

Table E1: Hicks Gate Improvement Study: S-Paramics Model Assessment, 2011 Morning Peak Period (7-10am)

7-8am

Route	Ref	Base			OP1			OP2			OP3		
		JT (s)	Vehs	Total time	JT (s)	Vehs	Total time	JT (s)	Vehs	Total time	JT (s)	Vehs	Total time
N-E	7_1	86	365	31406	69	316	21811	86	364	31305	85	364	30823
N-S	7_2	77	141	10887	81	135	10945	77	140	10773	71	142	10047
N-W	7_3	102	744	75694	113	743	84024	103	743	76400	90	744	66867
E-S	7_4	116	3	378	119	6	661	113	5	558	115	4	470
E-W	7_5	156	470	73471	146	479	70004	151	475	71961	159	484	76806
E-N	7_6	218	452	98543	161	510	82038	163	473	77001	211	399	84034
S-W	7_7	68	248	16968	67	241	16047	68	243	16493	92	236	21722
S-N	7_8	68	257	17428	65	217	14190	65	230	15039	104	228	23705
S-E	7_9	76	71	5377	74	64	4793	75	72	5361	131	54	7059
W-N	7_10	65	401	25884	75	333	25028	75	399	29833	64	403	25847
W-E	7_11	65	398	25789	65	394	25709	64	396	25366	73	396	28807
W-S	7_12	72	152	10940	73	156	11395	71	153	10885	94	150	14099
Total			3701	392765		3594	366644		3693	370974		3604	390285

8-9am

Route	Ref	Base			OP1			OP2			OP3		
		JT (s)	Vehs	Total time	JT (s)	Vehs	Total time	JT (s)	Vehs	Total time	JT (s)	Vehs	Total time
N-E	8_1	90	409	36601	69	359	24801	90	409	36836	88	416	36677
N-S	8_2	81	226	18376	91	213	19370	83	225	18718	76	219	16624
N-W	8_3	120	736	88489	146	729	106803	133	732	97327	110	736	81273
E-S	8_4	152	5	691	147	9	1364	149	8	1228	133	11	1445
E-W	8_5	237	470	111516	228	488	111458	235	484	113724	206	546	112216
E-N	8_6	370	448	165675	161	551	88817	163	513	83447	295	489	144171
S-W	8_7	113	326	36735	114	311	35478	106	317	33521	277	246	68065
S-N	8_8	103	334	34257	99	269	26638	93	283	26310	292	236	68938
S-E	8_9	110	124	13616	107	131	13988	99	133	13193	322	76	24473
W-N	8_10	65	471	30656	76	402	30625	76	472	35693	65	469	30418
W-E	8_11	69	510	35263	69	508	34930	66	514	34121	93	519	48072
W-S	8_12	80	254	20185	88	254	22427	81	251	20326	115	240	27551
Total			4311	592060		4225	516699		4341	514444		4203	659922

9-10am

Route	Ref	Base			OP1			OP2			OP3		
		JT (s)	Vehs	Total time	JT (s)	Vehs	Total time	JT (s)	Vehs	Total time	JT (s)	Vehs	Total time
N-E	9_1	85	300	25568	69	260	17915	85	300	25547	92	304	28025
N-S	9_2	76	209	15948	80	204	16303	77	211	16191	80	195	15596
N-W	9_3	93	554	51768	107	560	59660	99	559	55618	93	547	50919
E-S	9_4	117	7	768	120	8	1011	122	9	1062	130	19	2416
E-W	9_5	180	498	89767	165	517	85393	166	513	85187	189	513	96962
E-N	9_6	310	508	157661	161	526	84651	162	493	79971	288	430	123788
S-W	9_7	86	292	25212	96	267	25567	89	271	24031	210	233	48755
S-N	9_8	83	300	24771	83	230	19167	80	242	19328	229	228	52281
S-E	9_9	89	101	8942	90	90	8067	84	99	8338	255	92	23425
W-N	9_10	64	356	22918	74	298	22169	74	352	26133	67	353	23737
W-E	9_11	65	380	24826	65	379	24625	64	380	24221	90	387	35019
W-S	9_12	75	261	19463	75	264	19658	74	260	19145	113	238	26891
Total			3764	467614		3602	384185		3688	384771		3538	527814

Period Total		-	11777	1452438	-	11422	1267528	-	11723	1270189	-	11345	1578021
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Table E2: Hicks Gate Improvement Study: S-Paramics Model Assessment, 2011 Evening Peak Period (3-7pm)

3-4pm

Route	Ref	Base			OP1			OP2			OP3		
		JT (s)	Vehs	Total time	JT (s)	Vehs	Total time	JT (s)	Vehs	Total time	JT (s)	Vehs	Total time
N-E	15_1	86	435	37187	68	381	25925	86	436	37328	97	436	42261
N-S	15_2	78	302	23599	80	290	23112	78	302	23452	85	300	25612
N-W	15_3	84	496	41865	88	498	43573	85	496	42012	90	496	44666
E-S	15_4	110	18	1992	112	21	2373	110	21	2351	112	17	1939
E-W	15_5	128	391	49986	127	391	49512	126	394	49611	130	391	50843
E-N	15_6	199	525	104544	164	559	91686	163	520	84793	200	502	100554
S-W	15_7	62	152	9364	61	151	9154	61	150	9190	87	149	12885
S-N	15_8	67	234	15645	66	211	13871	66	220	14528	109	219	23762
S-E	15_9	105	127	13393	106	118	12442	105	125	13109	121	101	12185
W-N	15_10	65	513	33225	76	433	32765	75	514	38566	64	513	33011
W-E	15_11	65	439	28674	65	437	28496	65	440	28460	78	440	34197
W-S	15_12	81	351	28288	77	352	27167	78	348	27272	106	346	36635
Total			3983	387762		3842	360076		3966	370673		3909	418550

4-5pm

Route	Ref	Base			OP1			OP2			OP3		
		JT (s)	Vehs	Total time	JT (s)	Vehs	Total time	JT (s)	Vehs	Total time	JT (s)	Vehs	Total time
N-E	16_1	96	556	53228	68	483	32826	95	554	52738	382	463	176717
N-S	16_2	88	371	32696	87	359	31037	88	372	32597	374	309	115665
N-W	16_3	95	633	60094	96	630	60759	95	632	59756	373	530	197382
E-S	16_4	115	17	1939	112	25	2799	111	26	2856	117	18	2052
E-W	16_5	132	426	56226	128	431	54912	128	431	55024	140	433	60486
E-N	16_6	243	580	141170	168	619	103729	163	579	94502	247	567	140038
S-W	16_7	64	176	11368	64	174	11152	64	172	10955	128	168	21479
S-N	16_8	70	270	18959	69	244	16737	68	254	17387	160	244	38987
S-E	16_9	108	153	16517	109	145	15753	107	151	16182	173	101	17435
W-N	16_10	66	635	41672	78	558	43320	76	634	48329	69	630	43329
W-E	16_11	69	545	37358	68	545	37199	67	545	36474	113	539	60716
W-S	16_12	92	423	39025	83	425	35154	84	424	35729	141	412	58304
Total			4784	510251		4636	445378		4776	462528		4413	932591

5-6pm

Route	Ref	Base			OP1			OP2			OP3		
		JT (s)	Vehs	Total time	JT (s)	Vehs	Total time	JT (s)	Vehs	Total time	JT (s)	Vehs	Total time
N-E	17_1	98	555	54613	68	484	32878	97	557	54059	635	475	301821
N-S	17_2	91	367	33501	89	354	31418	90	365	32772	624	302	188255
N-W	17_3	98	629	61821	99	632	62577	97	630	61436	624	530	331073
E-S	17_4	126	17	2144	112	31	3469	111	32	3513	168	9	1456
E-W	17_5	148	427	63020	128	442	56296	128	443	56643	216	421	90927
E-N	17_6	325	582	189231	171	634	108504	163	594	97020	408	577	235036
S-W	17_7	68	205	13965	64	194	12436	65	193	12530	220	183	40293
S-N	17_8	74	315	23364	70	273	19077	71	286	20325	258	259	66917
S-E	17_9	112	168	18771	110	167	18472	110	172	18951	262	120	31471
W-N	17_10	67	719	48034	79	658	51982	77	719	55599	208	659	136841
W-E	17_11	73	623	45187	71	618	44036	69	623	42969	281	574	161066
W-S	17_12	119	469	55655	90	476	42978	92	473	43376	306	422	128813
Total			5076	609305		4963	484122		5085	499192		4530	1713967

6-7pm

Route	Ref	Base			OP1			OP2			OP3		
		JT (s)	Vehs	Total time	JT (s)	Vehs	Total time	JT (s)	Vehs	Total time	JT (s)	Vehs	Total time
N-E	18_1	87	446	38901	68	389	26470	87	445	38533	689	424	291765
N-S	18_2	81	299	24072	81	287	23173	79	300	23780	670	277	185847
N-W	18_3	86	507	43621	88	505	44682	86	505	43250	673	478	321995
E-S	18_4	116	12	1427	114	24	2757	110	25	2735	250	12	2982
E-W	18_5	135	390	52767	126	394	49828	126	396	49774	286	366	104743
E-N	18_6	259	571	148221	164	576	94285	163	537	87317	487	529	257440
S-W	18_7	65	173	11177	63	164	10233	62	162	10086	250	168	42006
S-N	18_8	70	270	19014	67	229	15365	67	239	16099	307	240	73815
S-E	18_9	109	136	14757	108	126	13527	107	135	14419	321	85	27128
W-N	18_10	66	621	40717	77	540	41557	76	618	47081	298	599	178213
W-E	18_11	68	536	36614	68	536	36203	67	535	35685	396	522	206856
W-S	18_12	94	412	38772	82	408	33287	83	407	33607	423	385	163129
Total			4372	470060		4180	391366		4304	402365		4085	1855921

Period Total		-	18216	1977379	-	17620	1680942	-	18131	1734758	-	16937	4921027
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Table E3: Hicks Gate Improvement Study: S-Paramics Model Assessment, 2024 Morning Peak Period (7-10am)

7-8am

Route	Ref	Base			OP1			OP2			OP3		
		JT (s)	Vehs	Total time	JT (s)	Vehs	Total time	JT (s)	Vehs	Total time	JT (s)	Vehs	Total time
N-E	7_1	85	372	31545	68	305	20811	84	372	31418	83	373	30889
N-S	7_2	78	174	13617	83	167	13869	78	174	13578	72	175	12592
N-W	7_3	105	724	75944	119	720	85924	106	724	76455	90	725	65244
E-S	7_4	113	5	619	116	7	833	112	7	726	111	8	881
E-W	7_5	156	458	71265	150	459	69018	153	459	70196	147	468	68784
E-N	7_6	196	465	91129	164	511	83659	163	475	77570	191	435	82946
S-W	7_7	64	291	18679	65	290	18743	65	290	18822	83	285	23793
S-N	7_8	64	274	17670	64	241	15363	64	255	16397	94	252	23597
S-E	7_9	75	72	5371	74	67	4927	74	71	5259	124	60	7424
W-N	7_10	65	403	26115	75	342	25644	75	400	29847	64	401	25768
W-E	7_11	68	422	28636	67	420	28090	66	423	27981	77	421	32449
W-S	7_12	77	184	14152	79	184	14415	75	183	13840	99	182	17951
Total			3845	394742		3712	381295		3833	382089		3785	392317

8-9am

Route	Ref	Base			OP1			OP2			OP3		
		JT (s)	Vehs	Total time	JT (s)	Vehs	Total time	JT (s)	Vehs	Total time	JT (s)	Vehs	Total time
N-E	8_1	92	429	39369	69	353	24394	96	429	41208	92	438	40040
N-S	8_2	89	274	24370	107	261	28031	95	270	25565	86	260	22213
N-W	8_3	133	713	94491	172	710	122282	151	708	107173	128	708	90390
E-S	8_4	253	9	2230	226	13	2837	294	10	2958	118	28	3270
E-W	8_5	358	450	160968	316	479	151368	329	475	156249	191	551	105353
E-N	8_6	382	445	169865	167	564	94325	165	532	87788	225	546	122713
S-W	8_7	116	391	45263	114	365	41661	120	372	44559	296	277	82006
S-N	8_8	108	355	38145	103	286	29623	110	299	32799	309	229	70971
S-E	8_9	117	142	16597	124	177	22025	125	163	20272	362	98	35336
W-N	8_10	65	470	30704	77	426	32639	76	471	35675	156	433	67529
W-E	8_11	76	577	43884	73	586	42932	71	584	41296	248	538	133714
W-S	8_12	97	323	31424	108	315	33933	96	317	30365	261	264	68939
Total			4578	697309		4536	626051		4630	625908		4370	842476

9-10am

Route	Ref	Base			OP1			OP2			OP3		
		JT (s)	Vehs	Total time	JT (s)	Vehs	Total time	JT (s)	Vehs	Total time	JT (s)	Vehs	Total time
N-E	9_1	85	305	25852	69	227	15651	86	301	25958	151	253	38252
N-S	9_2	80	250	19969	86	227	19511	82	242	19855	173	153	26429
N-W	9_3	107	534	57220	123	510	62897	116	522	60432	148	400	59106
E-S	9_4	208	28	5743	186	82	15267	187	64	11952	158	44	7005
E-W	9_5	317	541	171514	263	522	137260	252	534	134645	160	367	58880
E-N	9_6	373	537	200583	166	504	83558	165	491	80966	212	343	72691
S-W	9_7	111	351	38939	80	313	24991	105	322	33710	292	228	66316
S-N	9_8	105	327	34148	75	243	18163	96	259	24890	308	184	56661
S-E	9_9	111	124	13707	93	174	16092	109	157	17038	341	134	45905
W-N	9_10	65	352	22755	75	291	21945	74	344	25550	351	271	95241
W-E	9_11	69	414	28667	68	395	26936	67	405	27004	483	360	174167
W-S	9_12	85	320	27335	87	296	25806	84	305	25581	534	189	100934
Total			4081	646432		3781	468076		3946	487581		2927	801587

Period Total		-	12503	1738483	-	12029	1475421	-	12408	1495578	-	11081	2036380
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Table E4: Hicks Gate Improvement Study: S-Paramics Model Assessment, 2024 Evening Peak Period (3-7pm)

3-4pm

Route	Ref	Base			OP1			OP2			OP3		
		JT (s)	Vehs	Total time	JT (s)	Vehs	Total time	JT (s)	Vehs	Total time	JT (s)	Vehs	Total time
N-E	15_1	87	387	33699	68	318	21666	86	388	33512	85	390	33079
N-S	15_2	78	245	19120	78	234	18374	77	243	18714	70	244	17215
N-W	15_3	85	497	42015	87	496	43105	84	497	41853	82	496	40526
E-S	15_4	114	22	2450	115	25	2861	110	26	2854	114	23	2599
E-W	15_5	130	425	55096	128	428	54771	127	428	54238	133	427	56791
E-N	15_6	218	531	115553	167	564	94094	163	532	86563	206	509	105123
S-W	15_7	68	208	14068	67	206	13697	66	206	13547	109	205	22347
S-N	15_8	71	251	17691	69	229	15764	69	239	16409	131	231	30277
S-E	15_9	99	124	12229	98	115	11194	97	123	11960	138	95	13153
W-N	15_10	65	513	33184	76	438	33287	75	509	38210	64	511	32880
W-E	15_11	64	409	26066	64	408	26168	63	409	25657	63	410	25744
W-S	15_12	79	359	28393	76	360	27217	76	358	27138	97	356	34673
Total			3968	399564		3820	362197		3958	370652		3897	414409

4-5pm

Route	Ref	Base			OP1			OP2			OP3		
		JT (s)	Vehs	Total time	JT (s)	Vehs	Total time	JT (s)	Vehs	Total time	JT (s)	Vehs	Total time
N-E	16_1	246	527	129634	69	506	34935	228	531	120984	96	583	56143
N-S	16_2	240	389	93226	95	403	38279	222	389	86349	91	416	37922
N-W	16_3	240	579	138772	110	627	69146	223	581	129399	96	633	60838
E-S	16_4	123	21	2629	113	29	3281	111	31	3426	128	16	2085
E-W	16_5	146	464	67782	132	472	62400	128	475	61047	174	466	81274
E-N	16_6	303	585	177560	171	628	107611	163	600	98076	322	580	186459
S-W	16_7	74	254	18816	75	247	18466	71	247	17559	219	221	48267
S-N	16_8	76	292	22169	74	259	19196	73	271	19865	266	230	61018
S-E	16_9	106	152	16175	106	153	16137	104	158	16456	249	88	21849
W-N	16_10	113	599	67792	78	604	47346	77	637	48827	255	534	136353
W-E	16_11	130	537	70037	68	580	39267	67	583	39046	270	489	132120
W-S	16_12	265	507	134057	94	569	53657	98	567	55316	357	464	165972
Total			4907	938648		5076	509721		5069	696351		4719	990300

5-6pm

Route	Ref	Base			OP1			OP2			OP3		
		JT (s)	Vehs	Total time	JT (s)	Vehs	Total time	JT (s)	Vehs	Total time	JT (s)	Vehs	Total time
N-E	17_1	543	515	279824	111	645	71771	545	531	289501	332	562	186423
N-S	17_2	538	446	239797	205	415	84889	541	419	226843	328	339	111133
N-W	17_3	531	494	262214	234	570	133452	535	488	261057	306	460	140837
E-S	17_4	204	29	5965	145	18	2637	113	35	3969	309	6	1987
E-W	17_5	235	460	108240	162	384	62376	129	480	61935	332	382	126891
E-N	17_6	438	587	257404	169	523	88047	164	601	98280	514	527	270859
S-W	17_7	105	292	30665	131	255	33247	81	274	22140	416	166	69003
S-N	17_8	103	337	34777	123	261	32062	81	294	23921	470	177	83169
S-E	17_9	132	184	24381	162	187	30230	113	205	23292	459	103	47306
W-N	17_10	281	469	132095	178	610	108436	179	616	110387	381	433	165026
W-E	17_11	330	465	153243	208	668	139028	198	633	125068	421	497	209130
W-S	17_12	535	494	264128	336	550	184855	332	607	201290	505	348	175545
Total			4773	1792732		5085	971027		5183	1447683		4001	1587309

6-7pm

Route	Ref	Base			OP1			OP2			OP3		
		JT (s)	Vehs	Total time	JT (s)	Vehs	Total time	JT (s)	Vehs	Total time	JT (s)	Vehs	Total time
N-E	18_1	552	520	286861	226	382	86563	578	528	305435	1060	111	117924
N-S	18_2	546	388	212056	348	254	88533	578	363	209722	1243	41	51547
N-W	18_3	545	586	319169	364	526	191492	576	570	328188	942	99	93003
E-S	18_4	248	15	3788	232	41	9530	145	23	3263	675	7	4843
E-W	18_5	245	437	106901	218	386	84133	159	433	68782	255	102	26025
E-N	18_6	461	585	270060	184	513	94371	167	576	96052	273	155	42228
S-W	18_7	100	275	27620	95	237	22463	85	244	20644	1264	25	31842
S-N	18_8	96	327	31470	99	235	23325	86	265	22687	1416	28	39650
S-E	18_9	129	138	17686	157	148	23248	120	139	16670	1264	17	21039
W-N	18_10	249	612	152048	214	645	138281	160	712	114008	859	90	77497
W-E	18_11	298	533	159044	258	558	144053	179	594	106215	902	114	102822
W-S	18_12	501	505	252855	395	449	177440	279	456	127191	1148	42	48263
Total			4921	1839559		4374	1083432		4902	1418857		832	656682

Period Total		-	18569	4970503	-	18354	2926377	-	19112	3933544	-	13448	3648701
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