

## **Appendix D-1**

### **Traffic Impact Assessment**

Link	Link Description				2016 Base			2025																	
								Do Minimum			Construction								Final State						
	Road Name	Location	Direction	Posted Speed Limit (mph)	Vehicles	% HGV	HGV Trips	Vehicles	% HGV	HGV Trips	Phase 1A				Phase 1B				Vehicles	% HGV	HGV Trips	% Impact Vehicles	% Impact HGVs		
											Vehicles	% HGV	HGV Trips	% Impact Vehicles	% Impact HGVs	Vehicles	% HGV	HGV Trips						% Impact Vehicles	% Impact HGVs
1	A1 St Aubin's Road	West of Rou	Two-way	30	19077	4.5%	866	20048	4.5%	911	20058	4.5%	911	0.0%	0.0%	19912	4.6%	911	-0.7%	0.0%	20001	4.5%	908	-0.2%	-0.2%
2	A1 St Aubin's Road	SE of Round	Two-way	30	20539	6.2%	1283	22312	6.3%	1398	22273	6.3%	1398	-0.2%	0.0%	22159	7.1%	1566	-0.7%	12.0%	22223	6.3%	1392	-0.4%	-0.4%
3	A2 Victoria Avenue	West of Sign	Two-way	30	56070	2.1%	1167	57688	2.1%	1199	57670	2.1%	1199	0.0%	0.0%	57578	2.1%	1199	-0.2%	0.0%	57680	2.1%	1199	0.0%	0.0%
4	A1 Esplanade	West of Ken	Two-way	30	72276	3.2%	2322	75100	3.2%	2411	75055	3.4%	2579	-0.1%	7.0%	74861	3.4%	2579	-0.3%	7.0%	74993	3.2%	2408	-0.1%	-0.1%
5	A1 Esplanade	West of Patri	Two-way	30	66714	3.1%	2097	70510	3.1%	2211	70426	3.4%	2379	-0.1%	7.6%	70349	3.3%	2295	-0.2%	3.8%	70371	3.1%	2208	-0.2%	-0.2%
6	A1 Esplanade	West of Glou	Two-way	30	66773	3.1%	2100	70569	3.1%	2215	70485	3.4%	2383	-0.1%	7.6%	70408	3.3%	2299	-0.2%	3.8%	70429	3.1%	2211	-0.2%	-0.2%
7	A1 Esplanade	East of Glou	Two-way	30	68408	3.6%	2495	72560	3.6%	2646	72609	3.9%	2814	0.1%	6.3%	72360	3.9%	2814	-0.3%	6.3%	72546	3.6%	2646	0.0%	0.0%
8	Gloucester Street	South of Patri	SB	30	20751	2.6%	534	21984	2.6%	565	21883	2.6%	565	-0.5%	0.0%	21850	3.0%	649	-0.6%	14.9%	21876	2.6%	562	-0.5%	-0.5%
9	Seaton Place	East of Glou	Two-way	30	7324	0.9%	63	7678	0.9%	66	7621	0.9%	66	-0.7%	0.0%	7619	0.9%	66	-0.8%	0.0%	7588	0.9%	65	-1.2%	-1.1%
10	Patriotic Place	West of Glou	Two-way	30	3858	0.7%	28	3689	0.7%	27	3644	0.7%	27	-1.2%	0.0%	6184	0.4%	27	67.6%	0.0%	3660	0.7%	26	-0.8%	-0.8%
11	Patriotic Street	South of Patri	NB	30	1270	0.7%	9	539	0.7%	4	510	0.7%	4	-5.4%	0.0%	383	22.9%	88	-29.0%	2212.4%	551	0.7%	4	2.3%	2.3%
12	Newgate Street	West of Glou	EB	30	3382	2.3%	78	3637	2.3%	84	3582	2.3%	84	-1.5%	0.0%	66	127.3%	84	-98.2%	0.5%	3501	2.3%	80	-3.7%	-3.7%
13	Gloucester Street	South of The	SB	30	23099	2.1%	492	24340	2.1%	518	24305	2.1%	518	-0.1%	0.0%	24216	2.1%	518	-0.5%	0.0%	24425	2.1%	520	0.4%	0.4%
14	The Parade	West of Unid	WB	30	3223	0.4%	13	3226	0.4%	13	3226	0.4%	13	0.0%	0.0%	3248	0.4%	13	0.7%	0.0%	3328	0.4%	14	3.2%	3.2%
15	Union Street	North of The	Two-way	30	17125	1.8%	305	17525	1.8%	312	17521	1.8%	312	0.0%	0.0%	17489	1.8%	312	-0.2%	0.0%	17710	1.8%	314	1.1%	0.8%
16	The Parade	East of Unio	WB	30	10618	1.6%	173	10594	1.6%	173	10594	1.6%	173	0.0%	0.0%	10590	1.6%	173	0.0%	0.0%	10593	1.6%	173	0.0%	0.0%
17	The Parade	East of Glou	Two-way	30	15482	1.6%	252	15857	1.6%	257	15853	1.6%	257	0.0%	0.0%	15795	1.6%	257	-0.4%	0.0%	15939	1.6%	259	0.5%	0.5%
18	Gloucester Street	North of The	NB	30	4540	1.8%	84	4532	1.8%	84	4532	1.8%	84	0.0%	0.0%	4592	1.8%	84	1.3%	0.0%	4567	1.8%	84	0.8%	0.8%
19	The Parade	West of Glou	EB	30	21846	2.1%	459	23080	2.1%	485	23041	2.1%	485	-0.2%	0.0%	23034	2.1%	485	-0.2%	0.0%	23160	2.1%	486	0.3%	0.3%
20	The Parade	East of Eliza	EB	30	22025	2.1%	462	23319	2.1%	489	23292	2.1%	489	-0.1%	0.0%	23307	2.1%	489	-0.1%	0.0%	23402	2.1%	491	0.4%	0.4%
21	Parade Road	West of Eliza	EB	30	2820	0.4%	11	2820	0.4%	11	2820	0.4%	11	0.0%	0.0%	2820	0.4%	11	0.0%	0.0%	2820	0.4%	11	0.0%	0.0%
22	Savile Street	East of Eliza	WB	30	4463	1.6%	70	4458	1.6%	70	4458	1.6%	70	0.0%	0.0%	4548	1.5%	70	2.0%	0.0%	4594	1.6%	72	3.1%	3.1%
23	Elizabeth Place	South of Sav	Two-way	30	17471	3.2%	567	18153	3.2%	589	18153	3.2%	589	0.0%	0.0%	18207	3.2%	589	0.3%	0.0%	18284	3.2%	593	0.7%	0.6%
24	Rouge Bouillon	North of Sav	Two-way	30	21282	3.0%	630	21953	3.0%	649	21953	3.0%	649	0.0%	0.0%	21897	3.0%	649	-0.3%	0.0%	21946	3.0%	649	0.0%	0.0%
25	Cheapside	West of Eliza	EB	30	21336	2.6%	550	22562	2.6%	581	22535	2.6%	581	-0.1%	0.0%	22469	2.6%	581	-0.4%	0.0%	22501	2.6%	580	-0.3%	-0.3%
26	St John's Road	West of Wes	Two-way	30	9500	0.5%	49	10083	0.5%	52	10083	0.5%	52	0.0%	0.0%	10059	0.5%	52	-0.2%	0.0%	10076	0.5%	52	-0.1%	-0.2%
27	St John's Road	North of Chd	Two-way	30	10355	0.5%	53	10937	0.5%	56	10937	0.5%	56	0.0%	0.0%	10913	0.5%	56	-0.2%	0.0%	10931	0.5%	56	-0.1%	-0.1%
28	Old St John's Road	West of Chd	WB	30	1807	0.2%	3	1807	0.2%	3	1807	0.2%	3	0.0%	0.0%	1807	0.2%	3	0.0%	0.0%	1807	0.2%	3	0.0%	0.0%
29	St Aubin's Road	North of Wes	NB	30	20077	3.0%	598	21191	3.0%	632	21163	3.0%	632	-0.1%	0.0%	21108	3.0%	632	-0.4%	0.0%	21123	3.0%	630	-0.3%	-0.3%
30	Westmount Road	West of St A	Two-way	30	3856	3.6%	137	5228	3.5%	184	5228	3.5%	184	0.0%	0.0%	5228	3.5%	184	0.0%	0.0%	5228	3.5%	184	0.0%	0.0%
31	St Aubin's Road	North of Ker	NB	30	18603	2.7%	505	19726	2.7%	535	19699	2.7%	535	-0.1%	0.0%	19643	2.7%	535	-0.4%	0.0%	19658	2.7%	533	-0.3%	-0.3%
32	St Aubin's Road	South of Ker	Two-way	30	11645	3.3%	381	12048	3.4%	415	12065	4.1%	499	0.1%	20.2%	11933	3.5%	415	-1.0%	0.0%	12025	3.4%	413	-0.2%	-0.4%
33	Peirson Road	South of Ker	NB	30	1141	1.0%	11	349	1.0%	3	349	1.0%	3	0.0%	0.0%	349	1.0%	3	0.0%	0.0%	349	1.0%	3	0.0%	0.0%
34	Kensington Street	East of St Au	WB	30	7218	0.9%	66	7121	0.9%	65	7199	2.1%	149	1.1%	130.0%	7067	0.9%	65	-0.8%	0.0%	7157	0.9%	65	0.5%	0.5%
35	Kensington Place	South of Ker	NB	30	5984	0.4%	23	6245	0.4%	24	66	100.0%	66	-98.9%	171.5%	6191	0.4%	24	-0.9%	0.0%	6296	0.4%	25	0.8%	0.8%
36	Kensington Place	South of Lew	NB	30	5081	0.4%	20	6812	0.4%	27	6909	1.6%	111	1.4%	316.8%	6766	0.4%	27	-0.7%	0.0%	6798	0.4%	26	-0.2%	-0.2%
37	Lewis Street	West of Ken	Two-way	30	1632	0.0%	0	1623	0.0%	0	5708	0.0%	0	251.6%	0.0%	1623	0.0%	0	0.0%	0.0%	1623	0.0%	0	0.0%	0.0%
38	Lewis Street	South of Ker	Alternates	30	299	0.0%	0	1054	0.0%	0	5708	0.0%	0	441.5%	0.0%	1054	0.0%	0	0.0%	0.0%	1054	0.0%	0	0.0%	0.0%

## Appendix D-2

### Driver Delay Full Output

Av. Delay Per PCU (s/pcu)

Junction	Name	Model	Arm	2018 Application												
				2016 Base		2025 Do Minimum		Phase 1A		Phase 1B		Final State				
				AM Peak	PM Peak	AM Peak	PM Peak	AM Peak	PM Peak	AM Peak	PM Peak	AM Peak	PM Peak			
1,3,8,12, 14	Esplanade/Gloucester Street/Patriotic Street/Kensington Place/Peirson Road (2017 Model)	LinSig	Gloucester Street La Rte de la Libn Esplanade	46	30											
		LinSig	Esplanade Victoria Avenue St Aubin's Road	18	24											
		LinSig	Esplanade WB Esplanade RHT to KPI Esplanade EB	75	16											
1,3,8,12	Esplanade Main Scenario 3 v1* 1.Gloucester Street/Esplanade 3.Victoria Avenue/Esplanade 8.Patriotic Street/Esplanade 12.Kensington Place/Esplanade (Stage added to Kens Pl)	LinSig	Gloucester Street La Rte de la Libn Esplanade	19	25											
		LinSig	Esplanade Victoria Avenue St Aubin's Road	55	24											
		LinSig	Esplanade WB Esplanade RHT to KPI Esplanade EB	12	7											
1,3,8,12	Esplanade Main Scenario 3 v1* 1.Gloucester Street/Esplanade 3.Victoria Avenue/Esplanade 8.Patriotic Street/Esplanade 12.Kensington Place/Esplanade	LinSig	Gloucester Street La Rte de la Libn Esplanade	36	21											
		LinSig	Esplanade Victoria Avenue St Aubin's Road	14	7											
		LinSig	Esplanade WB Esplanade RHT to KPI Esplanade EB	80	151											
4	Rouge Bouillon/Saville Street	LinSig	Parade Road Rouge Bouillon Saville Street Elizabeth Place	36	152											
		LinSig	Esplanade Victoria Avenue St Aubin's Road	103	99											
		LinSig	Esplanade WB Esplanade RHT to KPI Esplanade EB	51	49											
4	Rouge Bouillon/Saville Street*	LinSig	Parade Road Rouge Bouillon Saville Street Elizabeth Place	38	38											
		LinSig	Esplanade Victoria Avenue St Aubin's Road	103	117											
		LinSig	Esplanade WB Esplanade RHT to KPI Esplanade EB	51	46											
5	Union Street/The Parade	LinSig	Parade North Union Street Parade South	38	14											
		LinSig	Esplanade WB Esplanade RHT to KPI Esplanade EB	18	78											
		LinSig	Parade North Union Street Parade South	33	20											
5	Union Street/The Parade *	LinSig	Parade North Union Street Parade South	15	11											
		LinSig	Esplanade WB Esplanade RHT to KPI Esplanade EB	33	20											
		LinSig	Parade North Union Street Parade South	13	3											
6	St Aubin's Road/A1 Roundabout	ARCADY	A1 North St Aubin's Road A1 South	30	34											
		LinSig	A1 North St Aubin's Road A1 South	71	77											
		ARCADY	A1 North St Aubin's Road A1 South	31	55											
6	St Aubins Signalised*	LinSig	A1 North St Aubin's Road A1 South	12	13											
		LinSig	A1 North St Aubin's Road A1 South	7	7											
		LinSig	A1 North St Aubin's Road A1 South	2	5											
7a	Peirson Road/spur from Kensington Street	PICADY	Peirson Rd East	10	16											
		PICADY	Peirson Rd East	6	7											
		PICADY	Peirson Rd East	17	43											
7b	St Aubin's Road/Kensington Street	PICADY	Kensington Street	23	565											
		PICADY	Peirson Road	11	21											
		PICADY	Peirson Road	25	41											
7	St Aubin's Road/Kensington Street*	LinSig	St Aubin's Road South Peirson Rd East St Aubin's Road North Kensington Street	37	43											
		LinSig	St Aubin's Road South Peirson Rd East St Aubin's Road North Kensington Street	2	2											
		LinSig	St Aubin's Road South Peirson Rd East St Aubin's Road North Kensington Street	6	11											
10	St Aubin's Rd/Westmount Rd	PICADY	Westmount Road	11	9											
11a	Cheapside/St. John's Road/West Park Avenue	PICADY	St John's Road	53	17											
11b	Spur from St. John's Road and West Park Avenue/Cheapside	PICADY	Spur	22	11											
13	Gloucester St/Seaton Place ped crossing*	LinSig	Gloucester Street Seaton Place	9	11											
		LinSig	Gloucester Street Seaton Place Patriotic Place	10	13											
13	Gloucester St/Seaton Place ped crossing*	LinSig	Gloucester Street Seaton Place Patriotic Place	41	44											
		LinSig	Gloucester Street Seaton Place Patriotic Place	53	105											
14	Newgate Street/Gloucester Street	PICADY	Newgate Street	17	27											
14	Newgate Street/Gloucester Street*	LinSig	Newgate Street	20	116											
15	Lewis Street/Kensington Place	PICADY	Lewis Street Kensington Place	9	9											
		PICADY	Lewis Street Kensington Place	10	16											
16	Lewis Street/Kensington Street	PICADY	Lewis Street East Lewis Street West	8	8											
		PICADY	Lewis Street East Lewis Street West	11	11											

Mitigation schemes  
\*Signal timings optimised for future mitigation schemes

**Within Practical Capacity** – junctions with an *RFC* below 0.85 or *PRC* above 0% have been deemed to operate within practical capacity.  
**Over Practical Capacity, Approaching Theoretical Capacity** – junctions with an *RFC* of between 0.85-0.99 or *PRC* of between -10% and 0%.  
**Over Theoretical Capacity** - junctions with an *RFC* over 1.00 or *PRC* below -10% have been deemed to operate over theoretical capacity with substantial queuing delays.