

# Appendix I

## Options forecast traffic analysis

## Appendix I – Options forecast traffic analysis

### I.1 Journey time comparisons

#### Journey times 2022 – Do-Minimum Vs Do-Something

**Table I-1** 2022 AM Peak – Journey Time Evaluation (Seconds), All Vehicles

Route	Description		2014 Base	2022					
	From	To		DM	DS 2	DS 4	DS 5B	DS 5D	DS 6
1	A12 east	M25 north	263	291	280	279	283	284	279
2	A12 east	M25 south	550	580	580	580	581	578	580
3	A12 east	A12 west	513	533	533	533	533	533	533
4	A12 west	M25 north	686	787	685	685	690	685	684
5	A12 west	M25 south	430	554	417	415	423	419	417
6	A12 west	A12 east	438	445	444	444	447	443	441
7	M25 north	A12 east	171	175	175	176	176	171	173
8	M25 north	A12 west	723	716	729	735	729	732	730
9	M25 north	M25 south	620	635	635	636	634	634	635
10	M25 south	A12 east	526	528	497	487	491	529	452
11	M25 south	A12 west	392	402	372	373	370	370	373
12	M25 south	M25 north	634	647	647	647	649	648	646

**Table I-2** 2022 Inter-Peak Hour – Journey Time Evaluation (Seconds), All Vehicles

Route	Description		2014 Base	2022					
	From	To		DM	DS 2	DS 4	DS 5B	DS 5D	DS 6
1	A12 east	M25 north	237	250	238	238	238	236	238
2	A12 east	M25 south	497	509	504	504	503	504	504
3	A12 east	A12 west	454	462	462	462	462	462	462
4	A12 west	M25 north	676	678	666	667	674	667	667
5	A12 west	M25 south	424	414	424	424	430	425	425
6	A12 west	A12 east	435	440	438	440	444	440	436
7	M25 north	A12 east	174	177	176	178	177	168	175
8	M25 north	A12 west	706	712	710	716	710	710	711
9	M25 north	M25 south	629	637	637	638	637	637	637
10	M25 south	A12 east	519	511	497	488	490	527	453
11	M25 south	A12 west	370	373	366	369	364	363	365
12	M25 south	M25 north	624	632	632	632	636	635	633

**Table I-3 2022 PM peak Hour – Journey Time Evaluation (Seconds), All Vehicles**

Route	Description		2014 Base	2022					
	From	To		DM	DS 2	DS 4	DS 5B	DS 5D	DS 6
1	A12 east	M25 north	253	266	248	248	249	249	249
2	A12 east	M25 south	502	537	522	524	523	523	523
3	A12 east	A12 west	464	477	477	477	477	477	477
4	A12 west	M25 north	696	954	664	664	671	664	665
5	A12 west	M25 south	463	745	422	422	429	424	420
6	A12 west	A12 east	449	490	454	455	456	457	451
7	M25 north	A12 east	183	185	184	184	185	203	183
8	M25 north	A12 west	741	744	744	752	746	746	744
9	M25 north	M25 south	632	653	653	654	653	652	653
10	M25 south	A12 east	542	547	502	498	496	549	457
11	M25 south	A12 west	387	398	368	372	365	365	368
12	M25 south	M25 north	609	622	623	622	626	625	623

### 2037 Journey Time Comparisons – Do-Minimum Vs Do-Something

**Table I-4 2037 AM Peak Hour – Journey Time Evaluation (Seconds) All Vehicles**

Route	Description		2014 Base	2037					
	From	To		DM	DS 2	DS 4	DS 5B	DS 5D	DS 6
1	A12 east	M25 north	263	337	309	300	310	318	314
2	A12 east	M25 south	550	596	597	598	599	601	599
3	A12 east	A12 west	513	537	537	537	537	541	537
4	A12 west	M25 north	686	1,223	872	840	849	859	850
5	A12 west	M25 south	430	1,042	444	440	450	447	446
6	A12 west	A12 east	438	700	454	454	457	454	451
7	M25 north	A12 east	171	179	185	180	187	183	185
8	M25 north	A12 west	723	749	773	758	769	787	777
9	M25 north	M25 south	620	661	662	663	661	661	662
10	M25 south	A12 east	526	673	515	508	543	553	469
11	M25 south	A12 west	392	504	380	381	383	377	380
12	M25 south	M25 north	634	818	900	861	863	822	868

**Table I-5 2037 Inter-Peak – Journey Time Evaluation (Seconds), All Vehicles**

Route	Description		2014 Base	2037					
	From	To		DM	DS 2	DS 4	DS 5B	DS 5D	DS 6
1	A12 east	M25 north	237	267	253	252	254	251	253
2	A12 east	M25 south	497	540	533	532	533	533	533
3	A12 east	A12 west	454	481	481	481	481	481	481
4	A12 west	M25 north	676	739	683	683	689	683	683
5	A12 west	M25 south	424	480	436	438	441	442	437
6	A12 west	A12 east	435	449	449	448	453	450	446
7	M25 north	A12 east	174	181	180	182	181	176	179
8	M25 north	A12 west	706	740	736	745	734	746	735
9	M25 north	M25 south	629	655	655	656	656	656	655
10	M25 south	A12 east	519	540	510	500	502	544	464
11	M25 south	A12 west	370	382	374	377	371	370	374
12	M25 south	M25 north	624	651	651	650	654	653	651

**Table I-6 2037 PM Peak Hour – Journey Time Evaluation (Seconds), All Vehicles**

Route	Description		2014 Base	2037					
	From	To		DM	DS 2	DS 4	DS 5B	DS 5D	DS 6
1	A12 east	M25 north	253	289	287	288	288	284	287
2	A12 east	M25 south	502	588	561	561	561	561	560
3	A12 east	A12 west	464	503	504	504	504	504	504
4	A12 west	M25 north	696	1,816	683	681	691	681	682
5	A12 west	M25 south	463	1,626	451	450	458	454	451
6	A12 west	A12 east	449	1,200	455	456	457	456	452
7	M25 north	A12 east	183	178	178	178	184	184	177
8	M25 north	A12 west	741	752	756	757	765	756	758
9	M25 north	M25 south	632	663	665	665	664	665	665
10	M25 south	A12 east	542	773	508	503	502	549	463
11	M25 south	A12 west	387	641	376	381	372	371	375
12	M25 south	M25 north	609	674	647	645	651	647	647

## I.2 Queue length comparisons

### 2022 Queue Length Comparisons – Do-Minimum Vs Do-Something

**Table I-7** 2022 AM peak – Queue Length Comparison (Metres)

Queue Counter	Location	2014 Base	2022					
			DM	DS 2	DS 4	DS 5B	DS 5D	DS 6
1	M25 north	65	60	68	66	66	66	66
2	A12 east	87	104	107	107	114	114	106
3	Brook Street	384	1,079	1,461	1,350	1,435	1,435	1,487
4	M25 south	71	83	40	52	41	41	44
5	A12 west	60	234	54	54	55	55	54
6	M25 north circulatory	109	86	31	30	31	31	31
7	A12 east circulatory	79	72	96	95	96	96	97
8	M25 south circulatory	69	125	117	118	119	119	117
9	A12 west circulatory	108	82	34	29	31	31	29

**Table I-8** 2022 Inter-Peak Hour – Queue Length Comparison (Metres)

Queue Counter	Location	2014 Base	2022					
			DM	DS 2	DS 4	DS 5B	DS 5D	DS 6
1	M25 north	34	38	32	31	32	32	32
2	A12 east	61	73	62	61	61	61	88
3	Brook Street	40	69	78	80	79	79	89
4	M25 south	49	54	21	28	22	22	24
5	A12 west	53	54	41	42	41	41	42
6	M25 north circulatory	103	35	49	49	48	48	48
7	A12 east circulatory	35	46	77	76	76	76	77
8	M25 south circulatory	42	42	46	53	46	46	49
9	A12 west circulatory	75	87	55	45	43	43	42

**Table I-9** 2022 PM Peak Hour – Queue Length Comparison (Metres)

Queue Counter	Location	2014 Base	2022					
			DM	DS 2	DS 4	DS 5B	DS 5D	DS 6
1	M25 north	69	70	70	72	77	77	79
2	A12 east	68	98	80	82	81	81	81
3	Brook Street	213	499	714	736	708	708	726
4	M25 south	76	116	38	52	40	40	43
5	A12 west	93	742	52	52	54	54	53
6	M25 north circulatory	129	88	35	31	37	37	32
7	A12 east circulatory	80	71	100	102	103	103	102
8	M25 south circulatory	70	87	69	78	79	79	72
9	A12 west circulatory	122	121	51	39	44	44	45

## 2037 Queue Length Comparisons – Do-Minimum Vs Do-Something

**Table I-10** 2037 AM Peak Hour – Queue Length Comparison (Metres)

Queue Counter	Location	2014 Base	2037					
			DM	DS 2	DS 4	DS 5B	DS 5D	DS 6
1	M25 north	65	63	167	110	162	89	179
2	A12 east	87	115	119	112	123	186	126
3	Brook Street	384	1,842	1,935	1,814	1,969	1,905	1,953
4	M25 south	71	883	45	54	46	45	46
5	A12 west	60	1,701	62	62	64	60	62
6	M25 north circulatory	109	112	39	35	37	36	37
7	A12 east circulatory	79	58	113	110	110	115	115
8	M25 south circulatory	69	121	116	103	113	125	113
9	A12 west circulatory	108	159	55	44	47	35	51

**Table I-11** 2037 Inter-Peak Hour – Queue Length Comparison (Metres)

Queue Counter	Location	2014 Base	2037					
			DM	DS 2	DS 4	DS 5B	DS 5D	DS 6
1	M25 north	34	50	42	42	41	36	54
2	A12 east	61	89	75	75	75	75	111
3	Brook Street	40	351	582	1,007	787	545	1,738
4	M25 south	49	71	23	33	23	23	26
5	A12 west	53	128	51	51	52	47	52
6	M25 north circulatory	103	62	53	51	54	53	52
7	A12 east circulatory	35	66	112	112	106	112	119
8	M25 south circulatory	42	63	41	46	44	48	44
9	A12 west circulatory	75	122	61	44	49	40	48

**Table I-12** 2037 PM peak – Queue Length Comparison (Metre)

Queue Counter	Location	2014 Base	2037					
			DM	DS 2	DS 4	DS 5B	DS 5D	DS 6
1	M25 north	69	61	81	79	121	52	83
2	A12 east	68	131	93	92	91	90	91
3	Brook Street	213	1,461	2,111	2,137	2,119	2,087	2,136
4	M25 south	76	1,643	50	65	51	51	53
5	A12 west	93	2,509	62	63	61	59	63
6	M25 north circulatory	129	83	69	66	67	69	68
7	A12 east circulatory	80	58	115	117	112	116	114
8	M25 south circulatory	70	102	77	75	77	76	80
9	A12 west circulatory	122	137	116	105	109	95	106