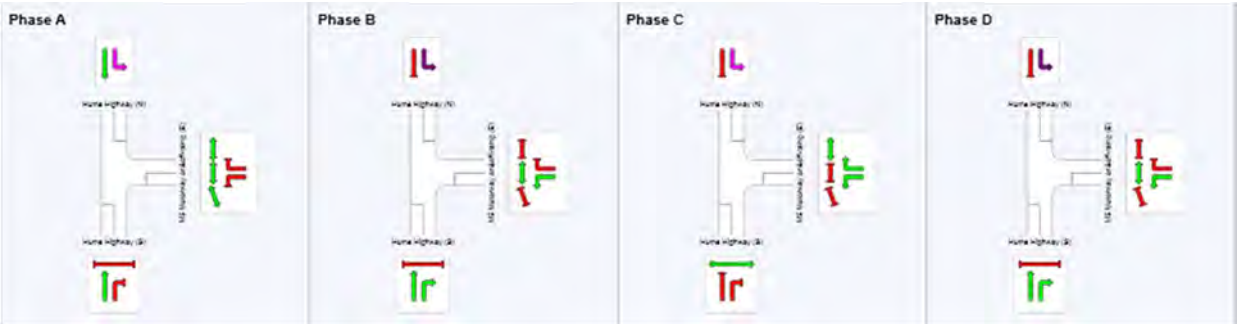
PHASING SUMMARY

Site: I-14 2030 MIMT AM

M5 Motorway / Hume Highway
2030 MIMT AM PEAK 7:45 am - 8:45 am
Signals - Fixed Time Cycle Time = 159 seconds (User-Given Phase Times)

Phase Timing Results

Phase	A	B	C	D
Reference Phase	No	No	No	Yes
Phase Change Time (sec)	20	97	123	0
Green Time (sec)	70	19	29	13
Yellow Time (sec)	4	4	4	4
All-Red Time (sec)	3	3	3	3
Phase Time (sec)	77	26	36	20
Phase Split	48 %	16 %	23 %	13 %



MOVEMENT SUMMARY

Site: I-14 2030 MIMT PM

M5 Motorway / Hume Highway
2030 MIMT PM PEAK 4:30 pm - 5:30 pm
Signals - Fixed Time Cycle Time = 159 seconds (User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Hume Highway (S)											
2	T1	2555	3.9	0.624	2.2	LOS A	7.1	51.1	0.12	0.11	58.3
3	R2	401	1.8	1.023	122.1	LOS F	20.4	145.1	1.00	1.07	22.6
Approach		2956	3.6	1.023	18.4	LOS B	20.4	145.1	0.24	0.24	48.0
East: M5 Motorway on&off-ramp (E)											
4	L2	1471	3.4	1.107	220.1	LOS F	89.7	646.4	1.00	1.28	15.0
6	R2	1217	6.2	1.235	312.3	LOS F	71.0	533.8	1.00	1.46	8.1
Approach		2688	4.7	1.235	261.9	LOS F	89.7	646.4	1.00	1.36	11.5
North: Hume Highway (N)											
7	L2	887	6.0	0.702	14.7	LOS B	27.7	210.3	0.61	0.82	45.5
8	T1	2837	2.4	0.870	20.5	LOS B	51.6	368.7	0.78	0.73	47.0
Approach		3724	3.3	0.870	19.1	LOS B	51.6	368.7	0.74	0.75	46.7
All Vehicles		9368	3.8	1.235	88.5	LOS F	89.7	646.4	0.66	0.77	26.0

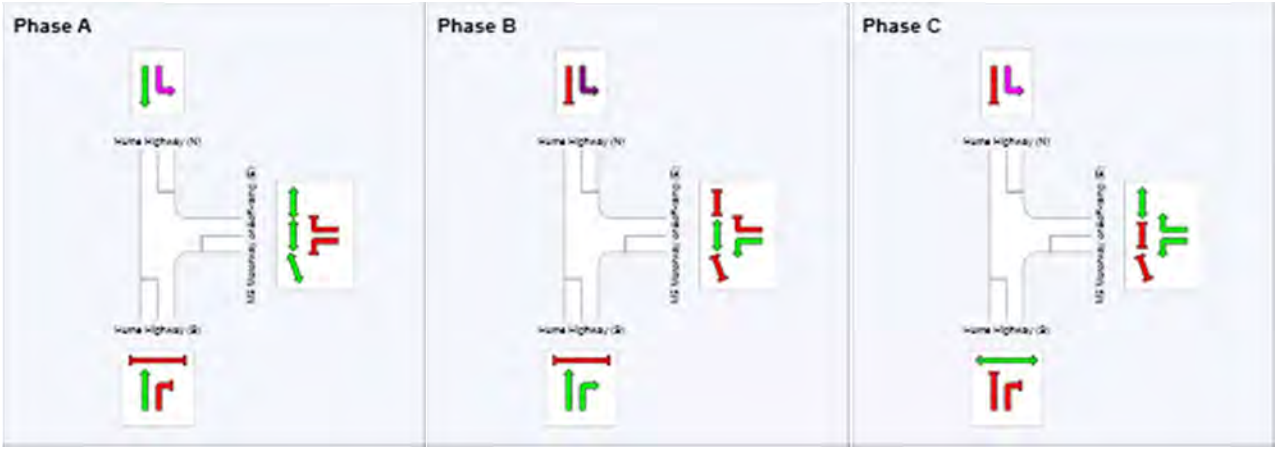
PHASING SUMMARY

Site: I-14 2030 MIMT PM

M5 Motorway / Hume Highway
2030 MIMT PM PEAK 4:30 pm - 5:30 pm
Signals - Fixed Time Cycle Time = 159 seconds (User-Given Phase Times)

Phase Timing Results

Phase	A	B	C
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	97	121
Green Time (sec)	90	17	31
Yellow Time (sec)	4	4	4
All-Red Time (sec)	3	3	3
Phase Time (sec)	97	24	38
Phase Split	61 %	15 %	24 %



I-15 Intersection of Cambridge Avenue and Canterbury Road

MOVEMENT SUMMARY

Site: I-15 2030 MIMT AM

Canterbury Road / Cambridge Avenue / Glenfield Road
2030 MIMT AM PEAK 7:45 am - 8:45 am
Roundabout

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Canterbury Road (S)											
1	L2	449	3.5	0.491	5.9	LOS A	3.0	21.7	0.59	0.68	53.0
2	T1	8	0.0	0.828	8.4	LOS A	11.9	84.6	0.85	0.87	50.5
3	R2	1017	2.1	0.828	13.8	LOS A	11.9	84.6	0.85	0.87	50.6
Approach		1475	2.5	0.828	11.4	LOS A	11.9	84.6	0.77	0.81	51.2
East: Cambridge Avenue (E)											
4	L2	307	3.1	0.163	3.5	LOS A	0.0	0.0	0.00	0.43	56.5
5	T1	81	7.8	0.087	5.4	LOS A	0.5	3.8	0.55	0.58	53.2
6	R2	54	9.8	0.087	10.6	LOS A	0.5	3.8	0.55	0.60	53.5
Approach		442	4.8	0.163	4.7	LOS A	0.5	3.8	0.17	0.48	55.5
North: Railway Parade (N)											
7	L2	316	0.7	0.737	32.5	LOS C	8.3	58.6	1.00	1.29	39.0
8	T1	3	0.0	0.548	25.1	LOS B	4.0	28.8	0.97	1.12	41.4
9	R2	168	1.9	0.548	30.5	LOS C	4.0	28.8	0.97	1.12	39.6
Approach		488	1.1	0.737	31.8	LOS C	8.3	58.6	0.99	1.23	39.2
West: Glenfield Road (W)											
10	L2	399	6.3	1.188	126.9	LOS F	45.3	335.6	1.00	2.45	17.6
11	T1	207	8.1	1.188	127.7	LOS F	45.3	335.6	1.00	2.39	17.8
12	R2	367	6.9	1.188	134.9	LOS F	37.5	278.5	1.00	2.27	17.7
Approach		973	6.9	1.188	130.1	LOS F	45.3	335.6	1.00	2.37	17.7
All Vehicles		3378	3.9	1.188	47.6	LOS D	45.3	335.6	0.79	1.28	33.3

MOVEMENT SUMMARY

Site: I-15 2030 MIMT PM

Canterbury Road / Cambridge Avenue / Glenfield Road
2030 MIMT PM PEAK 4:30 pm - 5:30 pm
Roundabout

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Canterbury Road (S)											
1	L2	338	2.2	0.471	8.8	LOS A	3.0	21.5	0.78	0.92	51.0
2	T1	6	0.0	0.402	7.2	LOS A	2.5	17.4	0.76	0.91	51.2
3	R2	334	1.3	0.402	12.6	LOS A	2.5	17.4	0.76	0.91	51.4
Approach		678	1.7	0.471	10.6	LOS A	3.0	21.5	0.77	0.92	51.2
East: Cambridge Avenue (E)											
4	L2	1129	2.2	0.596	3.6	LOS A	0.0	0.0	0.00	0.43	56.3
5	T1	294	7.9	0.450	7.2	LOS A	3.5	25.3	0.76	0.75	52.0
6	R2	328	1.0	0.450	12.3	LOS A	3.5	25.3	0.81	0.78	52.3
Approach		1751	2.9	0.596	5.8	LOS A	3.5	25.3	0.28	0.55	54.8
North: Railway Parade (N)											
7	L2	125	1.7	0.191	7.9	LOS A	1.0	6.8	0.69	0.80	52.8
8	T1	0	0.0	0.000	0.0	NA	0.0	0.0	0.00	0.00	0.0
9	R2	240	8.3	0.294	12.7	LOS A	1.7	12.6	0.72	0.86	50.0
Approach		365	6.1	0.294	11.0	LOS A	1.7	12.6	0.71	0.84	51.0
West: Glenfield Road (W)											
10	L2	271	4.7	0.428	8.5	LOS A	2.8	20.2	0.75	0.84	51.2
11	T1	54	0.0	0.428	8.3	LOS A	2.8	20.2	0.75	0.84	53.1
12	R2	451	3.7	0.498	13.7	LOS A	3.8	27.8	0.79	0.90	49.4
Approach		775	3.8	0.498	11.5	LOS A	3.8	27.8	0.77	0.88	50.2
All Vehicles		3569	3.2	0.596	8.5	LOS A	3.8	27.8	0.52	0.72	52.7

Appendix I

2030 SIDRA results with Moorebank IMT and SIMTA

1. Moorebank Avenue – 2030 cumulative scenario 1

I-01 Intersection of Moorebank Avenue, Anzac Road and Bapaume Road

MOVEMENT SUMMARY

Site: I-01 Cumulative Scenario 1 AM

Intersection of Moorebank Avenue, Anzac Road and Bapaume Road
2030 Cumulative Scenario 1 AM PEAK
Signals - Fixed Time Cycle Time = 110 seconds (Optimum Cycle Time - Minimum Delay)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Moorebank Avenue (S)											
1	L2	37	0.0	0.843	33.8	LOS C	31.3	253.1	0.87	0.85	31.7
2	T1	1293	19.1	0.843	28.1	LOS B	31.3	253.1	0.87	0.84	36.6
3	R2	473	3.1	0.856	37.1	LOS C	18.4	132.2	1.00	0.99	33.4
Approach		1802	14.5	0.856	30.6	LOS C	31.3	253.6	0.91	0.88	35.5
East: Anzac Road (E)											
4	L2	238	3.5	0.388	33.5	LOS C	9.8	70.8	0.79	0.79	34.9
5	T1	9	0.0	0.388	29.1	LOS C	9.8	70.8	0.79	0.79	34.2
6	R2	224	13.6	0.841	62.4	LOS E	13.2	103.3	1.00	0.95	28.1
Approach		472	8.3	0.841	47.1	LOS D	13.2	103.3	0.89	0.87	31.1
North: Moorebank Avenue (N)											
7	L2	383	9.9	0.221	5.7	LOS A	0.0	0.0	0.00	0.52	54.2
8	T1	848	26.6	0.561	19.6	LOS B	13.5	116.4	0.64	0.57	41.6
9	R2	142	5.2	0.322	22.5	LOS B	3.9	28.5	0.83	0.78	37.3
Approach		1374	19.7	0.561	16.0	LOS B	13.5	116.4	0.48	0.58	44.5
West: Bapaume Road (W)											
10	L2	9	77.8	0.021	15.3	LOS B	0.2	2.3	0.56	0.61	39.4
11	T1	1	0.0	0.012	48.4	LOS D	0.1	0.7	0.91	0.60	28.7
12	R2	1	0.0	0.012	52.1	LOS D	0.1	0.7	0.91	0.60	24.2
Approach		12	63.6	0.021	21.7	LOS B	0.2	2.3	0.63	0.60	36.3
All Vehicles		3659	15.8	0.856	27.2	LOS B	31.3	253.6	0.74	0.77	37.7

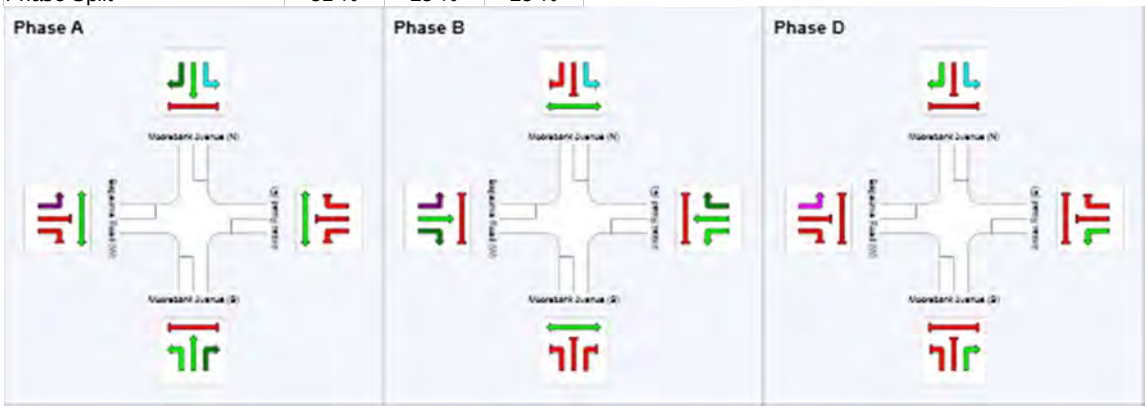
PHASING SUMMARY

Site: I-01 Cumulative Scenario 1 AM

Intersection of Moorebank Avenue, Anzac Road and Bapaume Road
2030 Cumulative Scenario 1 AM PEAK
Signals - Fixed Time Cycle Time = 110 seconds (Optimum Cycle Time - Minimum Delay)

Phase Timing Results

Phase	A	B	D
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	56	83
Green Time (sec)	50	21	21
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	56	27	27
Phase Split	51 %	25 %	25 %



MOVEMENT SUMMARY

Site: I-01 Cumulative Scenario 1 PM

Intersection of Moorebank Avenue, Anzac Road and Bapaume Road
2030 Cumulative Scenario 1 PM PEAK
Signals - Fixed Time Cycle Time = 120 seconds (Optimum Cycle Time - Minimum Delay)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Moorebank Avenue (S)											
1	L2	1	0.0	0.308	8.6	LOS A	2.7	24.0	0.15	0.13	50.0
2	T1	664	33.4	0.308	3.0	LOS A	2.7	24.0	0.15	0.13	56.2
3	R2	232	0.9	1.043	121.3	LOS F	23.7	167.5	1.00	1.26	17.1
Approach		897	25.0	1.043	33.6	LOS C	23.7	167.5	0.37	0.42	34.3
East: Anzac Road (E)											
4	L2	568	2.2	0.914	63.0	LOS E	38.8	277.0	1.00	0.99	25.8
5	T1	1	0.0	0.914	58.6	LOS E	38.8	277.0	1.00	0.99	25.4
6	R2	391	5.4	1.120	192.1	LOS F	45.9	336.1	1.00	1.40	13.6
Approach		960	3.5	1.120	115.5	LOS F	45.9	336.1	1.00	1.16	18.5
North: Moorebank Avenue (N)											
7	L2	353	3.9	0.195	5.7	LOS A	0.0	0.0	0.00	0.53	54.4
8	T1	1474	16.4	0.903	27.1	LOS B	40.8	325.7	0.66	0.71	37.2
9	R2	27	30.8	0.087	20.8	LOS B	0.8	7.0	0.51	0.68	38.0
Approach		1854	14.3	0.903	22.9	LOS B	40.8	325.7	0.53	0.67	40.2
West: Bapaume Road (W)											
10	L2	152	6.3	0.249	9.7	LOS A	2.6	19.1	0.37	0.60	45.1
11	T1	13	0.0	0.452	64.3	LOS E	2.4	17.1	1.00	0.74	24.7
12	R2	27	0.0	0.452	68.1	LOS E	2.4	17.1	1.00	0.74	20.4
Approach		192	4.9	0.452	21.6	LOS B	2.6	19.1	0.50	0.63	37.4
All Vehicles		3902	13.6	1.120	48.1	LOS D	45.9	336.1	0.61	0.73	29.6

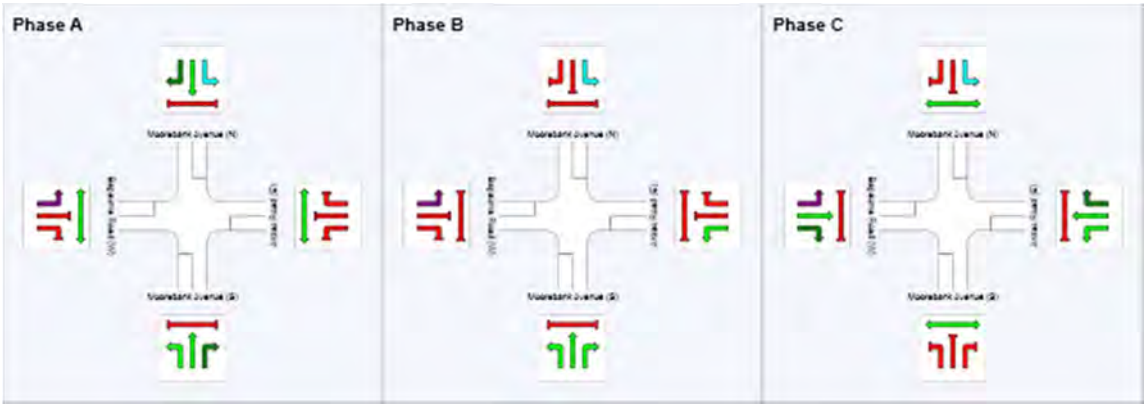
PHASING SUMMARY

Site: I-01 Cumulative Scenario 1 PM

Intersection of Moorebank Avenue, Anzac Road and Bapaume Road
2030 Cumulative Scenario 1 PM PEAK
Signals - Fixed Time Cycle Time = 120 seconds (Optimum Cycle Time - Minimum Delay)

Phase Timing Results

Phase	A	B	C
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	73	87
Green Time (sec)	67	8	27
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	73	14	33
Phase Split	61 %	12 %	28 %



I-02 Intersection of Moorebank Avenue, Warehouse Access 1 and DNSDC Access

MOVEMENT SUMMARY

Site: I-02 Cumulative Scenario 1 AM

Intersection of Moorebank Avenue, Warehouse Access 1 and DNSDC Access
2030 Cumulative Scenario 1 AM PEAK
Signals - Fixed Time Cycle Time = 100 seconds (Optimum Cycle Time - Minimum Delay)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Moorebank Avenue (S)											
1	L2	1	0.0	0.762	10.6	LOS A	15.9	123.9	0.40	0.37	44.4
2	T1	1769	13.3	0.762	4.9	LOS A	15.9	123.9	0.38	0.35	51.9
3	R2	56	0.0	0.501	58.3	LOS E	2.8	19.9	1.00	0.75	12.1
Approach		1826	12.9	0.762	6.6	LOS A	15.9	123.9	0.40	0.37	48.8
East: DNSDC Access (E)											
4	L2	5	20.0	0.219	55.2	LOS D	1.2	12.3	0.97	0.72	15.2
6	R2	19	66.7	0.219	55.4	LOS D	1.2	12.3	0.97	0.72	17.5
Approach		24	56.5	0.219	55.3	LOS D	1.2	12.3	0.97	0.72	17.1
North: Moorebank Avenue (N)											
7	L2	207	12.7	0.488	15.2	LOS B	13.3	108.1	0.55	0.60	28.1
8	T1	863	22.4	0.488	9.2	LOS A	13.3	108.1	0.54	0.53	45.6
9	R2	16	86.7	0.229	59.8	LOS E	0.8	9.9	0.98	0.70	16.5
Approach		1086	21.5	0.488	11.1	LOS A	13.3	108.1	0.55	0.54	40.8
West: Warehouse Access 1 (W)											
10	L2	15	92.9	0.082	43.4	LOS D	0.7	8.1	0.86	0.69	19.8
12	R2	1	0.0	0.082	42.5	LOS D	0.7	8.1	0.86	0.69	18.4
Approach		16	86.7	0.082	43.3	LOS D	0.7	8.1	0.86	0.69	19.7
All Vehicles		2953	16.8	0.762	8.8	LOS A	15.9	123.9	0.46	0.44	44.8

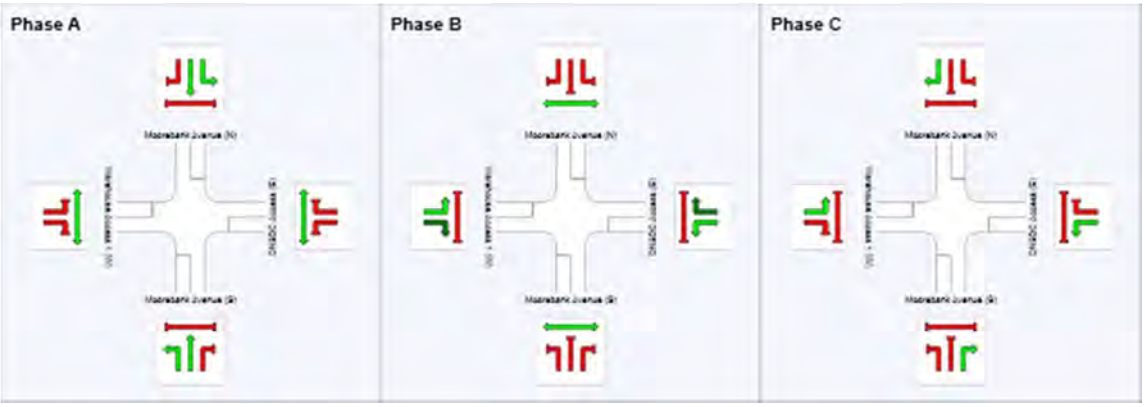
PHASING SUMMARY

Site: I-02 Cumulative Scenario 1 AM

Intersection of Moorebank Avenue, Warehouse Access 1 and DNSDC Access
2030 Cumulative Scenario 1 AM PEAK
Signals - Fixed Time Cycle Time = 100 seconds (Optimum Cycle Time - Minimum Delay)

Phase Timing Results

Phase	A	B	C
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	72	88
Green Time (sec)	66	10	6
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	72	16	12
Phase Split	72 %	16 %	12 %



MOVEMENT SUMMARY

Site: I-02 Cumulative Scenario 1 PM

Intersection of Moorebank Avenue, Warehouse Access 1 and DNSDC Access
2030 Cumulative Scenario 1 PM PEAK
Signals - Fixed Time Cycle Time = 90 seconds (Optimum Cycle Time - Minimum Delay)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Moorebank Avenue (S)											
1	L2	1	0.0	0.386	11.3	LOS A	4.9	41.8	0.31	0.27	43.2
2	T1	774	25.4	0.386	5.8	LOS A	4.9	41.8	0.31	0.27	50.8
3	R2	1	0.0	0.010	25.4	LOS B	0.0	0.2	0.64	0.63	18.1
Approach		776	25.4	0.386	5.8	LOS A	4.9	41.8	0.31	0.27	50.7
East: DNSDC Access (E)											
4	L2	35	0.0	0.825	55.7	LOS D	7.0	52.9	1.00	0.95	15.6
6	R2	106	12.9	0.825	55.7	LOS D	7.0	52.9	1.00	0.95	18.1
Approach		141	9.7	0.825	55.7	LOS D	7.0	52.9	1.00	0.95	17.5
North: Moorebank Avenue (N)											
7	L2	25	79.2	0.782	14.4	LOS A	28.0	217.0	0.68	0.64	28.8
8	T1	2031	10.9	0.782	7.9	LOS A	28.0	217.0	0.67	0.63	48.0
9	R2	15	92.9	0.198	53.9	LOS D	0.7	8.5	0.98	0.70	17.6
Approach		2071	12.3	0.782	8.3	LOS A	28.0	217.0	0.67	0.63	47.3
West: Warehouse Access 1 (W)											
10	L2	16	86.7	0.065	35.0	LOS C	0.6	7.0	0.81	0.69	22.4
12	R2	1	0.0	0.065	34.2	LOS C	0.6	7.0	0.81	0.69	21.1
Approach		17	81.3	0.065	34.9	LOS C	0.6	7.0	0.81	0.69	22.3
All Vehicles		3004	15.9	0.825	10.0	LOS A	28.0	217.0	0.60	0.55	45.1

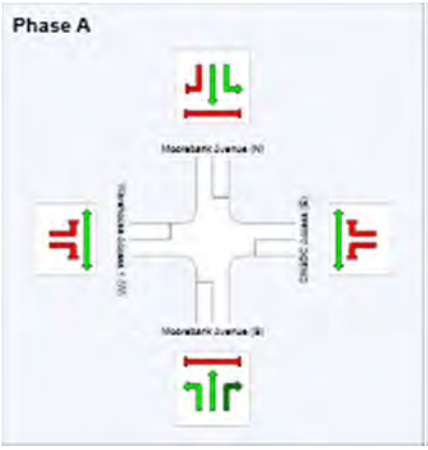
PHASING SUMMARY

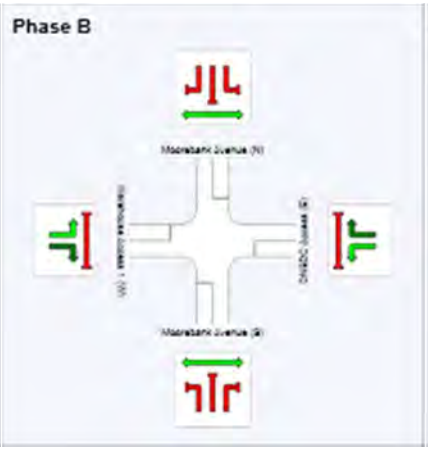
Site: I-02 Cumulative Scenario 1 PM

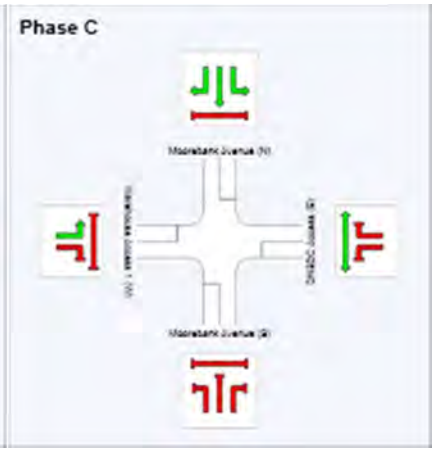
Intersection of Moorebank Avenue, Warehouse Access 1 and DNSDC Access
2030 Cumulative Scenario 1 PM PEAK
Signals - Fixed Time Cycle Time = 90 seconds (Optimum Cycle Time - Minimum Delay)

Phase Timing Results

Phase	A	B	C
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	60	78
Green Time (sec)	54	12	6
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	60	18	12
Phase Split	67 %	20 %	13 %







I-03 Intersection of Moorebank Avenue, Warehouse Access 2 and SIMTA Central Access

MOVEMENT SUMMARY

Site: I-03 Cumulative Scenario 1 AM

Intersection of Moorebank Avenue, Warehouse Access 2 and SIMTA Central Access
2030 Cumulative Scenario 1 AM PEAK
Signals - Fixed Time Cycle Time = 90 seconds (Optimum Cycle Time - Minimum Delay)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Moorebank Avenue (S)											
1	L2	1	0.0	0.882	32.9	LOS C	42.1	324.0	0.93	0.97	34.8
2	T1	1798	11.5	0.882	27.3	LOS B	42.1	324.0	0.91	0.95	38.1
3	R2	31	0.0	0.064	10.9	LOS A	0.4	2.9	0.45	0.65	36.2
Approach		1829	11.3	0.882	27.0	LOS B	42.1	324.0	0.90	0.95	38.1
East: SIMTA Central Access (E)											
4	L2	1	0.0	0.002	31.1	LOS C	0.0	0.2	0.75	0.60	33.2
6	R2	13	91.7	0.078	44.3	LOS D	0.5	6.4	0.90	0.69	15.7
Approach		14	84.6	0.078	43.3	LOS D	0.5	6.4	0.89	0.68	17.0
North: Moorebank Avenue (N)											
7	L2	89	21.2	0.100	15.8	LOS B	1.8	15.1	0.50	0.69	26.4
8	T1	759	20.9	0.383	6.9	LOS A	5.4	44.5	0.35	0.31	52.4
9	R2	20	84.2	0.133	25.3	LOS B	0.5	6.2	0.84	0.71	23.6
Approach		868	22.4	0.383	8.2	LOS A	5.4	44.5	0.38	0.35	49.5
West: Warehouse Access 2 (W)											
10	L2	18	94.1	0.068	33.3	LOS C	0.6	8.0	0.79	0.69	17.7
12	R2	1	0.0	0.068	32.5	LOS C	0.6	8.0	0.79	0.69	32.0
Approach		19	88.9	0.068	33.3	LOS C	0.6	8.0	0.79	0.69	18.6
All Vehicles		2731	15.8	0.882	21.2	LOS B	42.1	324.0	0.73	0.76	40.7

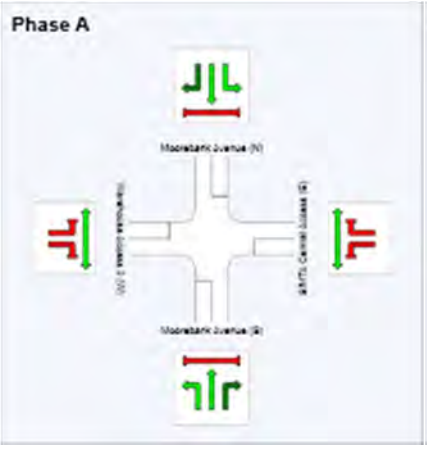
PHASING SUMMARY

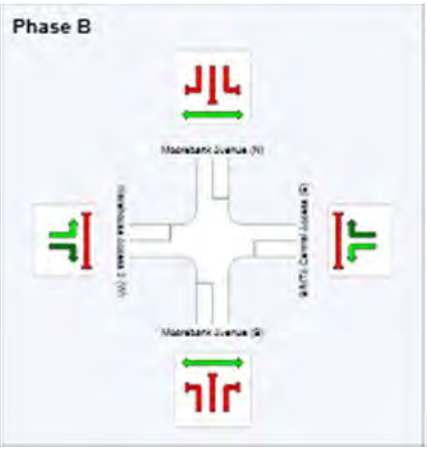
Site: I-03 Cumulative Scenario 1 AM

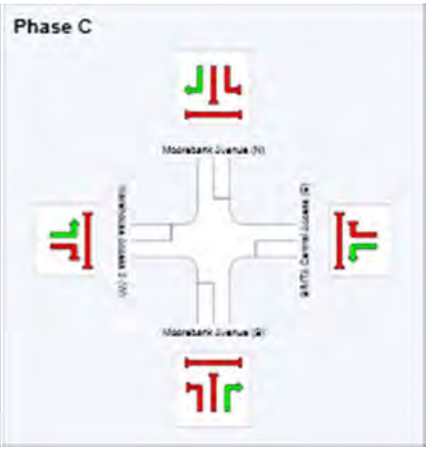
Intersection of Moorebank Avenue, Warehouse Access 2 and SIMTA Central Access
2030 Cumulative Scenario 1 AM PEAK
Signals - Fixed Time Cycle Time = 90 seconds (Optimum Cycle Time - Minimum Delay)

Phase Timing Results

Phase	A	B	C
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	58	78
Green Time (sec)	52	14	6
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	58	20	12
Phase Split	64 %	22 %	13 %







MOVEMENT SUMMARY

Site: I-03 Cumulative Scenario 1 PM

Intersection of Moorebank Avenue, Warehouse Access 2 and SIMTA Central Access
2030 Cumulative Scenario 1 PM PEAK
Signals - Fixed Time Cycle Time = 90 seconds (Optimum Cycle Time - Minimum Delay)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Moorebank Avenue (S)											
1	L2	1	0.0	0.347	16.3	LOS B	7.7	65.9	0.57	0.49	45.7
2	T1	672	25.1	0.347	10.7	LOS A	7.7	65.9	0.57	0.49	49.0
3	R2	1	0.0	0.008	15.6	LOS B	0.0	0.2	0.46	0.62	33.8
Approach		674	25.0	0.347	10.7	LOS A	7.7	65.9	0.56	0.49	48.9
East: SIMTA Central Access (E)											
4	L2	31	0.0	0.123	43.6	LOS D	1.2	8.5	0.91	0.72	28.3
6	R2	82	14.1	0.388	45.9	LOS D	3.5	27.1	0.96	0.77	17.6
Approach		113	10.3	0.388	45.2	LOS D	3.5	27.1	0.94	0.75	21.0
North: Moorebank Avenue (N)											
7	L2	20	94.7	0.025	10.7	LOS A	0.3	3.2	0.31	0.62	28.5
8	T1	2031	9.1	0.776	1.9	LOS A	8.7	65.5	0.21	0.20	57.8
9	R2	18	94.1	0.064	12.6	LOS A	0.3	3.2	0.48	0.66	31.0
Approach		2068	10.7	0.776	2.0	LOS A	8.7	65.5	0.22	0.21	57.3
West: Warehouse Access 2 (W)											
10	L2	20	84.2	0.072	33.2	LOS C	0.7	8.4	0.79	0.69	18.1
12	R2	1	0.0	0.072	32.5	LOS C	0.7	8.4	0.79	0.69	32.0
Approach		21	80.0	0.072	33.2	LOS C	0.7	8.4	0.79	0.69	18.8
All Vehicles		2876	14.5	0.776	6.0	LOS A	8.7	65.9	0.33	0.30	52.8

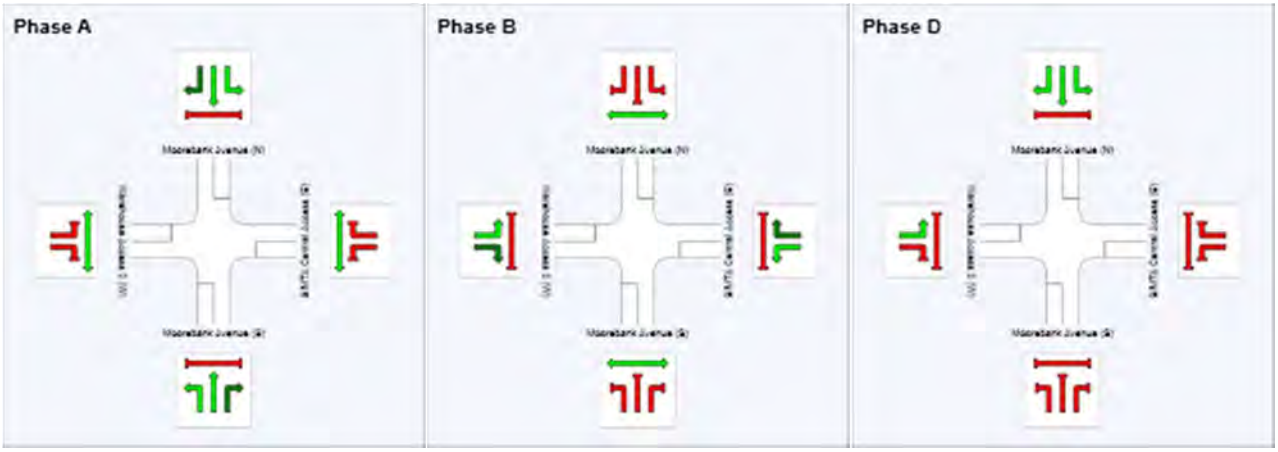
PHASING SUMMARY

Site: I-03 Cumulative Scenario 1 PM

Intersection of Moorebank Avenue, Warehouse Access 2 and SIMTA Central Access
2030 Cumulative Scenario 1 PM PEAK
Signals - Fixed Time Cycle Time = 90 seconds (Optimum Cycle Time - Minimum Delay)

Phase Timing Results

Phase	A	B	D
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	58	78
Green Time (sec)	52	14	6
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	58	20	12
Phase Split	64 %	22 %	13 %



I-04 Intersection of Moorebank Avenue and Warehouse Access 3

MOVEMENT SUMMARY

Site: I-04 Cumulative Scenario 1 AM

Intersection of Moorebank Avenue and Warehouse Access 3
2030 Cumulative Scenario 1 AM PEAK
Signals - Fixed Time Cycle Time = 90 seconds (Optimum Cycle Time - Minimum Delay)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Moorebank Avenue (S)											
1	L2	2	0.0	0.791	19.5	LOS B	29.7	225.4	0.81	0.75	41.8
2	T1	1801	9.9	0.791	14.0	LOS A	29.7	225.5	0.81	0.75	49.3
Approach		1803	9.9	0.791	14.0	LOS A	29.7	225.5	0.81	0.75	49.2
North: Moorebank Avenue (N)											
8	T1	725	18.0	0.275	3.6	LOS A	4.8	39.1	0.33	0.29	56.8
9	R2	34	84.4	0.220	21.1	LOS B	0.8	9.8	0.76	0.73	36.1
Approach		759	20.9	0.275	4.4	LOS A	4.8	39.1	0.35	0.31	55.9
West: Warehouse Access 3 (W)											
10	L2	29	96.4	0.130	36.7	LOS C	1.1	14.0	0.83	0.71	28.7
12	R2	1	0.0	0.130	35.9	LOS C	1.1	14.0	0.83	0.71	29.1
Approach		31	93.1	0.130	36.7	LOS C	1.1	14.0	0.83	0.71	28.7
All Vehicles		2593	14.1	0.791	11.5	LOS A	29.7	225.5	0.67	0.62	50.7

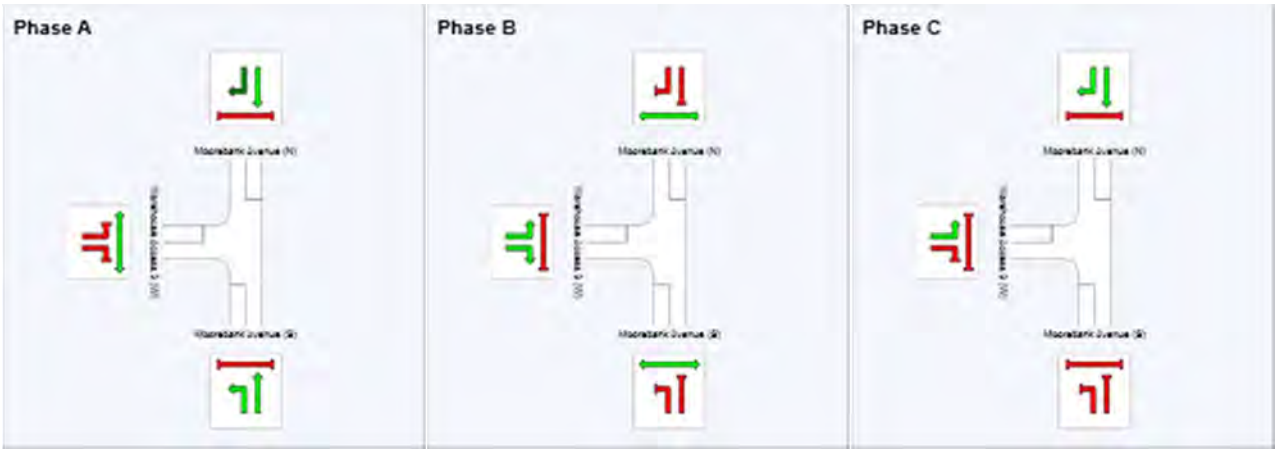
PHASING SUMMARY

Site: I-04 Cumulative Scenario 1 AM

Intersection of Moorebank Avenue and Warehouse Access 3
2030 Cumulative Scenario 1 AM PEAK
Signals - Fixed Time Cycle Time = 90 seconds (Optimum Cycle Time - Minimum Delay)

Phase Timing Results

Phase	A	B	C
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	62	78
Green Time (sec)	56	10	6
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	62	16	12
Phase Split	69 %	18 %	13 %



MOVEMENT SUMMARY

Site: I-04 Cumulative Scenario 1 PM

Intersection of Moorebank Avenue and Warehouse Access 3
2030 Cumulative Scenario 1 PM PEAK
Signals - Fixed Time Cycle Time = 90 seconds (Optimum Cycle Time - Minimum Delay)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Moorebank Avenue (S)											
1	L2	1	0.0	0.312	15.0	LOS B	6.8	56.9	0.53	0.46	45.8
2	T1	638	21.9	0.312	9.5	LOS A	6.8	56.9	0.53	0.46	52.3
Approach		639	21.9	0.312	9.5	LOS A	6.8	56.9	0.53	0.46	52.3
North: Moorebank Avenue (N)											
8	T1	2034	7.7	0.757	6.4	LOS A	26.4	196.7	0.59	0.55	54.6
9	R2	29	96.4	0.091	11.2	LOS A	0.4	4.5	0.44	0.66	42.0
Approach		2063	9.0	0.757	6.4	LOS A	26.4	196.7	0.59	0.55	54.4
West: Warehouse Access 3 (W)											
10	L2	34	84.4	0.138	36.5	LOS C	1.3	15.3	0.84	0.72	28.9
12	R2	2	0.0	0.138	35.8	LOS C	1.3	15.3	0.84	0.72	29.1
Approach		36	79.4	0.138	36.5	LOS C	1.3	15.3	0.84	0.72	28.9
All Vehicles		2738	12.9	0.757	7.5	LOS A	26.4	196.7	0.58	0.53	53.5

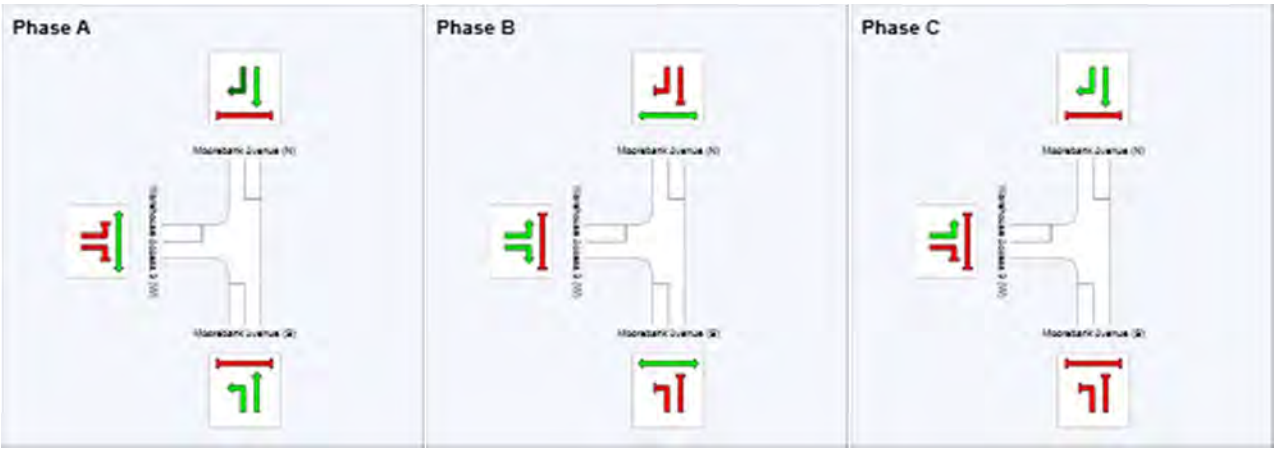
PHASING SUMMARY

Site: I-04 Cumulative Scenario 1 PM

Intersection of Moorebank Avenue and Warehouse Access 3
2030 Cumulative Scenario 1 PM PEAK
Signals - Fixed Time Cycle Time = 90 seconds (Optimum Cycle Time - Minimum Delay)

Phase Timing Results

Phase	A	B	C
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	60	76
Green Time (sec)	54	10	8
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	60	16	14
Phase Split	67 %	18 %	16 %



I-05 Intersection of Moorebank Avenue, Main Access and SIMTA Southern Access

MOVEMENT SUMMARY

Site: I-05 Cumulative Scenario 1 AM

Intersection of Moorebank Avenue, Main Access and SIMTA Southern Access
2030 Cumulative Scenario 1 AM PEAK
Signals - Fixed Time Cycle Time = 90 seconds (Optimum Cycle Time - Minimum Delay)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Moorebank Avenue (S)											
1	L2	1	0.0	0.774	21.7	LOS B	28.3	203.2	0.84	0.76	40.3
2	T1	1676	3.1	0.774	16.1	LOS B	28.3	203.2	0.84	0.76	48.0
Approach		1677	3.1	0.774	16.1	LOS B	28.3	203.2	0.84	0.76	48.0
East: SIMTA Southern Access (E)											
4	L2	1	0.0	0.004	41.9	LOS C	0.0	0.3	0.88	0.59	27.5
6	R2	16	93.3	0.115	45.9	LOS D	0.7	8.2	0.92	0.70	26.1
Approach		17	87.5	0.115	45.7	LOS D	0.7	8.2	0.92	0.70	26.2
North: Moorebank Avenue (N)											
8	T1	609	2.9	0.249	4.7	LOS A	5.1	36.9	0.37	0.32	55.9
9	R2	116	97.3	0.730	32.1	LOS C	4.3	55.3	1.00	0.94	31.0
Approach		725	18.0	0.730	9.1	LOS A	5.1	55.3	0.47	0.42	51.5
West: Main Access (W)											
10	L2	114	99.1	0.192	32.9	LOS C	2.0	25.9	0.80	0.73	30.0
12	R2	1	0.0	0.192	32.1	LOS C	2.0	25.2	0.80	0.73	30.6
Approach		115	98.2	0.192	32.9	LOS C	2.0	25.9	0.80	0.73	30.0
All Vehicles		2534	12.2	0.774	15.1	LOS B	28.3	203.2	0.73	0.66	47.9

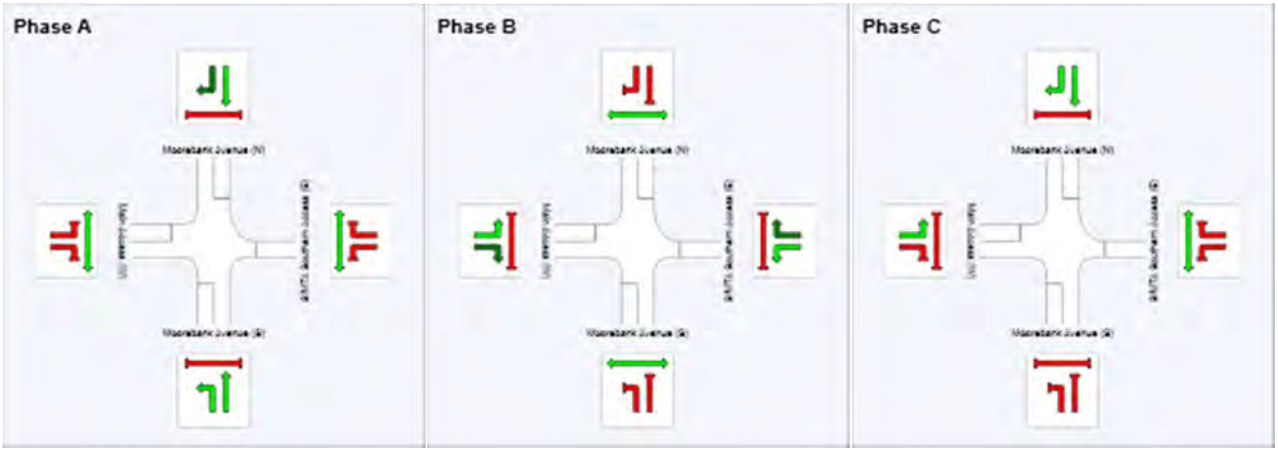
PHASING SUMMARY

Site: I-05 Cumulative Scenario 1 AM

Intersection of Moorebank Avenue, Main Access and SIMTA Southern Access
2030 Cumulative Scenario 1 AM PEAK
Signals - Fixed Time Cycle Time = 90 seconds (Optimum Cycle Time - Minimum Delay)

Phase Timing Results

Phase	A	B	C
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	57	77
Green Time (sec)	51	14	7
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	57	20	13
Phase Split	63 %	22 %	14 %



MOVEMENT SUMMARY

Site: I-05 Cumulative Scenario 1 PM

Intersection of Moorebank Avenue, Main Access and SIMTA Southern Access
2030 Cumulative Scenario 1 PM PEAK
Signals - Fixed Time Cycle Time = 90 seconds (Optimum Cycle Time - Minimum Delay)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Moorebank Avenue (S)											
1	L2	1	0.0	0.373	28.8	LOS C	8.3	59.4	0.79	0.67	35.6
2	T1	507	2.5	0.373	23.2	LOS B	8.3	59.5	0.79	0.67	44.1
Approach		508	2.5	0.373	23.3	LOS B	8.3	59.5	0.79	0.67	44.1
East: SIMTA Southern Access (E)											
4	L2	1	0.0	0.004	41.9	LOS C	0.0	0.3	0.88	0.59	27.5
6	R2	15	100.0	0.104	44.7	LOS D	0.6	7.8	0.91	0.70	27.1
Approach		16	93.3	0.104	44.5	LOS D	0.6	7.8	0.91	0.69	27.1
North: Moorebank Avenue (N)											
8	T1	1923	2.3	0.877	13.1	LOS A	32.4	231.4	0.63	0.63	49.9
9	R2	114	99.1	0.238	12.9	LOS A	1.7	21.6	0.54	0.71	41.0
Approach		2037	7.7	0.877	13.1	LOS A	32.4	231.4	0.62	0.64	49.5
West: Main Access (W)											
10	L2	116	97.3	0.113	19.7	LOS B	1.4	18.5	0.58	0.68	35.8
12	R2	1	0.0	0.113	19.8	LOS B	1.4	18.2	0.60	0.68	36.8
Approach		117	96.4	0.113	19.7	LOS B	1.4	18.5	0.58	0.68	35.9
All Vehicles		2678	11.1	0.877	15.5	LOS B	32.4	231.4	0.66	0.64	47.7

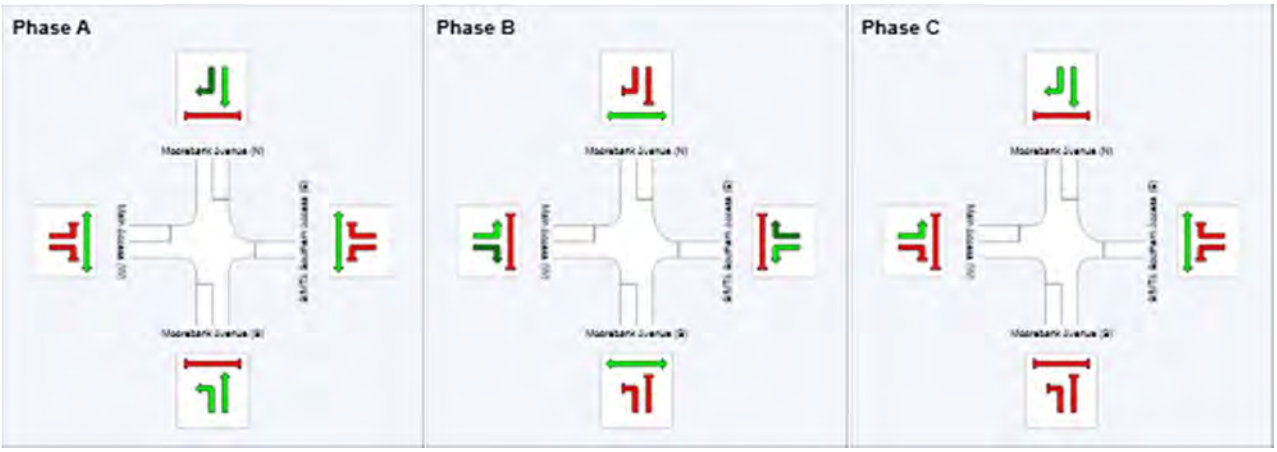
PHASING SUMMARY

Site: I-05 Cumulative Scenario 1 PM

Intersection of Moorebank Avenue, Main Access and SIMTA Southern Access
2030 Cumulative Scenario 1 PM PEAK
Signals - Fixed Time Cycle Time = 90 seconds (Optimum Cycle Time - Minimum Delay)

Phase Timing Results

Phase	A	B	C
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	38	58
Green Time (sec)	32	14	26
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	38	20	32
Phase Split	42 %	22 %	36 %



2. Moorebank Avenue – 2030 cumulative scenario 2

I-01 Intersection of Moorebank Avenue, Anzac Road and Bapaume Road

MOVEMENT SUMMARY

Site: I-01 Cumulative Scenario 2 AM

Intersection of Moorebank Avenue, Anzac Road and Bapaume Road
2030 Cumulative Scenario 2 AM PEAK
Signals - Fixed Time Cycle Time = 110 seconds (User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Moorebank Avenue (S)											
1	L2	19	0.0	0.648	15.2	LOS B	15.0	130.0	0.48	0.44	43.7
2	T1	1258	16.9	0.648	9.6	LOS A	15.0	130.0	0.47	0.43	49.4
3	R2	473	3.1	0.976	86.8	LOS F	31.9	229.2	1.00	1.21	21.7
Approach		1749	13.0	0.976	30.5	LOS C	31.9	229.2	0.62	0.64	36.0
East: Anzac Road (E)											
4	L2	245	3.4	0.371	31.8	LOS C	9.6	68.9	0.77	0.78	35.9
5	T1	3	0.0	0.371	27.5	LOS B	9.6	68.9	0.77	0.78	34.8
6	R2	224	13.6	0.929	75.8	LOS F	14.9	116.4	1.00	1.06	25.3
Approach		473	8.2	0.929	52.7	LOS D	14.9	116.4	0.88	0.91	29.6
North: Moorebank Avenue (N)											
7	L2	383	9.9	0.221	5.7	LOS A	0.0	0.0	0.00	0.52	54.2
8	T1	1058	17.8	0.938	44.7	LOS D	29.9	266.2	0.70	0.87	30.2
9	R2	100	4.2	0.339	15.0	LOS B	1.7	12.4	0.63	0.73	41.7
Approach		1541	15.0	0.938	33.1	LOS C	29.9	266.2	0.52	0.77	35.4
West: Bapaume Road (W)											
10	L2	6	66.7	0.010	10.1	LOS A	0.1	0.8	0.42	0.57	43.0
11	T1	1	0.0	0.014	50.6	LOS D	0.1	0.7	0.93	0.60	28.1
12	R2	1	0.0	0.014	54.4	LOS D	0.1	0.7	0.93	0.60	24.0
Approach		8	50.0	0.014	20.7	LOS B	0.1	0.8	0.55	0.58	37.1
All Vehicles		3772	13.3	0.976	34.3	LOS C	31.9	266.2	0.61	0.73	34.7

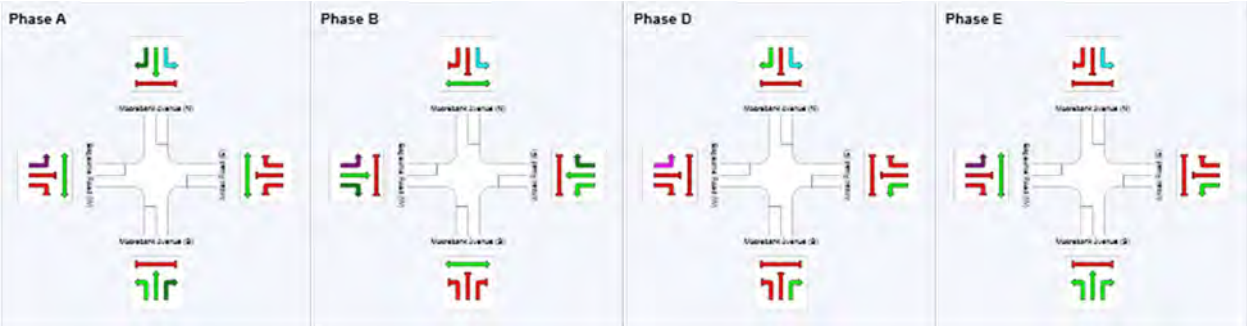
PHASING SUMMARY

Site: I-01 Cumulative Scenario 2 AM

Intersection of Moorebank Avenue, Anzac Road and Bapaume Road
2030 Cumulative Scenario 2 AM PEAK
Signals - Fixed Time Cycle Time = 110 seconds (User-Given Phase Times)

Phase Timing Results

Phase	A	B	D	E
Reference Phase	Yes	No	No	No
Phase Change Time (sec)	0	58	83	97
Green Time (sec)	52	19	8	7
Yellow Time (sec)	4	4	4	4
All-Red Time (sec)	2	2	2	2
Phase Time (sec)	58	25	14	13
Phase Split	53 %	23 %	13 %	12 %



MOVEMENT SUMMARY

Site: I-01 Cumulative Scenario 2 PM

Intersection of Moorebank Avenue, Anzac Road and Bapaume Road
2030 Cumulative Scenario 2 PM PEAK
Signals - Fixed Time Cycle Time = 110 seconds (User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Moorebank Avenue (S)											
1	L2	1	0.0	0.437	8.3	LOS A	3.9	35.0	0.16	0.15	50.6
2	T1	975	17.8	0.437	2.8	LOS A	3.9	35.0	0.16	0.15	56.5
3	R2	245	0.9	1.084	150.6	LOS F	26.7	188.0	1.00	1.37	14.9
Approach		1221	14.4	1.084	32.5	LOS C	26.7	188.0	0.33	0.39	35.1
East: Anzac Road (E)											
4	L2	568	2.2	0.954	73.1	LOS F	40.4	288.5	1.00	1.05	24.1
5	T1	1	0.0	0.954	68.7	LOS E	40.4	288.5	1.00	1.05	23.4
6	R2	391	5.4	1.198	253.1	LOS F	51.8	379.2	1.00	1.62	10.9
Approach		960	3.5	1.198	146.3	LOS F	51.8	379.2	1.00	1.28	15.8
North: Moorebank Avenue (N)											
7	L2	353	3.9	0.195	5.7	LOS A	0.0	0.0	0.00	0.53	54.4
8	T1	1423	13.5	0.891	23.8	LOS B	34.2	287.7	0.63	0.68	39.3
9	R2	24	21.7	0.107	20.3	LOS B	0.7	5.6	0.52	0.69	38.3
Approach		1800	11.7	0.891	20.2	LOS B	34.2	287.7	0.51	0.65	42.1
West: Bapaume Road (W)											
10	L2	109	5.8	0.240	8.9	LOS A	1.6	11.7	0.37	0.60	45.7
11	T1	6	0.0	0.212	59.9	LOS E	0.9	6.2	0.99	0.69	25.7
12	R2	9	0.0	0.212	63.6	LOS E	0.9	6.2	0.99	0.69	21.8
Approach		125	5.0	0.240	15.6	LOS B	1.6	11.7	0.45	0.61	41.0
All Vehicles		4106	10.4	1.198	53.2	LOS D	51.8	379.2	0.57	0.72	28.4

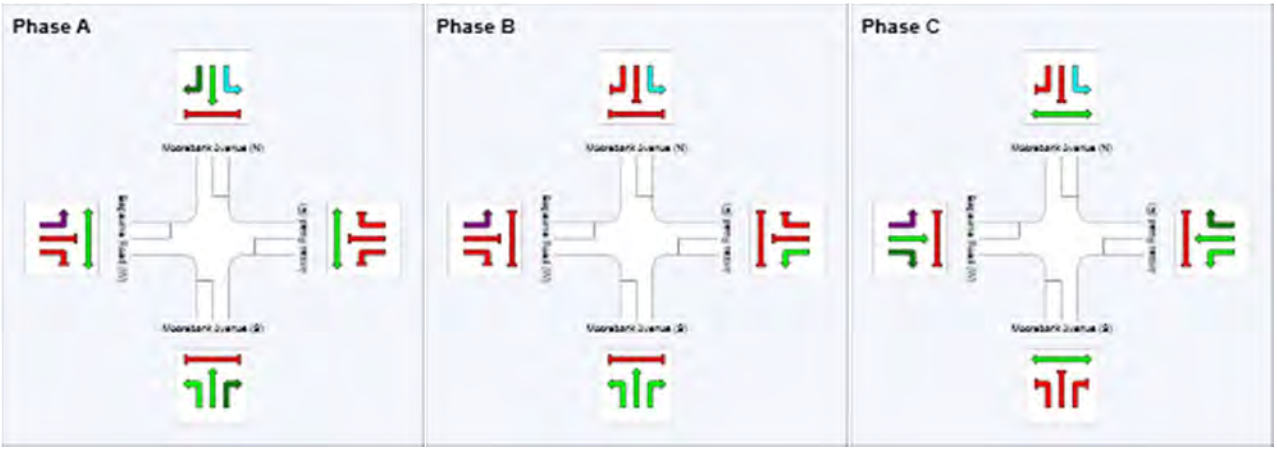
PHASING SUMMARY

Site: I-01 Cumulative Scenario 2 PM

Intersection of Moorebank Avenue, Anzac Road and Bapaume Road
2030 Cumulative Scenario 2 PM PEAK
Signals - Fixed Time Cycle Time = 110 seconds (User-Given Cycle Time)

Phase Timing Results

Phase	A	B	C
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	68	81
Green Time (sec)	62	7	23
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	68	13	29
Phase Split	62 %	12 %	26 %



I-02 Intersection of Moorebank Avenue and DNSDC Access

MOVEMENT SUMMARY

Site: I-02 Cumulative Scenario 2 AM

Intersection of Moorebank Avenue and DNSDC Access
2030 Cumulative Scenario 2 AM PEAK
Signals - Fixed Time Cycle Time = 100 seconds (User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Moorebank Avenue (S)											
2	T1	1726	12.2	0.635	0.5	LOS A	2.2	18.0	0.06	0.05	59.4
3	R2	34	0.0	0.113	11.6	LOS A	0.4	3.1	0.50	0.68	46.9
Approach		1760	12.0	0.635	0.7	LOS A	2.2	18.0	0.07	0.07	59.1
East: DNSDC Access (E)											
4	L2	5	20.0	0.349	56.4	LOS D	1.4	20.9	0.98	0.73	30.3
6	R2	23	72.7	0.349	57.0	LOS E	1.4	20.9	0.98	0.73	23.1
Approach		28	63.0	0.349	56.9	LOS E	1.4	20.9	0.98	0.73	24.4
North: Moorebank Avenue (N)											
7	L2	304	11.4	0.603	13.3	LOS A	13.0	110.8	0.45	0.57	44.5
8	T1	1002	16.4	0.603	5.3	LOS A	13.0	110.8	0.34	0.36	54.0
Approach		1306	15.2	0.603	7.2	LOS A	13.0	110.8	0.36	0.41	51.6
All Vehicles		3095	13.8	0.635	4.0	LOS A	13.0	110.8	0.20	0.22	55.1

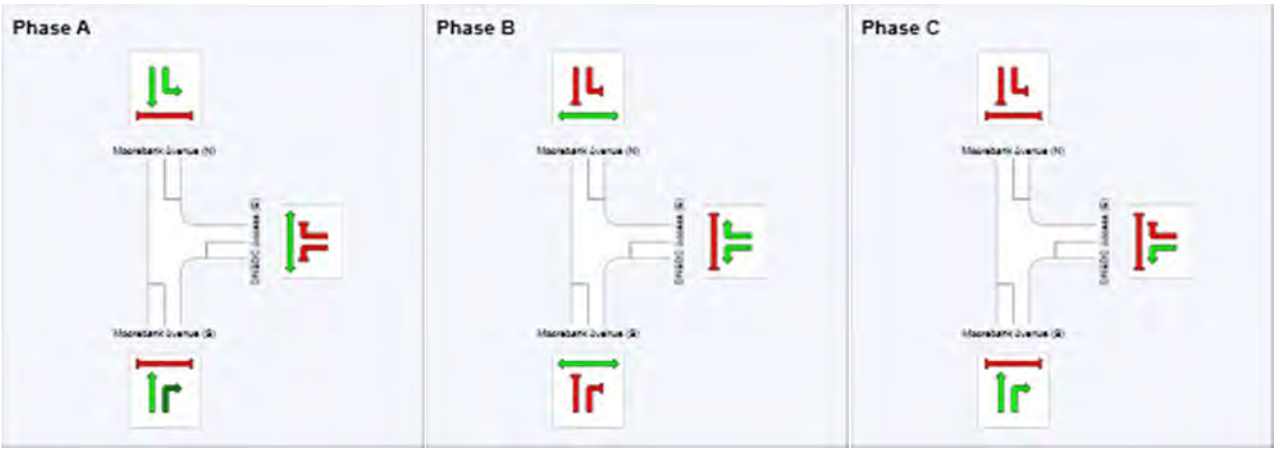
PHASING SUMMARY

Site: I-02 Cumulative Scenario 2 AM

Intersection of Moorebank Avenue and DNSDC Access
2030 Cumulative Scenario 2 AM PEAK
Signals - Fixed Time Cycle Time = 100 seconds (User-Given Cycle Time)

Phase Timing Results

Phase	A	B	C
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	72	88
Green Time (sec)	66	10	6
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	72	16	12
Phase Split	72 %	16 %	12 %



MOVEMENT SUMMARY

Site: I-02 Cumulative Scenario 2 PM

Intersection of Moorebank Avenue and DNSDC Access
2030 Cumulative Scenario 2 PM PEAK
Signals - Fixed Time Cycle Time = 100 seconds (User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Moorebank Avenue (S)											
2	T1	965	16.7	0.434	3.0	LOS A	4.1	35.7	0.19	0.17	56.9
3	R2	1	0.0	0.010	24.7	LOS B	0.0	0.2	0.60	0.63	40.7
Approach		966	16.7	0.434	3.1	LOS A	4.1	35.7	0.19	0.17	56.9
East: DNSDC Access (E)											
4	L2	16	0.0	0.866	57.5	LOS E	14.9	114.5	1.00	0.98	30.3
6	R2	255	5.8	0.866	57.6	LOS E	14.9	114.5	1.00	0.98	25.7
Approach		271	5.4	0.866	57.6	LOS E	14.9	114.5	1.00	0.98	26.0
North: Moorebank Avenue (N)											
7	L2	25	79.2	0.845	14.5	LOS B	23.6	192.2	0.48	0.48	44.5
8	T1	1975	9.3	0.845	7.6	LOS A	23.6	192.2	0.48	0.47	52.8
Approach		2000	10.2	0.845	7.7	LOS A	23.6	192.2	0.48	0.47	52.7
All Vehicles		3237	11.7	0.866	10.5	LOS A	23.6	192.2	0.44	0.43	49.8

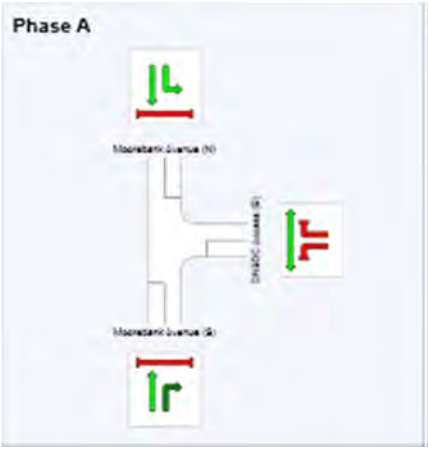
PHASING SUMMARY

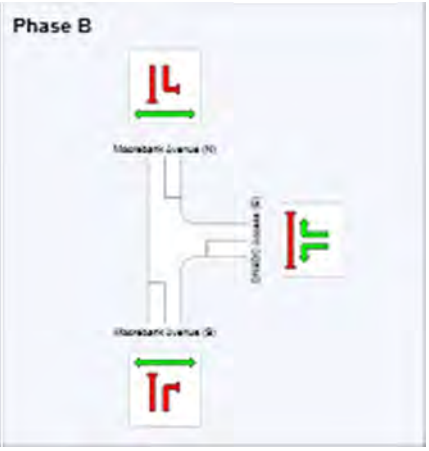
Site: I-02 Cumulative Scenario 2 PM

Intersection of Moorebank Avenue and DNSDC Access
2030 Cumulative Scenario 2 PM PEAK
Signals - Fixed Time Cycle Time = 100 seconds (User-Given Cycle Time)

Phase Timing Results

Phase	A	B
Reference Phase	Yes	No
Phase Change Time (sec)	0	73
Green Time (sec)	67	21
Yellow Time (sec)	4	4
All-Red Time (sec)	2	2
Phase Time (sec)	73	27
Phase Split	73 %	27 %





I-03 Intersection of Moorebank Avenue, MIMT Main Access and SIMTA Central Access

MOVEMENT SUMMARY

Site: I-03 Cumulative Scenario 2 AM

Intersection of Moorebank Avenue, MIMT Main Access and SIMTA Central Access
2030 Cumulative Scenario 2 AM PEAK
Signals - Fixed Time Cycle Time = 120 seconds (User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Moorebank Avenue (S)											
1	L2	4	0.0	0.719	11.4	LOS A	16.4	127.6	0.36	0.34	48.2
2	T1	1704	9.1	0.719	5.8	LOS A	16.4	127.6	0.36	0.34	54.7
3	R2	8	0.0	0.060	62.7	LOS E	0.5	3.3	0.95	0.67	21.6
Approach		1717	9.0	0.719	6.1	LOS A	16.4	127.6	0.36	0.34	54.5
East: SIMTA Central Access (E)											
4	L2	1	0.0	0.003	43.3	LOS D	0.0	0.3	0.80	0.59	26.2
6	R2	16	100.0	0.200	64.8	LOS E	0.9	18.3	0.96	0.71	24.3
Approach		17	93.8	0.200	63.4	LOS E	0.9	18.3	0.95	0.70	24.4
North: Moorebank Avenue (N)											
7	L2	186	14.7	0.429	12.9	LOS A	8.6	72.4	0.35	0.47	47.4
8	T1	773	12.8	0.429	5.3	LOS A	8.6	72.4	0.26	0.29	54.5
9	R2	48	80.4	0.720	74.4	LOS F	3.2	55.6	1.00	0.88	22.9
Approach		1007	16.4	0.720	10.0	LOS A	8.6	72.4	0.31	0.35	50.5
West: Main Access (W)											
10	L2	39	100.0	0.226	48.6	LOS D	2.0	39.3	0.86	0.74	28.0
12	R2	1	0.0	0.007	58.2	LOS E	0.1	0.4	0.93	0.59	22.3
Approach		40	97.4	0.226	48.9	LOS D	2.0	39.3	0.86	0.74	27.8
All Vehicles		2781	13.5	0.720	8.5	LOS A	16.4	127.6	0.36	0.35	52.1

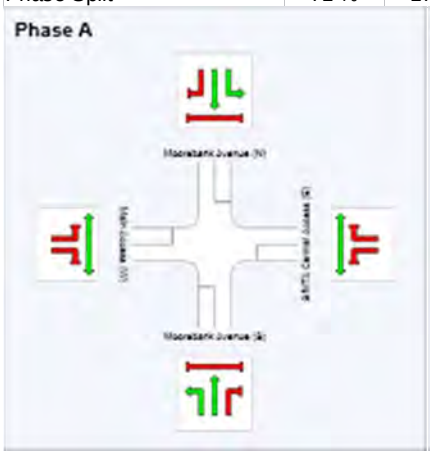
PHASING SUMMARY

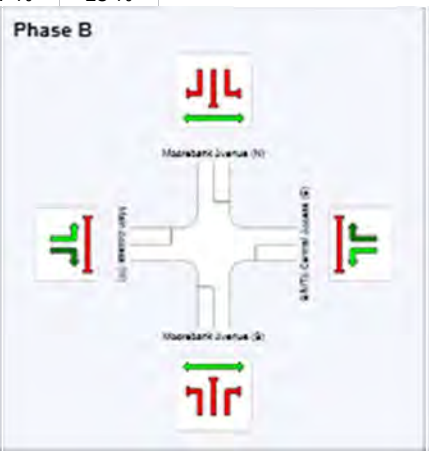
Site: I-03 Cumulative Scenario 2 AM

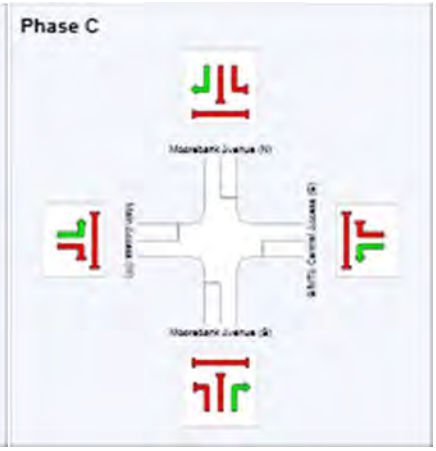
Intersection of Moorebank Avenue, MIMT Main Access and SIMTA Central Access
2030 Cumulative Scenario 2 AM PEAK
Signals - Fixed Time Cycle Time = 120 seconds (User-Given Cycle Time)

Phase Timing Results

Phase	A	B	C
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	85	105
Green Time (sec)	79	14	9
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	85	20	15
Phase Split	71 %	17 %	13 %







MOVEMENT SUMMARY

Site: I-03 Cumulative Scenario 2 PM

Intersection of Moorebank Avenue, MIMT Main Access and SIMTA Central Access
2030 Cumulative Scenario 2 PM PEAK
Signals - Fixed Time Cycle Time = 120 seconds (User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Moorebank Avenue (S)											
1	L2	1	0.0	0.414	21.7	LOS B	9.4	80.7	0.51	0.44	39.3
2	T1	687	16.1	0.414	16.2	LOS B	9.4	80.7	0.51	0.44	47.4
3	R2	1	0.0	0.013	27.7	LOS B	0.0	0.3	0.59	0.63	32.7
Approach		689	16.0	0.414	16.2	LOS B	9.4	80.7	0.51	0.44	47.4
East: SIMTA Central Access (E)											
4	L2	12	0.0	0.029	44.0	LOS D	0.5	3.7	0.81	0.67	26.0
6	R2	231	5.5	0.806	60.1	LOS E	14.2	109.7	1.00	0.93	25.9
Approach		242	5.2	0.806	59.3	LOS E	14.2	109.7	0.99	0.92	25.9
North: Moorebank Avenue (N)											
7	L2	19	100.0	0.812	13.0	LOS A	24.0	186.9	0.47	0.45	48.5
8	T1	1933	6.5	0.812	6.7	LOS A	24.3	182.8	0.47	0.44	54.0
9	R2	39	100.0	0.419	63.8	LOS E	2.3	46.0	0.97	0.76	25.1
Approach		1991	9.2	0.812	7.9	LOS A	24.3	186.9	0.48	0.45	53.0
West: Main Access (W)											
10	L2	48	80.4	0.141	31.7	LOS C	1.9	32.7	0.68	0.71	32.6
12	R2	4	0.0	0.013	44.0	LOS D	0.2	1.3	0.81	0.64	26.1
Approach		53	74.0	0.141	32.7	LOS C	1.9	32.7	0.69	0.70	32.1
All Vehicles		2975	11.6	0.812	14.4	LOS A	24.3	186.9	0.53	0.49	47.9

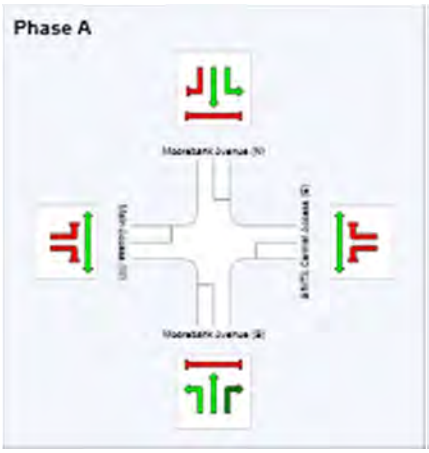
PHASING SUMMARY

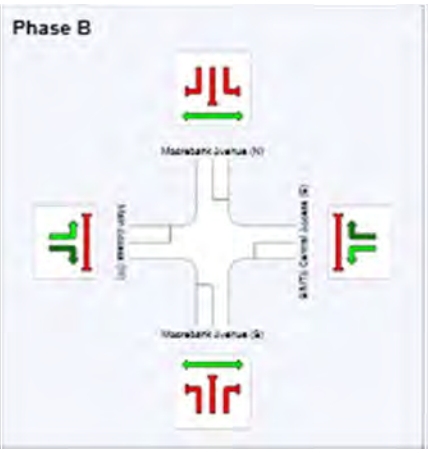
Site: I-03 Cumulative Scenario 2 PM

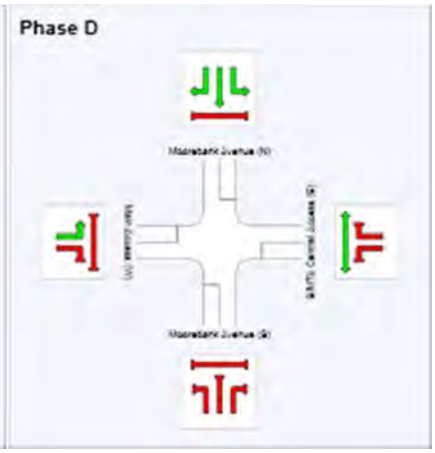
Intersection of Moorebank Avenue, MIMT Main Access and SIMTA Central Access
2030 Cumulative Scenario 2 PM PEAK
Signals - Fixed Time Cycle Time = 120 seconds (User-Given Cycle Time)

Phase Timing Results

Phase	A	B	D
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	65	100
Green Time (sec)	59	29	14
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	65	35	20
Phase Split	54 %	29 %	17 %







I-04 Intersection of Moorebank Avenue and Warehouse Access 1

MOVEMENT SUMMARY

Site: I-04 Cumulative Scenario 2 AM

Intersection of Moorebank Avenue and Warehouse Access 1
2030 Cumulative Scenario 2 AM PEAK
Signals - Fixed Time Cycle Time = 100 seconds (User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Moorebank Avenue (S)											
1	L2	5	0.0	0.713	10.3	LOS A	13.4	103.6	0.35	0.33	47.7
2	T1	1703	8.3	0.713	4.7	LOS A	13.4	103.6	0.35	0.33	54.0
Approach		1708	8.3	0.713	4.8	LOS A	13.4	103.6	0.35	0.33	53.9
North: Moorebank Avenue (N)											
8	T1	746	11.4	0.271	0.3	LOS A	0.5	3.9	0.03	0.03	59.5
9	R2	27	53.8	0.158	12.2	LOS A	0.4	3.8	0.49	0.68	41.5
Approach		774	12.9	0.271	0.8	LOS A	0.5	3.9	0.05	0.05	58.7
West: Warehouse Access 1 (W)											
10	L2	15	100.0	0.083	43.0	LOS D	0.7	8.4	0.86	0.70	25.6
12	R2	1	0.0	0.083	42.6	LOS D	0.7	8.4	0.86	0.70	23.8
Approach		16	93.3	0.083	43.0	LOS D	0.7	8.4	0.86	0.70	25.5
All Vehicles		2498	10.2	0.713	3.8	LOS A	13.4	103.6	0.26	0.24	55.0

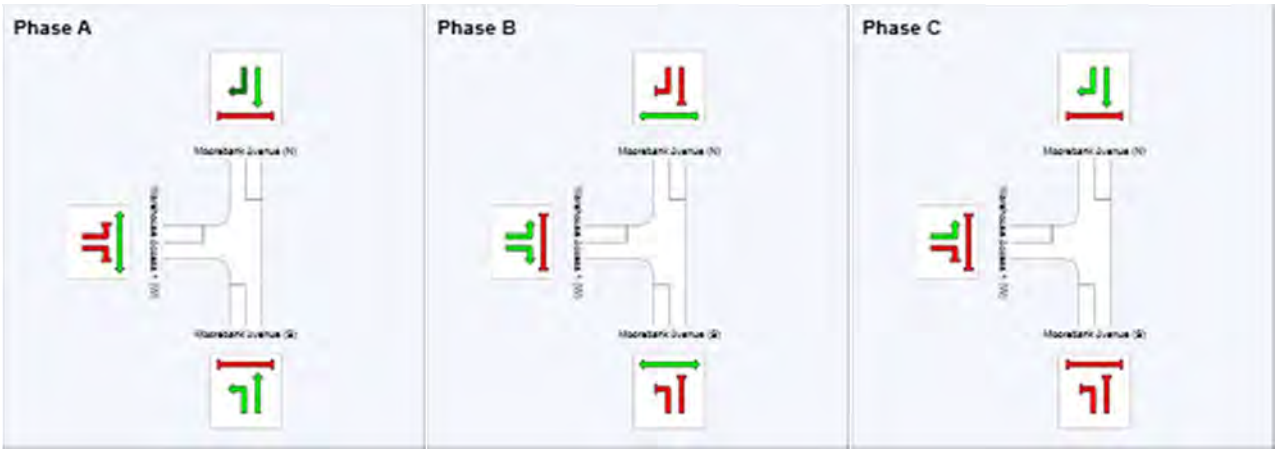
PHASING SUMMARY

Site: I-04 Cumulative Scenario 2 AM

Intersection of Moorebank Avenue and Warehouse Access 1
2030 Cumulative Scenario 2 AM PEAK
Signals - Fixed Time Cycle Time = 100 seconds (User-Given Cycle Time)

Phase Timing Results

Phase	A	B	C
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	72	88
Green Time (sec)	66	10	6
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	72	16	12
Phase Split	72 %	16 %	12 %



MOVEMENT SUMMARY

Site: I-04 Cumulative Scenario 2 PM

Intersection of Moorebank Avenue and Warehouse Access 1
2030 Cumulative Scenario 2 PM PEAK
Signals - Fixed Time Cycle Time = 100 seconds (User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Moorebank Avenue (S)											
1	L2	1	0.0	0.294	8.7	LOS A	2.6	22.0	0.17	0.15	49.8
2	T1	660	14.5	0.294	3.1	LOS A	2.6	22.0	0.17	0.15	55.9
Approach		661	14.5	0.294	3.1	LOS A	2.6	22.0	0.17	0.15	55.9
North: Moorebank Avenue (N)											
8	T1	1934	5.7	0.667	0.6	LOS A	2.7	20.1	0.06	0.06	59.2
9	R2	15	100.0	0.047	9.5	LOS A	0.2	2.3	0.33	0.63	43.8
Approach		1948	6.4	0.667	0.6	LOS A	2.7	20.1	0.06	0.06	59.1
West: Warehouse Access 1 (W)											
10	L2	27	53.8	0.163	46.4	LOS D	1.4	14.0	0.91	0.72	24.6
12	R2	5	0.0	0.163	45.9	LOS D	1.4	14.0	0.91	0.72	22.8
Approach		33	45.2	0.163	46.3	LOS D	1.4	14.0	0.91	0.72	24.3
All Vehicles		2642	8.9	0.667	1.8	LOS A	2.7	22.0	0.10	0.09	57.4

PHASING SUMMARY

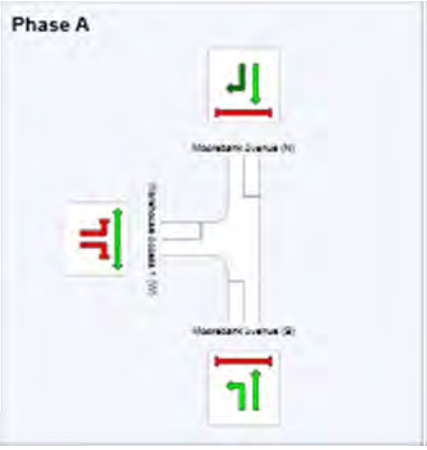
Site: I-04 Cumulative Scenario 2 PM

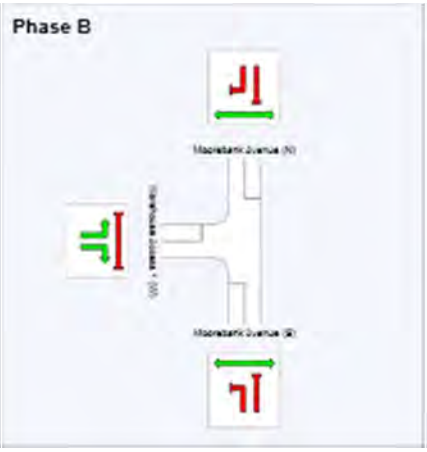
Intersection of Moorebank Avenue and Warehouse Access 1
2030 Cumulative Scenario 2 PM PEAK
Signals - Fixed Time Cycle Time = 100 seconds (User-Given Cycle Time)

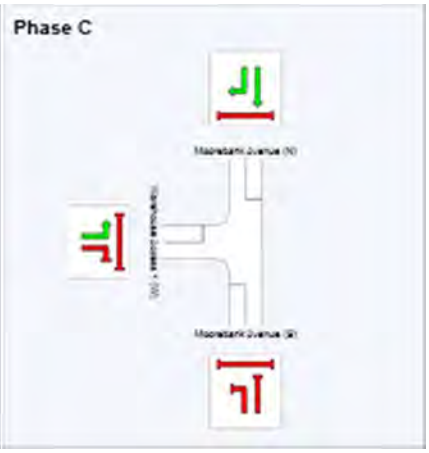
Phase times determined by the program
Sequence: NEW TCS I-04 PM
Movement Class: All Movement Classes
Input Sequence: A, B, C
Output Sequence: A, B, C

Phase Timing Results

Phase	A	B	C
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	72	88
Green Time (sec)	66	10	6
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	72	16	12
Phase Split	72 %	16 %	12 %







I-05 Intersection of Moorebank Avenue, Warehouse Access 2 and SIMTA Southern Access

MOVEMENT SUMMARY

Site: I-05 Cumulative Scenario 2 AM

Intersection of Moorebank Avenue, Warehouse Access 2 and SIMTA Southern Access
2030 Cumulative Scenario 2 AM PEAK
Signals - Fixed Time Cycle Time = 100 seconds (User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Moorebank Avenue (S)											
1	L2	4	0.0	0.732	13.0	LOS A	17.9	134.7	0.48	0.44	45.0
2	T1	1674	6.4	0.732	7.4	LOS A	17.9	134.7	0.48	0.44	50.1
Approach		1678	6.3	0.732	7.4	LOS A	17.9	134.7	0.48	0.44	50.1
East: SIMTA Southern Access (E)											
4	L2	1	0.0	0.237	52.1	LOS D	1.1	21.4	0.95	0.73	21.8
6	R2	22	100.0	0.237	52.6	LOS D	1.1	21.4	0.95	0.73	19.0
Approach		23	95.5	0.237	52.6	LOS D	1.1	21.4	0.95	0.73	19.1
North: Moorebank Avenue (N)											
8	T1	722	10.1	0.275	0.4	LOS A	0.5	3.8	0.03	0.03	59.4
9	R2	23	54.5	0.135	14.7	LOS B	0.4	3.8	0.58	0.69	37.1
Approach		745	11.4	0.275	0.8	LOS A	0.5	3.8	0.05	0.05	58.5
West: Warehouse Access 2 (W)											
10	L2	13	100.0	0.059	39.0	LOS C	0.5	6.8	0.82	0.68	24.3
12	R2	1	0.0	0.059	38.6	LOS C	0.5	6.8	0.82	0.68	25.6
Approach		14	92.3	0.059	39.0	LOS C	0.5	6.8	0.82	0.68	24.4
All Vehicles		2460	9.2	0.732	6.0	LOS A	17.9	134.7	0.35	0.32	51.5

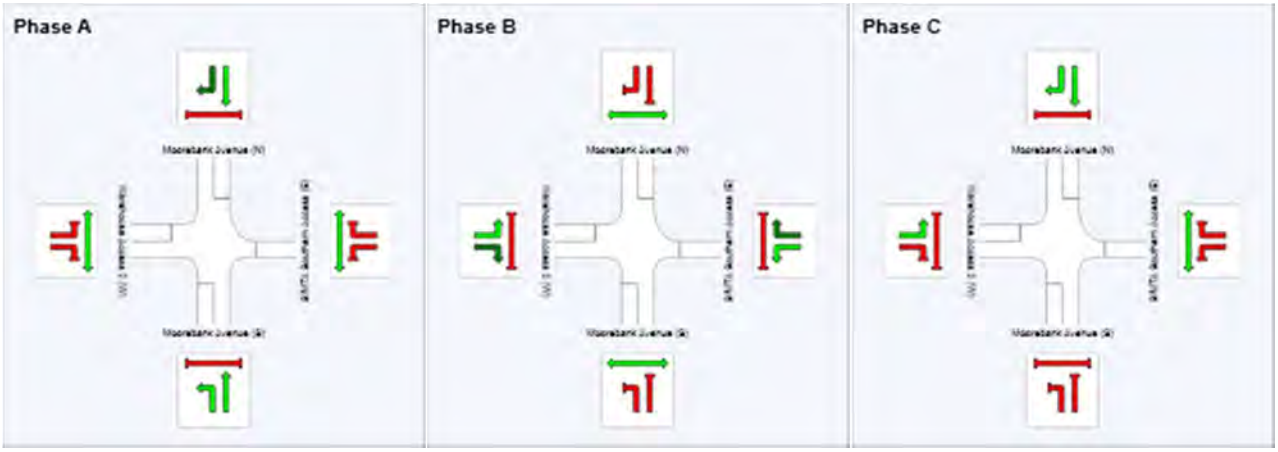
PHASING SUMMARY

Site: I-05 Cumulative Scenario 2 AM

Intersection of Moorebank Avenue, Warehouse Access 2 and SIMTA Southern Access
2030 Cumulative Scenario 2 AM PEAK
Signals - Fixed Time Cycle Time = 100 seconds (User-Given Cycle Time)

Phase Timing Results

Phase	A	B	C
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	68	88
Green Time (sec)	62	14	6
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	68	20	12
Phase Split	68 %	20 %	12 %



MOVEMENT SUMMARY

Site: I-05 Cumulative Scenario 2 PM

Intersection of Moorebank Avenue, Warehouse Access 2 and SIMTA Southern Access
2030 Cumulative Scenario 2 PM PEAK
Signals - Fixed Time Cycle Time = 100 seconds (User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Moorebank Avenue (S)											
1	L2	1	0.0	0.284	10.4	LOS A	3.4	27.4	0.24	0.21	47.9
2	T1	619	10.7	0.284	4.9	LOS A	3.4	27.4	0.24	0.21	53.1
Approach		620	10.7	0.284	4.9	LOS A	3.4	27.4	0.24	0.21	53.1
East: SIMTA Southern Access (E)											
4	L2	1	0.0	0.179	51.5	LOS D	0.9	16.9	0.94	0.71	21.9
6	R2	17	100.0	0.179	52.1	LOS D	0.9	16.9	0.94	0.71	19.1
Approach		18	94.1	0.179	52.1	LOS D	0.9	16.9	0.94	0.71	19.3
North: Moorebank Avenue (N)											
8	T1	1926	5.1	0.698	0.7	LOS A	2.9	21.8	0.07	0.06	59.0
9	R2	13	100.0	0.039	10.7	LOS A	0.2	2.3	0.38	0.63	40.4
Approach		1939	5.7	0.698	0.7	LOS A	2.9	21.8	0.07	0.07	58.8
West: Warehouse Access 2 (W)											
10	L2	23	54.5	0.108	42.0	LOS C	1.1	11.0	0.86	0.71	23.3
12	R2	4	0.0	0.108	41.5	LOS C	1.1	11.0	0.86	0.71	24.6
Approach		27	46.2	0.108	41.9	LOS C	1.1	11.0	0.86	0.71	23.5
All Vehicles		2604	7.9	0.698	2.5	LOS A	3.4	27.4	0.13	0.11	56.0

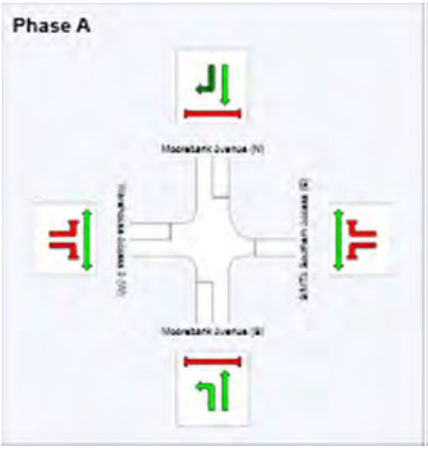
PHASING SUMMARY

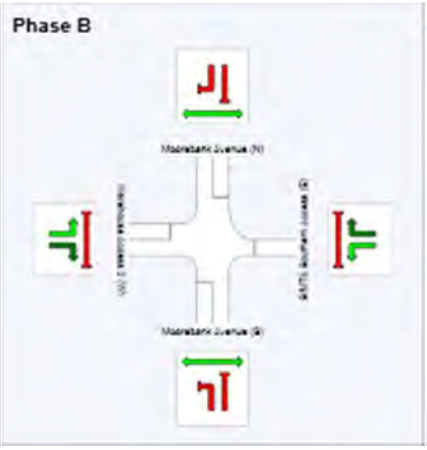
Site: I-05 Cumulative Scenario 2 PM

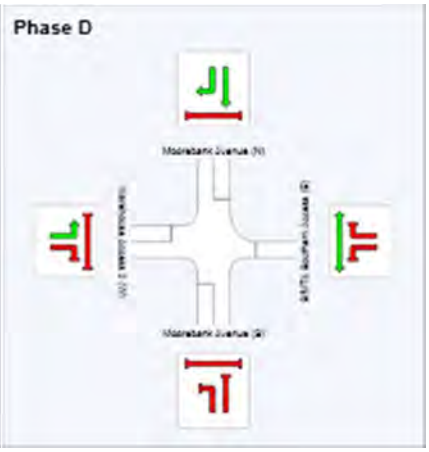
Intersection of Moorebank Avenue, Warehouse Access 2 and SIMTA Southern Access
2030 Cumulative Scenario 2 PM PEAK
Signals - Fixed Time Cycle Time = 100 seconds (User-Given Cycle Time)

Phase Timing Results

Phase	A	B	D
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	68	88
Green Time (sec)	62	14	6
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	68	20	12
Phase Split	68 %	20 %	12 %







I-06 Intersection of Moorebank Avenue and Warehouse Access 3

MOVEMENT SUMMARY

Site: I-06 Cumulative Scenario 2 AM

Intersection of Moorebank Avenue and Warehouse Access 3
2030 Cumulative Scenario 2 AM PEAK
Signals - Fixed Time Cycle Time = 100 seconds (User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Moorebank Avenue (S)											
1	L2	24	0.0	0.676	17.7	LOS B	25.2	181.0	0.69	0.64	44.1
2	T1	1625	3.2	0.676	12.1	LOS A	25.2	181.6	0.69	0.63	48.2
Approach		1649	3.2	0.676	12.2	LOS A	25.2	181.6	0.69	0.63	48.2
North: Moorebank Avenue (N)											
8	T1	611	3.1	0.228	0.3	LOS A	0.4	3.0	0.03	0.02	59.6
9	R2	112	48.1	0.668	31.2	LOS C	4.9	60.3	1.00	0.93	28.6
Approach		722	10.1	0.668	5.1	LOS A	4.9	60.3	0.18	0.16	53.5
West: Warehouse Access 3 (W)											
10	L2	54	100.0	0.182	44.7	LOS D	1.2	22.2	0.88	0.73	21.2
12	R2	1	0.0	0.182	44.2	LOS D	1.2	20.6	0.88	0.73	28.1
Approach		55	98.1	0.182	44.7	LOS D	1.2	22.2	0.88	0.73	21.3
All Vehicles		2426	7.4	0.676	10.8	LOS A	25.2	181.6	0.54	0.50	48.6

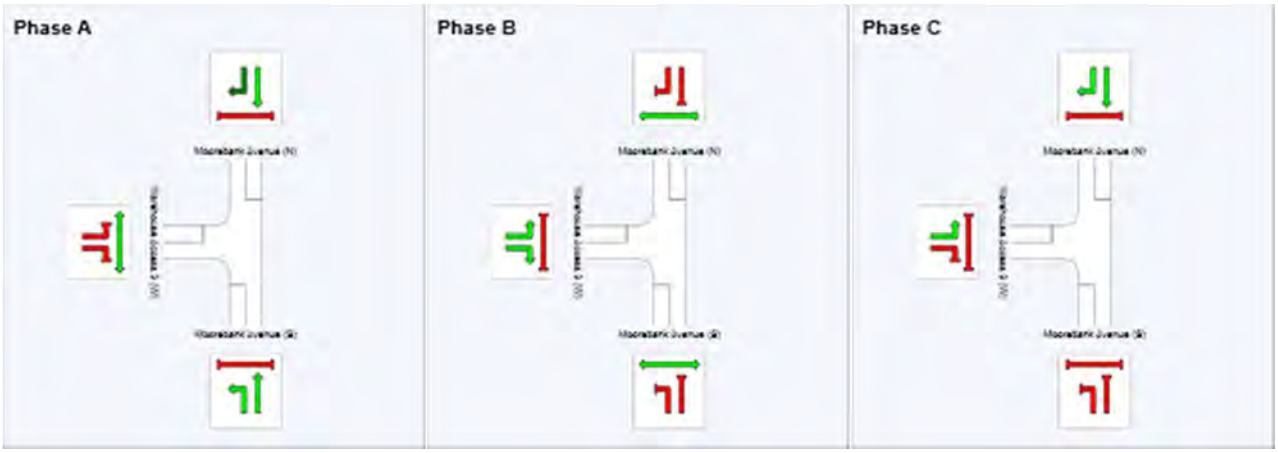
PHASING SUMMARY

Site: I-06 Cumulative Scenario 2 AM

Intersection of Moorebank Avenue and Warehouse Access 3
2030 Cumulative Scenario 2 AM PEAK
Signals - Fixed Time Cycle Time = 100 seconds (User-Given Cycle Time)

Phase Timing Results

Phase	A	B	C
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	70	86
Green Time (sec)	64	10	8
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	70	16	14
Phase Split	70 %	16 %	14 %



MOVEMENT SUMMARY

Site: I-06 Cumulative Scenario 2 PM

Intersection of Moorebank Avenue and Warehouse Access 3
2030 Cumulative Scenario 2 PM PEAK
Signals - Fixed Time Cycle Time = 100 seconds (User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Moorebank Avenue (S)											
1	L2	1	0.0	0.270	21.5	LOS B	7.2	51.5	0.63	0.53	41.5
2	T1	507	2.5	0.270	16.0	LOS B	7.2	51.5	0.63	0.53	45.5
Approach		508	2.5	0.270	16.0	LOS B	7.2	51.5	0.63	0.53	45.5
North: Moorebank Avenue (N)											
8	T1	1879	2.4	0.698	0.5	LOS A	3.2	22.7	0.06	0.06	59.4
9	R2	54	100.0	0.157	10.3	LOS A	0.6	11.7	0.41	0.67	41.4
Approach		1933	5.1	0.698	0.8	LOS A	3.2	22.7	0.07	0.07	58.9
West: Warehouse Access 3 (W)											
10	L2	112	48.1	0.266	33.4	LOS C	3.8	47.1	0.79	0.75	24.3
12	R2	24	0.0	0.266	54.3	LOS D	1.5	12.5	0.97	0.73	25.3
Approach		136	39.5	0.266	37.2	LOS C	3.8	47.1	0.82	0.74	24.5
All Vehicles		2577	6.4	0.698	5.7	LOS A	7.2	51.5	0.22	0.20	53.0

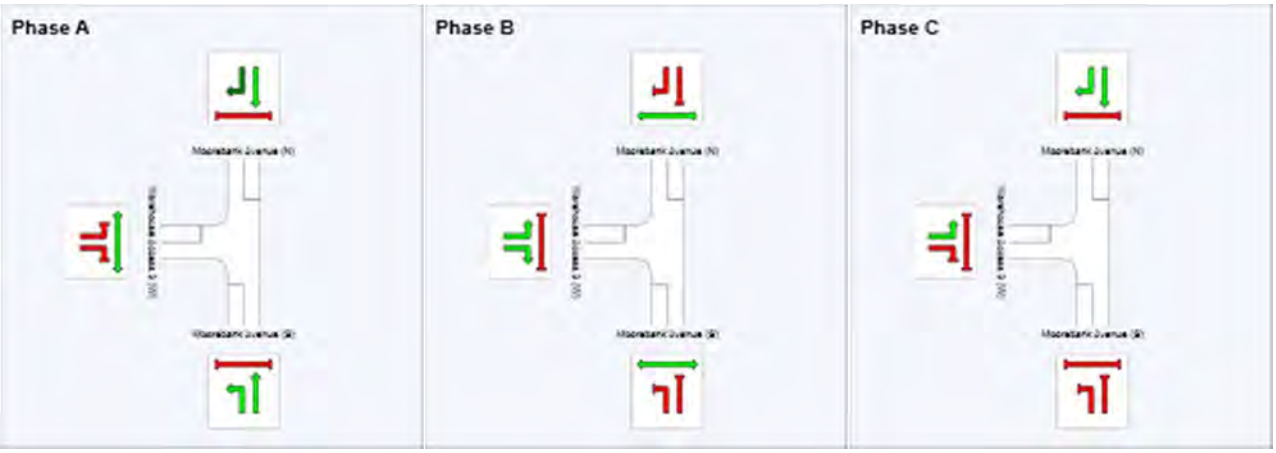
PHASING SUMMARY

Site: I-06 Cumulative Scenario 2 PM

Intersection of Moorebank Avenue and Warehouse Access 3
2030 Cumulative Scenario 2 PM PEAK
Signals - Fixed Time Cycle Time = 100 seconds (User-Given Cycle Time)

Phase Timing Results

Phase	A	B	C
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	55	71
Green Time (sec)	49	10	23
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	55	16	29
Phase Split	55 %	16 %	29 %



3. Moorebank Avenue – 2030 cumulative scenario 3

I-01 Intersection of Moorebank Avenue, Anzac Road and Bapaume Road

MOVEMENT SUMMARY

Site: I-01 Cumulative Scenario 3 AM

Intersection of Moorebank Avenue, Anzac Road and Bapaume Road
2030 Cumulative Scenario 3 AM PEAK
Signals - Fixed Time Cycle Time = 110 seconds (User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Moorebank Avenue (S)											
1	L2	20	0.0	0.632	14.9	LOS B	12.1	104.5	0.43	0.49	44.0
2	T1	1264	17.3	0.632	8.7	LOS A	13.2	114.9	0.42	0.43	50.3
3	R2	473	3.1	1.482	475.0	LOS F	81.9	588.3	1.00	1.87	5.7
Approach		1757	13.3	1.482	134.2	LOS F	81.9	588.3	0.58	0.82	15.4
East: Anzac Road (E)											
4	L2	271	3.1	0.472	36.6	LOS C	11.7	83.8	0.84	0.81	34.0
5	T1	4	0.0	0.472	32.3	LOS C	11.7	83.8	0.84	0.81	33.0
6	R2	224	13.6	0.909	71.5	LOS F	14.4	112.2	1.00	1.03	26.1
Approach		499	7.8	0.909	52.3	LOS D	14.4	112.2	0.91	0.91	29.7
North: Moorebank Avenue (N)											
7	L2	383	9.9	0.221	5.7	LOS A	0.0	0.0	0.00	0.52	54.2
8	T1	1452	13.4	1.096	147.4	LOS F	71.2	598.4	0.86	1.58	14.1
9	R2	101	3.1	0.375	14.8	LOS B	1.8	12.7	0.62	0.72	41.8
Approach		1936	12.2	1.096	112.5	LOS F	71.2	598.4	0.68	1.33	17.8
West: Bapaume Road (W)											
10	L2	5	60.0	0.008	9.8	LOS A	0.1	0.6	0.41	0.56	43.4
11	T1	1	0.0	0.017	53.2	LOS D	0.1	0.8	0.95	0.61	27.4
12	R2	1	0.0	0.017	56.9	LOS E	0.1	0.8	0.95	0.61	23.4
Approach		7	42.9	0.017	22.7	LOS B	0.1	0.8	0.56	0.57	36.3
All Vehicles		4199	12.2	1.482	114.3	LOS F	81.9	598.4	0.66	1.06	17.6

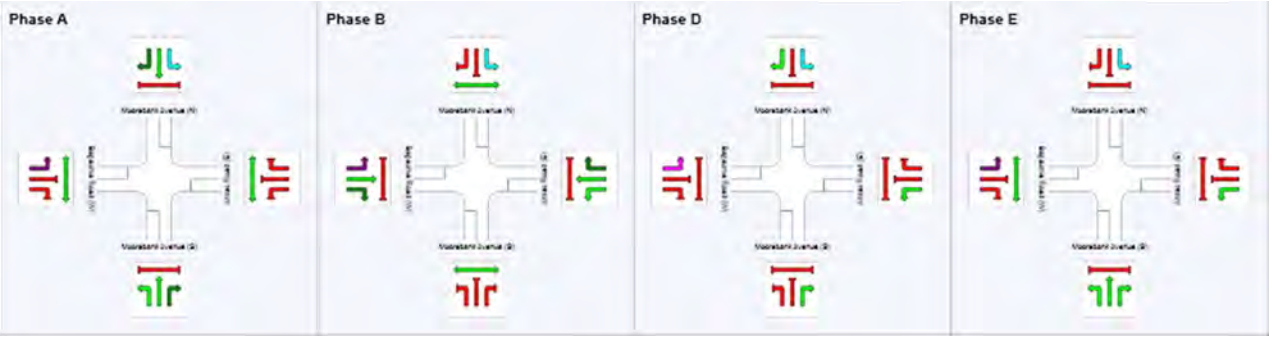
PHASING SUMMARY

Site: I-01 Cumulative Scenario 3 AM

Intersection of Moorebank Avenue, Anzac Road and Bapaume Road
2030 Cumulative Scenario 3 AM PEAK
Signals - Fixed Time Cycle Time = 110 seconds (User-Given Phase Times)

Phase Timing Results

Phase	A	B	D	E
Reference Phase	Yes	No	No	No
Phase Change Time (sec)	0	64	89	101
Green Time (sec)	58	19	6	3
Yellow Time (sec)	4	4	4	4
All-Red Time (sec)	2	2	2	2
Phase Time (sec)	64	25	12	9
Phase Split	58 %	23 %	11 %	8 %



MOVEMENT SUMMARY

Site: I-01 Cumulative Scenario 3 PM

Intersection of Moorebank Avenue, Anzac Road and Bapaume Road
2030 Cumulative Scenario 3 PM PEAK
Signals - Fixed Time Cycle Time = 110 seconds (User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Moorebank Avenue (S)											
1	L2	1	0.0	0.513	8.5	LOS A	5.4	45.8	0.19	0.17	50.3
2	T1	1186	14.3	0.513	3.0	LOS A	5.4	45.8	0.18	0.17	56.3
3	R2	261	0.8	1.079	143.7	LOS F	27.7	195.0	1.00	1.35	15.4
Approach		1448	11.8	1.079	28.4	LOS B	27.7	195.0	0.33	0.38	37.0
East: Anzac Road (E)											
4	L2	568	2.2	0.929	64.0	LOS E	37.6	268.4	1.00	1.02	26.0
5	T1	1	0.0	0.929	59.6	LOS E	37.6	268.4	1.00	1.02	25.2
6	R2	391	5.4	1.212	264.7	LOS F	53.1	389.1	1.00	1.65	10.5
Approach		960	3.5	1.212	145.6	LOS F	53.1	389.1	1.00	1.28	15.8
North: Moorebank Avenue (N)											
7	L2	353	3.9	0.195	5.7	LOS A	0.0	0.0	0.00	0.53	54.4
8	T1	1419	13.2	0.904	27.1	LOS B	36.1	301.0	0.65	0.72	37.6
9	R2	23	18.2	0.128	22.3	LOS B	0.7	5.6	0.56	0.69	37.3
Approach		1795	11.4	0.904	22.8	LOS B	36.1	301.0	0.52	0.68	40.5
West: Bapaume Road (W)											
10	L2	111	4.8	0.287	9.3	LOS A	1.6	11.7	0.41	0.61	45.5
11	T1	7	0.0	0.204	58.3	LOS E	1.0	6.9	0.99	0.70	26.1
12	R2	11	0.0	0.204	62.0	LOS E	1.0	6.9	0.99	0.70	22.2
Approach		128	4.1	0.287	16.4	LOS B	1.6	11.7	0.49	0.63	40.6
All Vehicles		4332	9.6	1.212	51.7	LOS D	53.1	389.1	0.56	0.71	28.8

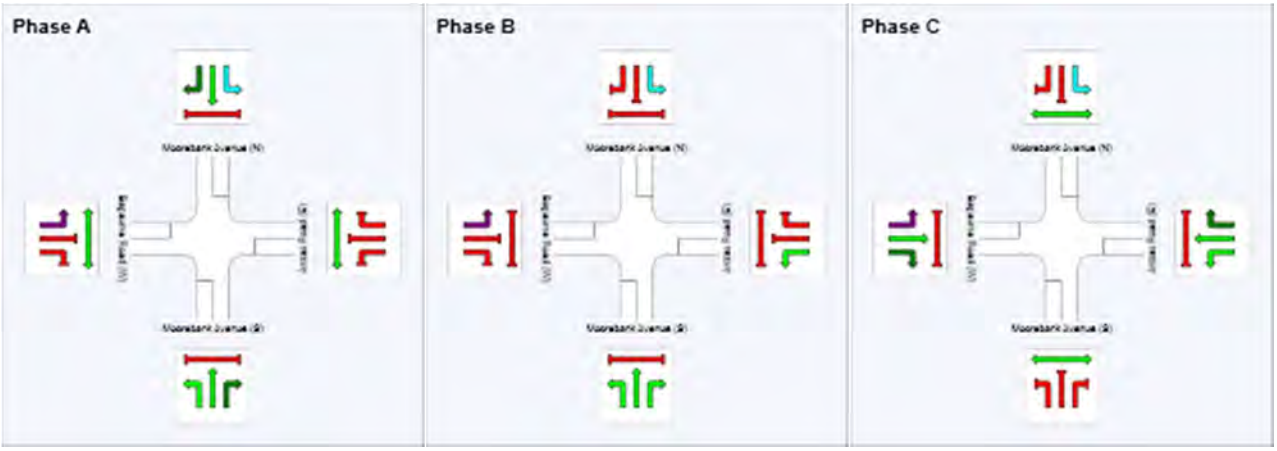
PHASING SUMMARY

Site: I-01 Cumulative Scenario 3 PM

Intersection of Moorebank Avenue, Anzac Road and Bapaume Road
2030 Cumulative Scenario 3 PM PEAK
Signals - Fixed Time Cycle Time = 110 seconds (User-Given Cycle Time)

Phase Timing Results

Phase	A	B	C
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	67	81
Green Time (sec)	61	8	23
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	67	14	29
Phase Split	61 %	13 %	26 %



I-02 Intersection of Moorebank Avenue and DNSDC Access

MOVEMENT SUMMARY

Site: I-02 Cumulative Scenario 3 AM

Intersection of Moorebank Avenue and DNSDC Access
2030 Cumulative Scenario 3 AM PEAK
Signals - Fixed Time Cycle Time = 100 seconds (User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Moorebank Avenue (S)											
2	T1	1718	11.7	0.627	0.5	LOS A	2.1	17.3	0.06	0.05	59.4
3	R2	44	2.4	0.201	17.9	LOS B	1.0	7.3	0.69	0.73	43.7
Approach		1762	11.5	0.627	1.0	LOS A	2.1	17.3	0.07	0.07	58.8
East: DNSDC Access (E)											
4	L2	6	33.3	0.608	59.4	LOS E	2.4	37.7	1.00	0.83	29.5
6	R2	39	83.8	0.608	60.0	LOS E	2.4	37.7	1.00	0.83	22.2
Approach		45	76.7	0.608	59.9	LOS E	2.4	37.7	1.00	0.83	23.2
North: Moorebank Avenue (N)											
7	L2	516	11.4	0.773	16.6	LOS B	24.4	200.7	0.66	0.73	42.0
8	T1	1205	11.9	0.773	6.6	LOS A	24.4	200.7	0.47	0.47	52.9
Approach		1721	11.7	0.773	9.6	LOS A	24.4	200.7	0.53	0.55	49.3
All Vehicles		3528	12.4	0.773	5.9	LOS A	24.4	200.7	0.31	0.31	52.9

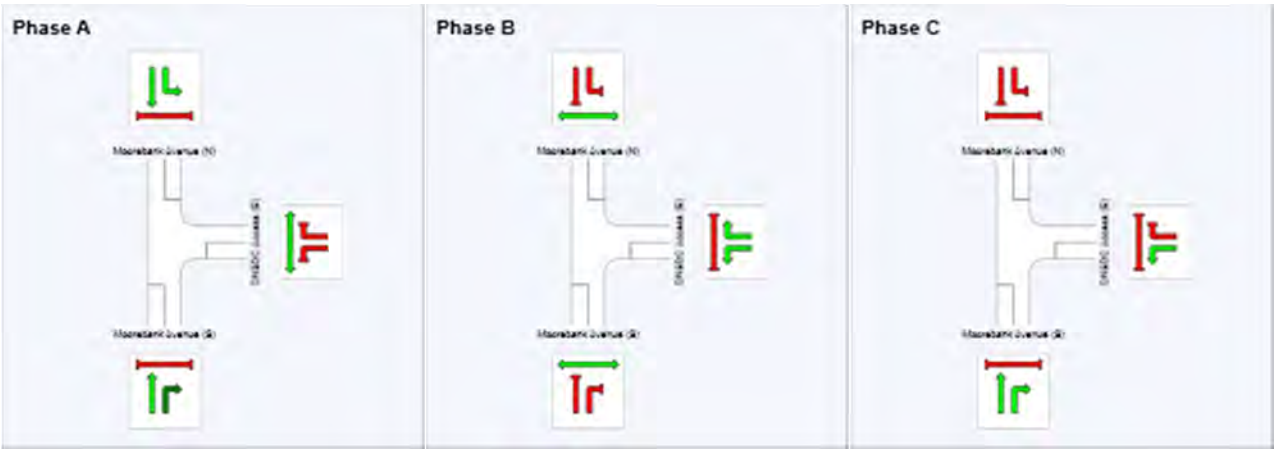
PHASING SUMMARY

Site: I-02 Cumulative Scenario 3 AM

Intersection of Moorebank Avenue and DNSDC Access
2030 Cumulative Scenario 3 AM PEAK
Signals - Fixed Time Cycle Time = 100 seconds (User-Given Cycle Time)

Phase Timing Results

Phase	A	B	C
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	72	88
Green Time (sec)	66	10	6
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	72	16	12
Phase Split	72 %	16 %	12 %



MOVEMENT SUMMARY

Site: I-02 Cumulative Scenario 3 PM

Intersection of Moorebank Avenue and DNSDC Access
2030 Cumulative Scenario 3 PM PEAK
Signals - Fixed Time Cycle Time = 100 seconds (User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Moorebank Avenue (S)											
2	T1	1083	13.4	0.517	6.5	LOS A	8.4	70.7	0.35	0.31	53.7
3	R2	1	100.0	0.017	45.5	LOS D	0.0	0.6	0.84	0.63	33.4
Approach		1084	13.5	0.517	6.6	LOS A	8.4	70.7	0.35	0.31	53.7
East: DNSDC Access (E)											
4	L2	21	0.0	0.935	67.2	LOS E	24.1	188.7	1.00	1.07	28.3
6	R2	363	7.2	0.935	67.3	LOS E	24.1	188.7	1.00	1.07	23.6
Approach		384	6.8	0.935	67.2	LOS E	24.1	188.7	1.00	1.07	23.9
North: Moorebank Avenue (N)											
7	L2	46	88.6	0.926	33.1	LOS C	47.3	390.0	0.83	0.91	34.8
8	T1	1952	8.1	0.926	25.6	LOS B	48.7	377.3	0.83	0.90	41.1
Approach		1998	10.0	0.926	25.7	LOS B	48.7	390.0	0.83	0.90	41.0
All Vehicles		3466	10.8	0.935	24.3	LOS B	48.7	390.0	0.70	0.74	41.1

PHASING SUMMARY

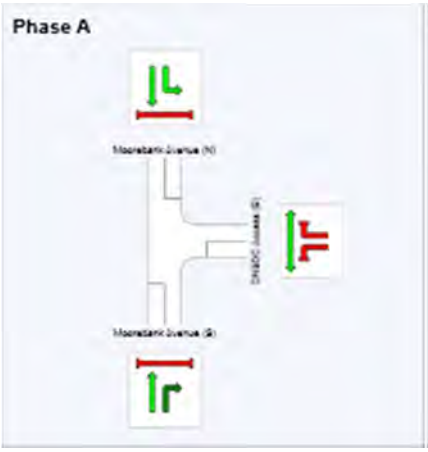
Site: I-02 Cumulative Scenario 3 PM

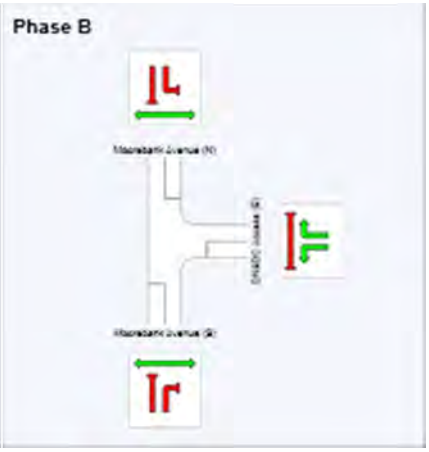
Intersection of Moorebank Avenue and DNSDC Access
2030 Cumulative Scenario 3 PM PEAK
Signals - Fixed Time Cycle Time = 100 seconds (User-Given Cycle Time)

Phase times determined by the program
Sequence: NEW TCS I-02 PM 2
Movement Class: All Movement Classes
Input Sequence: A, B
Output Sequence: A, B

Phase Timing Results

Phase	A	B
Reference Phase	Yes	No
Phase Change Time (sec)	0	67
Green Time (sec)	61	27
Yellow Time (sec)	4	4
All-Red Time (sec)	2	2
Phase Time (sec)	67	33
Phase Split	67 %	33 %





I-03 Intersection of Moorebank Avenue, MIMT Main Access and SIMTA Central Access

MOVEMENT SUMMARY

Site: I-03 Cumulative Scenario 3 AM

Intersection of Moorebank Avenue, MIMT Main Access and SIMTA Central Access
2030 Cumulative Scenario 3 AM PEAK
Signals - Fixed Time Cycle Time = 120 seconds (User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Moorebank Avenue (S)											
1	L2	7	0.0	0.693	9.5	LOS A	12.1	93.4	0.27	0.25	50.2
2	T1	1709	8.7	0.693	3.9	LOS A	12.1	93.4	0.26	0.25	56.3
3	R2	19	5.6	0.212	68.4	LOS E	1.1	8.3	0.99	0.70	20.4
Approach		1736	8.7	0.693	4.7	LOS A	12.1	93.4	0.27	0.25	55.7
East: SIMTA Central Access (E)											
4	L2	1	100.0	0.005	47.2	LOS D	0.0	0.6	0.83	0.60	24.4
6	R2	32	100.0	0.362	64.9	LOS E	1.9	35.2	0.98	0.74	24.3
Approach		33	100.0	0.362	64.3	LOS E	1.9	35.2	0.97	0.74	24.3
North: Moorebank Avenue (N)											
7	L2	398	13.0	0.501	14.5	LOS B	13.3	110.2	0.45	0.64	45.0
8	T1	775	9.4	0.501	4.2	LOS A	13.3	110.2	0.23	0.26	55.4
9	R2	39	54.1	0.701	75.9	LOS F	2.6	34.7	1.00	0.85	22.7
Approach		1212	12.0	0.701	9.9	LOS A	13.3	110.2	0.33	0.40	50.1
West: Main Access (W)											
10	L2	21	100.0	0.133	50.2	LOS D	1.1	20.2	0.86	0.72	27.6
12	R2	1	0.0	0.007	58.2	LOS E	0.1	0.4	0.93	0.59	22.3
Approach		22	95.2	0.133	50.6	LOS D	1.1	20.2	0.87	0.71	27.3
All Vehicles		3002	11.6	0.701	7.8	LOS A	13.3	110.2	0.31	0.32	52.5

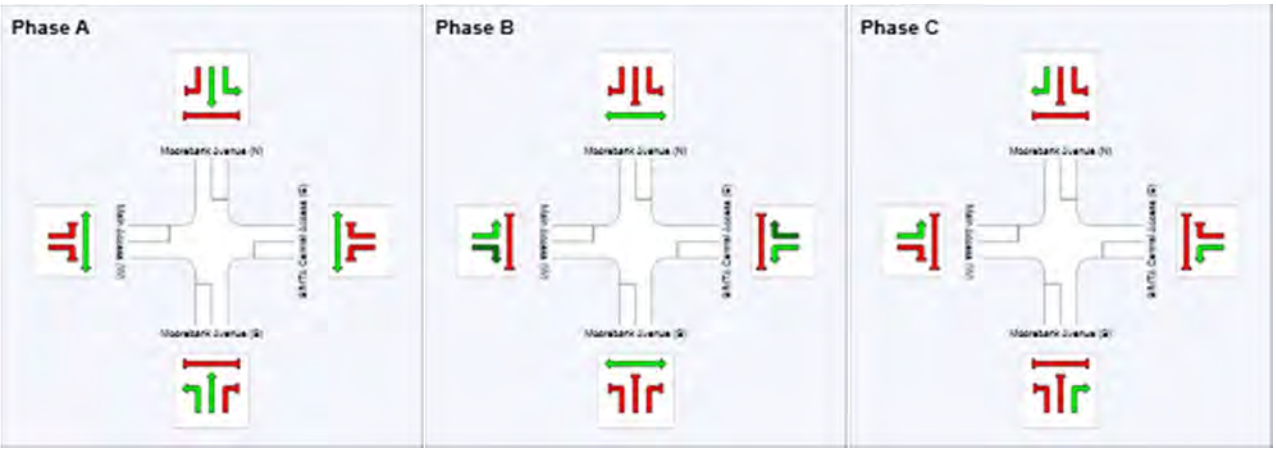
PHASING SUMMARY

Site: I-03 Cumulative Scenario 3 AM

Intersection of Moorebank Avenue, MIMT Main Access and SIMTA Central Access
2030 Cumulative Scenario 3 AM PEAK
Signals - Fixed Time Cycle Time = 120 seconds (User-Given Cycle Time)

Phase Timing Results

Phase	A	B	C
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	88	108
Green Time (sec)	82	14	6
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	88	20	12
Phase Split	73 %	17 %	10 %



MOVEMENT SUMMARY

Site: I-03 Cumulative Scenario 3 PM

Intersection of Moorebank Avenue, MIMT Main Access and SIMTA Central Access
2030 Cumulative Scenario 3 PM PEAK
Signals - Fixed Time Cycle Time = 120 seconds (User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Moorebank Avenue (S)											
1	L2	1	0.0	0.649	42.6	LOS D	16.5	137.9	0.85	0.74	28.7
2	T1	706	14.3	0.649	37.0	LOS C	16.5	137.9	0.85	0.74	37.3
3	R2	1	100.0	0.020	52.3	LOS D	0.1	0.7	0.83	0.64	23.8
Approach		708	14.4	0.649	37.1	LOS C	16.5	137.9	0.85	0.74	37.2
East: SIMTA Central Access (E)											
4	L2	17	0.0	0.032	37.5	LOS C	0.7	4.9	0.75	0.67	28.1
6	R2	339	7.1	0.923	73.6	LOS F	24.7	195.3	1.00	1.06	23.1
Approach		356	6.8	0.923	71.9	LOS F	24.7	195.3	0.99	1.04	23.3
North: Moorebank Avenue (N)											
7	L2	40	100.0	0.902	29.1	LOS C	47.5	374.4	0.80	0.83	38.2
8	T1	1912	5.1	0.902	22.2	LOS B	48.9	360.7	0.80	0.81	43.9
9	R2	21	100.0	0.113	47.3	LOS D	1.0	19.2	0.83	0.72	29.2
Approach		1973	8.1	0.902	22.7	LOS B	48.9	374.4	0.80	0.81	43.6
West: Main Access (W)											
10	L2	39	54.1	0.063	18.1	LOS B	1.0	13.9	0.48	0.65	39.4
12	R2	7	0.0	0.018	37.5	LOS C	0.3	2.1	0.74	0.65	28.2
Approach		46	45.5	0.063	21.1	LOS B	1.0	13.9	0.52	0.65	37.5
All Vehicles		3083	9.9	0.923	31.6	LOS C	48.9	374.4	0.83	0.82	38.8

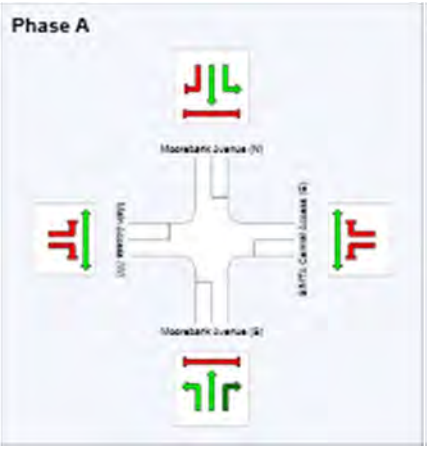
PHASING SUMMARY

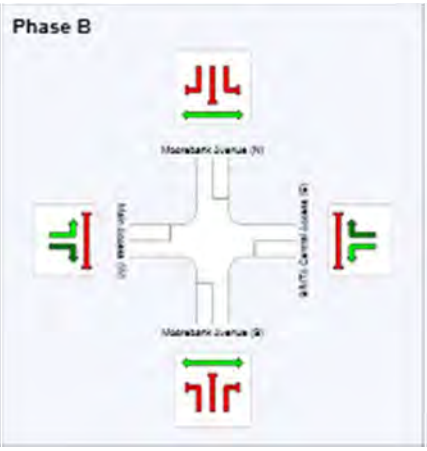
Site: I-03 Cumulative Scenario 3 PM

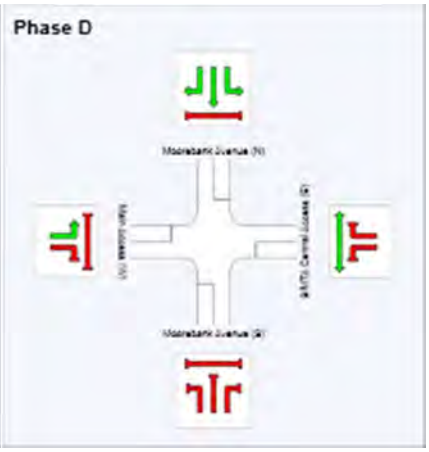
Intersection of Moorebank Avenue, MIMT Main Access and SIMTA Central Access
2030 Cumulative Scenario 3 PM PEAK
Signals - Fixed Time Cycle Time = 120 seconds (User-Given Cycle Time)

Phase Timing Results

Phase	A	B	D
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	44	87
Green Time (sec)	38	37	27
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	44	43	33
Phase Split	37 %	36 %	28 %







I-04 Intersection of Moorebank Avenue and Warehouse Access 1

MOVEMENT SUMMARY

Site: I-04 Cumulative Scenario 3 AM

Intersection of Moorebank Avenue and Warehouse Access 1
2030 Cumulative Scenario 3 AM PEAK
Signals - Fixed Time Cycle Time = 100 seconds (User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Moorebank Avenue (S)											
1	L2	11	0.0	0.721	10.4	LOS A	13.9	107.1	0.36	0.34	47.5
2	T1	1724	8.0	0.721	4.8	LOS A	13.9	107.1	0.36	0.33	53.9
Approach		1735	7.9	0.721	4.9	LOS A	13.9	107.1	0.36	0.33	53.8
North: Moorebank Avenue (N)											
8	T1	739	8.3	0.259	0.3	LOS A	0.5	3.6	0.03	0.03	59.5
9	R2	36	32.4	0.182	12.0	LOS A	0.5	4.4	0.50	0.68	41.9
Approach		775	9.4	0.259	0.9	LOS A	0.5	4.4	0.05	0.06	58.5
West: Warehouse Access 1 (W)											
10	L2	12	100.0	0.068	43.8	LOS D	0.5	6.7	0.87	0.69	25.4
12	R2	1	0.0	0.068	43.3	LOS D	0.5	6.7	0.87	0.69	23.5
Approach		13	91.7	0.068	43.8	LOS D	0.5	6.7	0.87	0.69	25.2
All Vehicles		2522	8.8	0.721	3.8	LOS A	13.9	107.1	0.27	0.25	54.9

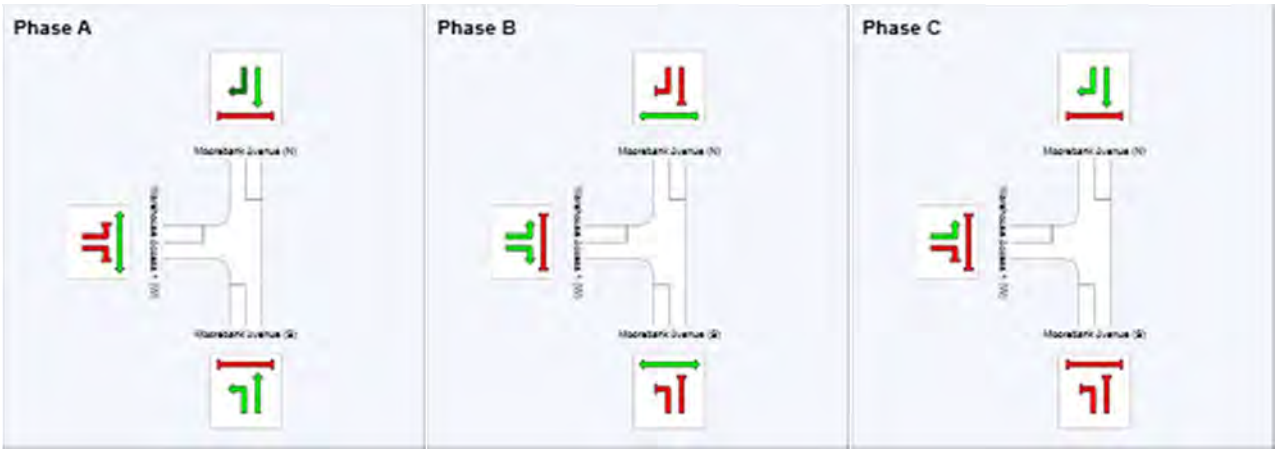
PHASING SUMMARY

Site: I-04 Cumulative Scenario 3 AM

Intersection of Moorebank Avenue and Warehouse Access 1
2030 Cumulative Scenario 3 AM PEAK
Signals - Fixed Time Cycle Time = 100 seconds (User-Given Cycle Time)

Phase Timing Results

Phase	A	B	C
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	72	88
Green Time (sec)	66	10	6
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	72	16	12
Phase Split	72 %	16 %	12 %



MOVEMENT SUMMARY

Site: I-04 Cumulative Scenario 3 PM

Intersection of Moorebank Avenue and Warehouse Access 1
2030 Cumulative Scenario 3 PM PEAK
Signals - Fixed Time Cycle Time = 100 seconds (User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Moorebank Avenue (S)											
1	L2	1	0.0	0.294	8.6	LOS A	2.6	21.8	0.17	0.15	49.8
2	T1	669	13.2	0.294	3.1	LOS A	2.6	21.8	0.17	0.15	55.9
Approach		671	13.2	0.294	3.1	LOS A	2.6	21.8	0.17	0.15	55.9
North: Moorebank Avenue (N)											
8	T1	1925	4.5	0.655	0.5	LOS A	2.6	18.9	0.06	0.06	59.2
9	R2	12	100.0	0.037	9.5	LOS A	0.1	1.8	0.33	0.63	43.8
Approach		1937	5.1	0.655	0.6	LOS A	2.6	18.9	0.06	0.06	59.1
West: Warehouse Access 1 (W)											
10	L2	36	32.4	0.232	48.5	LOS D	2.1	17.9	0.93	0.74	24.3
12	R2	11	0.0	0.232	48.3	LOS D	2.1	17.9	0.93	0.74	22.1
Approach		46	25.0	0.232	48.5	LOS D	2.1	17.9	0.93	0.74	23.8
All Vehicles		2654	7.5	0.655	2.1	LOS A	2.6	21.8	0.11	0.10	57.1

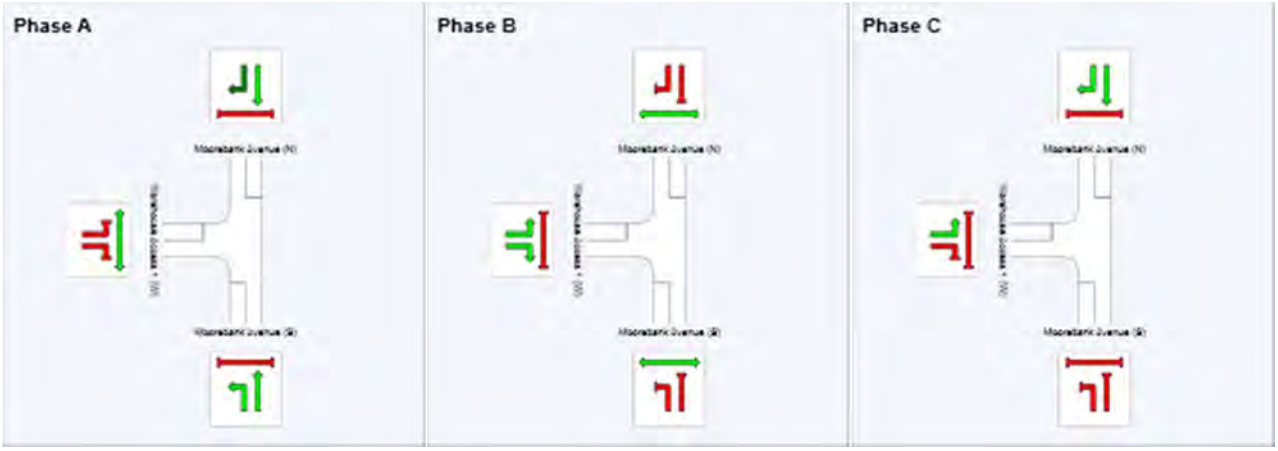
PHASING SUMMARY

Site: I-04 Cumulative Scenario 3 PM

Intersection of Moorebank Avenue and Warehouse Access 1
2030 Cumulative Scenario 3 PM PEAK
Signals - Fixed Time Cycle Time = 100 seconds (User-Given Cycle Time)

Phase Timing Results

Phase	A	B	C
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	72	88
Green Time (sec)	66	10	6
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	72	16	12
Phase Split	72 %	16 %	12 %



I-05 Intersection of Moorebank Avenue, Warehouse Access 2 and SIMTA Southern Access

MOVEMENT SUMMARY

Site: I-05 Cumulative Scenario 3 AM

Intersection of Moorebank Avenue, Warehouse Access 2 and SIMTA Southern Access
2030 Cumulative Scenario 3 AM PEAK
Signals - Fixed Time Cycle Time = 100 seconds (User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Moorebank Avenue (S)											
1	L2	8	0.0	0.728	13.0	LOS A	17.9	131.9	0.47	0.44	45.0
2	T1	1683	5.1	0.728	7.4	LOS A	17.9	131.9	0.47	0.44	50.2
Approach		1692	5.1	0.728	7.4	LOS A	17.9	131.9	0.47	0.44	50.1
East: SIMTA Southern Access (E)											
4	L2	1	100.0	0.429	54.0	LOS D	2.1	40.0	0.97	0.76	19.2
6	R2	42	100.0	0.429	54.0	LOS D	2.1	40.0	0.97	0.76	18.8
Approach		43	100.0	0.429	54.0	LOS D	2.1	40.0	0.97	0.76	18.8
North: Moorebank Avenue (N)											
8	T1	708	7.3	0.261	0.4	LOS A	0.5	3.5	0.03	0.03	59.4
9	R2	29	32.1	0.149	14.1	LOS A	0.4	4.0	0.57	0.69	37.8
Approach		738	8.3	0.261	0.9	LOS A	0.5	4.0	0.05	0.05	58.3
West: Warehouse Access 2 (W)											
10	L2	9	100.0	0.047	39.7	LOS C	0.4	5.2	0.82	0.67	24.0
12	R2	1	0.0	0.047	39.3	LOS C	0.4	5.2	0.82	0.67	25.4
Approach		11	90.0	0.047	39.7	LOS C	0.4	5.2	0.82	0.67	24.2
All Vehicles		2483	8.1	0.728	6.4	LOS A	17.9	131.9	0.36	0.33	50.8

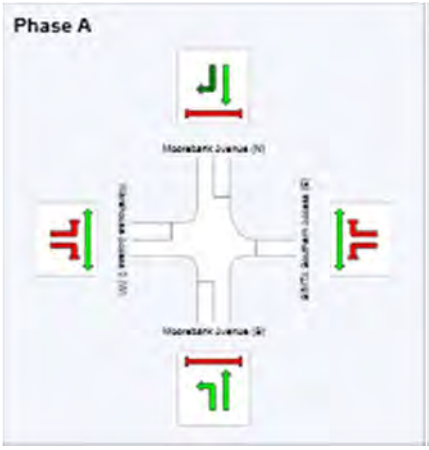
PHASING SUMMARY

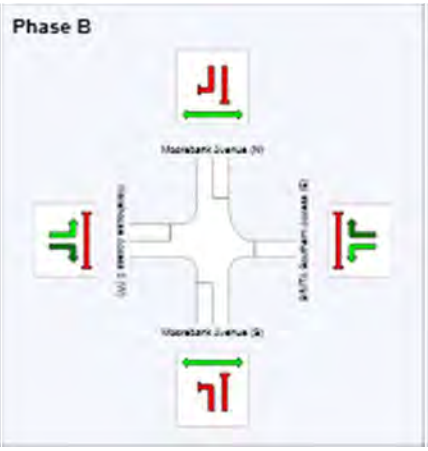
Site: I-05 Cumulative Scenario 3 AM

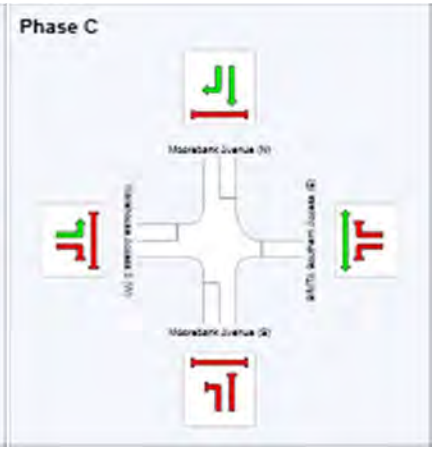
Intersection of Moorebank Avenue, Warehouse Access 2 and SIMTA Southern Access
2030 Cumulative Scenario 3 AM PEAK
Signals - Fixed Time Cycle Time = 100 seconds (User-Given Cycle Time)

Phase Timing Results

Phase	A	B	C
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	68	88
Green Time (sec)	62	14	6
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	68	20	12
Phase Split	68 %	20 %	12 %







MOVEMENT SUMMARY

Site: I-05 Cumulative Scenario 3 PM

Intersection of Moorebank Avenue, Warehouse Access 2 and SIMTA Southern Access
2030 Cumulative Scenario 3 PM PEAK
Signals - Fixed Time Cycle Time = 100 seconds (User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Moorebank Avenue (S)											
1	L2	1	0.0	0.268	10.4	LOS A	3.3	25.0	0.24	0.21	48.0
2	T1	606	7.6	0.268	4.8	LOS A	3.3	25.0	0.24	0.21	53.2
Approach		607	7.6	0.268	4.8	LOS A	3.3	25.0	0.24	0.21	53.2
East: SIMTA Southern Access (E)											
4	L2	1	100.0	0.339	53.4	LOS D	1.7	31.9	0.96	0.75	19.3
6	R2	33	100.0	0.339	53.4	LOS D	1.7	31.9	0.96	0.75	18.9
Approach		34	100.0	0.339	53.4	LOS D	1.7	31.9	0.96	0.75	18.9
North: Moorebank Avenue (N)											
8	T1	1926	4.0	0.689	0.6	LOS A	2.8	20.8	0.07	0.06	59.0
9	R2	9	100.0	0.028	10.6	LOS A	0.1	1.7	0.37	0.63	40.6
Approach		1936	4.5	0.689	0.7	LOS A	2.8	20.8	0.07	0.07	58.9
West: Warehouse Access 2 (W)											
10	L2	29	32.1	0.148	43.8	LOS D	1.6	13.7	0.89	0.72	23.0
12	R2	8	0.0	0.148	43.6	LOS D	1.6	13.7	0.89	0.72	24.0
Approach		38	25.0	0.148	43.8	LOS D	1.6	13.7	0.89	0.72	23.2
All Vehicles		2615	6.8	0.689	3.0	LOS A	3.3	31.9	0.13	0.12	55.2

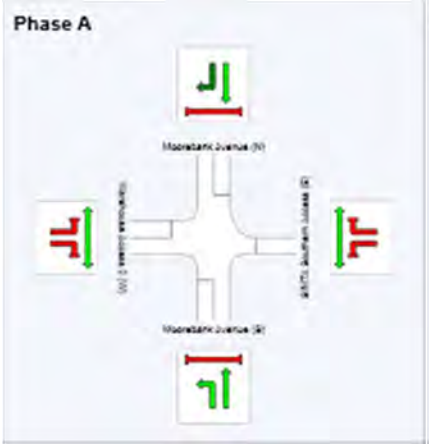
PHASING SUMMARY

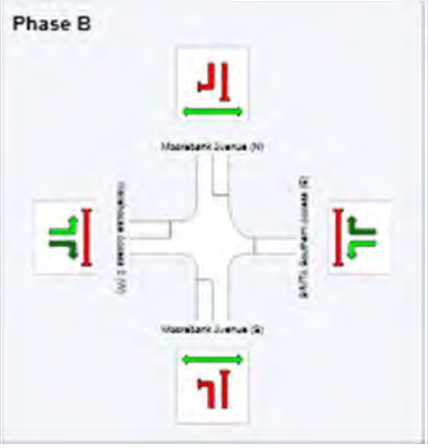
Site: I-05 Cumulative Scenario 3 PM

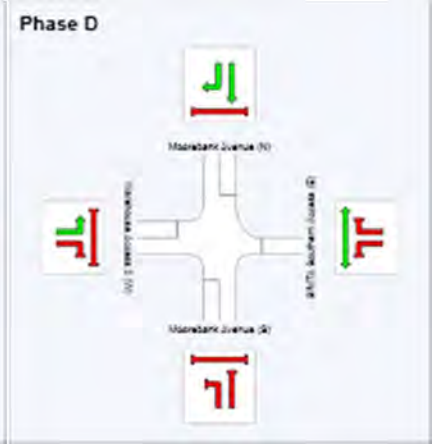
Intersection of Moorebank Avenue, Warehouse Access 2 and SIMTA Southern Access
2030 Cumulative Scenario 3 PM PEAK
Signals - Fixed Time Cycle Time = 100 seconds (User-Given Cycle Time)

Phase Timing Results

Phase	A	B	D
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	68	88
Green Time (sec)	62	14	6
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	68	20	12
Phase Split	68 %	20 %	12 %







I-06 Intersection of Moorebank Avenue and Warehouse Access 3

MOVEMENT SUMMARY

Site: I-06 Cumulative Scenario 3 AM

Intersection of Moorebank Avenue and Warehouse Access 3
2030 Cumulative Scenario 3 AM PEAK
Signals - Fixed Time Cycle Time = 100 seconds (User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Moorebank Avenue (S)											
1	L2	28	0.0	0.671	16.6	LOS B	24.8	178.0	0.66	0.62	44.9
2	T1	1660	3.2	0.671	11.0	LOS A	24.8	178.7	0.66	0.61	49.1
Approach		1688	3.2	0.671	11.1	LOS A	24.8	178.7	0.66	0.61	49.0
North: Moorebank Avenue (N)											
8	T1	612	3.3	0.229	0.3	LOS A	0.4	3.0	0.03	0.02	59.6
9	R2	98	33.3	0.595	23.1	LOS B	3.5	36.3	0.90	0.84	32.7
Approach		709	7.4	0.595	3.5	LOS A	3.5	36.3	0.15	0.14	55.4
West: Warehouse Access 3 (W)											
10	L2	33	100.0	0.121	46.0	LOS D	0.8	13.0	0.89	0.71	20.9
12	R2	1	0.0	0.121	45.6	LOS D	0.7	11.7	0.89	0.71	27.7
Approach		34	96.9	0.121	46.0	LOS D	0.8	13.0	0.89	0.71	21.1
All Vehicles		2432	5.7	0.671	9.4	LOS A	24.8	178.7	0.52	0.47	50.0

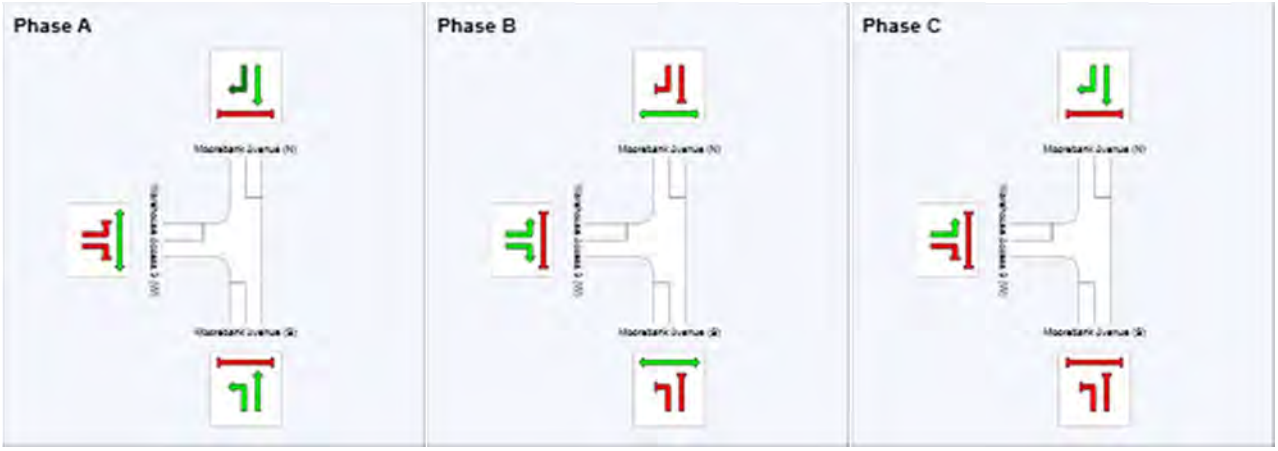
PHASING SUMMARY

Site: I-06 Cumulative Scenario 3 AM

Intersection of Moorebank Avenue and Warehouse Access 3
2030 Cumulative Scenario 3 AM PEAK
Signals - Fixed Time Cycle Time = 100 seconds (User-Given Cycle Time)

Phase Timing Results

Phase	A	B	C
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	72	88
Green Time (sec)	66	10	6
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	72	16	12
Phase Split	72 %	16 %	12 %



MOVEMENT SUMMARY

Site: I-06 Cumulative Scenario 3 PM

Intersection of Moorebank Avenue and Warehouse Access 3
2030 Cumulative Scenario 3 PM PEAK
Signals - Fixed Time Cycle Time = 100 seconds (User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Moorebank Avenue (S)											
1	L2	1	0.0	0.233	16.8	LOS B	6.1	43.4	0.53	0.45	44.9
2	T1	508	2.7	0.233	11.3	LOS A	6.1	43.5	0.53	0.45	48.9
Approach		509	2.7	0.233	11.3	LOS A	6.1	43.5	0.53	0.45	48.9
North: Moorebank Avenue (N)											
8	T1	1903	2.4	0.707	0.5	LOS A	3.3	23.6	0.06	0.06	59.4
9	R2	33	100.0	0.102	10.0	LOS A	0.4	6.5	0.38	0.65	41.7
Approach		1936	4.0	0.707	0.7	LOS A	3.3	23.6	0.07	0.07	59.1
West: Warehouse Access 3 (W)											
10	L2	98	33.3	0.271	38.9	LOS C	3.7	38.4	0.85	0.76	23.5
12	R2	28	0.0	0.271	54.2	LOS D	1.6	12.1	0.97	0.73	25.3
Approach		126	25.8	0.271	42.3	LOS C	3.7	38.4	0.88	0.75	24.0
All Vehicles		2572	4.8	0.707	4.8	LOS A	6.1	43.5	0.20	0.18	54.1

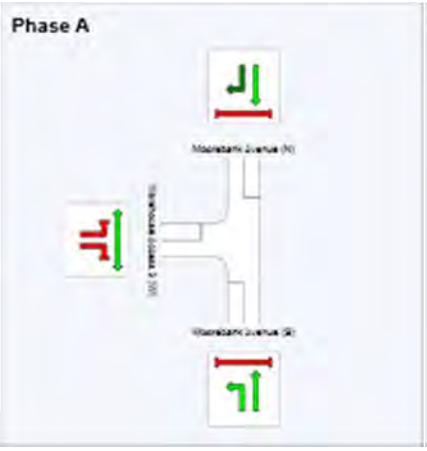
PHASING SUMMARY

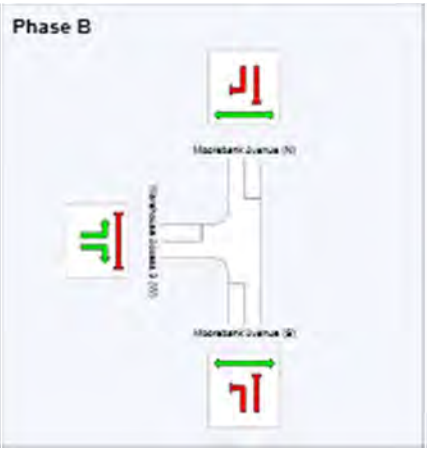
Site: I-06 Cumulative Scenario 3 PM

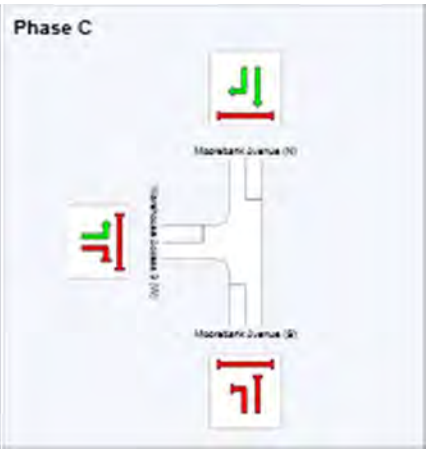
Intersection of Moorebank Avenue and Warehouse Access 3
2030 Cumulative Scenario 3 PM PEAK
Signals - Fixed Time Cycle Time = 100 seconds (User-Given Cycle Time)

Phase Timing Results

Phase	A	B	C
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	63	79
Green Time (sec)	57	10	15
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	63	16	21
Phase Split	63 %	16 %	21 %







4. On the wider road network – 2030 cumulative scenario 1

I-01 Intersection of the Hume Highway and Orange Grove Road

MOVEMENT SUMMARY

Site: I-01 2030 MIMT & SIMTA AM

Hume Highway / Orange Grove Road
2030 MIMT & SIMTA AM PEAK 7:45 am - 8:45 am
Signals - Fixed Time Cycle Time = 150 seconds (User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
NorthEast: Hume Highway (NE)											
25	T1	965	11.1	0.691	24.4	LOS B	19.9	152.6	0.85	0.77	35.7
26	R2	389	10.0	0.907	86.6	LOS F	17.0	128.8	1.00	0.94	23.8
Approach		1354	10.8	0.907	42.3	LOS C	19.9	152.6	0.89	0.82	30.0
NorthWest: Orange Grove Road (NW)											
27	L2	602	6.5	0.712	18.8	LOS B	19.5	144.4	0.54	0.81	44.8
29	R2	1355	8.9	1.011	122.9	LOS F	48.1	367.8	1.00	1.09	16.6
Approach		1957	8.1	1.065	90.9	LOS F	48.1	367.8	0.86	1.00	21.1
SouthWest: Hume Highway (SW)											
30	L2	1286	9.0	0.465	11.7	LOS A	14.6	111.6	0.35	0.70	50.0
31	T1	2186	4.9	0.805	22.9	LOS B	39.5	287.9	0.71	0.65	40.2
Approach		3472	6.4	0.805	18.7	LOS B	39.5	287.9	0.57	0.67	43.9
All Vehicles		6784	7.8	1.065	44.2	LOS D	48.1	367.8	0.72	0.79	30.3

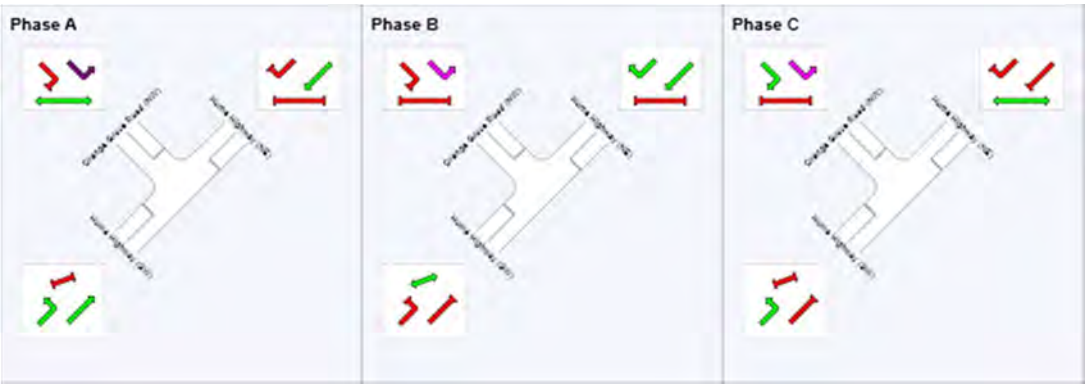
PHASING SUMMARY

Site: I-01 2030 MIMT & SIMTA AM

Hume Highway / Orange Grove Road
2030 MIMT & SIMTA AM PEAK 7:45 am - 8:45 am
Signals - Fixed Time Cycle Time = 150 seconds (User-Given Phase Times)

Phase Timing Results

Phase	A	B	C
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	84	108
Green Time (sec)	77	17	36
Yellow Time (sec)	5	4	5
All-Red Time (sec)	2	2	2
Phase Time (sec)	84	23	43
Phase Split	56 %	15 %	29 %



MOVEMENT SUMMARY

Site: I-01 2030 MIMT & SIMTA PM

Hume Highway / Orange Grove Road
2030 MIMT & SIMTA PM PEAK 4:30 pm - 5:30 pm
Signals - Fixed Time Cycle Time = 150 seconds (User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total	Demand Flows HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	95% Back of Queue Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	v/c	sec		veh	m		per veh	km/h
NorthEast: Hume Highway (NE)											
25	T1	1766	3.5	0.922	45.5	LOS D	50.8	366.7	0.91	0.98	26.5
26	R2	816	2.8	0.958	68.1	LOS E	24.7	176.9	1.00	1.04	27.6
Approach		2582	3.3	0.958	52.6	LOS D	50.8	366.7	0.94	1.00	26.9
NorthWest: Orange Grove Road (NW)											
27	L2	391	4.3	0.366	12.9	LOS A	7.0	50.8	0.28	0.64	49.0
29	R2	1393	5.5	1.094	156.7	LOS F	60.7	451.1	1.00	1.20	13.9
Approach		1783	5.3	1.094	125.2	LOS F	60.7	451.1	0.84	1.07	16.9
SouthWest: Hume Highway (SW)											
30	L2	1320	5.4	0.789	19.8	LOS B	21.0	156.3	0.80	0.84	44.6
31	T1	1100	5.5	0.990	94.2	LOS F	39.6	291.0	1.00	1.15	17.2
Approach		2420	5.4	0.990	53.6	LOS D	39.6	291.0	0.89	0.98	27.6
All Vehicles		6786	4.6	1.094	72.1	LOS F	60.7	451.1	0.90	1.01	23.1

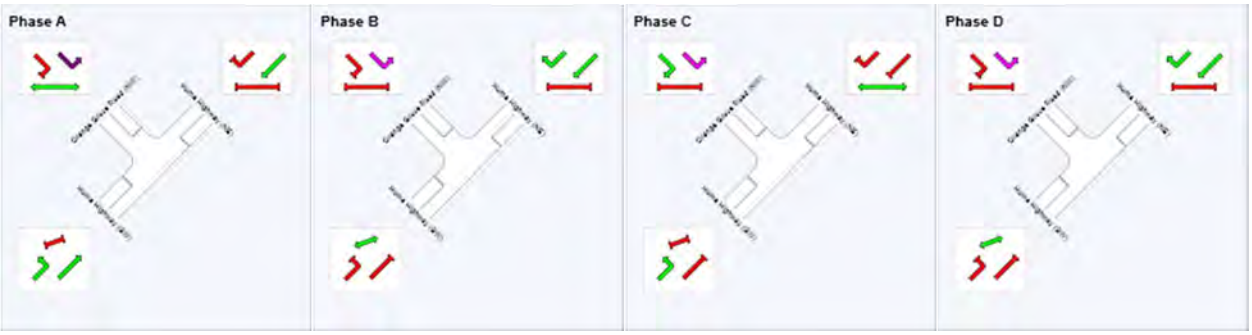
PHASING SUMMARY

Site: I-01 2030 MIMT & SIMTA PM

Hume Highway / Orange Grove Road
2030 MIMT & SIMTA PM PEAK 4:30 pm - 5:30 pm
Signals - Fixed Time Cycle Time = 150 seconds (User-Given Phase Times)

Phase Timing Results

Phase	A	B	C	D
Reference Phase	Yes	No	No	No
Phase Change Time (sec)	0	53	80	124
Green Time (sec)	47	20	38	19
Yellow Time (sec)	5	4	5	4
All-Red Time (sec)	2	2	2	2
Phase Time (sec)	54	26	45	25
Phase Split	36 %	17 %	30 %	17 %



I-02 Intersection of the Hume Highway and Elizabeth Drive

MOVEMENT SUMMARY

Site: I-02 2030 MIMT & SIMTA AM

Hume Highway / Elizabeth Drive
2030 MIMT & SIMTA AM PEAK 7:45 am - 8:45 am
Signals - Fixed Time Cycle Time = 150 seconds (User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Hume Highway (S)											
1	L2	137	5.4	0.155	22.6	LOS B	3.7	27.3	0.40	0.68	36.5
2	T1	2390	7.8	0.972	69.1	LOS E	72.3	544.2	0.99	1.08	18.2
Approach		2527	7.7	0.992	66.6	LOS E	72.3	544.2	0.96	1.06	18.8
East: Elizabeth Drive (E)											
4	L2	39	5.4	0.426	59.6	LOS E	10.5	77.4	0.91	0.82	18.6
5	T1	502	5.7	0.426	55.8	LOS D	11.9	87.2	0.90	0.82	23.7
6	R2	156	2.7	0.754	78.2	LOS F	11.7	83.5	1.00	0.87	14.8
Approach		697	5.0	0.754	61.0	LOS E	11.9	87.2	0.92	0.83	21.1
North: Hume Highway (N)											
7	L2	82	2.6	0.653	25.9	LOS B	24.4	185.9	0.61	0.58	31.5
8	T1	1770	10.4	0.653	19.8	LOS B	24.7	190.2	0.60	0.55	35.9
9	R2	353	9.6	1.170	248.6	LOS F	25.1	189.8	1.00	1.38	7.6
Approach		2205	9.9	1.170	56.6	LOS E	25.1	190.2	0.66	0.69	21.1
West: Elizabeth Drive (W)											
10	L2	627	5.2	1.011	108.6	LOS F	62.6	457.9	1.00	1.06	14.6
11	T1	1089	3.0	1.050	135.4	LOS F	59.4	426.7	1.00	1.34	11.9
12	R2	517	7.1	1.129	381.8	LOS F	61.4	458.6	1.00	1.60	5.3
Approach		2234	4.6	1.129	184.9	LOS F	62.6	458.6	1.00	1.32	9.5
All Vehicles		7663	7.2	1.170	97.7	LOS F	72.3	544.2	0.88	1.01	14.8

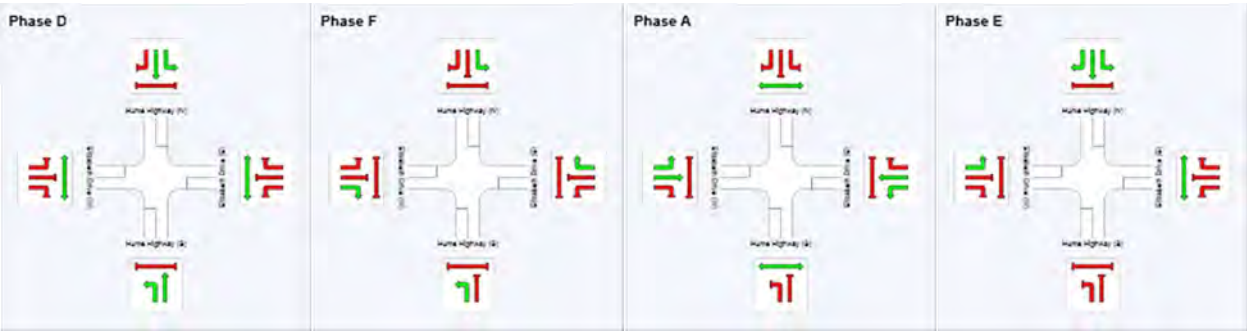
PHASING SUMMARY

Site: I-02 2030 MIMT & SIMTA AM

Hume Highway / Elizabeth Drive
2030 MIMT & SIMTA AM PEAK 7:45 am - 8:45 am
Signals - Fixed Time Cycle Time = 150 seconds (User-Given Phase Times)

Phase Timing Results

Phase	D	F	A	E
Reference Phase	Yes	No	No	No
Phase Change Time (sec)	0	66	89	131
Green Time (sec)	60	17	36	13
Yellow Time (sec)	4	4	4	4
All-Red Time (sec)	2	2	2	2
Phase Time (sec)	66	23	42	19
Phase Split	44 %	15 %	28 %	13 %



MOVEMENT SUMMARY

Site: I-02 2030 MIMT & SIMTA PM

Hume Highway / Elizabeth Drive
2030 MIMT & SIMTA PM PEAK 4:30 pm - 5:30 pm
Signals - Fixed Time Cycle Time = 150 seconds (User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Hume Highway (S)											
1	L2	323	5.6	0.477	39.9	LOS C	15.2	112.2	0.70	0.78	28.3
2	T1	1554	7.0	0.941	71.2	LOS F	45.3	340.7	0.98	1.05	17.8
Approach		1876	6.8	0.941	65.8	LOS E	45.3	340.7	0.93	1.00	19.2
East: Elizabeth Drive (E)											
4	L2	128	0.8	0.984	107.9	LOS F	33.6	239.2	1.00	1.16	12.0
5	T1	1082	2.3	0.984	104.0	LOS F	42.8	305.9	1.00	1.19	15.2
6	R2	172	0.0	1.066	165.1	LOS F	19.6	137.4	1.00	1.29	8.2
Approach		1382	1.9	1.066	112.0	LOS F	42.8	305.9	1.00	1.20	13.7
North: Hume Highway (N)											
7	L2	66	4.8	0.880	26.4	LOS B	44.8	328.2	0.75	0.74	31.5
8	T1	2483	4.4	0.880	20.6	LOS B	45.5	333.6	0.75	0.73	35.5
9	R2	961	3.0	0.917	76.9	LOS F	37.9	271.9	1.00	0.96	19.4
Approach		3511	4.0	0.917	36.1	LOS C	45.5	333.6	0.82	0.79	28.1
West: Elizabeth Drive (W)											
10	L2	325	5.8	0.434	34.2	LOS C	13.6	100.2	0.62	0.76	29.6
11	T1	529	4.4	0.698	61.8	LOS E	17.6	127.6	0.96	0.82	20.9
12	R2	309	2.4	0.978	112.9	LOS F	14.4	102.8	1.00	1.08	14.6
Approach		1164	4.2	0.978	67.6	LOS E	17.6	127.6	0.88	0.87	20.2
All Vehicles		7933	4.3	1.066	61.0	LOS E	45.5	340.7	0.88	0.92	20.8

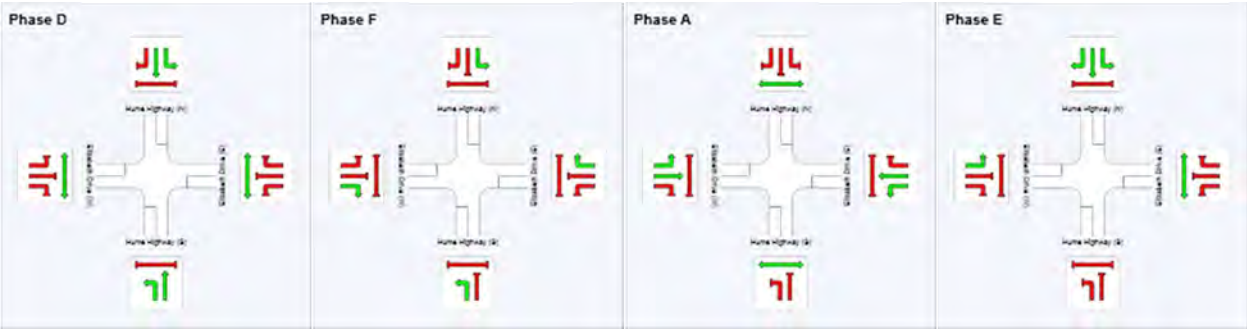
PHASING SUMMARY

Site: I-02 2030 MIMT & SIMTA PM

Hume Highway / Elizabeth Drive
2030 MIMT & SIMTA PM PEAK 4:30 pm - 5:30 pm
Signals - Fixed Time Cycle Time = 150 seconds (User-Given Phase Times)

Phase Timing Results

Phase	D	F	A	E
Reference Phase	Yes	No	No	No
Phase Change Time (sec)	0	53	72	108
Green Time (sec)	47	13	30	36
Yellow Time (sec)	4	4	4	4
All-Red Time (sec)	2	2	2	2
Phase Time (sec)	53	19	36	42
Phase Split	35 %	13 %	24 %	28 %



I-03 Intersection of the Hume Highway and Memorial Avenue

MOVEMENT SUMMARY

Site: I-03 2030 MIMT & SIMTA AM

Hume Highway / Memorial Avenue
2030 MIMT & SIMTA AM PEAK 7:45 am - 8:45 am
Signals - Fixed Time Cycle Time = 150 seconds (User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Hume Highway (S)											
1	L2	157	1.3	0.979	77.2	LOS F	73.9	553.0	1.00	1.11	25.1
2	T1	2135	8.6	0.979	69.0	LOS E	75.1	569.7	0.94	1.07	23.2
3	R2	267	0.0	1.137	222.0	LOS F	36.2	253.5	1.00	1.30	9.4
Approach		2559	7.2	1.137	85.4	LOS F	75.1	569.7	0.95	1.10	20.3
East: Memorial Avenue (E)											
4	L2	29	28.6	1.264	333.5	LOS F	29.0	222.7	1.00	1.72	6.7
5	T1	164	7.7	1.264	328.8	LOS F	29.0	222.7	1.00	1.71	6.6
6	R2	134	18.1	1.264	333.8	LOS F	26.0	208.4	1.00	1.69	4.7
Approach		327	13.8	1.264	331.2	LOS F	29.0	222.7	1.00	1.71	5.8
North: Hume Highway (N)											
7	L2	121	6.1	0.103	12.4	LOS A	2.6	19.4	0.36	0.64	39.4
8	T1	1779	13.0	0.767	28.7	LOS C	33.2	261.6	0.75	0.68	36.2
9	R2	101	3.1	0.439	72.0	LOS F	7.0	50.1	0.97	0.79	21.4
Approach		2001	12.1	0.767	29.9	LOS C	33.2	261.6	0.74	0.68	35.1
West: Memorial Avenue (W)											
10	L2	128	3.3	1.181	241.5	LOS F	47.6	339.8	1.00	1.57	9.0
11	T1	460	1.6	1.181	244.4	LOS F	59.4	423.7	1.00	1.63	8.5
12	R2	165	3.2	1.181	256.2	LOS F	59.4	423.7	1.00	1.68	10.8
Approach		753	2.2	1.181	246.5	LOS F	59.4	423.7	1.00	1.63	9.1
All Vehicles		5641	8.7	1.264	101.5	LOS F	75.1	569.7	0.88	1.06	17.7

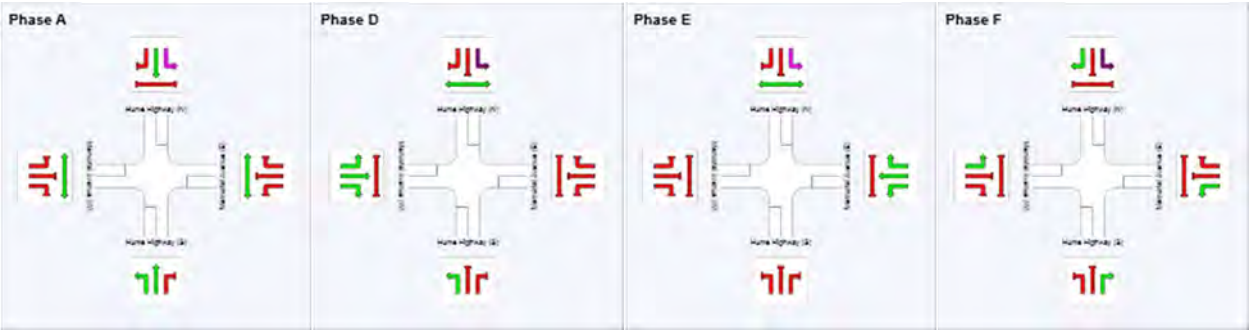
PHASING SUMMARY

Site: I-03 2030 MIMT & SIMTA AM

Hume Highway / Memorial Avenue
2030 MIMT & SIMTA AM PEAK 7:45 am - 8:45 am
Signals - Fixed Time Cycle Time = 150 seconds (User-Given Phase Times)

Phase Timing Results

Phase	A	D	E	F
Reference Phase	Yes	No	No	No
Phase Change Time (sec)	0	75	108	125
Green Time (sec)	69	27	11	19
Yellow Time (sec)	4	4	4	4
All-Red Time (sec)	2	2	2	2
Phase Time (sec)	75	33	17	25
Phase Split	50 %	22 %	11 %	17 %



MOVEMENT SUMMARY

Site: I-03 2030 MIMT & SIMTA PM

Hume Highway / Memorial Avenue
2030 MIMT & SIMTA PM PEAK 4:30 pm - 5:30 pm
Signals - Fixed Time Cycle Time = 150 seconds (User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Hume Highway (S)											
1	L2	121	0.9	0.834	48.4	LOS D	38.2	284.9	0.92	0.88	31.8
2	T1	1663	7.5	0.834	40.3	LOS C	39.0	294.5	0.88	0.83	31.0
3	R2	116	0.0	0.779	84.5	LOS F	8.9	62.5	1.00	0.87	19.4
Approach		1899	6.6	0.834	43.5	LOS D	39.0	294.5	0.89	0.83	30.1
East: Memorial Avenue (E)											
4	L2	55	0.0	1.228	299.2	LOS F	46.0	326.8	1.00	1.82	7.4
5	T1	289	2.2	1.228	294.7	LOS F	46.0	326.8	1.00	1.79	7.2
6	R2	211	6.0	1.228	299.7	LOS F	42.5	310.9	1.00	1.68	5.2
Approach		555	3.4	1.228	297.1	LOS F	46.0	326.8	1.00	1.75	6.5
North: Hume Highway (N)											
7	L2	152	2.8	0.090	8.4	LOS A	2.0	14.7	0.24	0.61	43.5
8	T1	2964	4.1	0.942	21.7	LOS B	66.7	486.4	0.70	0.70	40.1
9	R2	214	2.0	0.729	42.6	LOS D	9.2	65.3	1.00	0.83	28.2
Approach		3330	3.9	0.942	22.4	LOS B	66.7	486.4	0.69	0.71	39.1
West: Memorial Avenue (W)											
10	L2	82	1.3	0.947	94.0	LOS F	17.8	125.8	1.00	1.14	18.3
11	T1	209	1.0	0.947	90.9	LOS F	22.1	155.1	1.00	1.12	17.5
12	R2	171	0.0	0.947	98.0	LOS F	22.1	155.1	1.00	1.09	21.4
Approach		462	0.7	0.947	94.1	LOS F	22.1	155.1	1.00	1.11	19.2
All Vehicles		6246	4.4	1.228	58.5	LOS E	66.7	486.4	0.80	0.87	25.1

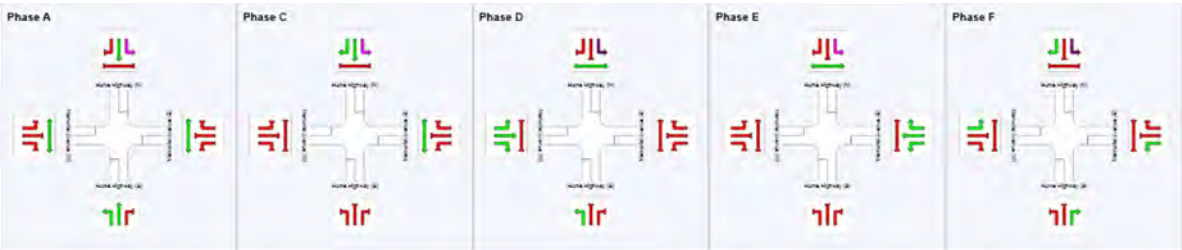
PHASING SUMMARY

Site: I-03 2030 MIMT & SIMTA PM

Hume Highway / Memorial Avenue
2030 MIMT & SIMTA PM PEAK 4:30 pm - 5:30 pm
Signals - Fixed Time Cycle Time = 150 seconds (User-Given Phase Times)

Phase Timing Results

Phase	A	C	D	E	F
Reference Phase	Yes	No	No	No	No
Phase Change Time (sec)	0	67	81	108	132
Green Time (sec)	61	8	21	18	12
Yellow Time (sec)	4	4	4	4	4
All-Red Time (sec)	2	2	2	2	2
Phase Time (sec)	67	14	27	24	18
Phase Split	45 %	9 %	18 %	16 %	12 %



I-04 Intersection of the Hume Highway and Hoxton Park Drive

MOVEMENT SUMMARY

Site: I-04 2030 MIMT & SIMTA AM

Hume Highway / Hoxton Park Road / Macquarie Street
2030 MIMT & SIMTA AM PEAK 7:45 am - 8:45 am
Signals - Fixed Time Cycle Time = 150 seconds (User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Hume Highway (S)											
1	L2	110	13.8	0.098	8.8	LOS A	0.9	7.4	0.13	0.57	50.6
2	T1	2159	6.5	0.852	31.5	LOS C	44.5	331.6	0.83	0.78	37.9
3	R2	1213	1.9	1.079	138.0	LOS F	52.5	373.6	1.00	1.22	13.8
Approach		3481	5.1	1.079	67.9	LOS E	52.5	373.6	0.87	0.93	25.3
East: Macquarie Street (E)											
4	L2	361	5.8	0.230	21.3	LOS B	5.5	40.4	0.66	0.73	39.0
5	T1	545	4.6	1.080	170.2	LOS F	32.6	237.6	1.00	1.38	13.2
Approach		906	5.1	1.080	110.9	LOS F	32.6	237.6	0.86	1.12	17.4
North: Hume Highway (N)											
7	L2	236	15.6	1.020	70.7	LOS F	51.1	399.0	1.00	1.07	23.8
8	T1	1493	10.3	1.020	104.2	LOS F	61.9	478.9	1.00	1.20	20.4
9	R2	246	19.2	1.257	327.7	LOS F	41.2	336.2	1.00	1.59	9.2
Approach		1975	12.1	1.257	128.1	LOS F	61.9	478.9	1.00	1.24	17.7
West: Hoxton Park Road (W)											
10	L2	345	18.0	0.583	47.3	LOS D	20.3	164.2	0.87	0.83	32.5
11	T1	1372	4.8	1.131	228.5	LOS F	69.0	502.9	1.00	1.64	10.4
12	R2	392	4.8	1.148	181.2	LOS F	29.4	215.4	1.00	1.25	14.0
Approach		2109	7.0	1.148	190.0	LOS F	69.0	502.9	0.98	1.44	12.7
All Vehicles		8471	7.2	1.257	116.9	LOS F	69.0	502.9	0.93	1.15	18.1

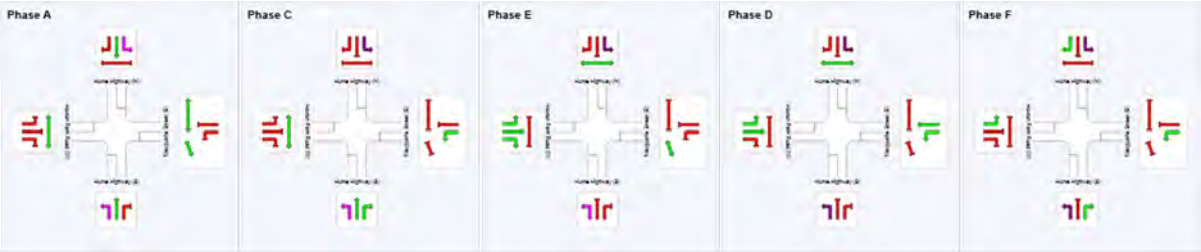
PHASING SUMMARY

Site: I-04 2030 MIMT & SIMTA AM

Hume Highway / Hoxton Park Road / Macquarie Street
2030 MIMT & SIMTA AM PEAK 7:45 am - 8:45 am
Signals - Fixed Time Cycle Time = 150 seconds (User-Given Phase Times)

Phase Timing Results

Phase	A	C	E	D	F
Reference Phase	Yes	No	No	No	No
Phase Change Time (sec)	0	49	77	100	126
Green Time (sec)	43	22	17	20	18
Yellow Time (sec)	4	4	4	4	4
All-Red Time (sec)	2	2	2	2	2
Phase Time (sec)	49	28	23	26	24
Phase Split	33 %	19 %	15 %	17 %	16 %



MOVEMENT SUMMARY

Site: I-04 2030 MIMT & SIMTA PM

Hume Highway / Hoxton Park Road / Macquarie Street
2030 MIMT & SIMTA PM PEAK 4:30 pm - 5:30 pm
Signals - Fixed Time Cycle Time = 150 seconds (User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Hume Highway (S)											
1	L2	201	7.0	0.171	9.6	LOS A	2.1	15.4	0.16	0.59	50.2
2	T1	1617	7.5	0.651	24.3	LOS B	25.6	193.6	0.64	0.58	41.4
3	R2	448	1.2	0.934	95.5	LOS F	19.1	135.2	1.00	1.00	18.1
Approach		2266	6.2	0.934	37.1	LOS C	25.6	193.6	0.67	0.66	34.8
East: Macquarie Street (E)											
4	L2	785	1.5	1.024	163.1	LOS F	39.7	281.3	0.98	1.11	12.1
5	T1	706	3.3	1.087	167.6	LOS F	41.8	300.7	1.00	1.39	13.3
Approach		1492	2.3	1.087	165.2	LOS F	41.8	300.7	0.99	1.24	12.7
North: Hume Highway (N)											
7	L2	101	5.2	0.971	38.2	LOS C	79.4	579.2	0.96	1.03	34.2
8	T1	2847	3.8	0.971	33.4	LOS C	80.6	587.5	0.85	0.91	37.0
9	R2	283	6.3	1.406	459.4	LOS F	56.5	417.3	1.00	1.82	6.9
Approach		3232	4.1	1.406	70.8	LOS F	80.6	587.5	0.86	0.99	26.0
West: Hoxton Park Road (W)											
10	L2	252	4.2	0.395	44.4	LOS D	13.7	99.2	0.80	0.80	33.6
11	T1	717	4.3	0.439	46.6	LOS D	14.2	102.8	0.87	0.73	30.4
12	R2	389	3.9	1.270	265.4	LOS F	35.7	261.3	1.00	1.44	10.3
Approach		1357	4.2	1.270	108.9	LOS F	35.7	261.3	0.89	0.95	19.3
All Vehicles		8347	4.4	1.406	84.7	LOS F	80.6	587.5	0.84	0.94	22.6

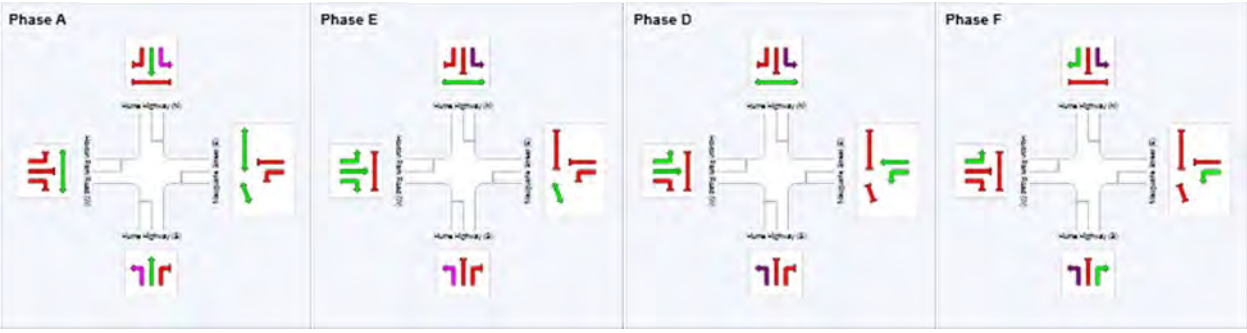
PHASING SUMMARY

Site: I-04 2030 MIMT & SIMTA PM

Hume Highway / Hoxton Park Road / Macquarie Street
2030 MIMT & SIMTA PM PEAK 4:30 pm - 5:30 pm
Signals - Fixed Time Cycle Time = 150 seconds (User-Given Phase Times)

Phase Timing Results

Phase	A	E	D	F
Reference Phase	Yes	No	No	No
Phase Change Time (sec)	0	78	98	127
Green Time (sec)	72	14	23	17
Yellow Time (sec)	4	4	4	4
All-Red Time (sec)	2	2	2	2
Phase Time (sec)	78	20	29	23
Phase Split	52 %	13 %	19 %	15 %



I-05 Intersection of the Hume Highway and Reilly Street

MOVEMENT SUMMARY

Site: I-05 2030 MIMT & SIMTA AM

Hume Highway / Reilly Street
2030 MIMT & SIMTA AM PEAK 7:45 am - 8:45 am
Signals - Fixed Time Cycle Time = 150 seconds (User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Hume Hignway (S)											
1	L2	80	2.6	0.946	35.3	LOS C	75.7	554.5	0.87	0.90	34.8
2	T1	3181	4.7	0.946	29.1	LOS C	75.7	554.5	0.80	0.84	34.2
3	R2	14	7.7	0.112	24.3	LOS B	0.5	3.8	0.51	0.68	36.2
Approach		3275	4.7	0.946	29.2	LOS C	75.7	554.5	0.80	0.84	34.2
East: Congressional Drive (E)											
4	L2	49	2.1	0.263	59.1	LOS E	5.9	42.6	0.89	0.74	24.5
5	T1	46	4.5	0.263	54.5	LOS D	5.9	42.6	0.89	0.74	24.0
6	R2	91	4.7	0.428	67.2	LOS E	6.1	44.6	0.95	0.79	18.7
Approach		186	4.0	0.428	61.9	LOS E	6.1	44.6	0.92	0.76	21.6
North: Hume Hignway (N)											
7	L2	32	3.3	0.567	18.1	LOS B	22.4	170.9	0.53	0.57	39.3
8	T1	1883	9.4	0.567	11.2	LOS A	25.5	195.5	0.51	0.49	46.4
9	R2	99	1.1	0.773	60.7	LOS E	6.1	43.1	1.00	0.93	22.5
Approach		2013	8.9	0.773	13.8	LOS A	25.5	195.5	0.53	0.52	43.9
West: Reilly Street (W)											
10	L2	120	3.5	0.274	50.3	LOS D	7.6	55.2	0.83	0.76	24.5
11	T1	14	7.7	0.274	45.7	LOS D	7.6	55.2	0.83	0.76	25.6
12	R2	235	1.3	1.033	150.9	LOS F	26.2	185.2	1.00	1.22	14.4
Approach		369	2.3	1.033	114.3	LOS F	26.2	185.2	0.94	1.05	16.6
All Vehicles		5844	6.0	1.033	30.3	LOS C	75.7	554.5	0.72	0.74	33.4

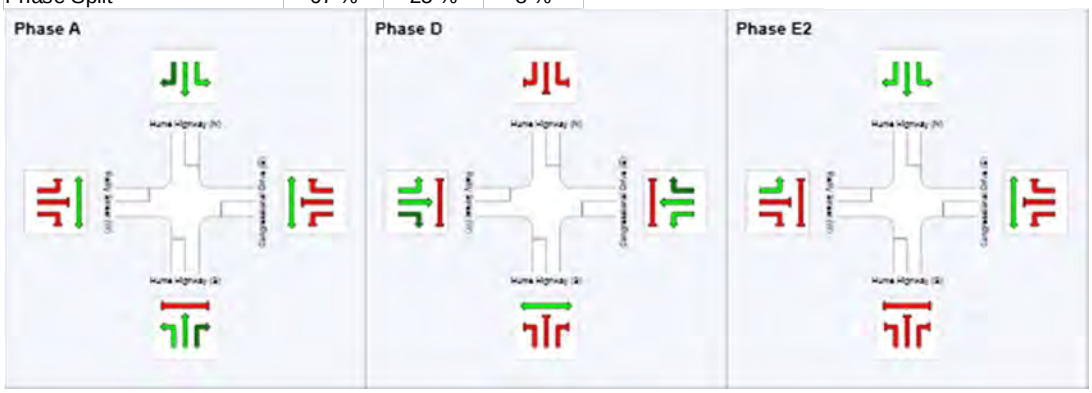
PHASING SUMMARY

Site: I-05 2030 MIMT & SIMTA AM

Hume Highway / Reilly Street
2030 MIMT & SIMTA AM PEAK 7:45 am - 8:45 am
Signals - Fixed Time Cycle Time = 150 seconds (User-Given Phase Times)

Phase Timing Results

Phase	A	D	E2
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	100	138
Green Time (sec)	94	32	6
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	100	38	12
Phase Split	67 %	25 %	8 %



MOVEMENT SUMMARY

Site: I-05 2030 MIMT & SIMTA PM

Hume Highway / Reilly Street
2030 MIMT & SIMTA PM PEAK 4:30 pm - 5:30 pm
Signals - Fixed Time Cycle Time = 150 seconds (User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	ODMov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Hume Hignway (S)											
1	L2	225	0.5	0.679	19.9	LOS B	27.0	198.3	0.54	0.58	41.7
2	T1	2080	6.5	0.679	11.8	LOS A	27.0	198.3	0.47	0.45	45.5
3	R2	21	5.0	0.392	31.0	LOS C	1.0	7.6	0.62	0.73	33.1
Approach		2326	5.9	0.679	12.8	LOS A	27.0	198.3	0.48	0.47	44.9
East: Congressional Drive (E)											
4	L2	42	2.5	0.205	61.9	LOS E	4.2	29.6	0.90	0.73	23.8
5	T1	24	0.0	0.205	57.3	LOS E	4.2	29.6	0.90	0.73	23.3
6	R2	52	0.0	0.236	65.6	LOS E	3.4	23.6	0.92	0.75	19.1
Approach		118	0.9	0.236	62.6	LOS E	4.2	29.6	0.91	0.74	21.7
North: Hume Hignway (N)											
7	L2	67	0.0	0.993	43.5	LOS D	110.4	799.2	0.91	1.03	26.0
8	T1	3707	3.3	0.993	39.6	LOS C	110.4	799.2	0.69	0.83	29.6
9	R2	178	1.2	0.810	59.8	LOS E	11.8	83.4	1.00	1.02	22.7
Approach		3952	3.2	0.993	40.6	LOS C	110.4	799.2	0.70	0.84	29.1
West: Reilly Street (W)											
10	L2	65	0.0	0.235	56.1	LOS D	5.8	40.6	0.86	0.74	23.5
11	T1	32	0.0	0.235	51.6	LOS D	5.8	40.6	0.86	0.74	24.5
12	R2	261	1.6	1.120	214.2	LOS F	35.0	248.2	1.00	1.37	11.0
Approach		358	1.2	1.120	171.0	LOS F	35.0	248.2	0.96	1.20	12.6
All Vehicles		6754	4.0	1.120	38.3	LOS C	110.4	799.2	0.64	0.73	30.1

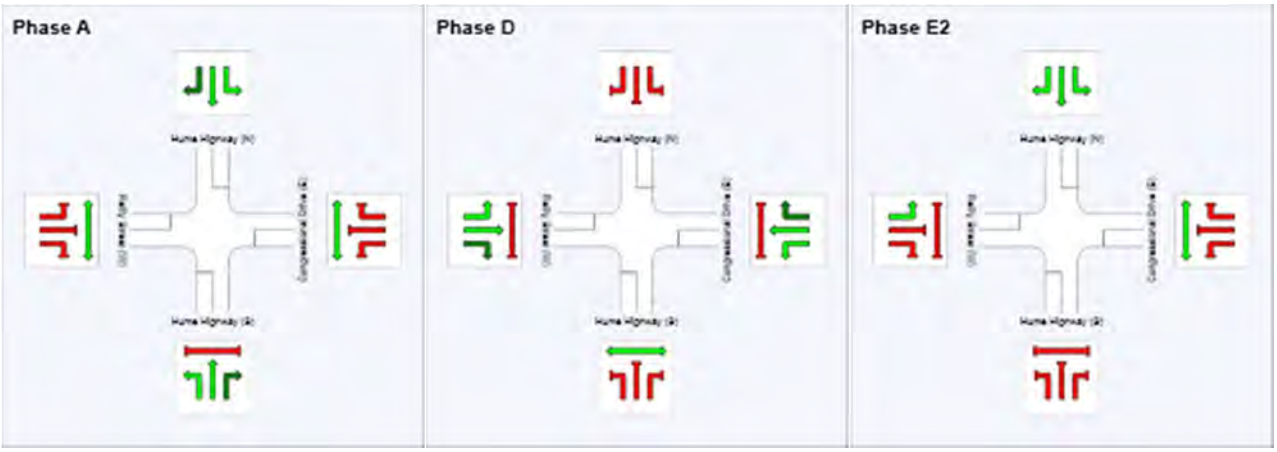
PHASING SUMMARY

Site: I-05 2030 MIMT & SIMTA PM

Hume Highway / Reilly Street
2030 MIMT & SIMTA PM PEAK 4:30 pm - 5:30 pm
Signals - Fixed Time Cycle Time = 150 seconds (User-Given Phase Times)

Phase Timing Results

Phase	A	D	E2
Reference Phase	Yes	No	No
Phase Change Time (sec)	0	98	133
Green Time (sec)	92	29	11
Yellow Time (sec)	4	4	4
All-Red Time (sec)	2	2	2
Phase Time (sec)	98	35	17
Phase Split	65 %	23 %	11 %



I-06 Intersection of Newbridge Road and Moorebank Avenue

MOVEMENT SUMMARY

Site: I-06 2030 MIMT & SIMTA AM

Network: 2030 MIMT & SIMTA AM

Newbridge Road / Moorebank Avenue
2030 MIMT & SIMTA AM PEAK 7:45 am - 8:45 am
Signals - Fixed Time Cycle Time = 133 seconds (User-Given Phase Times)

Movement Performance - Vehicles

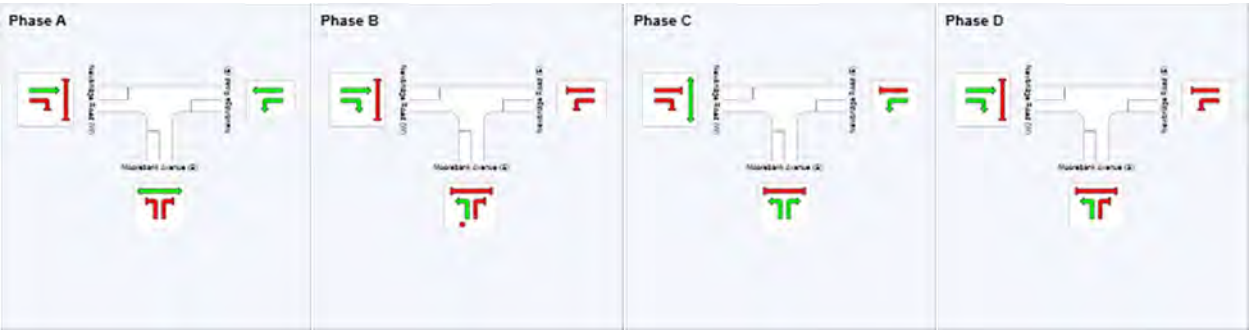
Mov ID	ODMov	Demand Flows Total veh/h	Demand Flows HV %	Arrival Flows Total veh/h	Arrival Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Moorebank Avenue (S)													
1	L2	1535	3.1	1224	3.2	0.632	18.9	LOS B	13.4	96.5	0.56	0.82	42.3
3	R2	1410	11.9	1127	12.2	0.684	15.2	LOS B	14.4	113.6	0.43	0.69	52.3
Approach		2944	7.3	2351 N1	7.5	0.684	17.1	LOS B	14.4	113.6	0.50	0.76	47.8
East: Newbridge Road (E)													
4	L2	719	21.8	719	21.8	0.663	19.5	LOS B	9.7	81.7	0.77	0.82	51.2
5	T1	965	5.1	965	5.1	1.260	311.5	LOS F	77.3	564.9	1.00	1.91	14.7
Approach		1684	12.2	1684	12.2	1.260	186.9	LOS F	77.3	564.9	0.90	1.44	19.0
West: Newbridge Road (W)													
11	T1	1581	6.5	1581	6.5	0.852	12.4	LOS A	30.8	227.8	0.63	0.60	60.9
12	R2	882	7.6	882	7.6	1.711	697.0	LOS F	103.0	769.2	1.00	2.01	3.0
Approach		2463	6.9	2463	6.9	1.711	257.6	LOS F	103.0	769.2	0.76	1.10	14.0
All Vehicles		7092	8.4	6498 N1	9.1	1.711	152.3	LOS F	103.0	769.2	0.70	1.07	19.4

PHASING SUMMARY

Site: I-06 2030 MIMT & SIMTA AM

Network: 2030 MIMT & SIMTA AM

Newbridge Road / Moorebank Avenue
2030 MIMT & SIMTA AM PEAK 7:45 am - 8:45 am
Signals - Fixed Time Cycle Time = 133 seconds (User-Given Phase Times)

Phase Timing Results

Phase	A	B	C	D
Reference Phase	Yes	No	No	No
Phase Change Time (sec)	0	33	55	116
Green Time (sec)	27	16	55	11
Yellow Time (sec)	4	4	4	4
All-Red Time (sec)	2	2	2	2
Phase Time (sec)	33	22	61	17
Phase Split	25 %	17 %	46 %	13 %