

2031 MODEL COMPARISONS - Ex John B

Mike Meister - values/comments in Red

17-Jul-19

Movement	2031 BASE				total delay	2031 + PnS + LT TE RAPA + 1-LANE ROUNDABOUT				total delay	Comments
	FLOWS	QUEUES		DELAYS		FLOWS	QUEUES		DELAYS		
		average	maximum				average	maximum			
Te Rapa (N)					810	Te Rapa/Base/Eagle Way				1634	
left	81	0.4	25	10	810	86	0.2	21	19	1634	
through	506	35	116	56	28336	631	46	153	67	42277	25% increase in flow
right	134	35	116	63	8442	143	46	153	62	8866	
The Base Parade (W)											
left	112	0	15	14	1568	92	0	9	11	1012	18% reduction in flow
through	395	52	156	46	18170	392	42	154	43	16856	
right	954	58	156	47	44838	1032	51	154	42	43344	
Te Rapa (S)											
left	507	21	141	25	12675	474	16	125	22	10428	
through	686	36	142	55	37730	795	45	157	55	43725	16% increase in flow
right	405	103	209	117	47385	416	106	202	126	52416	
Eagle Way (E)											
left	433	9	99	17	7361	517	17	98	23	11891	19% increase in flow
through	181	18	94	59	10679	172	16	55	61	10492	
right	85	18	94	58	4930	53	16	55	57	3021	38% reduction in flow
TOTAL	4479	103	209	117	222,924	4803	106	202	126	245,962	10% increase overall I/S delay
						TeRapa/Wairere					
Te Rapa (N)											
left	651	3	97	9	5859	823	4	119	14	11522	26% increase in flow
through	1061	68	194	63	66843	1095	78	247	65	71175	
right	242	11	49	51	12342	326	16	55	57	18582	35% increase in flow
Avalon (W)											
left	437	31	93	20	8740	501	34	117	29	14529	
through	346	31	93	71	24566	340	34	117	85	28900	
right	90	31	93	60	5400	81	34	117	56	4536	
Te Rapa (S)											
left	193	0.4	33	10	1930	186	0.3	28	9	1674	
through	839	34	175	39	32721	947	34	154	43	40721	
right	274	38	202	68	18632	115	7	76	49	5635	58% decrease in flow
Wairere (E)											
left	168	54	154	35	5880	111	53	158	18	1998	34% deduction in flow
through	309	54	154	47	14523	315	53	158	30	9450	
right	895	54	154	62	55490	787	53	158	62	48794	
TOTAL	5505	68	202	71	252,926	5627	78	247	85	257,516	minimal change overall I/S delay
						Eagle Way/Karewa/Maui RAB					
Eagle Way (W)											
left	362	3	82	7	2534	423	8	64	11	4653	17% increase in flow
right	248	2	71	4	992	226	28	44	4	904	
U-turn						58	28	44	4	232	
Karewa (S)											
left	183	2	51	6	1098	126	36	211	33	4158	31% reduction in flow + longer queues
through	215	2	51	6	1290	324	37	211	34	11016	51% increase in flow + longer queues
Maui (N)											
through	478	13	233	12	5736	485	28	71	7	3395	reduced queuing
right	252	24	267	21	5292	279	28	71	7	1953	reduced queuing
U-turn						26	28	71	7	182	
TOTAL	1738	24	267	21	16,942	1947	37	211	34	26,493	56% increase in overall I/S delays
						Wairere/Karewa					
Karewa (N)											
left	647	4	93	6	3882	685	18	169	11	7535	
Wairere (W)											
left	297	0	15	1	297	101	0.5	19	1	101	66% reduction in flows
through	892	0	15	0	0	1097	23	153	17	18649	23% increase in flows
Wairere (E)											
through	1372	-	-	0	0	1213	-	-	0	0	
right	0	-	-	0	0	309	9	73	21	6489	flow less than LTI/LTO PnS scenario
TOTAL	3208	4	93	6	4,179	3405	23	169	21	32,774	significant increase in overall I/S delays
						Wairere/Pukete					
Wairere (W)											
left	198	1	33	4	792	182	1	41	6	1092	
through	1058	24	115	32	33856	1263	22	110	26	32838	19% increase in flows
right	255	36	122	78	19890	314	59	187	95	29830	23% increase in flows
Pukete (S)											
left	150	0	9	5	750	232	2	47	8	1856	55% increase in flows
TOTAL	1661	36	122	78	55,288	1991	59	187	95	65,616	18% increase in intersection delays
						Countdown access					
Countdown access											
left in	28	2	80	11	308	23	1.1	38	1	25	
right in	413	10	92	13	5369	406	14	113	16	5684	
left out	293	28	69	33	9669	298	34	61	36	10132	
right out	75	28	69	33	2475	62	34	61	36	2108	
TOTAL	809	28	92	33	17,821	789	34	113	36	17,949	
OVERALL	17,400 vehs/hour					18,562 vehs/hour					7% increase in flows
	Max Queue		267 vehs		Max Queue		247 vehs			7% shorter max queue	
	Overall Average I/S Delay (secs/veh) 32.8					Overall Average I/S Delay (secs/veh) 34.8					6% increase in overall vehicle delays

WITH PnS