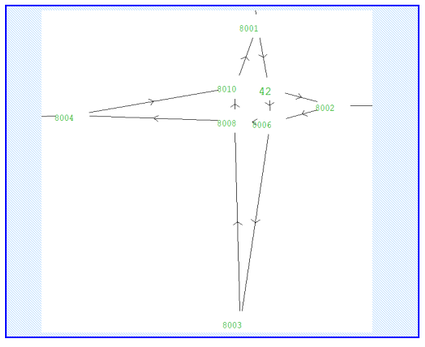
CLARIFICATION #9 – TURNING COUNT VALIDATION

Junction Turning Flows

Junction: **Harfreys Roundabout**



Survey Date: *01/08/2014*

Status: Validation

Arm Description

Arm	Inbound		Outbound		Description
	A-Node	B-Node	A-Node	B-Node	
A	8001	42	8010	8001	*A47 N*
B	8002	8006	42	8002	*William Adams Way E*
C	8003	8008	8006	8003	*A47 S*
D	8004	8010	8008	8004	*william Adams Way W*
E					
F					
G					

Growth Factors

Vehicle	Growth
Car	*1*
LGV	*1*
HGV	*1*

AM Peak

Include? Yes

Total Turns	16	
GEH < 5.0	10	63%
GEH < 7.5	12	75%
GEH < 10.0	15	94%

Warning ! Queues, see Row 200 for more info

OBSERVED

All Vehicle		To Arm A	B	C	D	E	F	G	TOTAL	ATC
From Arm	A	1	277	954	89				1321	
	B	176	19	64	111				370	
	C	1329	361	7	244				1941	
	D	129	160	103	5				397	
	E									
	F									
	G									
	TOTAL	1635	817	1128	449				4029	
	ATC									

MODELLED

All Vehicle		To Arm A	B	C	D	E	F	G	TOTAL
From Arm	A	0	273	1204	16				1493
	B	239	50	19	229				537
	C	1382	290	0	302				1974
	D	52	171	99	0				322
	E								
	F								
	G								
	TOTAL	1673	784	1322	547				4326

GEH

All Vehicle		To Arm A	B	C	D	E	F	G	
From Arm	A	1.414	0.241	7.611	10.075				4.585
	B	4.374	5.278	6.985	9.050				7.842
	C	1.440	3.935	3.742	3.510				0.746
	D	8.094	0.855	0.398	3.162				3.956
	E								
	F								
	G								
		0.934	1.166	5.543	4.391				4.595

ABSOLUTE DIFFERENCE

All Vehicle		To Arm A	B	C	D	E	F	G	TOTAL
From Arm	A	-1	-4	250	-73				172
	B	63	31	-45	118				167
	C	53	-71	-7	58				33
	D	-77	11	-4	-5				-75
	E								
	F								
	G								
	TOTAL	38	-33	194	98				297

PERCENTAGE DIFFERENCE

All Vehicle		To Arm A	B	C	D	E	F	G	
From Arm	A	-100%	-1%	26%	-82%				13%
	B	36%	163%	-70%	106%				45%
	C	4%	-20%	-100%	24%				2%
	D	-60%	7%	-4%	-100%				-19%
	E								
	F								
	G								
		2%	-4%	17%	22%				7%

Interpeak

Include? Yes

Total Turns	16	
GEH < 5.0	14	88%
GEH < 7.5	14	88%
GEH < 10.0	15	94%

OBSERVED

All Vehicle		To Arm A	B	C	D	E	F	G	TOTAL	ATC
From Arm	A	2	283	938	80				1303	
	B	201	11	35	75				322	
	C	907	131	4	118				1160	
	D	87	110	129	4				330	
	E									
	F									
	G									
	TOTAL	1197	535	1106	277				3115	
	ATC									

MODELLED

All Vehicle		To Arm A	B	C	D	E	F	G	TOTAL
From Arm	A	0	322	1069	81				1472
	B	165	0	0	198				363
	C	1004	176	0	128				1308
	D	99	140	96	0				335
	E								
	F								
	G								
	TOTAL	1268	638	1165	407				3478

GEH

All Vehicle		To Arm A	B	C	D	E	F	G	
From Arm	A	2.000	2.242	4.135	0.111				4.537
	B	2.661	4.690	8.367	10.528				2.215
	C	3.138	3.632	2.828	0.902				4.213
	D	1.244	2.683	3.111	2.828				0.274
	E								
	F								
	G								
		2.022	4.253	1.751	7.030				6.322

ABSOLUTE DIFFERENCE

All Vehicle		To Arm A	B	C	D	E	F	G	TOTAL
From Arm	A	-2	39	131	1				169
	B	-36	-11	-35	123				41
	C	97	45	-4	10				148
	D	12	30	-33	-4				5
	E								
	F								
	G								
	TOTAL	71	103	59	130				363

PERCENTAGE DIFFERENCE

All Vehicle		To Arm A	B	C	D	E	F	G	
From Arm	A	-100%	14%	14%	1%				13%
	B	-18%	-100%	-100%	164%				13%
	C	11%	34%	-100%	8%				13%
	D	14%	27%	-26%	-100%				2%
	E								
	F								
	G								
		6%	19%	5%	47%				12%

PM Peak

Include? Yes

Total Turns	16	
GEH < 5.0	11	69%
GEH < 7.5	13	81%
GEH < 10.0	15	94%

Warning ! Queues, see Row 200 for more info

OBSERVED

All Vehicle		To Arm A	B	C	D	E	F	G	TOTAL
From Arm	A	2	350	1330	50				1732
	B	180	16	113	34				343
	C	963	346	4	84				1397
	D	116	158	268	3				545
	E								
	F								
	G								
	TOTAL	1261	870	1715	171				4017
	ATC								

MODELLED

All Vehicle		To Arm A	B	C	D	E	F	G	TOTAL
From Arm	A	0	320	1456	58				1834
	B	242	14	51	140				447
	C	1090	200	0	196				1486
	D	154	149	383	0				686
	E								
	F								
	G								
	TOTAL	1486	683	1890	394				4453

GEH

All Vehicle		To Arm A	B	C	D	E	F	G	
From Arm	A	2.000	1.639	3.376	1.089				2.416
	B	4.268	0.516	6.847	11.364				5.233
	C	3.964	8.836	2.828	9.466				2.344
	D	3.271	0.726	6.374	2.449				5.683
	E								
	F								
	G								
		6.071	6.711	4.122	13.268				6.700

ABSOLUTE DIFFERENCE

All Vehicle		To Arm A	B	C	D	E	F	G	TOTAL
From Arm	A	-2	-30	126	8				102
	B	62	-2	-62	106				104
	C	127	-146	-4	112				89
	D	38	-9	115	-3				141
	E								
	F								
	G								
	TOTAL	225	-187	175	223				436

PERCENTAGE DIFFERENCE

All Vehicle		To Arm A	B	C	D	E	F	G	
From Arm	A	-100%	-9%	9%	16%				6%
	B	34%	-13%	-55%	312%				30%
	C	13%	-42%	-100%	133%				6%
	D	33%	-6%	43%	-100%				26%
	E								
	F								
	G								
		18%	-21%	10%	130%				11%

By Vehicle Type:

OBSERVED

Car		To Arm A	B	C	D	E	F	G	TOTAL
From Arm	A	1	238	787	47				1073
	B	134	17	53	75				279
	C	1125	329	5	179				1638
	D	50	103	42	5				200
	E								
	F								
	G								
	TOTAL	1310	687	887	306				3190

MODELLED

Car		To Arm A	B	C	D	E	F	G	TOTAL
From Arm	A	0	212	975	6				1193
	B	167	50	19	172				408
	C	1134	277	0	209				1620
	D	40	154	54	0				248
	E								
	F								
	G								
	TOTAL	1341	693	1048	387				3469

GEH

Car		To Arm A	B	C	D	E	F	G	
From Arm	A	1.41	1.73	6.33	7.96				3.57
	B	2.69	5.70	5.67	8.73				6.96
	C	0.27	2.99	3.16	2.15				0.45
	D	1.49	4.50	1.73	3.16				3.21
	E								
	F								
	G								
		0.85	0.23	5.18	4.35				4.84

OBSERVED

LGV		To Arm A	B	C	D	E	F	G	TOTAL
From Arm	A	0	29	125	28				182
	B	33	1	6	28				68
	C	156	18	0	48				222
	D	53	46	43	0				142
	E								
	F								
	G								
	TOTAL	242	94	174	104				614

MODELLED

LGV		To Arm A	B	C	D	E	F	G	TOTAL
From Arm	A	0	55	180	8				243
	B	55	0	0	57				112
	C	220	12	0	25				257
	D	9	17	15	0				41
	E								
	F								
	G								
	TOTAL	284	84	195	90				653

GEH

LGV		To Arm A	B	C	D	E	F	G	
From Arm	A	0.00	4.01	4.45	4.71				4.18
	B	3.32	1.41	3.46	4.45				4.64
	C	4.67	1.55	0.00	3.81				2.26
	D	7.90	5.17	5.20	0.00				10.56
	E								
	F								
	G								
		2.59	1.06	1.55	1.42				1.55

OBSERVED

HGV		To Arm A	B	C	D	E	F	G	TOTAL
From Arm	A	0	10	42	14				66
	B	9	1	5	8				23
	C	48	14	2	17				81
	D	26	11	18	0				55
	E								
	F								
	G								
	TOTAL	83	36	67	39				225

MODELLED

HGV		To Arm A	B	C	D	E	F	G	TOTAL
From Arm	A	0	6	49	2				57
	B	17	0	0	0				17
	C	28	1	0	68				97
	D	3	0	30	0				33
	E								
	F								
	G								
	TOTAL	48	7	79	70				204

GEH

HGV		To Arm A	B	C	D	E	F	G	
From Arm	A	0.000	1.414	1.038	4.243				1.148
	B	2.219	1.414	3.162	4.000				1.342
	C	3.244	4.747	2.000	7.823				1.696
	D	6.040	4.690	2.449	0.000				3.317
	E								
	F								
	G								
		4.325	6.254	1.404	4.199				1.434

By Vehicle Type:

OBSERVED

Car		To Arm A	B	C	D	E	F	G	TOTAL
From Arm	A	2	251	779	43				1075
	B	157	10	29	52				248
	C	748	104	1	67				920
	D	43	68	75	3				189
	E								
	F								
	G								
	TOTAL	950	433	884	165				2432

MODELLED

Car		To Arm A	B	C	D	E	F	G	TOTAL
From Arm	A	0	276	872	63				1211
	B	138	0	0	152				290
	C	818	137	0	94				1049
	D	78	106	67	0				251
	E								
	F								
	G								
	TOTAL	1034	519	939	309				2801

GEH

Car		To Arm A	B	C	D	E	F	G	
From Arm	A	2.00	1.54	3.24	2.75				4.02
	B	1.56	4.47	7.62	9.90				2.56
	C	2.50	3.01	1.41	3.01				4.11
	D	4.50	4.07	0.95	2.45				4.18
	E								
	F								
	G								
		2.67	3.94	1.82	9.35				7.21

OBSERVED

LGV		To Arm A	B	C	D	E	F	G	TOTAL
From Arm	A	0	26	132	18				176
	B	32	1	3	20				56
	C	116	23	2	39				180
	D	28	21	38	1				88
	E								
	F								
	G								
	TOTAL	176	71	175	78				500

MODELLED

LGV		To Arm A	B	C	D	E	F	G	TOTAL
From Arm	A	0	41	152	13				206
	B	19	0	0	46				65
	C	152	30	0	11				193
	D	15	34	12	0				61
	E								
	F								
	G								
	TOTAL	186	105	164	70				525

GEH

LGV		To Arm A	B	C	D	E	F	G	
From Arm	A	0.00	2.59	1.68	1.27				2.17
	B	2.57	1.41	2.45	4.53				1.16
	C	3.11	1.36	2.00	5.60				0.95
	D	2.80	2.48	5.20	1.41				3.13
	E								
	F								
	G								
		0.74	3.62	0.84	0.93				1.10

OBSERVED

HGV		To Arm A	B	C	D	E	F	G	TOTAL
From Arm	A	0	6	27	19				52
	B	12	0	3	3				18
	C	43	4	1	12				60
	D	16	21	16	0				53
	E								
	F								
	G								
	TOTAL	71	31	47	34				183

MODELLED

HGV		To Arm A	B	C	D	E	F	G	TOTAL
From Arm	A	0	5	45	5				55
	B	8	0	0	0				8
	C	34	9	0	23				66
	D	6	0	17	0				23
	E								
	F								
	G								
	TOTAL	48	14	62	28				152

GEH

HGV		To Arm A	B	C	D	E	F	G	
From Arm	A	0.000	0.426	3.000	4.041				0.410
	B	1.265	0.000	2.449	2.449				2.774
	C	1.450	1.961	1.414	2.630				0.756
	D	3.015	6.481	0.246	0.000				4.867
	E								
	F								
	G								
		2.982	3.584	2.032	1.078				2.395

By Vehicle Type:

OBSERVED

Car		To Arm A	B	C	D	E	F	G	TOTAL
From Arm	A	1	301	1162	31				1495
	B	147	15	101	30				293
	C	815	304	3	66				1188
	D	87	136	234	2				459
	E								
	F								
	G								
	TOTAL	1050	756	1500	129				3435

MODELLED

Car		To Arm A	B	C	D	E	F	G	TOTAL
From Arm	A	0	281	1234	48				1563
	B	211	14	49	119				393
	C	915	171	0	148				1234
	D	125	135	314	0				574
	E								
	F								
	G								
	TOTAL	1251	601	1597	315				3764

GEH

Car		To Arm A	B	C	D	E	F	G	
From Arm	A	1.41	1.17	2.08	2.70				1.74
	B	4.78	0.26	6.00	10.31				5.40
	C	3.40	8.63	2.45	7.93				1.32
	D	3.69	0.09	4.83	2.00				5.06
	E								
	F								
	G								
		5.93	5.95	2.46	12.48				5.48

OBSERVED

LGV		To Arm A	B	C	D	E	F	G	TOTAL
From Arm	A	1	40	157	13				211
	B	27	1	10	3				41
	C	127	38	1	11				177
	D	16	19	32	1				68
	E								
	F								
	G								
	TOTAL	171	98	200	28				497

MODELLED

LGV		To Arm A	B	C	D	E	F	G	TOTAL
From Arm	A	0	35	208	8				251
	B	25	0	2	21				48
	C	157	28	0	23				208
	D	25	14	31	0				70
	E								
	F								
	G								
	TOTAL	207	77	241	52				577

GEH

LGV		To Arm A	B	C	D	E	F	G	
From Arm	A	1.41	0.82	3.78	1.54				2.63
	B	0.39	1.41	3.27	5.20				1.05
	C	2.52	1.74	1.41	2.91				2.23
	D	1.99	1.23	0.18	1.41				0.24
	E								
	F								
	G								
		2.62	2.24	2.76	3.79				3.45

OBSERVED

HGV		To Arm A	B	C	D	E	F	G	TOTAL
From Arm	A	0	9	11	6				26
	B	6	0	2	1				9
	C	21	4	0	7				32
	D	13	3	2	0				18
	E								
	F								
	G								
	TOTAL	40	16	15	14				85

MODELLED

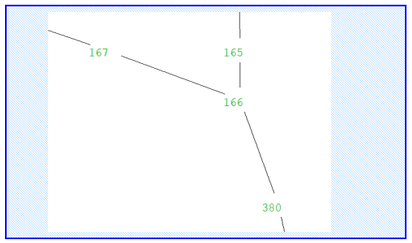
HGV		To Arm A	B	C	D	E	F	G	TOTAL
From Arm	A	0	4	14	2				20
	B	6	0	0	0				6
	C	18	1	0	25				44
	D	4	0	38	0				42
	E								
	F								
	G								
	TOTAL	28	5	52	27				112

GEH

HGV		To Arm A	B	C	D	E	F	G	
From Arm	A	0.000	1.961	0.849	2.000				1.251
	B	0.000	0.000	2.000	1.414				1.095
	C	0.679	1.897	0.000	4.500				1.947
	D	3.087	2.449	8.050	0.000				4.382
	E								
	F								
	G								
		2.058	3.395	6.393	2.871				2.720

Junction Turning Flows

Junction: **Southtown Rd/William Adams Way/Beccles Rd**



Survey Date: *08/01/2014*

Status: Validation

Arm Description

Arm	Inbound		Outbound		Description
	A-Node	B-Node	A-Node	B-Node	
A	165	166	166	165	*Southtown Rd*
B	380	166	166	380	*Beccles Rd*
C	167	166	166	167	*William Adams Way*
D					
E					
F					
G					

Growth Factors

Vehicle	Growth
Car	*1*
LGV	*1*
HGV	*1*

AM Peak

Include? Yes

Total Turns	9	
GEH < 5.0	5	56%
GEH < 7.5	8	89%
GEH < 10.0	8	89%

OBSERVED

All Vehicle	To Arm								
From Arm	A	B	C	D	E	F	G	TOTAL	ATC
A	0	313	98					411	
B	418	0	270					688	
C	85	205	0					290	
D									
E									
F									
G									
TOTAL	503	518	368					1389	
ATC									

MODELLED

All Vehicle	To Arm							
From Arm	A	B	C	D	E	F	G	TOTAL
A	0	236	185					421
B	543	0	353					896
C	0	313	0					313
D								
E								
F								
G								
TOTAL	543	549	538					1630

GEH

All Vehicle	To Arm							
From Arm	A	B	C	D	E	F	G	
A	0.000	4.648	7.330					0.501
B	5.713	0.000	4.685					7.387
C	13.038	6.718	0.000					1.332
D								
E								
F								
G								
	1.759	1.347	7.982					6.209

ABSOLUTE DIFFERENCE

All Vehicle	To Arm							
From Arm	A	B	C	D	E	F	G	TOTAL
A	0	-77	87					10
B	125	0	83					208
C	-85	108	0					23
D								
E								
F								
G								
TOTAL	40	31	170					241

PERCENTAGE DIFFERENCE

All Vehicle	To Arm							
From Arm	A	B	C	D	E	F	G	
A		-25%	89%					2%
B	30%		31%					30%
C	-100%	53%						8%
D								
E								
F								
G								
	8%	6%	46%					17%

Interpeak

Include? Yes

Total Turns	9	
GEH < 5.0	6	67%
GEH < 7.5	8	89%
GEH < 10.0	8	89%

OBSERVED

All Vehicle	To Arm								
From Arm	A	B	C	D	E	F	G	TOTAL	ATC
A	0	342	83					425	
B	287	0	237					524	
C	62	270	0					332	
D									
E									
F									
G									
TOTAL	349	612	320					1281	
ATC									

MODELLED

All Vehicle	To Arm							
From Arm	A	B	C	D	E	F	G	TOTAL
A	0	278	154					432
B	376	0	211					586
C	0	400	0					400
D								
E								
F								
G								
TOTAL	376	678	364					1418

GEH

All Vehicle	To Arm							
From Arm	A	B	C	D	E	F	G	
A	0.000	3.606	6.495					0.344
B	4.868	0.000	1.758					2.644
C	11.136	7.087	0.000					3.538
D								
E								
F								
G								
	1.397	2.605	2.397					3.732

ABSOLUTE DIFFERENCE

All Vehicle	To Arm							
From Arm	A	B	C	D	E	F	G	TOTAL
A	0	-64	71					7
B	89	0	-26					62
C	-62	130	0					68
D								
E								
F								
G								
TOTAL	27	66	44					137

PERCENTAGE DIFFERENCE

All Vehicle	To Arm							
From Arm	A	B	C	D	E	F	G	
A		-19%	85%					2%
B	31%		-11%					12%
C	-100%	48%						20%
D								
E								
F								
G								
	8%	11%	14%					11%

PM Peak

Include? Yes

Total Turns	9	
GEH < 5.0	7	78%
GEH < 7.5	8	89%
GEH < 10.0	8	89%

OBSERVED

All Vehicle	To Arm							
From Arm	A	B	C	D	E	F	G	TOTAL
A	0	526	113					639
B	307	0	222					529
C	118	318	0					436
D								
E								
F								
G								
TOTAL	425	844	335					1604
ATC								

MODELLED

All Vehicle	To Arm							
From Arm	A	B	C	D	E	F	G	TOTAL
A	0	474	186					660
B	388	0	263					651
C	0	382	0					382
D								
E								
F								
G								
TOTAL	388	856	448					1692

GEH

All Vehicle	To Arm							
From Arm	A	B	C	D	E	F	G	
A	0.000	2.307	5.947					0.827
B	4.343	0.000	2.607					5.005
C	15.362	3.406	0.000					2.685
D								
E								
F								
G								
	1.838	0.415	5.723					2.176

ABSOLUTE DIFFERENCE

All Vehicle	To Arm							
From Arm	A	B	C	D	E	F	G	TOTAL
A	0	-52	73					21
B	81	0	41					122
C	-118	64	0					-54
D								
E								
F								
G								
TOTAL	-37	12	113					88

PERCENTAGE DIFFERENCE

All Vehicle	To Arm							
From Arm	A	B	C	D	E	F	G	
A		-10%	64%					3%
B	26%		18%					23%
C	-100%	20%						-12%
D								
E								
F								
G								
	-9%	1%	34%					6%

By Vehicle Type:

OBSERVED

Car		To Arm A	B	C	D	E	F	G	TOTAL
From Arm	A	0	247	67					314
	B	353	0	211					564
	C	58	153	0					211
	D								
	E								
	F								
	G								
	TOTAL	411	400	278					1089

MODELLED

Car		To Arm A	B	C	D	E	F	G	TOTAL
From Arm	A	0	200.75	141.82					342.57
	B	475.35	0	266.4					741.75
	C	0	242.81	0					242.81
	D								
	E								
	F								
	G								
	TOTAL	475.35	443.56	408.22					1327.13

GEH

Car		To Arm A	B	C	D	E	F	G	
From Arm	A	0.00	3.09	7.32					1.58
	B	6.01	0.00	3.59					6.96
	C	10.77	6.38	0.00					2.11
	D								
	E								
	F								
	G								
		3.06	2.12	7.03					6.85

OBSERVED

LGV		To Arm A	B	C	D	E	F	G	TOTAL
From Arm	A	0	33	21					54
	B	41	0	46					87
	C	19	37	0					56
	D								
	E								
	F								
	G								
	TOTAL	60	70	67					197

MODELLED

LGV		To Arm A	B	C	D	E	F	G	TOTAL
From Arm	A	0	21.71	43.41					65.12
	B	56.61	0	69.3					125.91
	C	0	64.82	0					64.82
	D								
	E								
	F								
	G								
	TOTAL	56.61	86.53	112.71					255.85

GEH

LGV		To Arm A	B	C	D	E	F	G	
From Arm	A	0.00	2.16	3.95					1.44
	B	2.23	0.00	3.07					3.77
	C	6.16	3.90	0.00					1.13
	D								
	E								
	F								
	G								
		0.44	1.87	4.82					3.91

OBSERVED

HGV		To Arm A	B	C	D	E	F	G	TOTAL
From Arm	A	0	33	10					43
	B	24	0	13					37
	C	8	15	0					23
	D								
	E								
	F								
	G								
	TOTAL	32	48	23					103

MODELLED

HGV		To Arm A	B	C	D	E	F	G	TOTAL
From Arm	A	0	13.53043	0					13.53043
	B	11.27826	0	16.95652					28.23478
	C	0	5.5	0					5.5
	D								
	E								
	F								
	G								
	TOTAL	11.27826	19.03043	16.95652					47.26522

GEH

HGV		To Arm A	B	C	D	E	F	G	
From Arm	A	0.000	4.036	4.472					5.543
	B	3.029	0.000	1.022					1.535
	C	4.000	2.967	0.000					4.636
	D								
	E								
	F								
	G								
		4.455	5.004	1.352					6.430

By Vehicle Type:

OBSERVED

Car		To Arm A	B	C	D	E	F	G	TOTAL
From Arm	A	0	281	63					344
	B	239	0	184					423
	C	41	222	0					263
	D								
	E								
	F								
	G								
	TOTAL	280	503	247					1030

MODELLED

Car		To Arm A	B	C	D	E	F	G	TOTAL
From Arm	A	0	247.72	116.56					364.28
	B	316.86	0	173.81					490.67
	C	0	334.73	0					334.73
	D								
	E								
	F								
	G								
	TOTAL	316.86	582.45	290.37					1189.68

GEH

Car		To Arm A	B	C	D	E	F	G	
From Arm	A	0.00	2.05	5.65					1.08
	B	4.67	0.00	0.76					3.17
	C	9.06	6.76	0.00					4.15
	D								
	E								
	F								
	G								
		2.13	3.41	2.65					4.79

OBSERVED

LGV		To Arm A	B	C	D	E	F	G	TOTAL
From Arm	A	0	31	13					44
	B	30	0	42					72
	C	11	36	0					47
	D								
	E								
	F								
	G								
	TOTAL	41	67	55					163

MODELLED

LGV		To Arm A	B	C	D	E	F	G	TOTAL
From Arm	A	0	26.01	37.09					63.1
	B	48.47	0	28.41					76.88
	C	0	61.42	0					61.42
	D								
	E								
	F								
	G								
	TOTAL	48.47	87.43	65.5					201.4

GEH

LGV		To Arm A	B	C	D	E	F	G	
From Arm	A	0.00	0.93	4.81					2.61
	B	2.95	0.00	2.29					0.57
	C	4.69	3.64	0.00					1.96
	D								
	E								
	F								
	G								
		1.12	2.32	1.35					2.84

OBSERVED

HGV		To Arm A	B	C	D	E	F	G	TOTAL
From Arm	A	0	30	7					37
	B	18	0	11					29
	C	10	12	0					22
	D								
	E								
	F								
	G								
	TOTAL	28	42	18					88

MODELLED

HGV		To Arm A	B	C	D	E	F	G	TOTAL
From Arm	A	0	4.747826	0					4.747826
	B	10.26957	0	8.478261					18.74783
	C	0	3.530435	0					3.530435
	D								
	E								
	F								
	G								
	TOTAL	10.26957	8.278261	8.478261					27.02609

GEH

HGV		To Arm A	B	C	D	E	F	G	
From Arm	A	0.000	6.058	3.742					7.059
	B	2.056	0.000	0.808					2.098
	C	4.472	3.039	0.000					5.169
	D								
	E								
	F								
	G								
		4.053	6.726	2.617					8.040

By Vehicle Type:

OBSERVED

Car		To Arm A	B	C	D	E	F	G	TOTAL
From Arm	A	0	458	96					554
	B	251	0	189					440
	C	91	272	0					363
	D								
	E								
	F								
	G								
	TOTAL	342	730	285					1357

MODELLED

Car		To Arm A	B	C	D	E	F	G	TOTAL
From Arm	A	0	411.33	164.26					575.59
	B	347.6	0	230.23					577.83
	C	0	338.72	0					338.72
	D								
	E								
	F								
	G								
	TOTAL	347.6	750.05	394.49					1492.14

GEH

Car		To Arm A	B	C	D	E	F	G	
From Arm	A	0.00	2.24	5.98					0.91
	B	5.58	0.00	2.85					6.11
	C	13.49	3.82	0.00					1.30
	D								
	E								
	F								
	G								
		0.30	0.74	5.94					3.58

OBSERVED

LGV		To Arm A	B	C	D	E	F	G	TOTAL
From Arm	A	0	46	12					58
	B	36	0	29					65
	C	19	38	0					57
	D								
	E								
	F								
	G								
	TOTAL	55	84	41					180

MODELLED

LGV		To Arm A	B	C	D	E	F	G	TOTAL
From Arm	A	0	55.25	21.42					76.67
	B	36.6	0	26.45					63.05
	C	0	39.11	0					39.11
	D								
	E								
	F								
	G								
	TOTAL	36.6	94.36	47.87					178.83

GEH

LGV		To Arm A	B	C	D	E	F	G	
From Arm	A	0.00	1.30	2.30					2.28
	B	0.10	0.00	0.48					0.24
	C	6.16	0.18	0.00					2.58
	D								
	E								
	F								
	G								
		2.72	1.10	1.03					0.09

OBSERVED

HGV		To Arm A	B	C	D	E	F	G	TOTAL
From Arm	A	0	22	5					27
	B	20	0	4					24
	C	8	8	0					16
	D								
	E								
	F								
	G								
	TOTAL	28	30	9					67

MODELLED

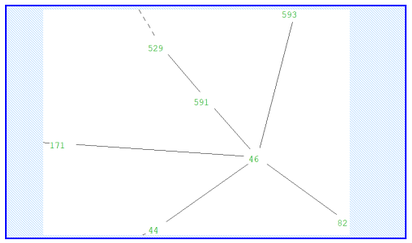
HGV		To Arm A	B	C	D	E	F	G	TOTAL
From Arm	A	0	7.821739	0					7.821739
	B	3.752174	0	5.904348					9.656522
	C	0	3.873913	0					3.873913
	D								
	E								
	F								
	G								
	TOTAL	3.752174	11.69565	5.904348					21.35217

GEH

HGV		To Arm A	B	C	D	E	F	G	
From Arm	A	0.000	3.672	3.162					4.596
	B	4.715	0.000	0.856					3.497
	C	4.000	1.693	0.000					3.847
	D								
	E								
	F								
	G								
		6.086	4.009	1.134					6.868

Junction Turning Flows

Junction: **Beccles Road Roundabout**



Survey Date: *08/01/2014*

Status: Validation

Arm Description

Arm	Inbound		Outbound		Description
	A-Node	B-Node	A-Node	B-Node	
A	593	46	46	593	*Beccles Rd*
B	82	46	46	82	*Church Rd*
C	44	46	46	44	*A143 Beccles Rd*
D	171	46	46	171	*Burgh Rd*
E	591	46	46	591	*Suffolk Rd*
F					
G					

Growth Factors

Vehicle	Growth
Car	*1*
LGV	*1*
HGV	*1*

AM Peak

Include? Yes

Total Turns	25	
GEH < 5.0	20	80%
GEH < 7.5	22	88%
GEH < 10.0	23	92%

OBSERVED

All Vehicle		To Arm								
		A	B	C	D	E	F	G	TOTAL	ATC
From Arm	A	13	245	103	36	30			427	
	B	319	1	50	73	36			479	
	C	122	91	1	27	43			284	
	D	93	143	25	0	18			279	
	E	11	22	30	25	0			88	
	F									
	G									
	TOTAL	558	502	209	161	127			1557	
	ATC									

MODELLED

All Vehicle		To Arm							
		A	B	C	D	E	F	G	TOTAL
From Arm	A	0	123	110	51	42			327
	B	346	0	23	57	10			436
	C	5	118	0	49	60			231
	D	247	92	19	0	5			363
	E	0	25	49	16	0			90
	F								
	G								
	TOTAL	598	358	202	173	117			1447

GEH

All Vehicle		To Arm							
		A	B	C	D	E	F	G	
From Arm	A	5.099	8.982	0.710	2.288	2.044			5.158
	B	1.499	1.414	4.487	1.954	5.548			2.010
	C	14.713	2.637	1.414	3.508	2.341			3.295
	D	11.802	4.752	1.182	0.000	3.784			4.685
	E	4.690	0.671	3.018	1.988	0.000			0.235
	F								
	G								
		1.664	6.950	0.515	0.920	0.930			2.835

ABSOLUTE DIFFERENCE

All Vehicle		To Arm							
		A	B	C	D	E	F	G	TOTAL
From Arm	A	-13	-122	7	15	12			-100
	B	27	-1	-27	-16	-26			-43
	C	-117	27	-1	22	17			-53
	D	154	-51	-6	0	-13			84
	E	-11	3	19	-9	0			2
	F								
	G								
	TOTAL	40	-144	-7	12	-10			-110

PERCENTAGE DIFFERENCE

All Vehicle		To Arm							
		A	B	C	D	E	F	G	
From Arm	A	-100%	-50%	7%	42%	41%			-23%
	B	9%	-100%	-54%	-22%	-74%			-9%
	C	-96%	30%	-100%	80%	39%			-19%
	D	165%	-36%	-22%		-72%			30%
	E	-100%	15%	63%	-36%				3%
	F								
	G								
		7%	-29%	-4%	7%	-8%			-7%

Interpeak

Include? Yes

Total Turns	25	
GEH < 5.0	20	80%
GEH < 7.5	23	92%
GEH < 10.0	24	96%

OBSERVED

All Vehicle		To Arm								
		A	B	C	D	E	F	G	TOTAL	ATC
From Arm	A	25	270	117	46	17			475	
	B	246	0	30	120	32			428	
	C	80	55	0	15	21			171	
	D	36	100	13	0	10			159	
	E	10	23	19	6	0			58	
	F									
	G									
	TOTAL	397	448	179	187	80			1291	
	ATC									

MODELLED

All Vehicle		To Arm							
		A	B	C	D	E	F	G	TOTAL
From Arm	A	0	168	108	80	29			384
	B	248	0	36	52	11			347
	C	0	97	0	9	29			135
	D	104	79	30	0	6			218
	E	0	32	26	6	0			64
	F								
	G								
	TOTAL	352	375	199	147	75			1148

GEH

All Vehicle		To Arm							
		A	B	C	D	E	F	G	
From Arm	A	7.071	6.917	0.892	4.309	2.447			4.383
	B	0.141	0.000	1.058	7.397	4.412			4.102
	C	12.649	4.855	0.000	1.810	1.613			2.892
	D	8.107	2.256	3.619	0.000	1.531			4.290
	E	4.472	1.644	1.462	0.049	0.000			0.723
	F								
	G								
		2.326	3.582	1.475	3.127	0.577			4.091

ABSOLUTE DIFFERENCE

All Vehicle		To Arm							
		A	B	C	D	E	F	G	TOTAL
From Arm	A	-25	-102	-9	34	12			-91
	B	2	0	6	-69	-21			-81
	C	-80	42	0	-6	8			-36
	D	68	-21	17	0	-4			59
	E	-10	9	7	0	0			6
	F								
	G								
	TOTAL	-45	-73	20	-40	-5			-143

PERCENTAGE DIFFERENCE

All Vehicle		To Arm							
		A	B	C	D	E	F	G	
From Arm	A	-100%	-38%	-8%	74%	69%			-19%
	B	1%		20%	-57%	-64%			-19%
	C	-100%	77%		-42%	38%			-21%
	D	188%	-21%	129%		-43%			37%
	E	-100%	37%	36%	2%				10%
	F								
	G								
		-11%	-16%	11%	-22%	-6%			-11%

PM Peak

Include? Yes

Total Turns	25	
GEH < 5.0	20	80%
GEH < 7.5	23	92%
GEH < 10.0	23	92%

OBSERVED

All Vehicle		To Arm							
		A	B	C	D	E	F	G	TOTAL
From Arm	A	13	328	235	71	27			674
	B	226	0	26	137	35			424
	C	93	70	1	23	23			210
	D	40	163	15	0	12			230
	E	7	34	20	6	1			68
	F								
	G								
	TOTAL	379	595	297	237	98			1606
	ATC								

MODELLED

All Vehicle		To Arm							
		A	B	C	D	E	F	G	TOTAL
From Arm	A	0	255	180	119	36			590
	B	300	0	57	110	9			476
	C	0	148	0	21	40			209
	D	138	120	32	0	10			300
	E	6	28	25	14	0			73
	F								
	G								
	TOTAL	443	551	294	265	95			1648

GEH

All Vehicle		To Arm							
		A	B	C	D	E	F	G	
From Arm	A	5.099	4.295	3.818	4.905	1.663			3.348
	B	4.536	0.000	4.801	2.391	5.529			2.446
	C	13.634	7.493	1.414	0.333	2.955			0.052
	D	10.355	3.572	3.500	0.000	0.654			4.291
	E	0.554	1.113	1.124	2.580	1.414			0.592
	F								
	G								
		3.144	1.827	0.162	1.756	0.329			1.036

ABSOLUTE DIFFERENCE

All Vehicle		To Arm							
		A	B	C	D	E	F	G	TOTAL
From Arm	A	-13	-73	-55	48	9			-84
	B	74	0	31	-27	-26			52
	C	-93	78	-1	-2	17			-1
	D	98	-43	17	0	-2			70
	E	-1	-6	5	8	-1			5
	F								
	G								
	TOTAL	64	-44	-3	28	-3			42

PERCENTAGE DIFFERENCE

All Vehicle		To Arm							
		A	B	C	D	E	F	G	
From Arm	A	-100%	-22%	-23%	67%	35%			-12%
	B	33%		119%	-19%	-74%			12%
	C	-100%	112%	-100%	-7%	72%			0%
	D	244%	-26%	113%		-18%			30%
	E	-20%	-18%	27%	137%	-100%			7%
	F								
	G								
		17%	-7%	-1%	12%	-3%			3%

By Vehicle Type:

OBSERVED

Car		To Arm A	B	C	D	E	F	G	TOTAL
From Arm	A	7	190	91	33	23			344
	B	259	0	45	67	33			404
	C	104	90	1	23	39			257
	D	82	131	21	0	14			248
	E	10	18	25	24	0			77
	F								
	G								
	TOTAL	462	429	183	147	109			1330

MODELLED

Car		To Arm A	B	C	D	E	F	G	TOTAL
From Arm	A	0	96.15	83.16	39.43	37.96			256.7
	B	307.98	0	14.47	52.99	8.57			384.01
	C	3.8	102.55	0	43.31	50.65			200.31
	D	213.12	85.7	17.74	0	4.58			321.14
	E	0	22.82	40.92	14.26	0			78
	F								
	G								
	TOTAL	524.9	307.22	156.29	149.99	101.76			1240.16

GEH

Car		To Arm A	B	C	D	E	F	G	
From Arm	A	3.74	7.85	0.84	1.07	2.71			5.04
	B	2.91	0.00	5.60	1.81	5.36			1.01
	C	13.65	1.28	1.41	3.53	1.74			3.75
	D	10.79	4.35	0.74	0.00	3.09			4.34
	E	4.47	1.07	2.77	2.23	0.00			0.11
	F								
	G								
		2.83	6.35	2.05	0.25	0.71			2.51

OBSERVED

LGV		To Arm A	B	C	D	E	F	G	TOTAL
From Arm	A	3	26	6	1	3			39
	B	35	1	4	5	2			47
	C	15	1	0	0	3			19
	D	7	9	3	0	4			23
	E	1	2	4	1	0			8
	F								
	G								
	TOTAL	61	39	17	7	12			136

MODELLED

LGV		To Arm A	B	C	D	E	F	G	TOTAL
From Arm	A	0	23.22	13.72	9.91	4.33			51.18
	B	37.98	0	8.44	4.24	0.96			51.62
	C	1.03	15.4	0	5.25	9.13			30.81
	D	21.87	5.84	1.69	0	0.55			29.95
	E	0	2.44	8.04	1.74	0			12.22
	F								
	G								
	TOTAL	60.88	46.9	31.89	21.14	14.97			175.78

GEH

LGV		To Arm A	B	C	D	E	F	G	
From Arm	A	2.45	0.56	2.46	3.81	0.69			1.81
	B	0.49	1.41	1.78	0.35	0.85			0.66
	C	4.93	5.03	0.00	3.24	2.49			2.37
	D	3.91	1.16	0.86	0.00	2.29			1.35
	E	1.41	0.30	1.65	0.63	0.00			1.33
	F								
	G								
		0.02	1.21	3.01	3.77	0.81			3.19

OBSERVED

HGV		To Arm A	B	C	D	E	F	G	TOTAL
From Arm	A	3	29	6	2	4			44
	B	25	0	1	1	1			28
	C	3	0	0	4	1			8
	D	4	3	1	0	0			8
	E	0	2	1	0	0			3
	F								
	G								
	TOTAL	35	34	9	7	6			91

MODELLED

HGV		To Arm A	B	C	D	E	F	G	TOTAL
From Arm	A	0	3.769565	13.44783	1.756522	0			18.97391
	B	0.378261	0	0	0	0			0.378261
	C	0.004348	0	0	0	0			0.004348
	D	11.84783	0	0	0	0			11.84783
	E	0	0	0	0	0			0
	F								
	G								
	TOTAL	12.23043	3.769565	13.44783	1.756522	0			31.20435

GEH

HGV		To Arm A	B	C	D	E	F	G	
From Arm	A	2.449	6.233	2.388	0.178	2.828			4.460
	B	6.912	0.000	1.414	1.414	1.414			7.333
	C	2.444	0.000	0.000	2.828	1.414			3.997
	D	2.788	2.449	1.414	0.000	0.000			1.221
	E	0.000	2.000	1.414	0.000	0.000			2.449
	F								
	G								
		4.686	6.956	1.328	2.506	3.464			7.650

By Vehicle Type:

OBSERVED

Car		To Arm A	B	C	D	E	F	G	TOTAL
From Arm	A	12	224	105	38	12			391
	B	204	0	21	105	22			352
	C	70	47	0	13	18			148
	D	26	94	11	0	9			140
	E	8	20	17	4	0			49
	F								
	G								
	TOTAL	320	385	154	160	61			1080

MODELLED

Car		To Arm A	B	C	D	E	F	G	TOTAL
From Arm	A	0	152.29	97.97	69.95	24.24			344.45
	B	223.21	0	33.85	46.86	10.64			314.56
	C	0	86.39	0	7.16	24.01			117.56
	D	83.33	73.55	26.67	0	5.1			188.65
	E	0	28.15	22.72	4.85	0			55.72
	F								
	G								
	TOTAL	306.54	340.38	181.21	128.82	63.99			1020.94

GEH

Car		To Arm A	B	C	D	E	F	G	
From Arm	A	4.90	5.23	0.70	4.35	2.88			2.43
	B	1.31	0.00	2.45	6.67	2.81			2.05
	C	11.83	4.82	0.00	1.84	1.31			2.64
	D	7.75	2.23	3.61	0.00	1.47			3.80
	E	4.00	1.66	1.28	0.40	0.00			0.93
	F								
	G								
		0.76	2.34	2.10	2.59	0.38			1.82

OBSERVED

LGV		To Arm A	B	C	D	E	F	G	TOTAL
From Arm	A	13	23	6	4	4			50
	B	21	0	4	11	7			43
	C	8	7	0	2	3			20
	D	5	4	1	0	1			11
	E	2	3	2	1	0			8
	F								
	G								
	TOTAL	49	37	13	18	15			132

MODELLED

LGV		To Arm A	B	C	D	E	F	G	TOTAL
From Arm	A	0	14.01	7.15	7.74	3.44			32.34
	B	20.66	0	2.23	4.64	0.8			28.33
	C	0	10.99	0	1.6	5.06			17.65
	D	10.17	5.13	3.06	0	0.61			18.97
	E	0	3.44	3.21	1.27	0			7.92
	F								
	G								
	TOTAL	30.83	33.57	15.65	15.25	9.91			105.21

GEH

LGV		To Arm A	B	C	D	E	F	G	
From Arm	A	5.10	2.09	0.45	1.54	0.29			2.75
	B	0.07	0.00	1.00	2.27	3.14			2.46
	C	4.00	1.33	0.00	0.30	1.03			0.54
	D	1.88	0.53	1.45	0.00	0.43			2.06
	E	2.00	0.25	0.75	0.25	0.00			0.03
	F								
	G								
		2.88	0.58	0.70	0.67	1.44			2.46

OBSERVED

HGV		To Arm A	B	C	D	E	F	G	TOTAL
From Arm	A	0	23	6	4	1			34
	B	21	0	5	4	3			33
	C	2	1	0	0	0			3
	D	5	2	1	0	0			8
	E	0	0	0	1	0			1
	F								
	G								
	TOTAL	28	26	12	9	4			79

MODELLED

HGV		To Arm A	B	C	D	E	F	G	TOTAL
From Arm	A	0	1.369565	2.430435	2.547826	1.017391			7.365217
	B	4.347826	0	0	0	0			4.347826
	C	0	0	0	0	0			0
	D	10.27826	0	0	0	0			10.27826
	E	0	0	0	0	0			0
	F								
	G								
	TOTAL	14.62609	1.369565	2.430435	2.547826	1.017391			21.9913

GEH

HGV		To Arm A	B	C	D	E	F	G	
From Arm	A	0.000	6.197	1.739	0.803	0.017			5.857
	B	4.678	0.000	3.162	2.828	2.449			6.630
	C	2.000	1.414	0.000	0.000	0.000			2.449
	D	1.910	2.000	1.414	0.000	0.000			0.754
	E	0.000	0.000	0.000	1.414	0.000			1.414
	F								
	G								
		2.897	6.658	3.563	2.685	1.883			8.023

By Vehicle Type:

OBSERVED

Car		To Arm A	B	C	D	E	F	G	TOTAL
From Arm	A	9	275	214	62	21			581
	B	182	0	22	123	32			359
	C	81	65	1	23	22			192
	D	36	149	13	0	10			208
	E	5	31	17	5	0			58
	F								
	G								
	TOTAL	313	520	267	213	85			1398

MODELLED

Car		To Arm A	B	C	D	E	F	G	TOTAL
From Arm	A	0	233.81	156.95	100.2	33.95			524.91
	B	268.88	0	50.26	99.9	8.54			427.58
	C	0.01	129.5	0	19.09	36.94			185.54
	D	128.5	111.51	29.02	0	9.36			278.39
	E	5.61	26.79	23.1	13.41	0			68.91
	F								
	G								
	TOTAL	403	501.61	259.33	232.6	88.79			1485.33

GEH

Car		To Arm A	B	C	D	E	F	G	
From Arm	A	4.24	2.58	4.19	4.24	2.47			2.39
	B	5.79	0.00	4.70	2.19	5.21			3.46
	C	12.73	6.54	1.41	0.85	2.75			0.47
	D	10.20	3.28	3.50	0.00	0.21			4.51
	E	0.26	0.78	1.36	2.77	0.00			1.37
	F								
	G								
		4.76	0.81	0.47	1.31	0.41			2.30

OBSERVED

LGV		To Arm A	B	C	D	E	F	G	TOTAL
From Arm	A	4	34	18	7	2			65
	B	24	0	3	14	1			42
	C	11	5	0	0	1			17
	D	4	13	1	0	1			19
	E	2	3	3	1	1			10
	F								
	G								
	TOTAL	45	55	25	22	6			153

MODELLED

LGV		To Arm A	B	C	D	E	F	G	TOTAL
From Arm	A	0	20.88	19.17	14.69	2.41			57.15
	B	22.05	0	6.65	10.51	0.51			39.72
	C	0	18.78	0	2.34	2.58			23.7
	D	8.12	8.96	2.94	0	0.48			20.5
	E	0	1.02	2.25	0.79	0			4.06
	F								
	G								
	TOTAL	30.17	49.64	31.01	28.33	5.98			145.13

GEH

LGV		To Arm A	B	C	D	E	F	G	
From Arm	A	2.83	2.50	0.27	2.34	0.28			1.00
	B	0.41	0.00	1.66	1.00	0.56			0.36
	C	4.69	4.00	0.00	2.16	1.18			1.49
	D	1.67	1.22	1.38	0.00	0.60			0.34
	E	2.00	1.40	0.46	0.22	1.41			2.24
	F								
	G								
		2.42	0.74	1.14	1.26	0.01			0.64

OBSERVED

HGV		To Arm A	B	C	D	E	F	G	TOTAL
From Arm	A	0	19	3	2	4			28
	B	20	0	1	0	2			23
	C	1	0	0	0	0			1
	D	0	1	1	0	1			3
	E	0	0	0	0	0			0
	F								
	G								
	TOTAL	21	20	5	2	7			55

MODELLED

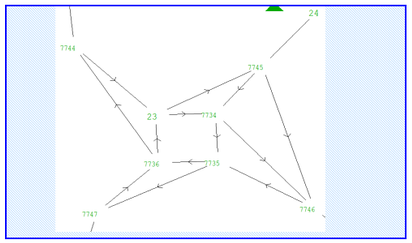
HGV		To Arm A	B	C	D	E	F	G	TOTAL
From Arm	A	0	0.004348	3.878261	3.886957	0			7.769565
	B	8.591304	0	0	0	0			8.591304
	C	0.008696	0	0	0	0			0.008696
	D	0.956522	0	0	0	0			0.956522
	E	0	0	0	0	0			0
	F								
	G								
	TOTAL	9.556522	0.004348	3.878261	3.886957	0			17.32609

GEH

HGV		To Arm A	B	C	D	E	F	G	
From Arm	A	0.000	6.162	0.474	1.100	2.828			4.784
	B	3.017	0.000	1.414	0.000	2.000			3.625
	C	1.396	0.000	0.000	0.000	0.000			1.396
	D	1.383	1.414	1.414	0.000	1.414			1.453
	E	0.000	0.000	0.000	0.000	0.000			0.000
	F								
	G								
		2.928	6.322	0.532	1.100	3.742			6.265

Junction Turning Flows

Junction: **Gapton Roundabout**



Survey Date: *01/08/2014*

Status: Validation

Arm Description

Arm	Inbound		Outbound		Description
	A-Node	B-Node	A-Node	B-Node	
A	7744	23	7736	7744	*A47 N*
B	24	7745	7745	24	*Pasteur Rd*
C	38	7746	7746	38	*A47 S*
D	7747	7736	7735	7747	*Gapton Hall*
E					
F					
G					

Growth Factors

Vehicle	Growth
Car	*1*
LGV	*1*
HGV	*1*

AM Peak

Include? Yes

Total Turns	16	
GEH < 5.0	14	88%
GEH < 7.5	15	94%
GEH < 10.0	15	94%

OBSERVED

All Vehicle	To Arm								
From Arm	A	B	C	D	E	F	G	TOTAL	ATC
A	1	152	905	357				1415	
B	95	1	399	234				729	
C	897	676	1	60				1634	
D	315	221	22	3				561	
E									
F									
G									
TOTAL	1308	1050	1327	654				4339	
ATC									

MODELLED

All Vehicle	To Arm							
From Arm	A	B	C	D	E	F	G	TOTAL
A	0	140	924	340				1404
B	19	0	553	173				745
C	944	630	0	48				1622
D	328	190	17	0				535
E								
F								
G								
TOTAL	1291	960	1494	561				4306

GEH

All Vehicle	To Arm							
From Arm	A	B	C	D	E	F	G	
A	1.414	0.993	0.628	0.911				0.293
B	10.066	1.414	7.059	4.276				0.589
C	1.549	1.800	1.414	1.633				0.297
D	0.725	2.162	1.132	2.449				1.111
E								
F								
G								
	0.472	2.839	4.447	3.773				0.502

ABSOLUTE DIFFERENCE

All Vehicle	To Arm							
From Arm	A	B	C	D	E	F	G	TOTAL
A	-1	-12	19	-17				-11
B	-76	-1	154	-61				16
C	47	-46	-1	-12				-12
D	13	-31	-5	-3				-26
E								
F								
G								
TOTAL	-17	-90	167	-93				-33

PERCENTAGE DIFFERENCE

All Vehicle	To Arm							
From Arm	A	B	C	D	E	F	G	
A	-100%	-8%	2%	-5%				-1%
B	-80%	-100%	39%	-26%				2%
C	5%	-7%	-100%	-20%				-1%
D	4%	-14%	-23%	-100%				-5%
E								
F								
G								
	-1%	-9%	13%	-14%				-1%

Interpeak

Include? Yes

Total Turns	16	
GEH < 5.0	11	69%
GEH < 7.5	13	81%
GEH < 10.0	15	94%

OBSERVED

All Vehicle	To Arm								
From Arm	A	B	C	D	E	F	G	TOTAL	ATC
A	4	218	689	258				1169	
B	122	4	518	366				1010	
C	631	431	3	142				1207	
D	318	332	86	1				737	
E									
F									
G									
TOTAL	1075	985	1296	767				4123	
ATC									

MODELLED

All Vehicle	To Arm							
From Arm	A	B	C	D	E	F	G	TOTAL
A	0	200	761	285				1246
B	50	0	642	310				1002
C	629	580	0	60				1269
D	394	149	70	0				613
E								
F								
G								
TOTAL	1073	929	1473	655				4130

GEH

All Vehicle	To Arm							
From Arm	A	B	C	D	E	F	G	
A	2.828	1.245	2.674	1.639				2.216
B	7.764	2.828	5.149	3.046				0.252
C	0.080	6.627	2.449	8.159				1.762
D	4.028	11.800	1.812	1.414				4.773
E								
F								
G								
	0.061	1.810	4.757	4.200				0.109

ABSOLUTE DIFFERENCE

All Vehicle	To Arm							
From Arm	A	B	C	D	E	F	G	TOTAL
A	-4	-18	72	27				77
B	-72	-4	124	-56				-8
C	-2	149	-3	-82				62
D	76	-183	-16	-1				-124
E								
F								
G								
TOTAL	-2	-56	177	-112				7

PERCENTAGE DIFFERENCE

All Vehicle	To Arm							
From Arm	A	B	C	D	E	F	G	
A	-100%	-8%	10%	10%				7%
B	-59%	-100%	24%	-15%				-1%
C	0%	35%	-100%	-58%				5%
D	24%	-55%	-19%	-100%				-17%
E								
F								
G								
	0%	-6%	14%	-15%				0%

PM Peak

Include? Yes

Total Turns	16	
GEH < 5.0	10	63%
GEH < 7.5	15	94%
GEH < 10.0	15	94%

OBSERVED

All Vehicle	To Arm							
From Arm	A	B	C	D	E	F	G	TOTAL
A	3	203	893	389				1488
B	165	4	749	391				1309
C	824	400	1	49				1274
D	364	238	92	5				699
E								
F								
G								
TOTAL	1356	845	1735	834				4770
ATC								

MODELLED

All Vehicle	To Arm							
From Arm	A	B	C	D	E	F	G	TOTAL
A	0	137	884	376				1397
B	26	0	908	274				1208
C	918	485	0	9				1412
D	372	200	44	0				616
E								
F								
G								
TOTAL	1316	822	1836	659				4633

GEH

All Vehicle	To Arm							
From Arm	A	B	C	D	E	F	G	
A	2.449	5.062	0.302	0.665				2.396
B	14.224	2.828	5.524	6.416				2.847
C	3.185	4.041	1.414	7.428				3.766
D	0.417	2.568	5.821	3.162				3.237
E								
F								
G								
	1.094	0.797	2.390	6.405				1.998

ABSOLUTE DIFFERENCE

All Vehicle	To Arm							
From Arm	A	B	C	D	E	F	G	TOTAL
A	-3	-66	-9	-13				-91
B	-139	-4	159	-117				-101
C	94	85	-1	-40				138
D	8	-38	-48	-5				-83
E								
F								
G								
TOTAL	-40	-23	101	-175				-137

PERCENTAGE DIFFERENCE

All Vehicle	To Arm							
From Arm	A	B	C	D	E	F	G	
A	-100%	-33%	-1%	-3%				-6%
B	-84%	-100%	21%	-30%				-8%
C	11%	21%	-100%	-82%				11%
D	2%	-16%	-52%	-100%				-12%
E								
F								
G								
	-3%	-3%	6%	-21%				-3%

By Vehicle Type:

OBSERVED

Car	From Arm \ To Arm	A	B	C	D	E	F	G	TOTAL
	A	0	112	740	296				1148
	B	73	1	322	186				582
	C	716	545	1	50				1312
	D	258	196	15	0				469
	E								
	F								
	G								
	TOTAL	1047	854	1078	532				3511

MODELLED

Car	From Arm \ To Arm	A	B	C	D	E	F	G	TOTAL
	A	0	108	749	273				1130
	B	12	0	430	151				593
	C	722	535	0	43				1300
	D	267	163	16	0				446
	E								
	F								
	G								
	TOTAL	1001	806	1195	467				3469

GEH

Car	From Arm \ To Arm	A	B	C	D	E	F	G	
	A	0.00	0.38	0.33	1.36				0.53
	B	9.36	1.41	5.57	2.70				0.45
	C	0.22	0.43	1.41	1.03				0.33
	D	0.56	2.46	0.25	0.00				1.08
	E								
	F								
	G								
		1.44	1.67	3.47	2.91				0.71

OBSERVED

LGV	From Arm \ To Arm	A	B	C	D	E	F	G	TOTAL
	A	0	27	128	49				204
	B	18	0	51	38				107
	C	131	106	0	7				244
	D	44	22	4	3				73
	E								
	F								
	G								
	TOTAL	193	155	183	97				628

MODELLED

LGV	From Arm \ To Arm	A	B	C	D	E	F	G	TOTAL
	A	0	21	145	59				225
	B	7	0	97	21				125
	C	187	83	0	5				275
	D	54	20	1	0				75
	E								
	F								
	G								
	TOTAL	248	124	243	85				700

GEH

LGV	From Arm \ To Arm	A	B	C	D	E	F	G	
	A	0.00	1.22	1.46	1.36				1.43
	B	3.11	0.00	5.35	3.13				1.67
	C	4.44	2.37	0.00	0.82				1.92
	D	1.43	0.44	1.90	2.45				0.23
	E								
	F								
	G								
		3.70	2.62	4.11	1.26				2.79

OBSERVED

HGV	From Arm \ To Arm	A	B	C	D	E	F	G	TOTAL
	A	1	13	37	12				63
	B	4	0	26	10				40
	C	50	25	0	3				78
	D	13	3	3	0				19
	E								
	F								
	G								
	TOTAL	68	41	66	25				200

MODELLED

HGV	From Arm \ To Arm	A	B	C	D	E	F	G	TOTAL
	A	0	11	30	8				49
	B	0	0	26	1				27
	C	35	12	0	0				47
	D	7	7	0	0				14
	E								
	F								
	G								
	TOTAL	42	30	56	9				137

GEH

HGV	From Arm \ To Arm	A	B	C	D	E	F	G	
	A	1.414	0.577	1.209	1.265				1.871
	B	2.828	0.000	0.000	3.838				2.246
	C	2.301	3.022	0.000	2.449				3.921
	D	1.897	1.789	2.449	0.000				1.231
	E								
	F								
	G								
		3.506	1.846	1.280	3.881				4.853

By Vehicle Type:

OBSERVED

Car	From Arm \ To Arm	A	B	C	D	E	F	G	TOTAL
	A	2	177	561	226				966
	B	95	3	429	322				849
	C	484	341	2	131				958
	D	274	290	77	1				642
	E								
	F								
	G								
	TOTAL	855	811	1069	680				3415

MODELLED

Car	From Arm \ To Arm	A	B	C	D	E	F	G	TOTAL
	A	0	175	613	243				1031
	B	44	0	536	256				836
	C	490	490	0	55				1035
	D	345	122	63	0				530
	E								
	F								
	G								
	TOTAL	879	787	1212	554				3432

GEH

Car	From Arm \ To Arm	A	B	C	D	E	F	G	
	A	2.00	0.15	2.15	1.11				2.06
	B	6.12	2.45	4.87	3.88				0.45
	C	0.27	7.31	2.00	7.88				2.44
	D	4.04	11.71	1.67	1.41				4.63
	E								
	F								
	G								
		0.82	0.85	4.23	5.07				0.29

OBSERVED

LGV	From Arm \ To Arm	A	B	C	D	E	F	G	TOTAL
	A	2	32	94	25				153
	B	15	1	72	37				125
	C	99	68	1	10				178
	D	34	34	7	0				75
	E								
	F								
	G								
	TOTAL	150	135	174	72				531

MODELLED

LGV	From Arm \ To Arm	A	B	C	D	E	F	G	TOTAL
	A	0	17	125	35				177
	B	3	0	74	47				124
	C	112	69	0	5				186
	D	41	24	7	0				72
	E								
	F								
	G								
	TOTAL	156	110	206	87				559

GEH

LGV	From Arm \ To Arm	A	B	C	D	E	F	G	
	A	2.00	3.03	2.96	1.83				1.87
	B	4.00	1.41	0.23	1.54				0.09
	C	1.27	0.12	1.41	1.83				0.59
	D	1.14	1.86	0.00	0.00				0.35
	E								
	F								
	G								
		0.49	2.26	2.32	1.68				1.20

OBSERVED

HGV	From Arm \ To Arm	A	B	C	D	E	F	G	TOTAL
	A	0	9	34	7				50
	B	12	0	17	7				36
	C	48	22	0	1				71
	D	10	8	2	0				20
	E								
	F								
	G								
	TOTAL	70	39	53	15				177

MODELLED

HGV	From Arm \ To Arm	A	B	C	D	E	F	G	TOTAL
	A	0	8	23	7				38
	B	3	0	32	7				42
	C	27	21	0	0				48
	D	8	3	0	0				11
	E								
	F								
	G								
	TOTAL	38	32	55	14				139

GEH

HGV	From Arm \ To Arm	A	B	C	D	E	F	G	
	A	0.000	0.343	2.060	0.000				1.809
	B	3.286	0.000	3.030	0.000				0.961
	C	3.429	0.216	0.000	1.414				2.982
	D	0.667	2.132	2.000	0.000				2.286
	E								
	F								
	G								
		4.355	1.175	0.272	0.263				3.023

By Vehicle Type:

OBSERVED

Car	From Arm \ To Arm	A	B	C	D	E	F	G	TOTAL
	A	2	178	727	331				1238
	B	155	1	681	349				1186
	C	676	338	1	40				1055
	D	317	209	84	0				610
	E								
	F								
	G								
	TOTAL	1150	726	1493	720				4089

MODELLED

Car	From Arm \ To Arm	A	B	C	D	E	F	G	TOTAL
	A	0	113	716	316				1145
	B	23	0	808	246				1077
	C	751	430	0	8				1189
	D	344	177	42	0				563
	E								
	F								
	G								
	TOTAL	1118	720	1566	570				3974

GEH

Car	From Arm \ To Arm	A	B	C	D	E	F	G	
	A	2.00	5.39	0.41	0.83				2.69
	B	13.99	1.41	4.65	5.97				3.24
	C	2.81	4.69	1.41	6.53				4.00
	D	1.49	2.30	5.29	0.00				1.94
	E								
	F								
	G								
		0.95	0.22	1.87	5.91				1.81

OBSERVED

LGV	From Arm \ To Arm	A	B	C	D	E	F	G	TOTAL
	A	1	20	143	54				218
	B	9	3	63	38				113
	C	120	50	0	8				178
	D	36	27	8	5				76
	E								
	F								
	G								
	TOTAL	166	100	214	105				585

MODELLED

LGV	From Arm \ To Arm	A	B	C	D	E	F	G	TOTAL
	A	0	20	156	58				234
	B	3	0	92	26				121
	C	151	45	0	1				197
	D	24	21	2	0				47
	E								
	F								
	G								
	TOTAL	178	86	250	85				599

GEH

LGV	From Arm \ To Arm	A	B	C	D	E	F	G	
	A	1.41	0.00	1.06	0.53				1.06
	B	2.45	2.45	3.29	2.12				0.74
	C	2.66	0.73	0.00	3.30				1.39
	D	2.19	1.22	2.68	3.16				3.70
	E								
	F								
	G								
		0.91	1.45	2.36	2.05				0.58

OBSERVED

HGV	From Arm \ To Arm	A	B	C	D	E	F	G	TOTAL
	A	0	5	23	4				32
	B	1	0	5	4				10
	C	28	12	0	1				41
	D	11	2	0	0				13
	E								
	F								
	G								
	TOTAL	40	19	28	9				96

MODELLED

HGV	From Arm \ To Arm	A	B	C	D	E	F	G	TOTAL
	A	0	4	12	2				18
	B	0	0	8	2				10
	C	16	10	0	0				26
	D	4	2	0	0				6
	E								
	F								
	G								
	TOTAL	20	16	20	4				60

GEH

HGV	From Arm \ To Arm	A	B	C	D	E	F	G	
	A	0.000	0.471	2.630	1.155				2.800
	B	1.414	0.000	1.177	1.155				0.000
	C	2.558	0.603	0.000	1.414				2.592
	D	2.556	0.000	0.000	0.000				2.271
	E								
	F								
	G								
		3.651	0.717	1.633	1.961				4.076