

Lincoln Eastern Bypass

Local Model Validation Report
Appendices



July 2011
V0.1

Document Control Sheet

Project Title Lincoln Eastern Bypass

Report Title Local Model Validation Report - Appendices

Version 01

Status Draft

Control Date October 2012

Record of Issue

Issue	Status	Author	Date	Check	Date	Authorised	Date
				A.Wooltorton		A.Wooltorton	

Distribution

Organisation	Contact	Copies
Lincolnshire County Council	Lee Rowley	1

Appendices

- Appendix A: Inconsistent Counts
- Appendix B: Calibration / Validation counts
- Appendix C: Speed – Flow Curves
- Appendix D: Zoning System
- Appendix E: Bus Routes
- Appendix F: Calibration at Postcard Sites
- Appendix G: Screenline Calibration / Validation
- Appendix H: Observed / Modelled Journey Time Distance
- Appendix I: Journey Time Validation
- Appendix J: Routing Plots

Appendix A – Inconsistent Counts

ID	Inconsistent Site Names	Action Taken
1	ATC@IS1, MCLC@IS1	ATC Total split into classification proportions from MCLC
2	ATC@IS10, MCLC@IS10	ATC Total split into classification proportions from MCLC
3	ATC@IS11, MCLC@IS11	ATC Total split into classification proportions from MCLC
4	ATC@IS11a, MCLC@IS11a, ATC75	ATC75 flows exactly the same as ATC@RSI11a Flows. Split ATC@RSI11a Total into classification proportions from MCLC
5	ATC@IS12, MCLC@IS12	ATC Total split into classification proportions from MCLC
6	ATC@IS13N, MCLC@IS13N, TC65, MCLC@IS13S, ATC@IS13S	Discovered that the directional split on the MCLC at 13N appears reversed when compared to the other data; this has been reversed. ATC Total split into average classification proportions shown in MCLC@13N, MCLC@13S and the MCJC. MCJC Turning movements factored to match ATC flows
7	ATC@IS14N, MCLC@IS14N, Site 10 (2010), Site 10 (2009), Traf 07, Traf 07a, TC60, ATC94, LS4, TC61	Average classification proportions across the MCLC and MCJC surveys have then been calculated and applied to ATC totals to derive Cars, LGVs and HGVs. Turning movements at TC60 and TC61 have then been factored to match the calculated link flows
8	ATC@IS14S, MCLC@IS14S	ATC Total split into classification proportions from MCLC
9	ATC@IS16, MCLC@IS16, TC33, TC40	ATC Total split into average classification proportions shown in MCLC@RSI16, TC33 and TC40. MCJC Turning movements factored to match ATC flows
10	ATC@IS2, MCLC@IS2	ATC Total split into classification proportions from MCLC
11	ATC@IS3, MCLC@IS3, TC23	ATC Total split into average classification proportions shown in MCLC@RSI3 and the MCJC. MCJC Turning movements factored to match ATC flows
12	ATC@IS4, MCLC@IS4, ATC63	ATC Total split into classification proportions from MCLC
13	ATC@IS5, MCLC@IS5, TC43	ATC Total split into average classification proportions shown in MCLC@RSI5 and the MCJC

ID	Inconsistent Site Names	Action Taken
14	MCLC@IS6, TC15	Average of MCLC and MCJC flows taken
15	ATC@IS7, MCLC@IS7, TC30, ATC88	ATC Total split into average classification proportions shown in MCLC@RSI7 and the MCJC. ATC88 same as RSI ATC so excluded from database
16	ATC@IS8, MCLC@IS8, ATC87, TC36	ATC Total split into average classification proportions shown in MCLC@RSI8 and the MCJC. ATC87 same as RSI ATC so excluded from database. MCJC Turning movements factored to match ATC flows
17	ATC@IS9, TC36, MCLC@IS9	ATC Total split in classification proportions from MCLC. MCJC movements towards ID16 fixed and so remaining MCJC movements have been factored to match ATC Total
18	ATC02, TC01	ATC Total split into classification proportions from MCJC. MCJC Turning Movements Factored to match total ATC
19	ATC03, TC02	ATC Total split into classification proportions from MCJC
20	ATC04, TC02	ATC Total split into classification proportions from MCJC
21	ATC05, TC03	ATC Total split into classification proportions from MCJC
22	ATC06, TC04	ATC Total split into classification proportions from MCJC
23	ATC17, TC07	ATC Total split into classification proportions from MCJC. MCJC Turning Movements Factored to match total ATC
24	ATC25, TC13	ATC Total split into classification proportions from MCJC. MCJC Turning Movements Factored to match total ATC
25	ATC30, TC11	ATC Total split into classification proportions from MCJC
26	ATC65, TC32, LS5, L081	ATC Data retained, Adjust TC32 (note that no calculation is required for this as same AnodeBnode as ATC65) and L081 MCJC to match, Delete LS5 as less reliable than ATC65
27	ATC68, TC34	ATC Total split into classification proportions from MCJC. MCJC Turning Movements Factored to match total ATC

ID	Inconsistent Site Names	Action Taken
28	ATC69, TC40	ATC Total split into classification proportions from MCJC
29	ATC70, TC47	ATC Total split into classification proportions from MCJC
30	ATC77, TC50	ATC Total split into classification proportions from MCJC. MCJC Turning Movements Factored to match total ATC
31	ATC77, TC51	ATC Classifications calculated in ID33 split in proportion with turning movements at MCJC
32	ATC78, TC50	ATC Classifications calculated from TC50, inconsistent movements that have already been calculated in ID32 held fixed
33	ATC79, TC39	ATC Total split into classification proportions from MCJC
34	ATC80, TC39	ATC Total split into classification proportions from MCJC
35	ATC91, TC65	ATC Total split into classification proportions from MCJC. MCJC Turning Movements Factored to match total ATC
36	L082, ATC95	ATC Total split into classification proportions from MCJC. MCJC Turning Movements Factored to match total ATC
37	ATC93, LS2	ATC Total split into classification proportions from LS2
38	L082, L084	Totals of inconsistent flows averaged, with average flows distributed over turning movements, taking those movements calculated in ID38 as fixed
39	L083, TC32	Use TC32 totals as from 2006, L082 is 2008, totals distributed at L082 in accordance with turning proportions
40	Site 1 (2010), Site 1 (2009)	Counts averaged
41	Site 11 (2010), Site 11 (2009), TC62, Traf 08	Delete Site 1110, Site 1109 and Traf 08 counts as uncertain of their exact locations and also outside 2006, retain 2006 TC62 count
42	Site 12 (2010), Site 12 (2009)	Link counts look ok, average taken

ID	Inconsistent Site Names	Action Taken
43	Site 13 (2010), Site 13 (2009), Traf 10	Retain Traf 10, Delete Sites 1309 and 1310 as distant from 2006
44	Site 14 (2010), Site 14 (2009), Traf 11	Retain Traf 11, Delete Sites 1409 and 1410 as distant from 2006
45	Site 15 (2010), Site 15 (2009), Traf 12, TC55	Remove Sites 1509, 1510 and Traf 08, use TC55 (Note: could have averaged sites Traf 08 and TC55 as both 2006 but did not do this due to time pressures)
46	Site 16 (2010), Site 16 (2009)	Counts averaged
47	Site 17 (2010), Site 17 (2009)	Counts averaged
48	Site 18 (2010), Site 18 (2009)	Counts averaged
49	Site 19 (2010), Site 19 (2009)	Counts averaged
50	Site 20 (2010), Site 20 (2009)	Not in VISUM network so removed
51	Site 2 (2010), Site 2 (2009)	Counts averaged
52	Site 3 (2010), Site 3 (2009)	Counts averaged
53	Site 4 (2010), Site 4 (2009)	Counts averaged
54	Site 5 (2010), Site 5 (2009), TC31	Retain TC 31, Sites 509 and 510 deleted as distant from 2006
55	Site 6 (2010), Site 6 (2009), Traf 03	Remove Sites 609 and 610, retain Traf 03 as 2006 count
56	Site 7 (2010), Site 7 (2009), Traf 04	Remove Sites 709 and 710, retain Traf 04 as 2006 count
57	Site 8 (2010), Site 8 (2009), Traf 05	Remove Sites 809 and 810, retain Traf 05 as 2006 count

ID	Inconsistent Site Names	Action Taken
58	Site 9 (2010), Site 9 (2009), ATC66a, Traf 06	ATC Total split in proportion with classifications from Traf06 MCLC
59	TC01, TC06	Totals of inconsistent flows averaged, with average flows distributed over turning movements, taking those movements calculated in ID19 as fixed
60	TC03, TC04	Counts averaged
61	TC17, TC51	Totals of inconsistent flows averaged, with average flows distributed over turning movements, taking those movements calculated in ID33 as fixed (these movements are linked to ATC data and so are considered more reliable)
62	TC16, TC17	Totals of inconsistent flows averaged, with average flows then distributed over turning movements, taking those movements calculated in ID64 as fixed
63	TC14, TC16	Totals of inconsistent flows averaged, with average flows then distributed over turning movements, taking those movements calculated in ID65 as fixed
64	TC18, TC18a	Totals of inconsistent flows averaged, with average flows distributed over turning movements
65	TC22, TC23	Totals of inconsistent flows averaged, comparisons look ok
66	TC23, TC24	Totals of inconsistent flows averaged, comparisons look ok
67	TC27, TC26	Totals of inconsistent flows averaged, with average flows distributed over turning movements
68	TC33, L111	TC33 flows fixed and L111 flows factored to match
69	TC44, TC45	Totals of inconsistent flows averaged, comparisons look ok
70	TC45, TC46	Totals of inconsistent flows averaged, comparisons look ok
71	TC51, TC50	Amendments from ClashIDs32 and 33 have addressed clashes between these junctions
72	TC66, TC67	Totals of inconsistent flows averaged, with average flows distributed over turning movements
73	TC73, TC25	TC73 flows held fixed and TC25 flows factored to match, comparisons show that TC26 and TC73

ID	Inconsistent Site Names	Action Taken
		are not too dissimilar but that TC25 is much more different
74	TC73, TC26	Totals of inconsistent flows averaged, with average flows distributed over turning movements
75	Traf 02, TC31, TC58	Excluded Traf02 as flows differ significantly to TC31 and TC58. TC31 and TC58 flows averaged and distributed across turning movements
76	Traf 09, TC32, Traf 09a	Average Flows used
77	TC41, TC22	Totals of inconsistent flows averaged
78	TC42, TC43	Totals of inconsistent flows averaged
79	LS3, TC64, LS3, TC63	ATC Classifications considered unreliable, for simplicity and speed average flows across MCJCs taken, then distributed over turning movements
80	TC70, TC69	Totals of inconsistent flows averaged
81	TC41, TC42, LS1	inconsistent flows average
82	TC35, TC36	TC36 flows were calculated under ClashIDs 16 & 17 where comparisons were drawn with ATC data, where there are conflicts TC36 flows have therefore been held fixed and TC35 flows have been adjusted to match
83	L113, L112	inconsistent flows average

Appendix B – Calibration & Validation Counts

Calibration Count Sites

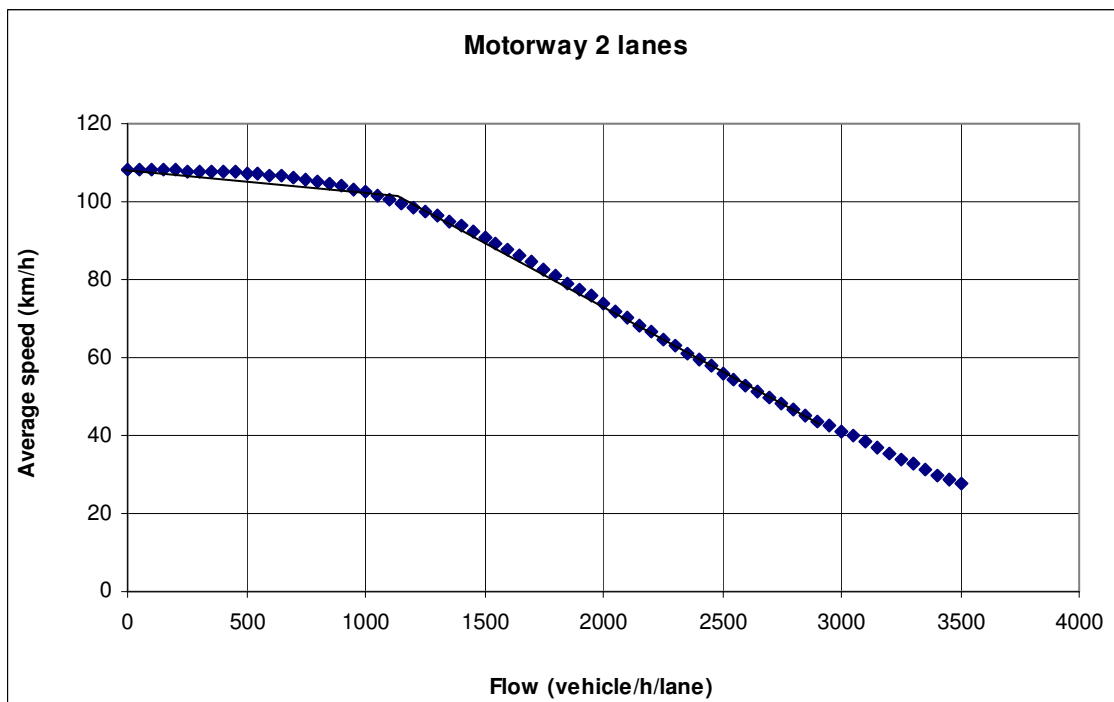
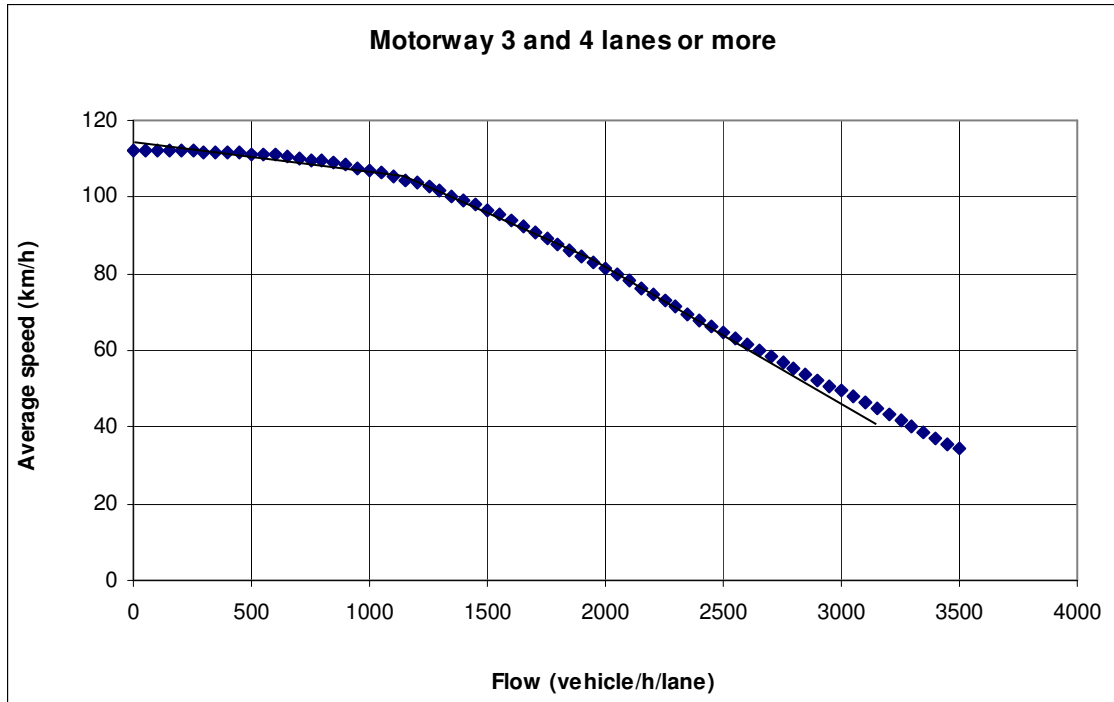
Site No.	Site	Dir,	Anode	Bnode	AM (pcu)	IP (pcu)	PM (veh)
Calibration Count Sites							
RSI01	B1398 Middle St	SB	5631	4135	642	196	293
RSI01	B1398 Middle St	SB	4135	5631	166	190	608
RSI02	A15 North of Lincs	NB	119527799	119512936	447	434	688
RSI02	A15 North of Lincs	SB	119512936	119527799	774	413	533
RSI03	A57 West of Linc	NB	119537502	119529293	1042	578	597
RSI03	A57 West of Linc	SB	119529293	119537502	661	553	1025
RSI04	A46 North of Lincs	NB	119520663	119530689	652	513	590
RSI04	A46 North of Lincs	SB	119530689	119520663	346	526	749
RSI05	B1190 Lincoln Rd	EB	119523255	119539035	329	202	277
RSI05	B1190 Lincoln Rd	WB	119539035	119523255	230	221	292
RSI06	A46 SW of Lincs	NB	119519586	119512782	1322	-	-
RSI06	A46 SW of Lincs	SB	119512781	119539003	1267	894	1165
RSI07	B1308 Greetwell Rd	EB	119516693	119545527	123	211	506
RSI07	B1308 Greetwell Rd	WB	119545527	119516693	563	199	127
RSI08	B1190 Washingb. Rd	EB	119525748	119545520	124	-	-
RSI08	B1190 Washingb. Rd	WB	119545520	119525748	443	-	-
RSI09	B1188 Canwick Rd	NB	119534819	119534820	1122	641	614
RSI09	B1188 Canwick Rd	SB	119534820	119534819	577	758	1354
RSI10	A15 Cross O Cliff	NB	119525785	119540776	458	455	473
RSI10	A15 Cross O Cliff	SB	119540776	119525785	314	426	740
RSI11	Brant Rd	NB	31	119536355	418	322	424
RSI11	Brant Rd	SB	119536355	31	271	319	538
RSI11a	Station Rd	EB	119516945	119513147	376	225	236
RSI11a	Station Rd	WB	119513147	119516945	329	217	402
RSI12	A158 Rugby Rd East	EB	119512694	119532410	612	540	542
RSI12	A158 Rugby Rd East	WB	119532410	119512694	481	558	776
ATC62	Fen Ln	SB	119523323	119538005	110	43	117
ATC62	Fen Ln	EB	119523323	119538005	110	43	117
ATC66a	Waterside South	WB	119541695	119537117	178	56	64
ATC76	A607 Grantham Rd	NB	119535799	119544516	428	322	545
ATC76	A607 Grantham Rd	SB	119544516	119535799	575	301	500
ATC77	A15 Sleaford Rd	NB	119529229	119545504	479	258	312
ATC77	A15 Sleaford Rd	SB	119545504	119529229	419	265	447
ATC78	Bloxholm Ln	NB	119525811	119545622	101	37	76
ATC80	B1188 Lincoln Rd	EB	119542251	119545512	296	387	681
ATC80	B1188 Lincoln Rd	WB	119545512	119542251	712	371	349
ATC81	Heighington Rd	WB	119521125	119524079	307	94	88
ATC89	Hawthorn Rd	EB	119545621	119531885	259	-	-

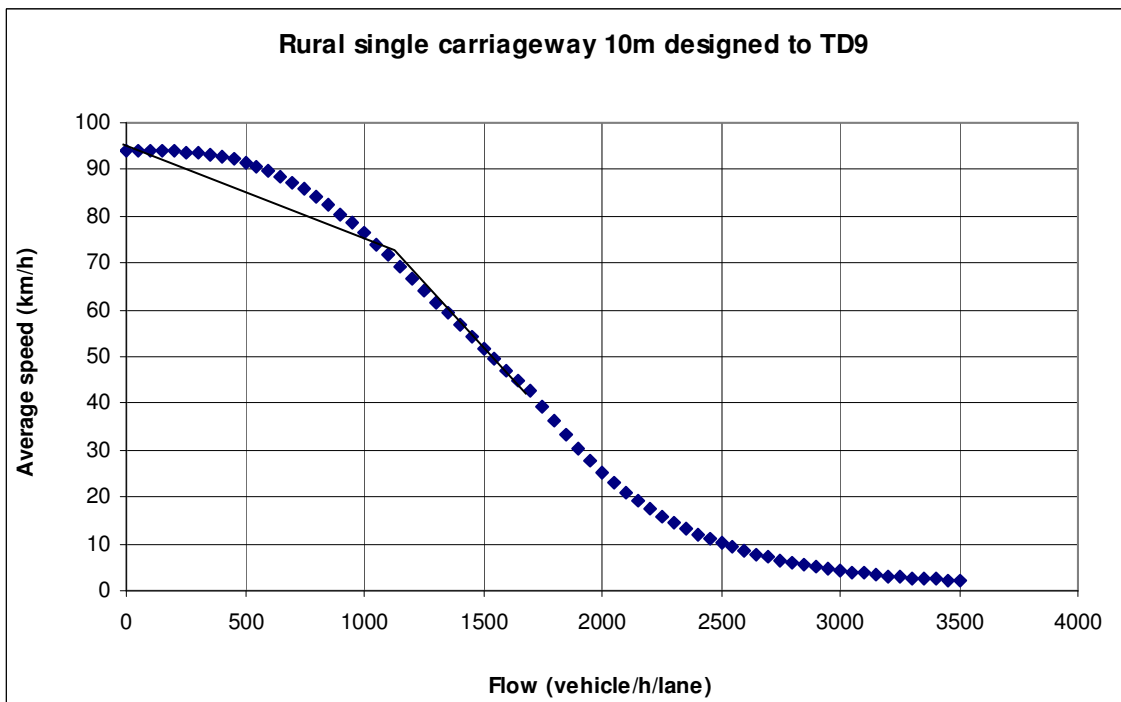
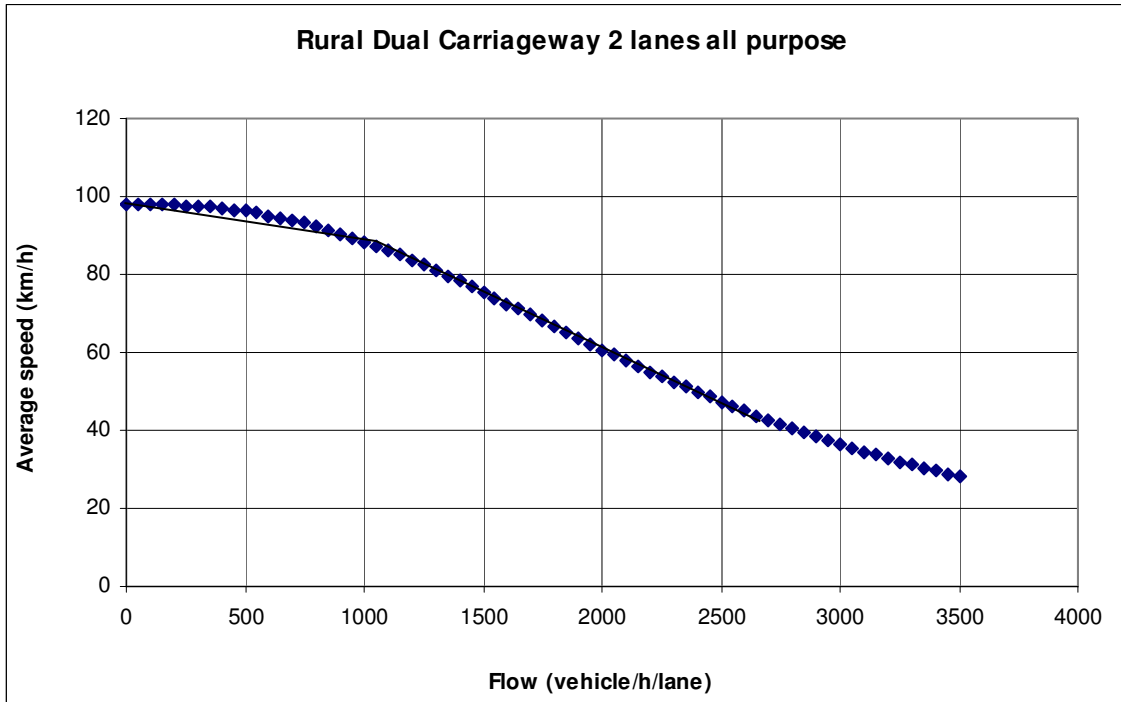
Site No.	Site	Dir,	Anode	Bnode	AM (pcu)	IP (pcu)	PM (veh)
ATC89	Hawthorn Rd	WB	119531885	119545621	506	-	-
L081	Brayford Way	NB	119526713	119527712	862	845	1027
L081	Brayford Way	SB	119527712	119526713	1046	899	1077
L082	BrayFord Wharf East	SB	119518823	119517044	206	259	262
L113	Northern Terrace	EB	119521029	119531615	319	231	100
L113	Gt Northern Terrace	WB	119531615	119521029	122	214	212
RS114N	A15 Canwick Rd	NB	119532688	119522918	1994	1202	1146
RS114N	A15 Canwick Rd	SB	119522918	119532688	1216	1341	1774
Site 3	East Gate	WB	119526595	119524011	224	-	-
Site 4	A15 Wragby Rd	WB	119523371	119529580	625	-	-
TC22	A15	NB	119531101	4560	520	506	801
TC22	A15	SB	4560	119531101	910	509	705
TC23	A158	WB	119515142	119516326	675	700	895
TC24	A158	EB	119516326	119515142	820	644	745
TC25	B1182 Ruskin Ave	EB	119513411	119515357	565	511	823
TC25	B1182 Ruskin Ave	WB	119515357	119513411	808	526	574
TC36	Washingb' Rd	EB	119534820	3533	125	175	312
TC36	Washingb' Rd	WB	3533	119534820	448	236	308
TC41	A46	WB	119531738	119529131	1428	1100	1873
TC41	A46	SB	119531738	119529131	1428	1100	1873
TC42	A46	EB	119514146	119536562	1962	1080	1786
TC42	A46	NB	119514146	119536562	1962	1080	1786
TC50	A15 London Rd	EB	119542296	119545503	514	308	555
TC50	A15 London Rd	WB	119545503	119542296	580	294	388
TC52	Lincoln Rd	EB	119513975	119524365	392	283	351
TC52	Lincoln Rd	WB	119524365	119513975	308	274	359
TC53	A1434 Newark Rd	EB	119531204	165	636	650	776
TC53	A1434 Newark Rd	WB	165	119531204	597	622	665
TC63	B1262 High St	NB	119516576	119514127	368	279	295
TC63	B1262 High St	SB	119514127	119516576	315	306	282
TC68	Brant Rd	NB	119518650	119526790	363	238	463
TC68	Brant Rd	SB	119526790	119518650	444	-	-
TC74	Outer Circle Dr	EB	119519672	119529037	301	262	339
TC74	Outer Circle Dr	WB	119529037	119519672	182	351	377
Traf 03	B1308 Monks Rd	EB	119524816	119517474	467	417	392
Traf 03	B1308 Monks Rd	WB	119517474	119524816	349	480	461
Traf 04	Croft St	EB	119516165	119522506	155	182	181
Traf 04	Croft St	WB	119522506	119516165	351	224	296
Traf 05	Waterside North	WB	119527059	119535794	147	141	119

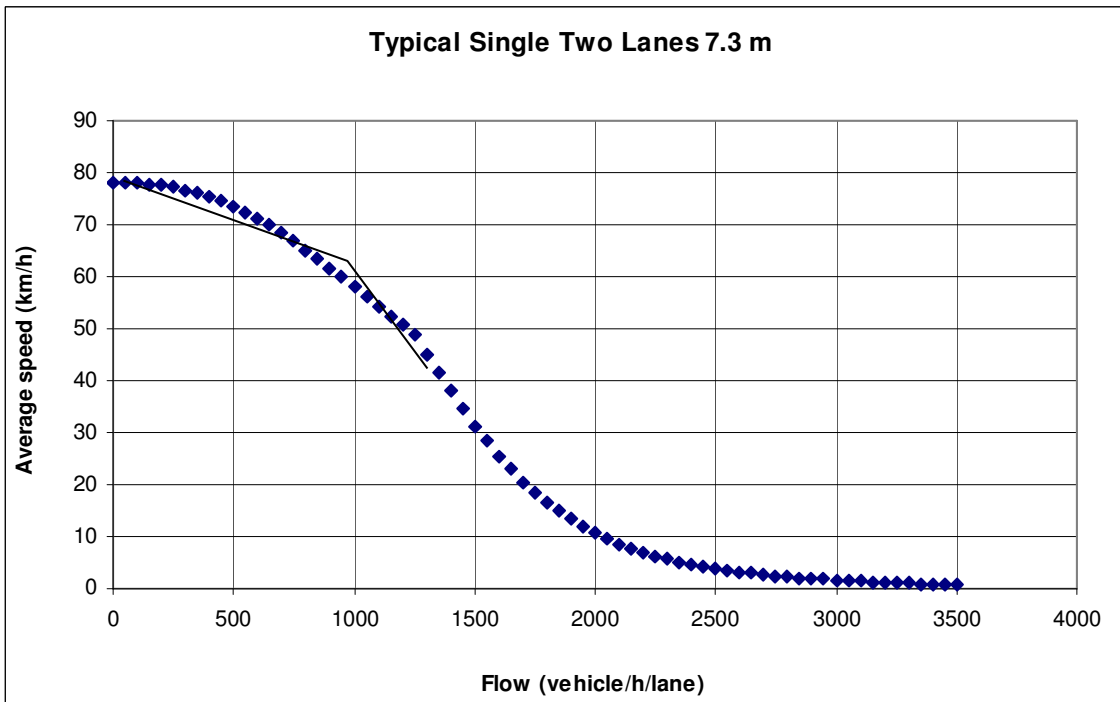
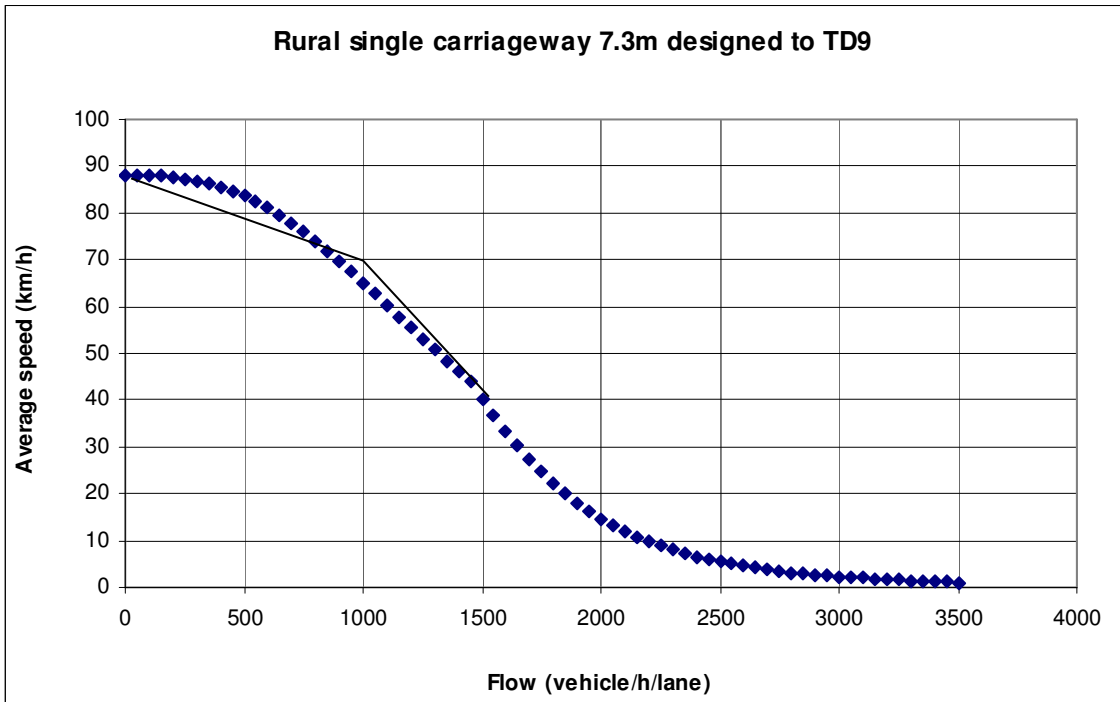
Validation Count Sites

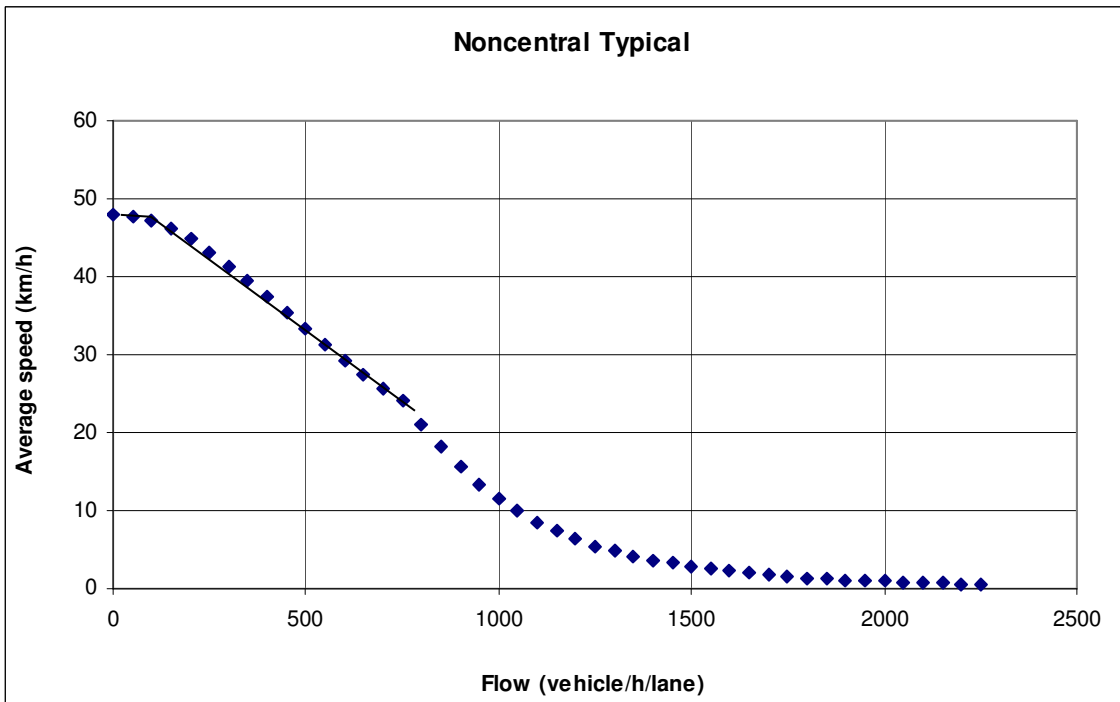
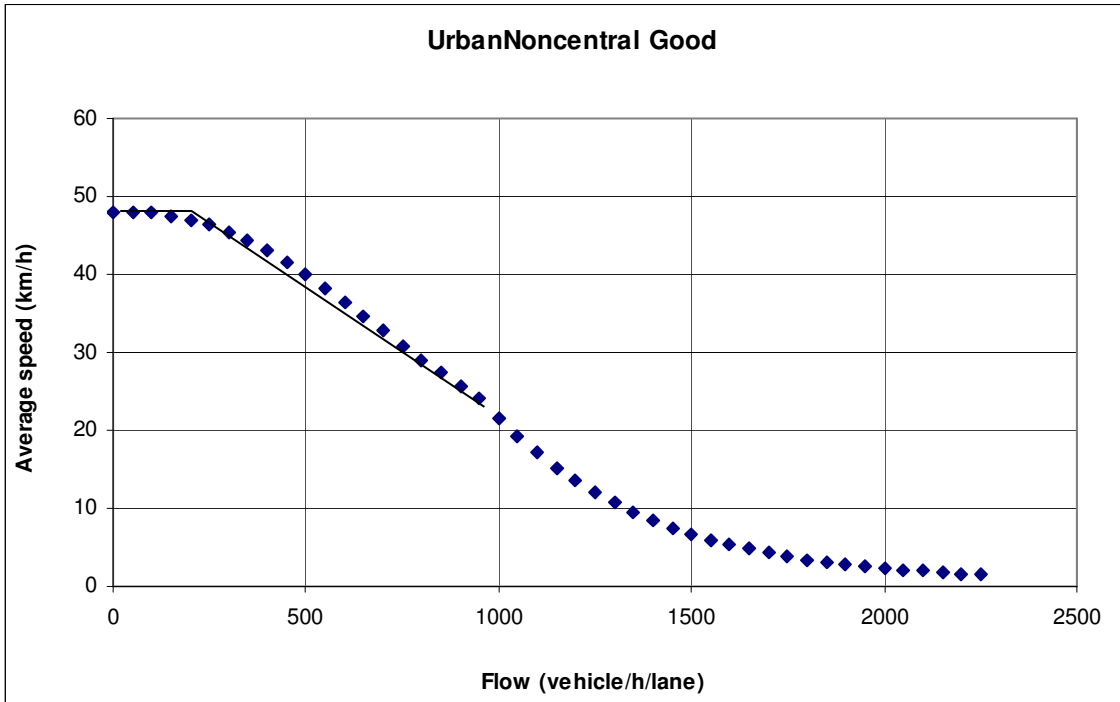
Site No.	Site	Dir.	Anode	Bnode	AM (pcu)	IP (pcu)	PM (veh)
Validation Count Sites							
ATC66a	Waterside South	EB	119537117	119541695	53	51	102
ATC71	B1190 Doddington Rd	EB	119545645	119530811	507	553	670
ATC71	B1190 Doddington Rd	WB	119530811	119545645	728	573	649
ATC78	Bloxholm Ln	SB	119545622	119525811	100	43	108
ATC81	Heighington Rd	EB	119524079	119521125	97	159	343
L082	BrayFord Wharf East	NB	119517044	119518823	86	104	104
LTC1	Beevor St	EB	119512888	119535466	165	68	29
LTC1	Beevor St	WB	119535466	119512888	78	78	85
Site 1	Newport	EB	119525571	119529003	352	-	-
Site 16	Carline Rd	EB	119528366	119539263	87	-	-
Site 17	Upper Long Leys Rd	EB	119519544	119529869	19	-	-
Site 18	Burton Rd	EB	119518285	119515671	501	-	-
Site 19	Mildmay St	EB	119533604	119536871	31	-	-
TC22	A46	WB	119528632	119529186	805	885	870
TC23	A46	EB	119529186	119528632	981	821	1120
TC26	B1273 Longdales Rd	EB	119527203	119545636	583	576	837
TC26	B1273 Longdales Rd	WB	119545636	119527203	763	545	593
TC31	Lindum Terrace	WB	119533260	119537871	106	67	193
TC32	B1003 Ropewalk	WB	119528600	119524325	294	602	701
TC32	B1003 Ropewalk	EB	119541066	119528600	698	525	365
TC33	B1360 Valentine Rd	EB	119518113	119519166	429	601	777
TC33	B1360 Valentine Rd	WB	119519166	119518113	676	579	624
TC40	Skellingthorpe Rd	EB	119525974	5198	282	307	435
TC40	Skellingthorpe Rd	WB	5198	119525974	278	271	270
TC44	B1190 Doddington Rd	EB	119532776	119534353	181	255	385
TC44	B1190 Doddington Rd	WB	119534353	119532776	428	272	318
TC45	A1434 Newark Rd	EB	119526471	171	462	402	558
TC45	A1434 Newark Rd	WB	171	119526471	300	399	428
TC56	B1308 West Parade	EB	119524201	119524200	424	298	332
TC56	B1308 West Parade	WB	119524200	119524201	393	390	419
TC66	A57 Newland	EB	119532301	119525809	879	704	719
TC66	A57 Newland	WB	119525809	119532301	490	427	684
TC67	Brayford Wharf North	EB	119534515	119514190	51	6	3
TC67	Brayford Wharf North	WB	119514190	119534515	11	7	62
TC71	B1378 Skellingth' Rd	EB	119536558	119516921	1085	389	398
TC71	B1378 Skellingth' Rd	WB	119516921	119536558	485	483	587
TC72	Scopwick Pl	EB	119524096	119536786	250	179	233
TC72	Scopwick Pl	WB	119536786	119524096	213	177	196
Traf 05	Waterside North	EB	119535794	119527059	26	12	5

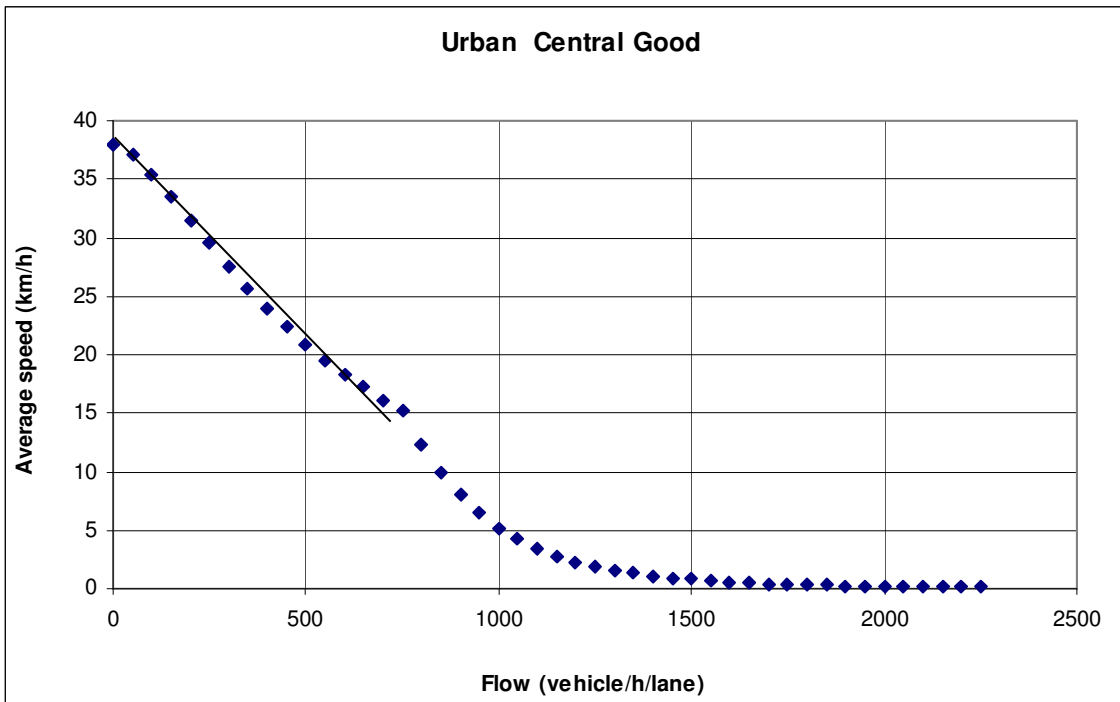
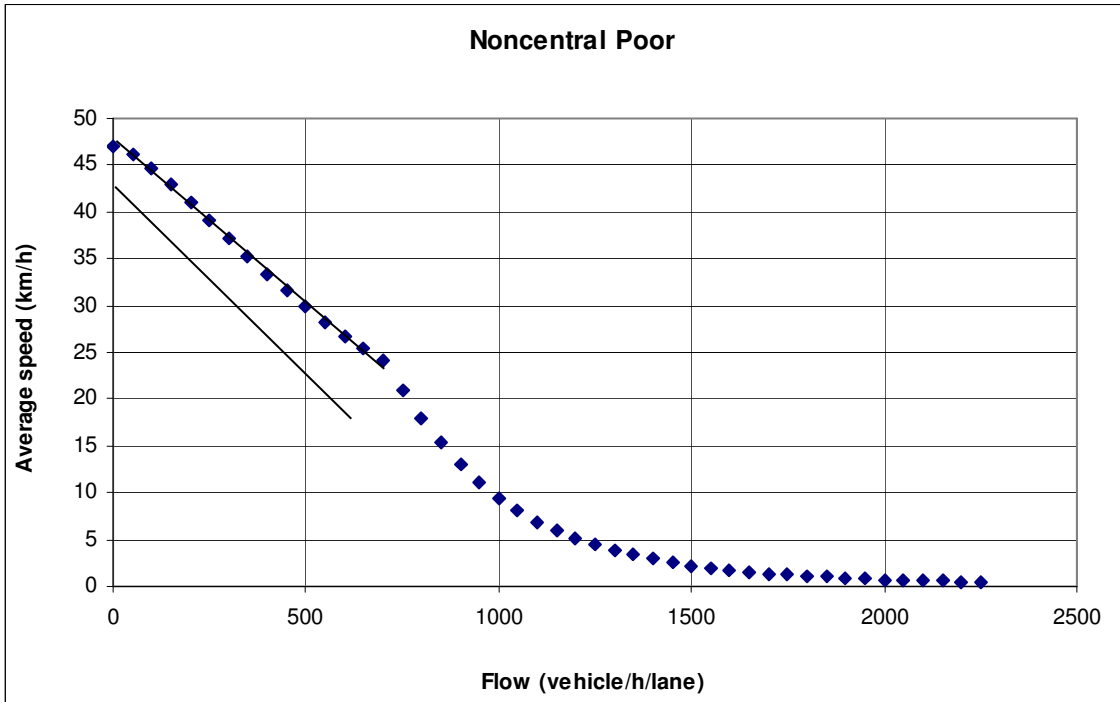
Appendix C – Speed – Flow Curves

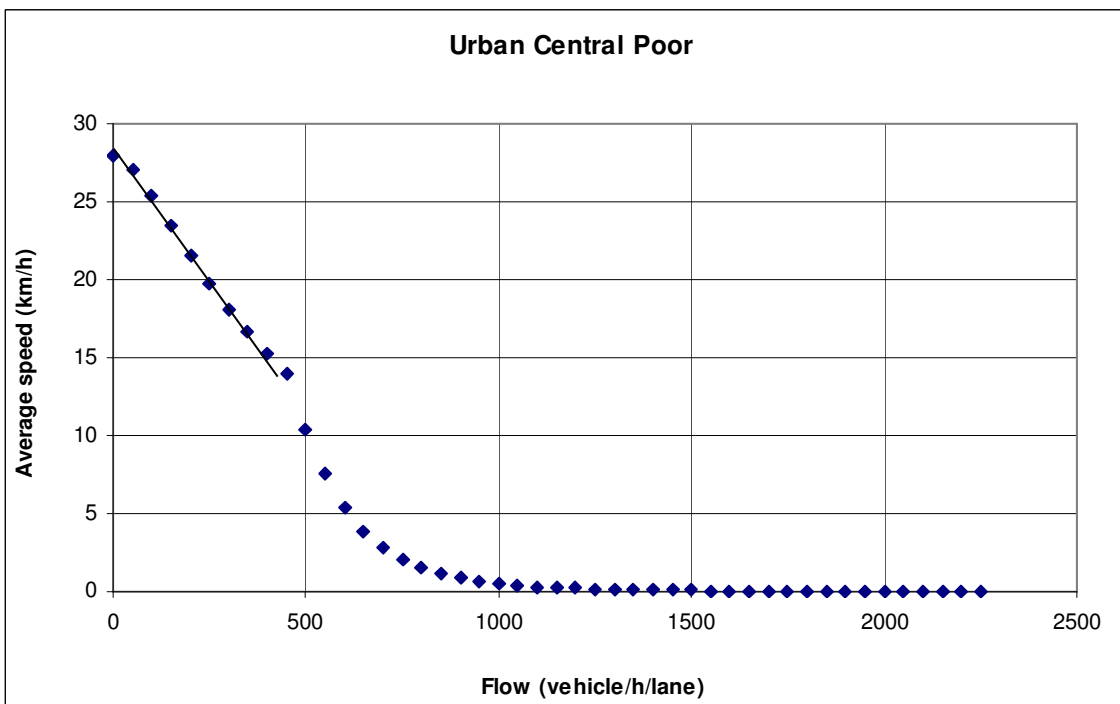
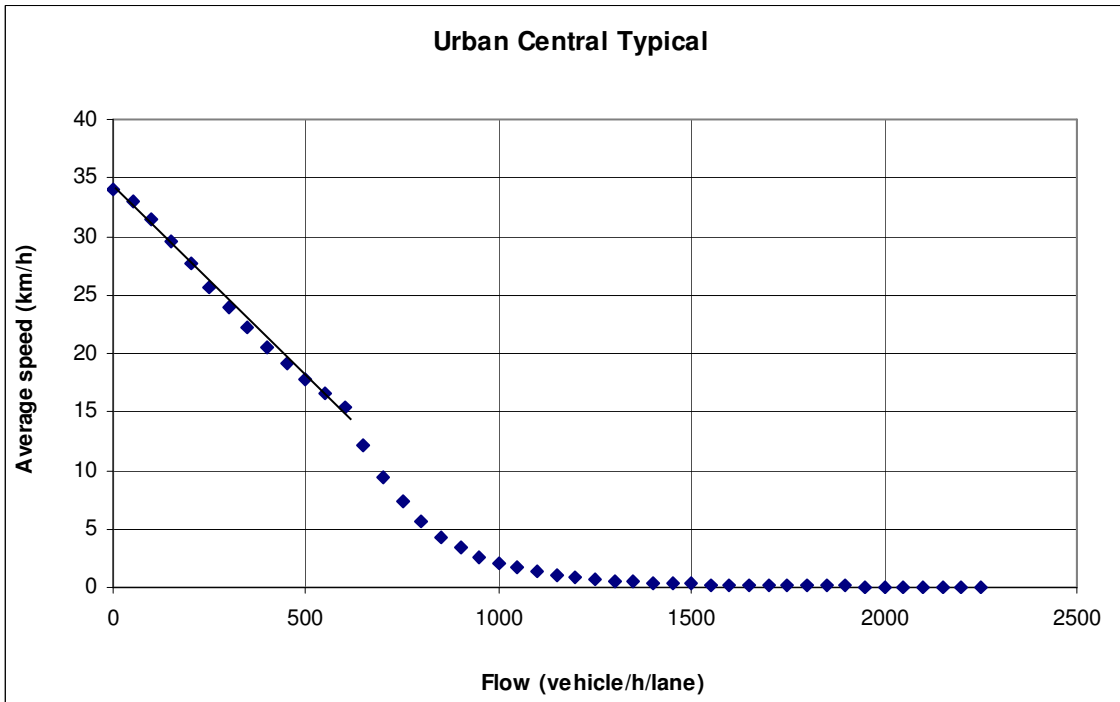


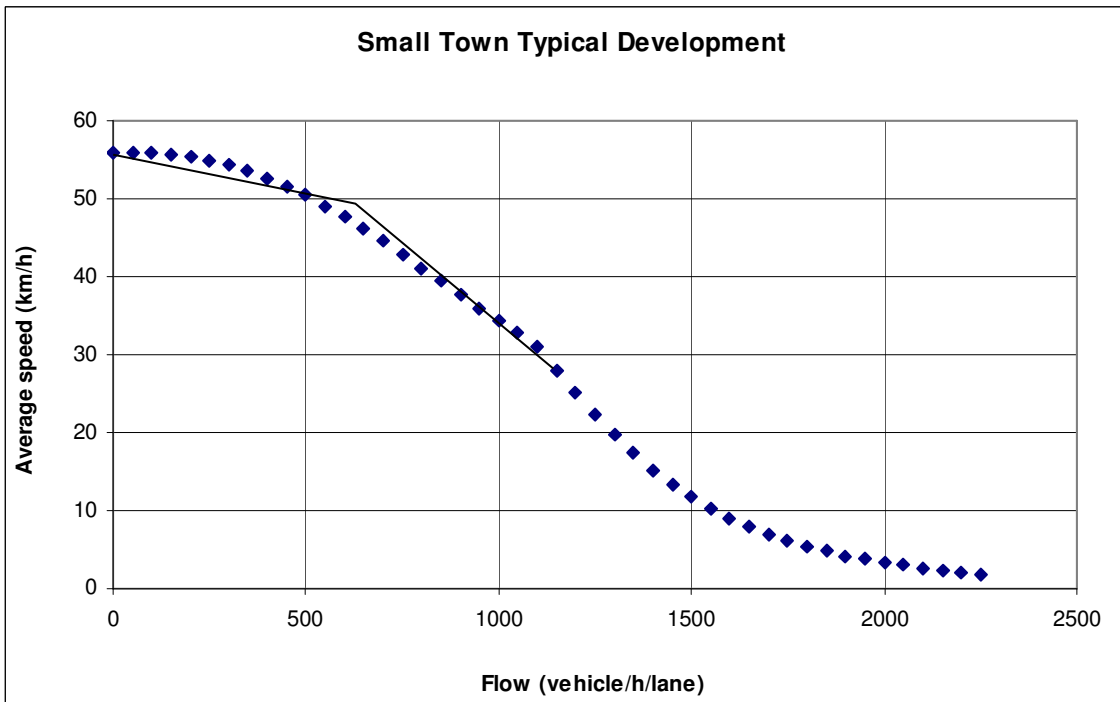
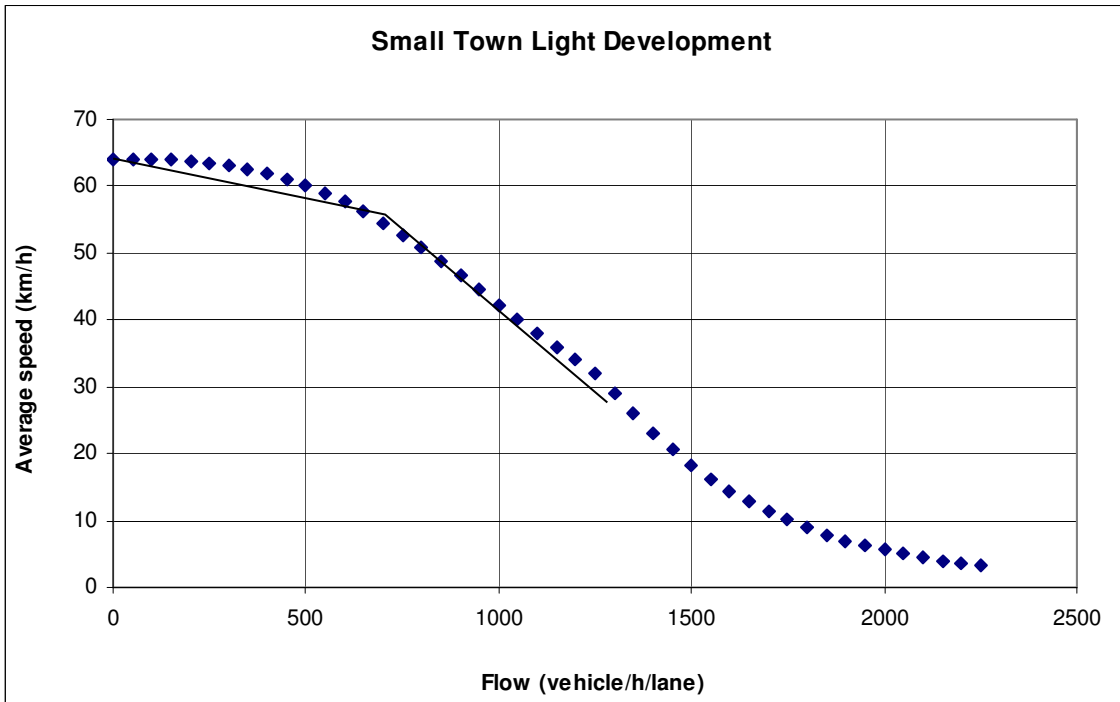


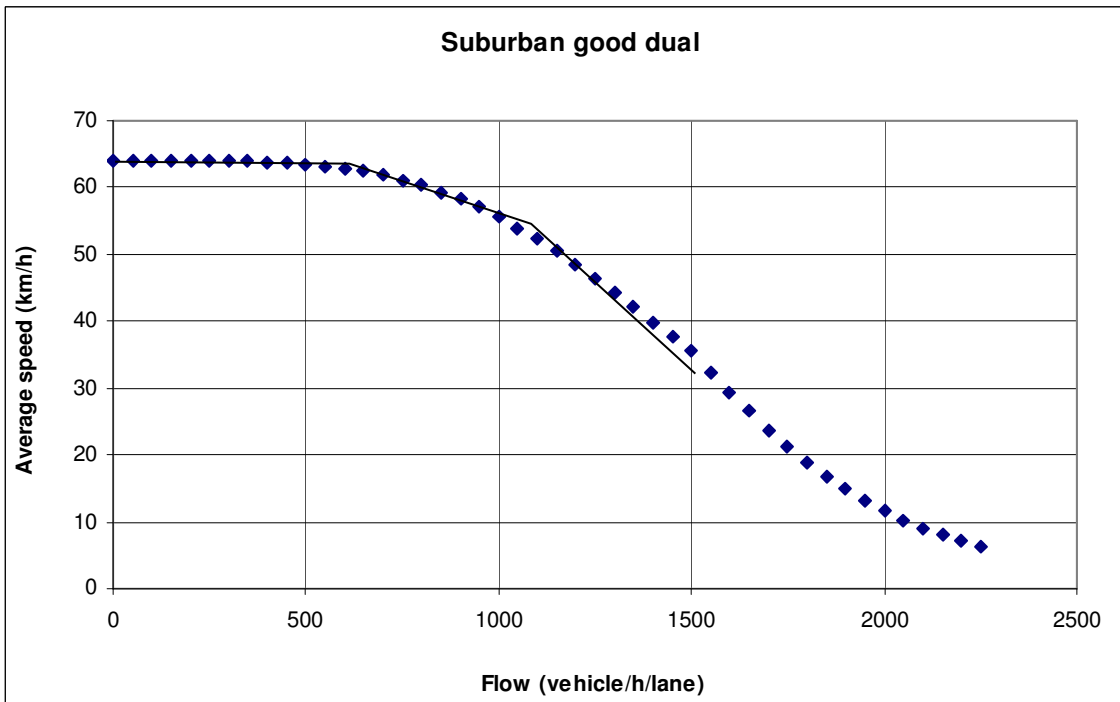
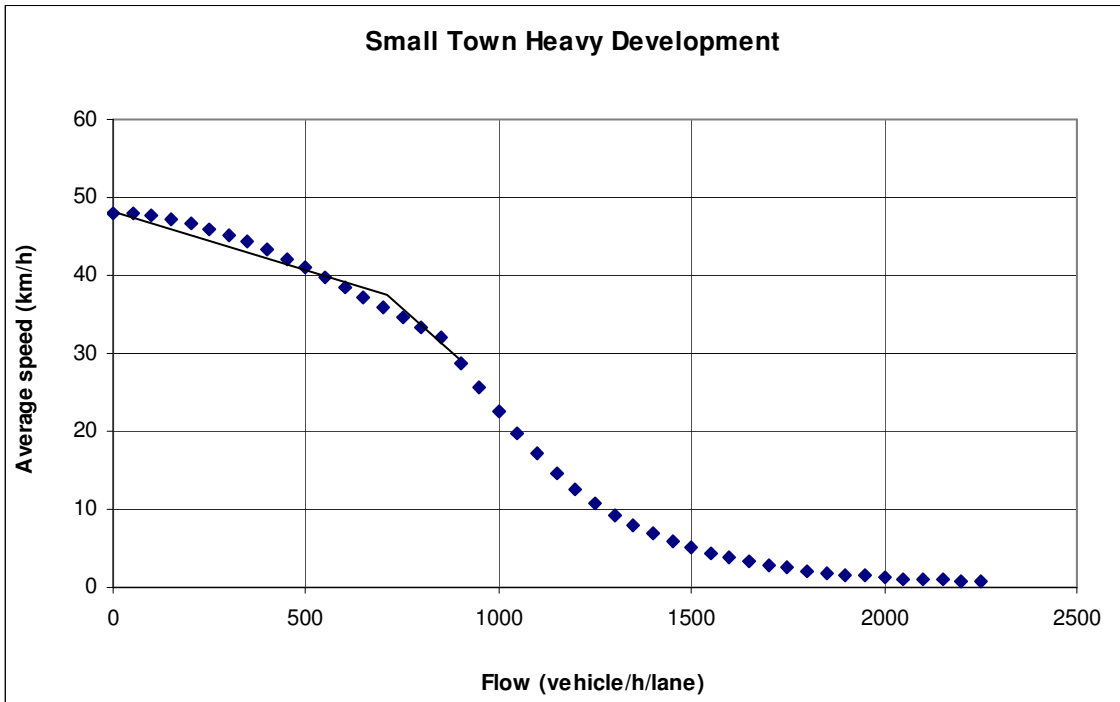


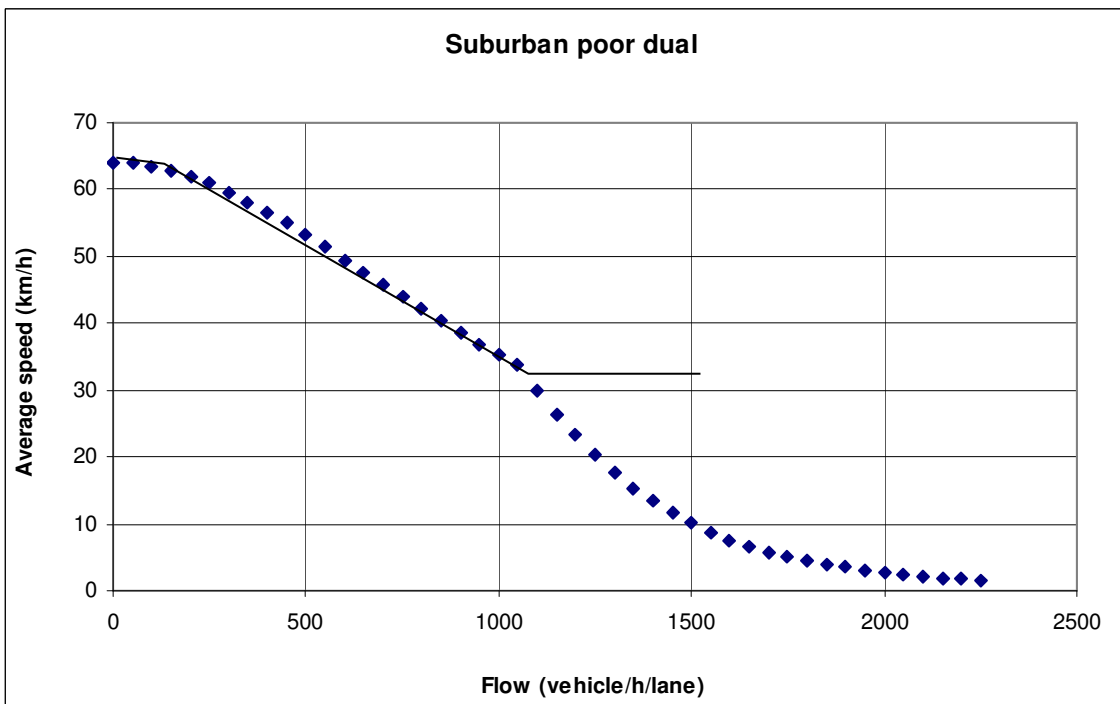
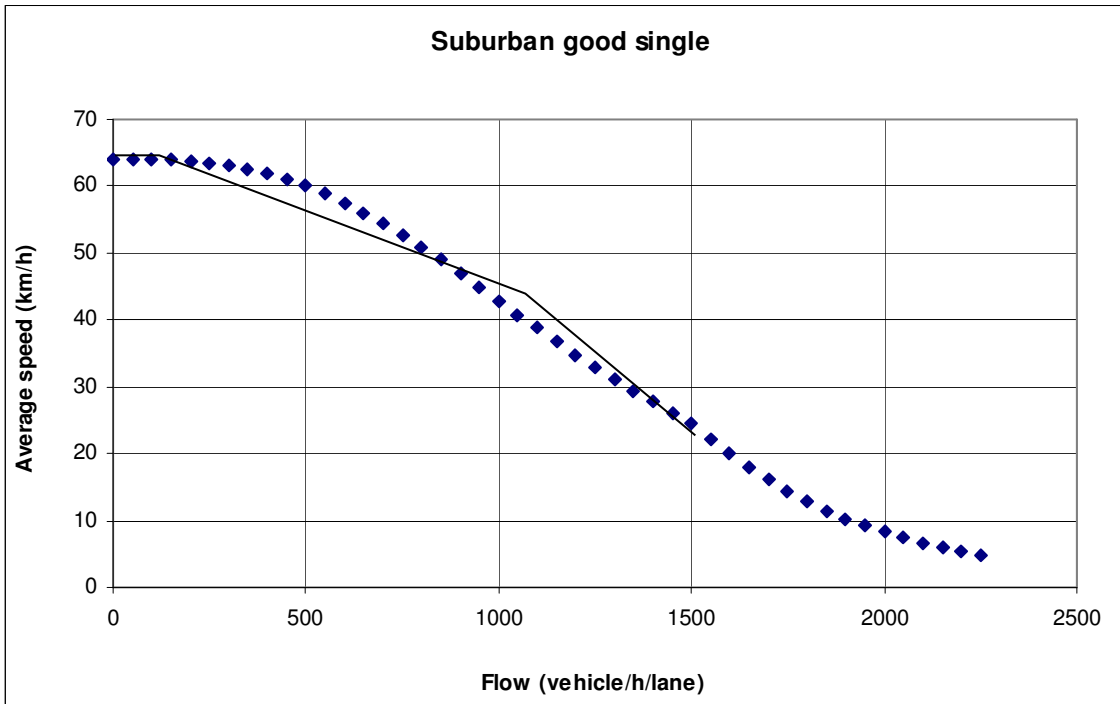


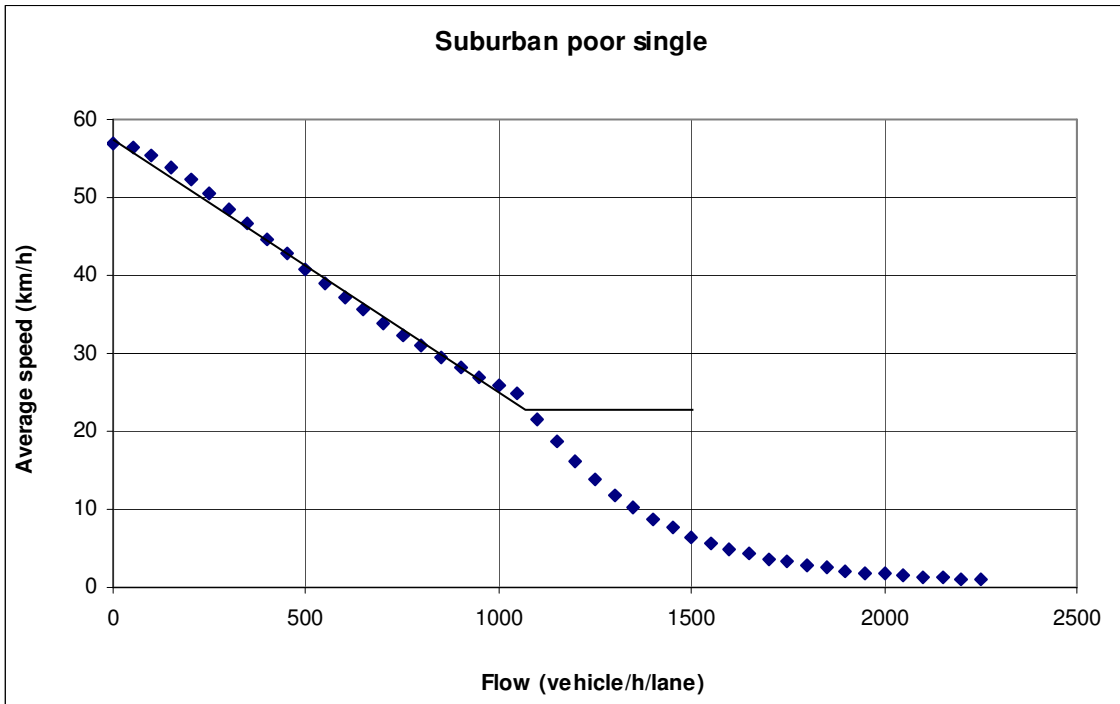




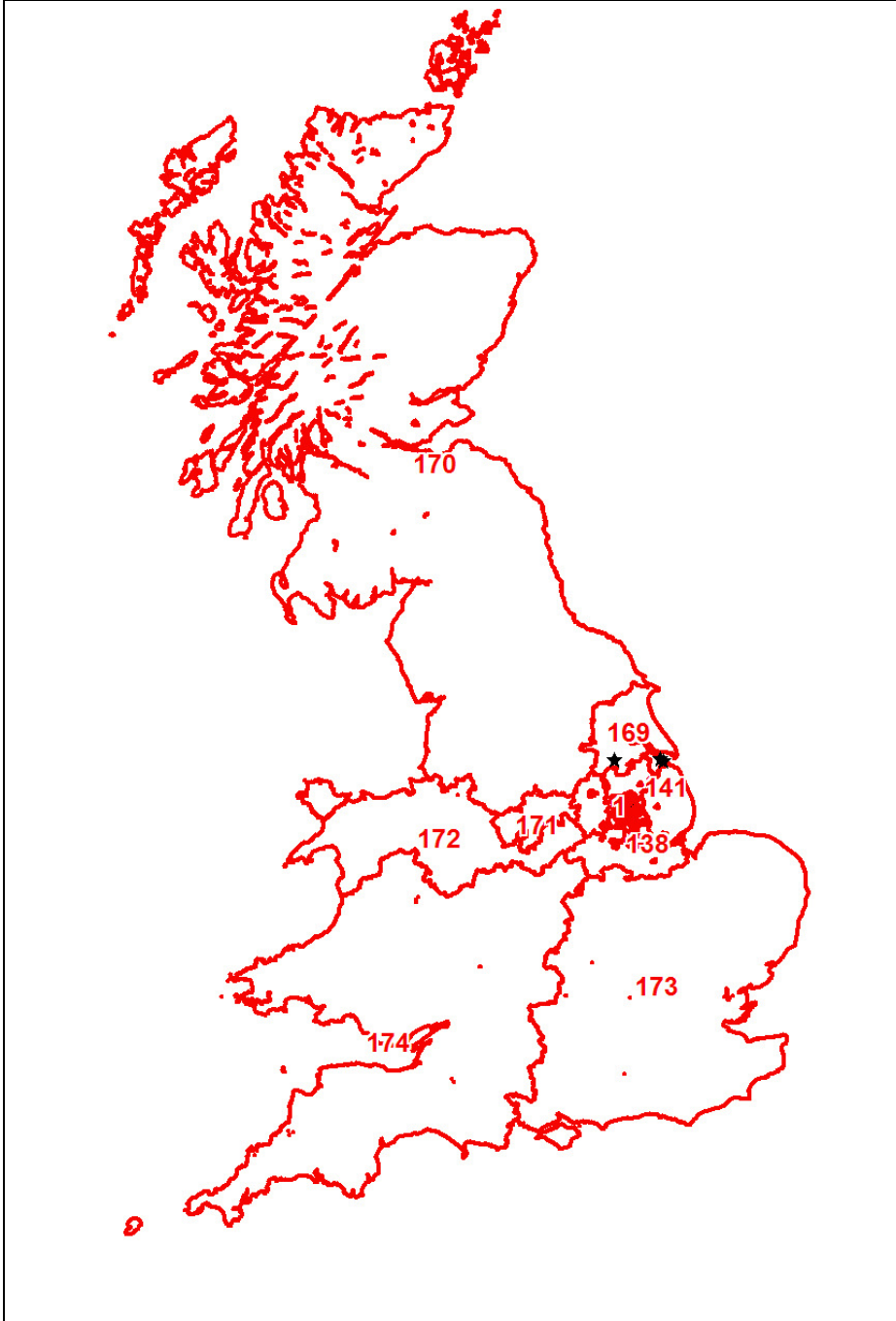


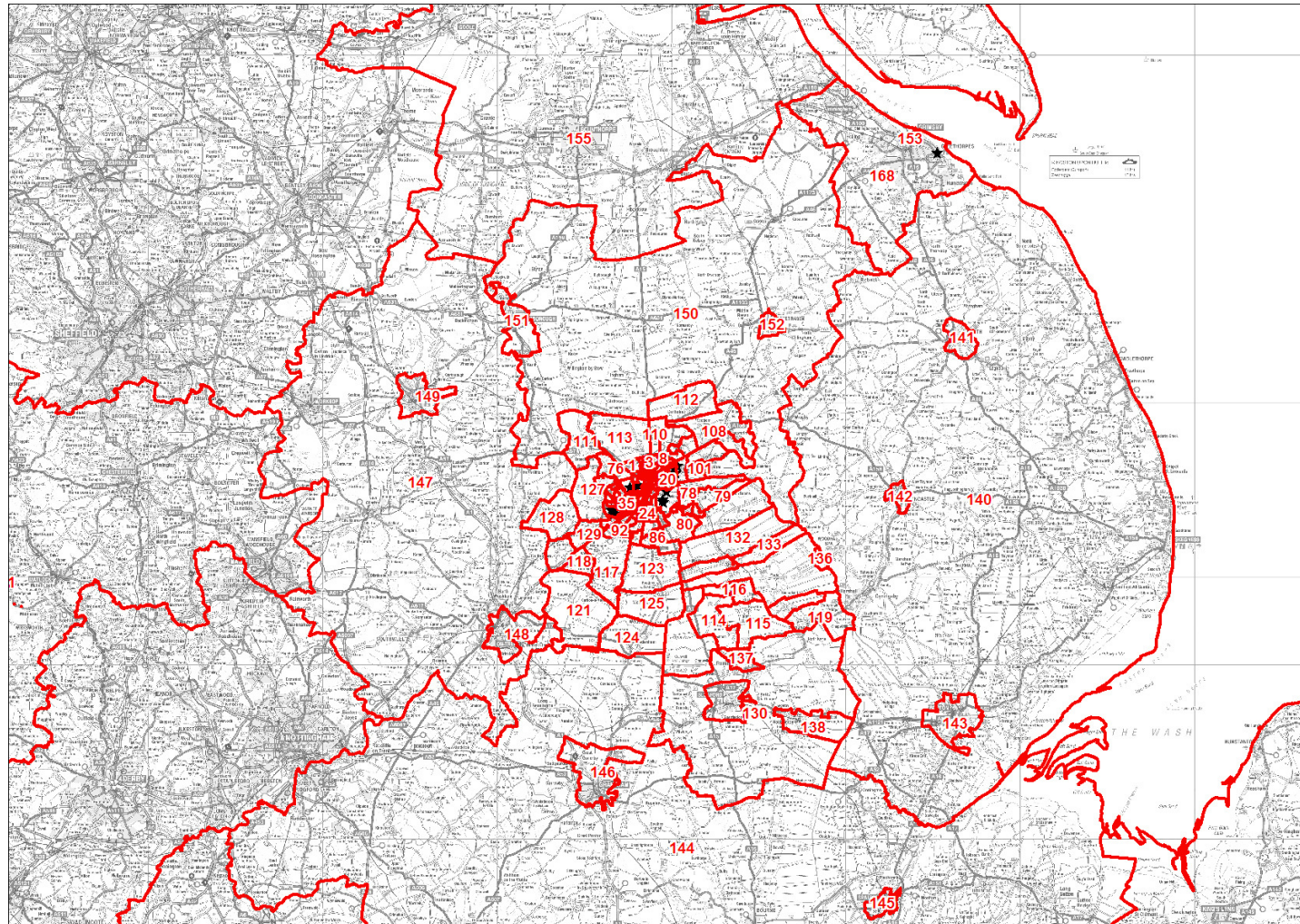


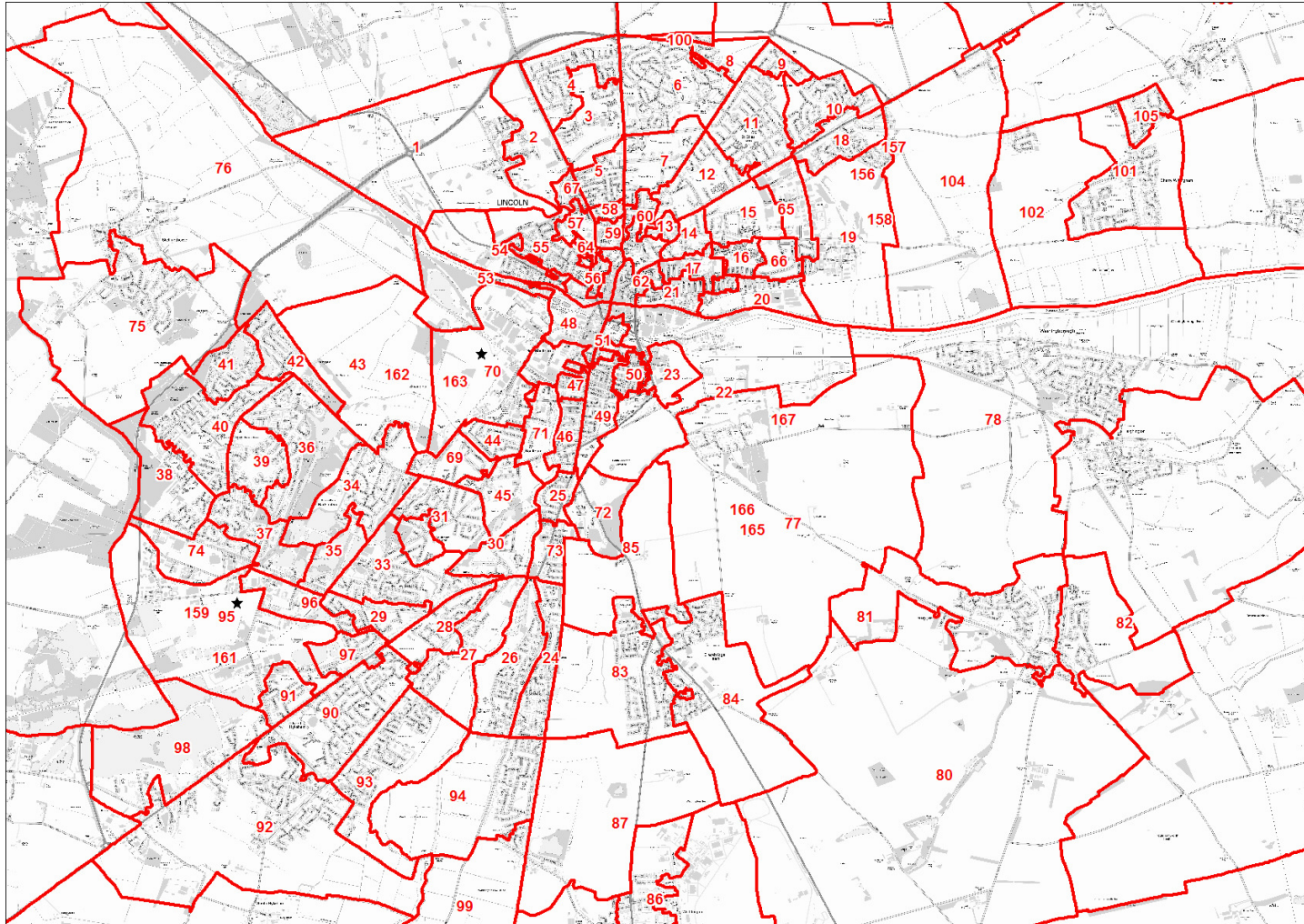


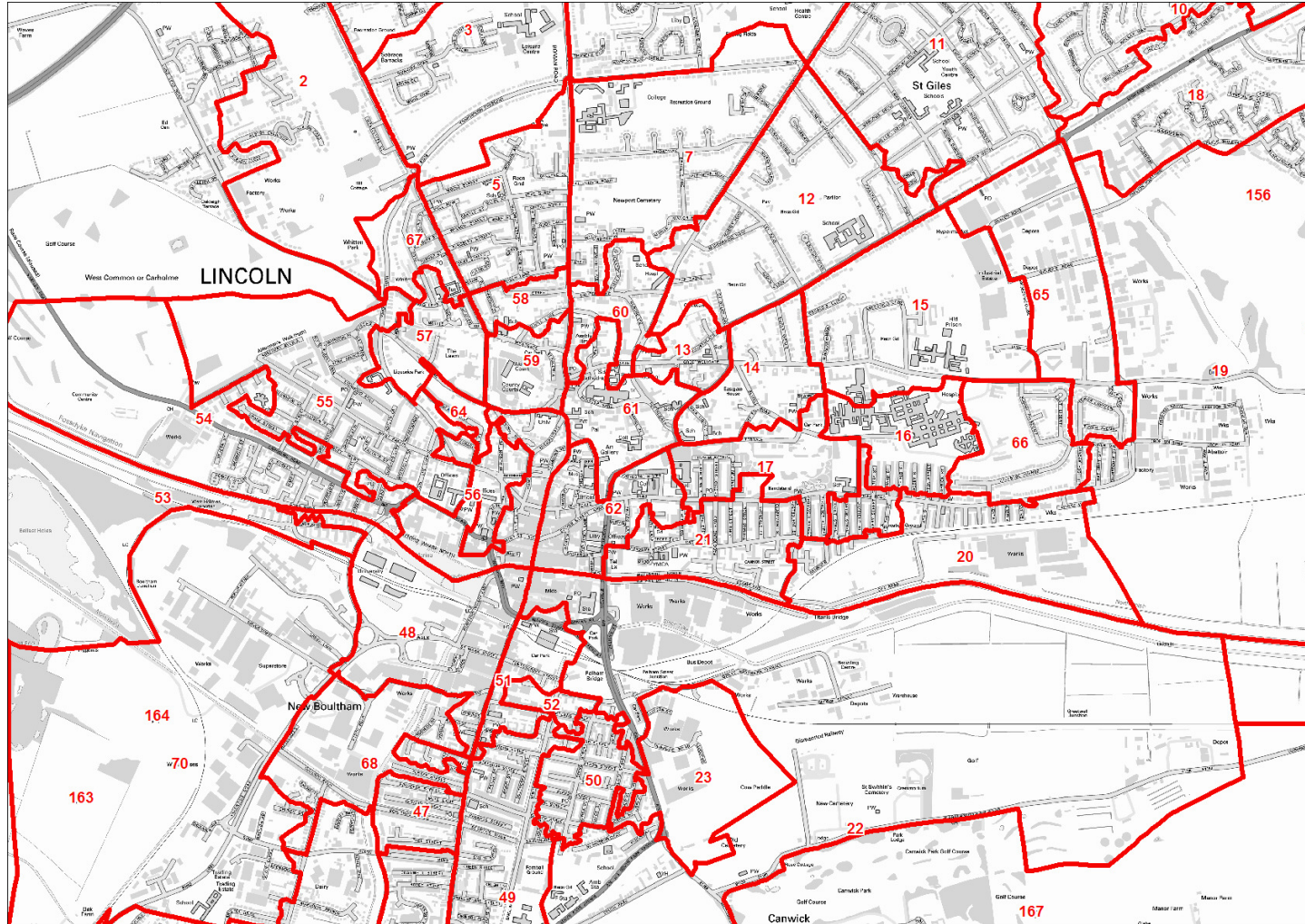


Appendix D – Zoning System









Zone Number	Zone Description	Level
1	Lincoln (main)	LPA
2	Lincoln (main)	LPA
3	Lincoln (main)	LPA
4	Lincoln (main)	LPA
5	Lincoln (main)	LPA
6	Lincoln (main)	LPA
7	Lincoln (main)	LPA
8	Lincoln (main)	LPA
9	Lincoln (main)	LPA
10	Lincoln (main)	LPA
11	Lincoln (main)	LPA
12	Lincoln (main)	LPA
13	Lincoln (main)	LPA
14	Lincoln (main)	LPA
15	Lincoln (main)	LPA
16	Lincoln (main)	LPA
17	Lincoln (main)	LPA
18	Lincoln (main)	LPA
19	Lincoln (main)	LPA
20	Lincoln (main)	LPA
21	Lincoln (main)	LPA
22	Lincoln (main)	LPA
23	Lincoln (main)	LPA
24	Lincoln (main)	LPA
25	Lincoln (main)	LPA
26	Lincoln (main)	LPA
27	Lincoln (main)	LPA
28	Lincoln (main)	LPA
29	Lincoln (main)	LPA
30	Lincoln (main)	LPA
31	Lincoln (main)	LPA
32	Lincoln (main)	LPA
33	Lincoln (main)	LPA
34	Lincoln (main)	LPA
35	Lincoln (main)	LPA
36	Birchwood	LPA
37	Birchwood	LPA
38	Birchwood	LPA
39	Birchwood	LPA
40	Birchwood	LPA
41	Birchwood	LPA
42	Birchwood	LPA
43	Lincoln (main)	LPA
44	Lincoln (main)	LPA
45	Lincoln (main)	LPA
46	Lincoln (main)	LPA

Zone Number	Zone Description	Level
47	Lincoln (main)	LPA
48	Lincoln (main)	LPA
49	Lincoln (main)	LPA
50	Lincoln (main)	LPA
51	Lincoln (main)	LPA
52	Lincoln (main)	LPA
53	Lincoln (main)	LPA
54	Lincoln (main)	LPA
55	Lincoln (main)	LPA
56	Lincoln (main)	LPA
57	Lincoln (main)	LPA
58	Lincoln (main)	LPA
59	Lincoln (main)	LPA
60	Lincoln (main)	LPA
61	Lincoln (main)	LPA
62	Lincoln (main)	LPA
63	Lincoln (main)	LPA
64	Lincoln (main)	LPA
65	Lincoln (main)	LPA
66	Lincoln (main)	LPA
67	Lincoln (main)	LPA
68	Lincoln (main)	LPA
69	Lincoln (main)	LPA
70	Lincoln (main)	LPA
71	Lincoln (main)	LPA
72	Lincoln (main)	LPA
73	Lincoln (main)	LPA
74	Birchwood	LPA
75	Skellingthorpe	LPA
76	Skellingthorpe	LPA
77	Lincoln (part of)	LPA
78	Heighington / Washingborough	LPA
79	Heighington / Washingborough	LPA
80	Branston	LPA
81	Branston	LPA
82	Branston	LPA
83	Bracebridge Heath	LPA
84	Bracebridge Heath	LPA
85	Bracebridge Heath	LPA
86	Waddington	LPA
87	Waddington	LPA
88	Waddington	LPA
89	Waddington	LPA
90	Lincoln (part of)	LPA
91	Lincoln (part of)	LPA
92	Lincoln (part of)	LPA

Zone Number	Zone Description	Level
93	Lincoln (part of)	LPA
94	Lincoln (part of)	LPA
95	Lincoln (part of)	LPA
96	Lincoln (part of)	LPA
97	Lincoln (part of)	LPA
98	Lincoln (part of)	LPA
99	Waddington	LPA
100	Lincoln (part of)	LPA
101	Cherry Willingham / Reepham	LPA
102	Rural	LPA
103	Cherry Willingham / Reepham	LPA
104	Rural	LPA
105	Cherry Willingham / Reepham	LPA
106	Nettleham	LPA
107	Nettleham	LPA
108	Rural	LPA
109	Rural	LPA
110	Rural	LPA
111	Saxilby	LPA
112	Welton / Dunholme	LPA
113	Rural	LPA
114	Rural	LPA
115	Rural	LPA
116	Rural	LPA
117	Rural	LPA
118	Rural	LPA
119	Rural	LPA
120	Rural	LPA
121	Rural	LPA
122	Rural	LPA
123	Rural	LPA
124	Rural	LPA
125	Rural	LPA
126	Rural	LPA
127	Rural	LPA
128	Rural	LPA
129	Rural	LPA
130	Rural	LPA
131	Rural	LPA
132	Rural	LPA
133	Metheringham	LPA
134	Rural	LPA
135	Metheringham	LPA
136	Woodhall Spa (part of)	LPA
137	Ruskinton	LPA
138	Heckington	LPA

Zone Number	Zone Description	Level
139	Sleaford	LPA
140	East Lindsey	External
141	Louth	External
142	Horncastle	External
143	Boston	External
144	South Kesteven	External
145	Spalding	External
146	Grantham	External
147	West Lindsey	External
148	Newark-On-Trent	External
149	Retford	External
150	West Lindsey	External
151	Gainsborough	External
152	Market Rasen	External
153	Grimsby - Point Zone	External
154	Cleethorpes - Point Zone	External
155	Scunthorpe - Point Zone	External
156	NEQ1 - Point Zone	LPA
157	NEQ2 - Point Zone	LPA
158	NEQ3 - Point Zone	LPA
159	SWQ1 - Point Zone	LPA
160	SWQ2 - Point Zone	LPA
161	SWQ3 - Point Zone	LPA
162	WGC1 - Point Zone	LPA
163	WGC2 - Point Zone	LPA
164	WGC3 - Point Zone	LPA
165	SEQ1 - Point Zone	LPA
166	SEQ2 - Point Zone	LPA
167	SEQ3 - Point Zone	LPA
168	Grimsby	External
169	Hull and A15	External
170	A1 North	External
171	Chesterfield, Mansfield and the Peak District	External
172	Nottingham, Derby and A50	External
173	A1 South	External
174	M42 and M69	External

Appendix E – Bus Routes

Bus Service	Route	Direction	Frequency		
			AM	IP	PM
1	Lincoln-Grantham	IB	2	6	1
		OB	2	12	2
2	Lincoln-Branston	IB	3	16	3
		OB	1	16	3
3	Lincoln-Grimsby	IB	2	10	2
		OB	2	12	2
4(1)	Lincoln-County Hospital	IB	2	16	3
		OB	3	16	3
4(2)	Lincoln-Nettleham	IB	1	4	0
		OB	1	6	0
5(1)	Lincoln-Boston	IB	1	7	1
		OB	1	10	1
5(2)	Lincoln-Er Estate	-	1	6	1
6	Lincoln-Skegness	IB	2	6	1
		OB	2	7	1
10(1)	Lincoln-Horncastle	IB	1	2	1
		OB	1	4	1
10(2)	Lincoln-Louth	IB	1	3	1
		OB	1	3	1
11	Lincoln-Welton	IB	2	12	2
		OB	2	12	2
13	Lincoln-Waddington	IB	2	12	2
		OB	2	12	2
15	Lincoln-Short Ferry	IB	1	13	2
		OB	3	13	2
27	Lincoln-North Hykeham	IB	5	35	5
		OB	5	35	5
29	Lincoln-Doddington	IB	1	6	1
		OB	1	6	2
31	Sleaford-Lincoln	IB	1	3	1
		OB	1	3	1
44	Lincoln-Birchwood	IB	4	24	4
		OB	4	24	4
46	Lincoln-Newark	IB	1	2	1
		OB	1	3	1
46A	Lincoln-Carlton Le Moorland	IB	0	1	1
		OB	0	2	1
66	Lincoln-Birchwood	IB	6	35	6
		OB	6	30	6
87	Lincoln-Newark	IB	1	2	1
		OB	0	2	1
100	Scunthorpe-Lincoln	IB	1	5	1
		OB	1	5	1
103	Lincoln-Scunthorpe	IB	1	3	1
		OB	1	3	1
106/107	Lincoln-Gainsborough	IB	1	3	1
		OB	1	3	2
777	Lincoln-Carltons	-	1	6	1

Appendix F – Calibration at Postcard Sites

AM Calibration

Site	Dir.	A Node	B Node	Obs. (pcu)	Mod. (pcu)	Abs Diff	% Diff	GEH	Pass on Flows	Pass on GEH
Inbound										
01	SB	5631	4135	642	580	62	-64%	2.5	✓	✓
02	SB	119512936	119527799	774	797	23	3%	0.8	✓	✓
03	NB	119537502	119529293	1042	1019	22	-2%	0.7	✓	✓
04	NB	119520663	119530689	652	809	157	24%	5.8	✗	✗
05	EB	119523255	119539035	329	434	105	32%	5.4	✗	✗
06	NB	119519586	119512782	1322	1171	151	-11%	4.3	✓	✓
07	WB	119545527	119516693	563	437	126	-22%	5.6	✗	✗
08	WB	119545520	119525748	443	504	61	14%	2.8	✓	✓
09	NB	119534819	119534820	1122	1157	36	3%	1.1	✓	✓
10	NB	119525785	119540776	458	409	49	-11%	2.4	✓	✓
11	NB	31	119536355	418	511	93	22%	4.3	✓	✓
11a	WB	119513147	119516945	329	285	44	-13%	2.5	✓	✓
12	EB	119512694	119532410	612	789	177	29%	6.7	✗	✗
Total				8,705	8,902	197	2%	2.1	✓	✓
Postcard Sites Passed									9/13	9/13
% Passed									69%	69%
Outbound										
01	NB	5631	4135	642	580	62	-64%	2.5	✓	✗
02	SB	119512936	119527799	774	797	23	3%	0.8	✓	✓
03	NB	119537502	119529293	1042	1019	22	-2%	0.7	✓	✗
04	NB	119520663	119530689	652	809	157	24%	5.8	✗	✓
05	EB	119523255	119539035	329	434	105	32%	5.4	✗	✓
06	NB	119519586	119512782	1322	1171	151	-11%	4.3	✓	✗
07	WB	119545527	119516693	563	437	126	-22%	5.6	✗	✓
08	WB	119545520	119525748	443	504	61	14%	2.8	✓	✓
09	NB	119534819	119534820	1122	1157	36	3%	1.1	✓	✓
10	NB	119525785	119540776	458	409	49	-11%	2.4	✓	✓
11	NB	31	119536355	418	511	93	22%	4.3	✓	✓
11a	WB	119513147	119516945	329	285	44	-13%	2.5	✓	✓
12	EB	119512694	119532410	481	475	6	-1%	0.3	✓	✓
Total				5,384	5,010	374	-7%	5.2	✓	✗
Postcard Sites Passed									11/13	10/13
% Passed									85%	77%

IP Calibration

Site	Dir.	A Node	B Node	Obs. (pcu)	Mod. (pcu)	Abs Diff	% Diff	GEH	Pass on Flows	Pass on GEH
Inbound										
01	SB	5631	4135	196	130	66	-0.34	5.2	✓	✗
02	SB	119512936	119527799	413	534	121	0.29	5.6	✗	✗
03	NB	119537502	119529293	578	582	4	0.01	0.2	✓	✓
04	NB	119520663	119530689	513	545	32	6%	1.4	✓	✓
05	EB	119523255	119539035	202	219	17	8%	1.2	✓	✓
06*	NB	119519586	119512782	822	822	0	0%	0.0	✓	✓
07	WB	119545527	119516693	199	169	30	-15%	2.2	✓	✓
08*	WB	119545520	119525748	223	223	0	0%	0.0	✓	✓
09	NB	119534819	119534820	641	678	38	6%	1.5	✓	✓
10	NB	119525785	119540776	455	415	41	-9%	1.9	✓	✓
11	NB	31	119536355	322	320	2	-1%	0.1	✓	✓
11a	WB	119513147	119516945	217	209	8	-4%	0.6	✓	✓
12	EB	119512694	119532410	540	577	37	7%	1.5	✓	✓
Total				5,322	5,423	100	0.02	1.4	✓	✓
Postcard Sites Passed									12/13	11/13
% Passed									92%	85%
Outbound										
01	NB	5631	4135	190	164	26	-14%	2.0	✓	✓
02	SB	119512936	119527799	434	537	103	24%	4.7	✗	✓
03	NB	119537502	119529293	553	452	101	-18%	4.5	✗	✓
04	NB	119520663	119530689	526	567	42	8%	1.8	✓	✓
05	EB	119523255	119539035	221	235	14	6%	0.9	✓	✓
06	NB	119519586	119512782	894	864	30	-3%	1.0	✓	✓
07	WB	119545527	119516693	211	169	42	-20%	3.1	✓	✓
08*	WB	119545520	119525748	163	163	0	0%	0.0	✓	✓
09	NB	119534819	119534820	758	767	9	1%	0.3	✓	✓
10	NB	119525785	119540776	426	461	35	8%	1.7	✓	✓
11	NB	31	119536355	319	408	88	28%	4.6	✓	✓
11a	WB	119513147	119516945	225	241	15	7%	1.0	✓	✓
12	EB	119512694	119532410	558	615	57	10%	2.3	✓	✓
Total				5,478	5,643	164	0.03	2.2	✓	✓
Postcard Sites Passed									11/13	13/13
% Passed									85%	100%

Note - * Denotes that count data was unavailable at these sites and so the observed count is set to equal the modelled count.

PM Calibration

Site	Dir.	A Node	B Node	Obs. (pcu)	Mod. (pcu)	Abs Diff	% Diff	GEH	Pass on Flows	Pass on GEH
Inbound										
01	SB	5631	4135	293	228	65	-0.22	4.0	✓	✓
02	SB	119512936	119527799	533	620	87	0.16	3.6	✓	✓
03	NB	119537502	119529293	597	644	46	0.08	1.9	✓	✓
04	NB	119520663	119530689	590	685	95	0.16	3.8	✓	✓
05	EB	119523255	119539035	277	379	102	0.37	5.6	✗	✗
06*	NB	119519586	119512782	1261	1261	0	0.00	0.0	✓	✓
07	WB	119545527	119516693	127	97	30	-0.24	2.8	✓	✓
08*	WB	119545520	119525748	272	272	0	0.00	0.0	✓	✓
09	NB	119534819	119534820	614	632	17	0.03	0.7	✓	✓
10	NB	119525785	119540776	473	491	18	0.04	0.8	✓	✓
11	NB	31	119536355	424	351	74	-0.17	3.7	✓	✓
11a	WB	119513147	119516945	402	327	75	-0.19	3.9	✓	✓
12	EB	119512694	119532410	542	575	33	0.06	1.4	✓	✓
Total				6,407	6,562	155	2%	1.9	✓	✓
Postcard Sites Passed									12/13	12/13
% Passed									92%	92%
Outbound										
01	NB	5631	4135	608	566	42	-0.07	1.7	✓	✓
02	SB	119512936	119527799	688	660	28	-0.04	1.1	✓	✓
03	NB	119537502	119529293	1025	750	275	-0.27	9.2	✗	✗
04	NB	119520663	119530689	749	541	208	-0.28	8.2	✗	✗
05	EB	119523255	119539035	292	230	62	-0.21	3.8	✓	✓
06	NB	119519586	119512782	1165	945	220	-0.19	6.8	✗	✗
07	WB	119545527	119516693	506	372	134	-0.27	6.4	✗	✗
08*	WB	119545520	119525748	295	295	0	0.00	0.0	✓	✓
09	NB	119534819	119534820	1354	1080	274	-0.20	7.9	✗	✗
10	NB	119525785	119540776	740	828	89	0.12	3.2	✓	✓
11	NB	31	119536355	538	649	111	0.21	4.6	✗	✓
11a	WB	119513147	119516945	236	259	23	0.10	1.5	✓	✓
12	EB	119512694	119532410	776	683	93	-0.12	3.4	✓	✓
Total				8,971	7,858	1113	-12%	12.1	✗	✗
Postcard Sites Passed									7/13	8/13
% Passed									54%	62%

Appendix G – Screenline Calibration / Validation

AM Screenline Summary

Screenline	Dir.	Obs (pcu)	Mod (pcu)	Abs Diff	% Diff	GEH	Pass on Flows	Pass on GEH
1	NB	1,767	1,638	129	-0.07	3.1	✓	✓
	SB	3,356	3,321	35	-0.01	0.6	✓	✓
2	EB	1,895	1,714	181	-0.10	4.2	✓	✗
	WB	3,723	3,451	272	-0.07	4.5	✓	✗
3	NB	1,371	1,362	9	-0.01	0.2	✓	✓
	SB	1,538	1,470	68	-0.04	1.8	✓	✓
4	EB	4,837	4,098	739	-0.15	11.1	✗	✗
	WB	3,237	2,869	368	-0.11	6.7	✓	✗
5	NB	5,272	5,522	251	0.05	3.4	✓	✓
	SB	4,212	4,588	376	0.09	5.7	✓	✗
6	EB	7,205	7,257	52	0.01	0.6	✓	✓
	WB	6,053	6,255	202	0.03	2.6	✓	✓
7	EB	5,555	5,464	91	-0.02	1.2	✓	✓
	WB	6,127	6,329	202	0.03	2.6	✓	✓
Screenlines Passed							13/14	9/14
Screenlines Pass Rate							93%	64%

AM Screenlines Calibration & Validation – Screenline 1

Road Name	A Node	B Node	Calibration/ Validation	Observed (pcu)	Modelled (pcu)	Abs Diff	% Diff	GEH	Pass on Flows	Pass on GEH
Screenline 1 - Northbound										
A57 Saxilby Rd	119530689	119520663	Calibration	346	356	10	0.03	0.5	✓	✓
Fen Ln	119538005	119523323	Validation	73	65	8	-0.11	1.0	✓	✓
B1398 Middle St	4135	5631	Calibration	166	98	69	-0.41	6.0	✓	✗
A15	119531101	4560	Calibration	520	669	149	0.29	6.1	✗	✗
A46 Lincoln Rd	119529293	119537502	Calibration	661	450	211	-0.32	8.9	✗	✗
Screenline Total				1,767	1,638	129	-0.07	3.1	✓	✓
Screenline 1 - Southbound										
A57 Saxilby Rd	119520663	119530689	Calibration	652	809	157	0.24	5.8	✗	✗
Fen Ln	119523323	119538005	Calibration	110	99	11	-0.10	1.1	✓	✓
B1398 Middle St	5631	4135	Calibration	642	580	62	-0.10	2.5	✓	✓
A15	4560	119531101	Calibration	910	814	96	-0.11	3.3	✓	✓
A46 Lincoln Rd	119537502	119529293	Calibration	1,042	1019	22	-0.02	0.7	✓	✓
Screenline Total				3,356	3,321	35	-0.01	0.6	✓	✓

AM Screenlines Calibration & Validation – Screenline 2

Road Name	A Node	B Node	Calibration/ Validation	Observed (pcu)	Modelled (pcu)	Abs Diff	% Diff	GEH	Pass on Flows	Pass on GEH
Screenline 2 - Eastbound										
A158 Wragby Rd	119532410	119512694	Calibration	481	475	6	-0.01	0.3	✓	✓
Hawthorn Rd	119545621	119531885	Calibration	259	152	108	-0.41	7.5	✗	✗
Greetwell Rd	119516693	119545527	Calibration	123	112	11	-0.09	1.0	✓	✓
B1190 Washingborough Rd	119525748	119545520	Calibration	124	119	5	-0.04	0.4	✓	✓
Heighington Rd	119524079	119521125	Validation	97	64	33	-0.34	3.7	✓	✓
B1188 Lincoln Rd	119542251	119545512	Calibration	296	276	20	-0.07	1.2	✓	✓
A15 Sleaford Rd	119542296	119545503	Calibration	514	517	2	0.00	0.1	✓	✓
Screenline Total				1,895	1,714	181	-0.10	4.2	✓	✗
Screenline 2 - Westbound										
A158 Wragby Rd	119512694	119532410	Calibration	612	789	177	0.29	6.7	✗	✗
Hawthorn Rd	119531885	119545621	Calibration	506	344	162	-0.32	7.9	✗	✗
Greetwell Rd	119545527	119516693	Calibration	563	437	126	-0.22	5.6	✗	✗
B1190 Washingborough Rd	119545520	119525748	Calibration	443	504	61	0.14	2.8	✓	✓
Heighington Rd	119521125	119524079	Calibration	307	110	197	-0.64	13.6	✗	✗
B1188 Lincoln Rd	119545512	119542251	Calibration	712	725	14	0.02	0.5	✓	✓
A15 Sleaford Rd	119545503	119542296	Calibration	580	542	38	-0.07	1.6	✓	✓
Screenline Total				3,723	3,451	272	-0.07	4.5	✓	✗

AM Screenlines Calibration & Validation – Screenline 3

Road Name	A Node	B Node	Calibration/ Validation	Observed (pcu)	Modelled (pcu)	Abs Diff	% Diff	GEH	Pass on Flows	Pass on GEH
Screenline 3 - Northbound										
Bloxholm Ln	119525811	119545622	Calibration	101	100	2	-0.02	0.2	✓	✓
A15 Sleaford Rd	119529229	119545504	Calibration	479	442	36	-0.08	1.7	✓	✓
A607 Grantham Rd	119535799	119544516	Calibration	428	395	33	-0.08	1.6	✓	✓
Brant Rd	119518650	119526790	Calibration	363	426	63	0.17	3.2	✓	✓
Screenline Total				1,371	1,362	9	-0.01	0.2	✓	✓
Screenline 3 - Southbound										
Bloxholm Ln	119545622	119525811	Validation	100	47	52	-0.53	6.1	✓	✗
A15 Sleaford Rd	119545504	119529229	Calibration	419	469	50	0.12	2.4	✓	✓
A607 Grantham Rd	119544516	119535799	Calibration	575	434	140	-0.24	6.2	✗	✗
Brant Rd	119526790	119518650	Calibration	444	519	75	0.17	3.4	✓	✓
Screenline Total				1,538	1,470	68	-0.04	1.8	✓	✓

AM Screenlines Calibration & Validation – Screenline 4

Road Name	A Node	B Node	Calibration/ Validation	Observed (pcu)	Modelled (pcu)	Abs Diff	% Diff	GEH	Pass on Flows	Pass on GEH
Screenline 4 - Eastbound										
Lincoln Rd	119513975	119524365	Calibration	392	433	41	0.10	2.0	✓	✓
A1434 Newark Rd	119531204	165	Calibration	636	593	44	-0.07	1.8	✓	✓
B1190 Doddington Rd	119545645	119530811	Validation	507	855	349	0.69	13.4	✗	✗
B1378 Skellingthorpe Rd	119536558	119516921	Validation	1,085	528	557	-0.51	19.6	✗	✗
A46	119514146	119536562	Calibration	1,962	1637	325	-0.17	7.7	✗	✗
A57 Saxilby Rd	119520663	119530689	Calibration	652	809	157	0.24	5.8	✗	✗
Fen Ln	119523323	119538005	Calibration	110	99	11	-0.10	1.1	✓	✓
Screenline Total				4,837	4,098	739	-0.15	11.1	✗	✗
Screenline 4 - Westbound										
Lincoln Rd	119524365	119513975	Calibration	308	273	35	-0.11	2.1	✓	✓
A1434 Newark Rd	165	119531204	Calibration	597	562	35	-0.06	1.5	✓	✓
B1190 Doddington Rd	119530811	119545645	Validation	728	1053	325	0.45	10.9	✗	✗
B1378 Skellingthorpe Rd	119516921	119536558	Validation	485	342	143	-0.30	7.0	✗	✗
A46	119531738	119529131	Calibration	1,428	1272	156	-0.11	4.3	✓	✓
A57 Saxilby Rd	119530689	119520663	Calibration	346	356	10	0.03	0.5	✓	✓
Fen Ln	119538005	119523323	Validation	73	65	8	-0.11	1.0	✓	✓
Screenline Total				3,237	2,869	368	-0.11	6.7	✓	✗

AM Screenlines Calibration & Validation – Screenline 5

Road Name	A Node	B Node	Calibration/ Validation	Observed (pcu)	Modelled (pcu)	Abs Diff	% Diff	GEH	Pass on Flows	Pass on GEH
Screenline 5 - Northbound										
A15 Canwick Rd	119532688	119522918	Calibration	1,994	2282	289	0.14	6.2	✓	✗
B1262 High St	119516576	119514127	Calibration	368	404	36	0.10	1.8	✓	✓
B1003 Brayford Wharf East	119517044	119518823	Validation	86	29	57	-0.66	7.5	✓	✗
Brayford Way	119526713	119527712	Calibration	862	1170	308	0.36	9.7	✗	✗
A46	119514146	119536562	Calibration	1,962	1637	325	-0.17	7.7	✗	✗
Screenline Total				5,272	5,522	251	0.05	3.4	✓	✓
Screenline 5 - Southbound										
A15 Canwick Rd	119522918	119532688	Calibration	1,216	1281	65	0.05	1.9	✓	✓
B1262 High St	119514127	119516576	Calibration	315	566	251	0.80	11.9	✗	✗
B1003 Brayford Wharf East	119518823	119517044	Calibration	206	562	356	1.72	18.1	✗	✗
Brayford Way	119527712	119526713	Calibration	1,046	907	140	-0.13	4.5	✓	✓
A46	119531738	119529131	Calibration	1,428	1272	156	-0.11	4.3	✓	✓
Screenline Total				4,212	4,588	376	0.09	5.7	✓	✗

AM Screenlines Calibration & Validation – Screenline 6

Road Name	A Node	B Node	Calibration/ Validation	Observed (pcu)	Modelled (pcu)	Abs Diff	% Diff	GEH	Pass on Flows	Pass on GEH
Screenline 6 - Eastbound										
A46	119529186	119528632	Validation	981	857	124	-0.13	4.1	✓	✓
Scopwick Pl	119524096	119536786	Validation	250	255	5	0.02	0.3	✓	✓
B1273 Longdales Rd	119527203	119545636	Validation	583	715	132	0.23	5.2	✗	✗
Broadway	119525820	119528801	Validation	139	139	0	0.00	0.0	✓	✓
Newport	119525571	119529003	Validation	352	218	134	-0.38	7.9	✗	✗
Mildmay St	119533604	119536871	Validation	31	74	43	1.36	5.9	✓	✗
Burton Rd	119518285	119515671	Validation	501	409	93	-0.18	4.3	✓	✓
Upper Long Leys Rd	119519544	119529869	Validation	19	0	19	-0.99	6.1	✓	✗
Carline Rd	119528366	119539263	Validation	87	32	55	-0.63	7.2	✓	✗
B1308 West Parade	119524201	119524200	Validation	424	339	85	-0.20	4.3	✓	✓
A57 Newland	119532301	119525809	Validation	879	1165	286	0.32	8.9	✗	✗
Brayford Wharf North	119534515	119514190	Validation	51	0	51	-1.00	10.1	✓	✗
B1003 Ropewalk	119541066	119528600	Validation	698	567	131	-0.19	5.2	✗	✗
Beevor St	119512888	119535466	Validation	165	143	21	-0.13	1.7	✓	✓
B1360 Valentine Rd	119518113	119519166	Validation	429	412	17	-0.04	0.8	✓	✓
Skellingthorpe Rd	119525974	5198	Validation	282	334	52	0.18	2.9	✓	✓
Moorland Ave	119526358	119536569	Validation	263	263	0	0.00	0.0	✓	✓
B1190 Doddington Rd	119532776	119534353	Validation	181	75	106	-0.59	9.4	✗	✗
A1434 Newark Rd	119526471	171	Validation	462	832	371	0.80	14.6	✗	✗
Hykeham Rd	119538384	119521800	Validation	429	429	0	0.00	0.0	✓	✓
A46	119514146	119536562	Calibration	1,962	1637	325	-0.17	7.7	✗	✗
Screenline Total				7205	7257	52	0.01	0.6	✓	✓

Road Name	A Node	B Node	Calibration/ Validation	Observed (pcu)	Modelled (pcu)	Abs Diff	% Diff	GEH	Pass on Flows	Pass on GEH
Screenline 6 - Westbound										
A46	119528632	119529186	Validation	805	916	111	0.14	3.8	✓	✓
Scopwick Pl	119536786	119524096	Validation	213	166	48	-0.22	3.5	✓	✓
B1273 Longdales Rd	119545636	119527203	Validation	763	665	98	-0.13	3.7	✓	✓
Broadway	119528801	119525820	Validation	28	28	0	0.00	0.0	✓	✓
Newport	119529003	119525571	Validation	127	127	0	0.00	0.0	✓	✓
Mildmay St	119536871	119533604	Validation	72	72	0	0.00	0.0	✓	✓
Burton Rd	119515671	119518285	Validation	37	37	0	0.00	0.0	✓	✓
Upper Long Leys Rd	119529869	119519544	Validation	105	105	0	0.00	0.0	✓	✓
Carline Rd	119539263	119528366	Validation	33	33	0	0.00	0.0	✓	✓
B1308 West Parade	119524200	119524201	Validation	393	736	343	0.87	14.4	✗	✗
A57 Newland	119525809	119532301	Validation	490	288	202	-0.41	10.2	✗	✗
Brayford Wharf North	119514190	119534515	Validation	11	0	11	-1.00	4.7	✓	✓
B1003 Ropewalk	119528600	119524325	Validation	294	740	446	1.52	19.6	✗	✗
Beevor St	119535466	119512888	Validation	78	70	9	-0.11	1.0	✓	✓
B1360 Valentine Rd	119519166	119518113	Validation	676	315	361	-0.53	16.2	✗	✗
Skellingthorpe Rd	5198	119525974	Validation	278	328	50	0.18	2.9	✓	✓
Moorland Ave	119536569	119526358	Validation	365	365	0	0.00	0.0	✓	✓
B1190 Doddington Rd	119534353	119532776	Validation	428	445	18	0.04	0.8	✓	✓
A1434 Newark Rd	171	119526471	Validation	300	263	37	-0.12	2.2	✓	✓
Hykeham Rd	119521800	119538384	Validation	555	555	0	0.00	0.0	✓	✓
Screenline Total				6053	6255	202	0.03	2.6	✓	✓

AM Screenlines Calibration & Validation – Screenline 7

Road Name	A Node	B Node	Calibration/ Validation	Observed (pcu)	Modelled (pcu)	Abs Diff	% Diff	GEH	Pass on Flows	Pass on GEH
Screenline 7 - Eastbound										
A158	119516326	119515142	Calibration	820	607	212	-0.26	7.9	✘	✘
Wolsey Way	119519162	5124	Validation	133	133	0	0.00	0.0	✓	✓
Outer Circle Dr	119519672	119529037	Calibration	301	269	32	-0.11	1.9	✓	✓
Oval Approach	119535701	119514617	Validation	56	56	0	0.00	0.0	✓	✓
B1182 Ruskin Ave	119513411	119515357	Calibration	565	580	14	0.03	0.6	✓	✓
Byron Ave	119524094	119524093	Validation	99	99	0	0.00	0.0	✓	✓
Lee Rd	119534350	119536525	Validation	512	512	0	0.00	0.0	✓	✓
East Gate	119524011	119526595	Validation	77	77	0	0.00	0.0	✓	✓
A15 Wragby Rd	119529580	119523371	Validation	972	972	0	0.00	0.0	✓	✓
B1308 Monks Rd	119524816	119517474	Calibration	467	550	83	0.18	3.7	✓	✓
Croft St	119516165	119522506	Calibration	155	0	155	-1.00	17.6	✘	✘
Waterside North	119535794	119527059	Validation	26	58	32	1.21	4.9	✓	✓
Waterside South	119537117	119541695	Validation	53	138	85	1.60	8.7	✓	✘
Great Northern Terrace	119521029	119531615	Calibration	319	438	118	0.37	6.1	✘	✘
Washingborough Rd	119534820	3533	Calibration	125	119	6	-0.05	0.5	✓	✓
Heightington Rd	119518310	2821	Validation	64	64	0	0.00	0.0	✓	✓
B1188 Lincoln Rd	119542251	119545512	Calibration	296	276	20	-0.07	1.2	✓	✓
A15 London Rd	119542296	119545503	Calibration	514	517	2	0.00	0.1	✓	✓
Screenline Total				5555	5464	91	-0.02	1.2	✓	✓

Road Name	A Node	B Node	Calibration/ Validation	Observed (pcu)	Modelled (pcu)	Abs Diff	% Diff	GEH	Pass on Flows	Pass on GEH
Screenline 7 - Westbound										
A158	119515142	119516326	Calibration	675	483	191	-0.28	7.9	✘	✘
Wolsey Way	5124	119519162	Validation	194	194	0	0.00	0.0	✓	✓
Outer Circle Dr	119529037	119519672	Calibration	182	151	31	-0.17	2.4	✓	✓
Oval Approach	119514617	119535701	Validation	63	63	0	0.00	0.0	✓	✓
B1182 Ruskin Ave	119515357	119513411	Calibration	808	453	355	-0.44	14.1	✘	✘
Byron Ave	119524093	119524094	Validation	35	35	0	0.00	0.0	✓	✓
Lee Rd	119536525	119534350	Validation	219	219	0	0.00	0.0	✓	✓
East Gate	119526595	119524011	Calibration	224	108	117	-0.52	9.1	✘	✘
A15 Wragby Rd	119523371	119529580	Calibration	625	1421	796	1.27	24.9	✘	✘
Lindum Terrace	119533260	119537871	Validation	106	0	105	-1.00	14.4	✘	✘
B1308 Monks Rd	119517474	119524816	Calibration	349	610	261	0.75	11.9	✘	✘
Croft St	119522506	119516165	Calibration	351	281	70	-0.20	3.9	✓	✓
Waterside North	119527059	119535794	Calibration	147	218	71	0.49	5.3	✓	✘
Waterside South	119541695	119537117	Calibration	178	62	116	-0.65	10.5	✘	✘
Great Northern Terrace	119531615	119521029	Calibration	122	150	28	0.23	2.4	✓	✓
Washingborough Rd	3533	119534820	Calibration	448	504	56	0.12	2.6	✓	✓
Heightington Rd	2821	119518310	Validation	110	110	0	0.00	0.0	✓	✓
B1188 Lincoln Rd	119545512	119542251	Calibration	712	725	14	0.02	0.5	✓	✓
A15 London Rd	119545503	119542296	Calibration	580	542	38	-0.07	1.6	✓	✓
Screenline Total				6127	6329	202	0.03	2.6	✓	✓

IP Screenline Summary

Screenline	Dir.	Obs (pcu)	Mod (pcu)	Abs Diff	% Diff	GEH	Pass on Flows	Pass on GEH
1	NB	1,814	1,849	35	0.02	0.8	✓	✓
	SB	1,840	1,818	21	-0.01	0.5	✓	✓
2	EB	1,929	1,965	36	0.02	0.8	✓	✓
	WB	1,843	1,895	52	0.03	1.2	✓	✓
3	NB	855	881	25	0.03	0.9	✓	✓
	SB	1,021	1,048	27	0.03	0.8	✓	✓
4	EB	3,512	3,545	33	0.01	0.6	✓	✓
	WB	3,617	3,617	0	0.00	0.0	✓	✓
5	NB	3,510	4,015	505	0.14	8.2	✗	✗
	SB	3,904	4,520	615	0.16	9.5	✗	✗
6	EB	5,594	5,272	322	-0.06	4.4	✓	✗
	WB	5,472	5,371	101	-0.02	1.4	✓	✓
7	EB	4,803	4,721	82	-0.02	1.2	✓	✓
	WB	5,318	5,123	196	-0.04	2.7	✓	✓
Screenlines Passed							12/14	12/14
Screenlines Pass Rate							86%	86%

IP Screenlines Calibration & Validation – Screenline 1

Road Name	A Node	B Node	Calibration/ Validation	Observed (pcu)	Modelled (pcu)	Abs Diff	% Diff	GEH	Pass on Flows	Pass on GEH
Screenline 1 - Northbound										
A57 Saxilby Rd	119530689	119520663	Calibration	526	567	42	0.1	1.8	✓	✓
Fen Ln	119538005	119523323	Validation	40	0	40	-1.0	8.9	✓	✗
B1398 Middle St	4135	5631	Calibration	190	164	26	-0.1	2.0	✓	✓
A15	119531101	4560	Calibration	506	666	160	0.3	6.6	✗	✗
A46 Lincoln Rd	119529293	119537502	Calibration	553	452	101	-0.2	4.5	✗	✓
Screenline Total				1,814	1,849	35	0.02	0.8	✓	✓
Screenline 1 - Southbound										
A57 Saxilby Rd	119520663	119530689	Calibration	513	545	32	0.1	1.4	✓	✓
Fen Ln	119523323	119538005	Calibration	43	0	43	-1.0	9.3	✓	✗
B1398 Middle St	5631	4135	Calibration	196	130	66	-0.3	5.2	✓	✗
A15	4560	119531101	Calibration	509	561	52	0.1	2.3	✓	✓
A46 Lincoln Rd	119537502	119529293	Calibration	578	582	4	0.0	0.2	✓	✓
Screenline Total				1,840	1,818	21	-0.01	0.5	✓	✓

IP Screenlines Calibration & Validation – Screenline 2

Road Name	A Node	B Node	Calibration/ Validation	Observed (pcu)	Modelled (pcu)	Abs Diff	% Diff	GEH	Pass on Flows	Pass on GEH
Screenline 2 - Eastbound										
A158 Wragby Rd	119532410	119512694	Calibration	558	615	57	0.1	2.3	✓	✓
Hawthorn Rd	119545621	119531885	Calibration	143	143	0	0.0	0.0	✓	✓
Greetwell Rd	119516693	119545527	Calibration	211	169	42	-0.2	3.1	✓	✓
B1190 Washingborough Rd	119525748	119545520	Calibration	163	163	0	0.0	0.0	✓	✓
Heighington Rd	119524079	119521125	Validation	159	124	35	-0.2	3.0	✓	✓
B1188 Lincoln Rd	119542251	119545512	Calibration	387	379	8	0.0	0.4	✓	✓
A15 Sleaford Rd	119542296	119545503	Calibration	308	373	65	0.2	3.5	✓	✓
Screenline Total				1,929	1,965	36	0.02	0.8	✓	✓
Screenline 2 - Westbound										
A158 Wragby Rd	119512694	119532410	Calibration	540	577	37	0.1	1.5	✓	✓
Hawthorn Rd	119531885	119545621	Calibration	122	122	0	0.0	0.0	✓	✓
Greetwell Rd	119545527	119516693	Calibration	199	169	30	-0.2	2.2	✓	✓
B1190 Washingborough Rd	119545520	119525748	Calibration	223	223	0	0.0	0.0	✓	✓
Heighington Rd	119521125	119524079	Calibration	94	95	1	0.0	0.1	✓	✓
B1188 Lincoln Rd	119545512	119542251	Calibration	371	356	15	0.0	0.8	✓	✓
A15 Sleaford Rd	119545503	119542296	Calibration	294	353	59	0.2	3.3	✓	✓
Screenline Total				1,843	1,895	52	0.03	1.2	✓	✓

IP Screenlines Calibration & Validation – Screenline 3

Road Name	A Node	B Node	Calibration/ Validation	Observed (pcu)	Modelled (pcu)	Abs Diff	% Diff	GEH	Pass on Flows	Pass on GEH
Screenline 3 - Northbound										
Bloxholm Ln	119525811	119545622	Calibration	37	32	5	-0.1	0.8	✓	✓
A15 Sleaford Rd	119529229	119545504	Calibration	258	321	63	0.2	3.7	✓	✓
A607 Grantham Rd	119535799	119544516	Calibration	322	263	59	-0.2	3.4	✓	✓
Brant Rd	119518650	119526790	Calibration	238	264	26	0.1	1.6	✓	✓
Screenline Total				855	881	25	0.03	0.9	✓	✓
Screenline 3 - Southbound										
Bloxholm Ln	119545622	119525811	Validation	43	18	25	-0.6	4.6	✓	✓
A15 Sleaford Rd	119545504	119529229	Calibration	265	355	89	0.3	5.1	✓	✗
A607 Grantham Rd	119544516	119535799	Calibration	301	265	37	-0.1	2.2	✓	✓
Brant Rd	119526790	119518650	Calibration	411	411	0	0.0	0.0	✓	✓
Screenline Total				1,021	1,048	27	0.03	0.8	✓	✓

IP Screenlines Calibration & Validation – Screenline 4

Road Name	A Node	B Node	Calibration/ Validation	Observed (pcu)	Modelled (pcu)	Abs Diff	% Diff	GEH	Pass on Flows	Pass on GEH
Screenline 4 - Eastbound										
Lincoln Rd	119513975	119524365	Calibration	283	309	25	0.1	1.5	✓	✓
A1434 Newark Rd	119531204	165	Calibration	650	543	107	-0.2	4.4	✗	✓
B1190 Doddington Rd	119545645	119530811	Validation	553	695	142	0.3	5.7	✗	✗
B1378 Skellingthorpe Rd	119536558	119516921	Validation	389	377	12	0.0	0.6	✓	✓
A46	119514146	119536562	Calibration	1080	1075	4	0.0	0.1	✓	✓
A57 Saxilby Rd	119520663	119530689	Calibration	513	545	32	0.1	1.4	✓	✓
Fen Ln	119523323	119538005	Calibration	43	0	43	-1.0	9.3	✓	✗
Screenline Total				3,512	3,545	33	0.01	0.6	✓	✓
Screenline 4 - Westbound										
Lincoln Rd	119524365	119513975	Calibration	274	228	46	-0.2	2.9	✓	✓
A1434 Newark Rd	165	119531204	Calibration	622	463	159	-0.3	6.8	✗	✗
B1190 Doddington Rd	119530811	119545645	Validation	573	747	174	0.3	6.8	✗	✗
B1378 Skellingthorpe Rd	119516921	119536558	Validation	483	350	132	-0.3	6.5	✗	✗
A46	119531738	119529131	Calibration	1100	1261	161	0.1	4.7	✓	✓
A57 Saxilby Rd	119530689	119520663	Calibration	526	567	42	0.1	1.8	✓	✓
Fen Ln	119538005	119523323	Validation	40	0	40	-1.0	8.9	✓	✗
Screenline Total				3,617	3,617	0	0.00	0.0	✓	✓

IP Screenlines Calibration & Validation – Screenline 5

Road Name	A Node	B Node	Calibration/ Validation	Observed (pcu)	Modelled (pcu)	Abs Diff	% Diff	GEH	Pass on Flows	Pass on GEH
Screenline 5 - Northbound										
A15 Canwick Rd	119532688	119522918	Calibration	1202	1443	241	0.2	6.6	✗	✗
B1262 High St	119516576	119514127	Calibration	279	352	72	0.3	4.1	✓	✓
B1003 Brayford Wharf East	119517044	119518823	Validation	104	0	104	-1.0	14.4	✗	✗
Brayford Way	119526713	119527712	Calibration	845	1145	300	0.4	9.5	✗	✗
A46	119514146	119536562	Calibration	1080	1075	4	0.0	0.1	✓	✓
Screenline Total				3,510	4,015	505	0.14	8.2	✗	✗
Screenline 5 - Southbound										
A15 Canwick Rd	119522918	119532688	Calibration	1341	1335	7	0.0	0.2	✓	✓
B1262 High St	119514127	119516576	Calibration	306	609	303	1.0	14.2	✗	✗
B1003 Brayford Wharf East	119518823	119517044	Calibration	259	433	174	0.7	9.3	✗	✗
Brayford Way	119527712	119526713	Calibration	899	883	16	0.0	0.5	✓	✓
A46	119531738	119529131	Calibration	1100	1261	161	0.1	4.7	✓	✓
Screenline Total				3,904	4,520	615	0.16	9.5	✗	✗

IP Screenlines Calibration & Validation – Screenline 6

Road Name	A Node	B Node	Calibration/ Validation	Observed (pcu)	Modelled (pcu)	Abs Diff	% Diff	GEH	Pass on Flows	Pass on GEH
Screenline 6 - Eastbound										
A46	119529186	119528632	Validation	821	720	100	-0.1	3.6	✓	✓
Scopwick Pl	119524096	119536786	Validation	179	173	6	0.0	0.4	✓	✓
B1273 Longdales Rd	119527203	119545636	Validation	576	528	49	-0.1	2.1	✓	✓
Broadway	119525820	119528801	Validation	1	1	0	0.0	0.0	✓	✓
Newport	119525571	119529003	Validation	104	104	0	0.0	0.0	✓	✓
Mildmay St	119533604	119536871	Validation	45	45	0	0.0	0.0	✓	✓
Burton Rd	119518285	119515671	Validation	160	160	0	0.0	0.0	✓	✓
Upper Long Leys Rd	119519544	119529869	Validation	0	0	0	0.0	0.0	✓	✓
Carline Rd	119528366	119539263	Validation	11	11	0	0.0	0.0	✓	✓
B1308 West Parade	119524201	119524200	Validation	298	368	69	0.2	3.8	✓	✓
A57 Newland	119532301	119525809	Validation	704	817	113	0.2	4.1	✗	✓
Brayford Wharf North	119534515	119514190	Validation	6	0	6	-1.0	3.6	✓	✓
B1003 Ropewalk	119541066	119528600	Validation	525	377	147	-0.3	6.9	✗	✗
Beevor St	119512888	119535466	Validation	68	169	100	1.5	9.2	✗	✗
B1360 Valentine Rd	119518113	119519166	Validation	601	323	277	-0.5	12.9	✗	✗
Skellingthorpe Rd	119525974	5198	Validation	307	290	16	-0.1	0.9	✓	✓
Moorland Ave	119526358	119536569	Validation	239	239	0	0.0	0.0	✓	✓
B1190 Doddington Rd	119532776	119534353	Validation	255	218	37	-0.1	2.4	✓	✓
A1434 Newark Rd	119526471	171	Validation	402	437	35	0.1	1.7	✓	✓
Hykeham Rd	119538384	119521800	Validation	291	291	0	0.0	0.0	✓	✓
A46	119514146	119536562	Calibration	821	720	100	-0.1	3.6	✓	✓
Screenline Total				5594	5272	322	-0.06	4.4	✓	✗

Road Name	A Node	B Node	Calibration/ Validation	Observed (pcu)	Modelled (pcu)	Abs Diff	% Diff	GEH	Pass on Flows	Pass on GEH
Screenline 6 - Westbound										
A46	119528632	119529186	Validation	885	958	73	0.1	2.4	✓	✓
Scopwick Pl	119536786	119524096	Validation	177	138	39	-0.2	3.1	✓	✓
B1273 Longdales Rd	119545636	119527203	Validation	545	591	46	0.1	1.9	✓	✓
Broadway	119528801	119525820	Validation	12	12	0	0.0	0.0	✓	✓
Newport	119529003	119525571	Validation	179	179	0	0.0	0.0	✓	✓
Mildmay St	119536871	119533604	Validation	50	50	0	0.0	0.0	✓	✓
Burton Rd	119515671	119518285	Validation	72	72	0	0.0	0.0	✓	✓
Upper Long Leys Rd	119529869	119519544	Validation	72	72	0	0.0	0.0	✓	✓
Carline Rd	119539263	119528366	Validation	20	20	0	0.0	0.0	✓	✓
B1308 West Parade	119524200	119524201	Validation	390	676	286	0.7	12.4	✗	✗
A57 Newland	119525809	119532301	Validation	427	258	169	-0.4	9.1	✗	✗
Brayford Wharf North	119514190	119534515	Validation	7	0	7	-1.0	3.8	✓	✓
B1003 Ropewalk	119528600	119524325	Validation	602	682	80	0.1	3.2	✓	✓
Beevor St	119535466	119512888	Validation	78	170	92	1.2	8.3	✓	✗
B1360 Valentine Rd	119519166	119518113	Validation	579	305	275	-0.5	13.1	✗	✗
Skellingthorpe Rd	5198	119525974	Validation	271	280	10	0.0	0.6	✓	✓
Moorland Ave	119536569	119526358	Validation	146	146	0	0.0	0.0	✓	✓
B1190 Doddington Rd	119534353	119532776	Validation	272	268	4	0.0	0.2	✓	✓
A1434 Newark Rd	171	119526471	Validation	399	205	194	-0.5	11.2	✗	✗
Hykeham Rd	119521800	119538384	Validation	289	289	0	0.0	0.0	✓	✓
Screenline Total				5472	5371	101	-0.02	1.4	✓	✓

IP Screenlines Calibration & Validation – Screenline 7

Road Name	A Node	B Node	Calibration/ Validation	Observed (pcu)	Modelled (pcu)	Abs Diff	% Diff	GEH	Pass on Flows	Pass on GEH
Screenline 7 - Eastbound										
A158	119516326	119515142	Calibration	644	639	5	0.0	0.2	✓	✓
Wolsey Way	119519162	5124	Validation	130	130	0	0.0	0.0	✓	✓
Outer Circle Dr	119519672	119529037	Calibration	262	136	126	-0.5	8.9	✗	✗
Oval Approach	119535701	119514617	Validation	18	18	0	0.0	0.0	✓	✓
B1182 Ruskin Ave	119513411	119515357	Calibration	511	451	60	-0.1	2.7	✓	✓
Byron Ave	119524094	119524093	Validation	23	23	0	0.0	0.0	✓	✓
Lee Rd	119534350	119536525	Validation	344	344	0	0.0	0.0	✓	✓
East Gate	119524011	119526595	Validation	96	96	0	0.0	0.0	✓	✓
A15 Wragby Rd	119529580	119523371	Validation	890	890	0	0.0	0.0	✓	✓
B1308 Monks Rd	119524816	119517474	Calibration	417	460	43	0.1	2.1	✓	✓
Croft St	119516165	119522506	Calibration	182	55	127	-0.7	11.7	✗	✗
Waterside North	119535794	119527059	Validation	12	88	76	6.6	10.8	✓	✗
Waterside South	119537117	119541695	Validation	51	85	34	0.7	4.2	✓	✓
Great Northern Terrace	119521029	119531615	Calibration	231	268	37	0.2	2.3	✓	✓
Washingborough Rd	119534820	3533	Calibration	175	163	12	-0.1	0.9	✓	✓
Heightington Rd	119518310	2821	Validation	124	124	0	0.0	0.0	✓	✓
B1188 Lincoln Rd	119542251	119545512	Calibration	387	379	8	0.0	0.4	✓	✓
A15 London Rd	119542296	119545503	Calibration	308	373	65	0.2	3.5	✓	✓
Screenline Total				4803	4721	82	-0.02	1.2	✓	✓

Road Name	A Node	B Node	Calibration/ Validation	Observed (pcu)	Modelled (pcu)	Abs Diff	% Diff	GEH	Pass on Flows	Pass on GEH
Screenline 7 - Westbound										
A158	119515142	119516326	Calibration	700	657	43	-0.1	1.6	✓	✓
Wolsey Way	5124	119519162	Validation	140	140	0	0.0	0.0	✓	✓
Outer Circle Dr	119529037	119519672	Calibration	351	246	105	-0.3	6.1	✗	✗
Oval Approach	119514617	119535701	Validation	25	25	0	0.0	0.0	✓	✓
B1182 Ruskin Ave	119515357	119513411	Calibration	526	371	155	-0.3	7.3	✗	✗
Byron Ave	119524093	119524094	Validation	23	23	0	0.0	0.0	✓	✓
Lee Rd	119536525	119534350	Validation	157	157	0	0.0	0.0	✓	✓
East Gate	119526595	119524011	Calibration	114	114	0	0.0	0.0	✓	✓
A15 Wragby Rd	119523371	119529580	Calibration	1104	1104	0	0.0	0.0	✓	✓
Lindum Terrace	119533260	119537871	Validation	67	121	53	0.8	5.5	✓	✗
B1308 Monks Rd	119517474	119524816	Calibration	480	477	4	0.0	0.2	✓	✓
Croft St	119522506	119516165	Calibration	224	240	15	0.1	1.0	✓	✓
Waterside North	119527059	119535794	Calibration	141	199	58	0.4	4.4	✓	✓
Waterside South	119541695	119537117	Calibration	56	82	27	0.5	3.2	✓	✓
Great Northern Terrace	119531615	119521029	Calibration	214	140	74	-0.3	5.6	✓	✗
Washingborough Rd	3533	119534820	Calibration	236	223	13	-0.1	0.8	✓	✓
Heightington Rd	2821	119518310	Validation	95	95	0	0.0	0.0	✓	✓
B1188 Lincoln Rd	119545512	119542251	Calibration	371	356	15	0.0	0.8	✓	✓
A15 London Rd	119545503	119542296	Calibration	294	353	59	0.2	3.3	✓	✓
Screenline Total				5318	5123	196	-0.04	2.7	✓	✓

PM Screenline Summary

Screenline	Dir.	Obs (pcu)	Mod (pcu)	Abs Diff	% Diff	GEH	Pass on Flows	Pass on GEH
1	NB	3,264	2,878	386	-0.12	7.0	✓	✗
	SB	2,302	2,219	83	-0.04	1.7	✓	✓
2	EB	3,385	3,029	356	-0.11	6.3	✓	✗
	WB	1,875	1,938	63	0.03	1.4	✓	✓
3	NB	1,396	1,376	20	-0.01	0.5	✓	✓
	SB	1,492	1,383	109	-0.07	2.9	✓	✓
4	EB	4,687	4,524	163	-0.03	2.4	✓	✓
	WB	4,963	4,250	713	-0.14	10.5	✗	✗
5	NB	4,358	4,238	120	-0.03	1.8	✓	✓
	SB	5,269	5,387	119	0.02	1.6	✓	✓
6	EB	6,843	6,098	745	-0.11	9.3	✗	✗
	WB	6,474	6,319	155	-0.02	1.9	✓	✓
7	EB	6,275	5,531	743	-0.12	9.7	✗	✗
	WB	6,299	5,687	612	-0.10	7.9	✗	✗
Screenlines Passed							10/14	8/14
Screenlines Pass Rate							71%	57%

PM Screenlines Calibration & Validation – Screenline 1

Road Name	A Node	B Node	Calibration/ Validation	Observed (pcu)	Modelled (pcu)	Abs Diff	% Diff	GEH	Pass on Flows	Pass on GEH
Screenline 1 – Northbound										
A57 Saxilby Rd	119530689	119520663	Calibration	749	541	208	-0.3	8.2	✘	✘
Fen Ln	119538005	119523323	Validation	81	56	25	-0.3	3.0	✓	✓
B1398 Middle St	4135	5631	Calibration	608	566	42	-0.1	1.7	✓	✓
A15	119531101	4560	Calibration	801	965	164	0.2	5.5	✘	✘
A46 Lincoln Rd	119529293	119537502	Calibration	1025	750	275	-0.3	9.2	✘	✘
Screenline Total				3,264	2,878	386	-0.12	7.0	✓	✘
Screenline 1 – Southbound										
A57 Saxilby Rd	119520663	119530689	Calibration	590	685	95	0.2	3.8	✓	✓
Fen Ln	119523323	119538005	Calibration	117	44	73	-0.6	8.1	✓	✘
B1398 Middle St	5631	4135	Calibration	293	228	65	-0.2	4.0	✓	✓
A15	4560	119531101	Calibration	705	618	86	-0.1	3.4	✓	✓
A46 Lincoln Rd	119537502	119529293	Calibration	597	644	46	0.1	1.9	✓	✓
Screenline Total				2,302	2,219	83	-0.04	1.7	✓	✓

PM Screenlines Calibration & Validation – Screenline 2

Road Name	A Node	B Node	Calibration/ Validation	Observed (pcu)	Modelled (pcu)	Abs Diff	% Diff	GEH	Pass on Flows	Pass on GEH
Screenline 2 - Eastbound										
A158 Wragby Rd	119532410	119512694	Calibration	776	683	93	-0.1	3.4	✓	✓
Hawthorn Rd	119545621	119531885	Calibration	229	229	0	0.0	0.0	✓	✓
Greetwell Rd	119516693	119545527	Calibration	506	372	134	-0.3	6.4	✗	✗
B1190 Washingborough Rd	119525748	119545520	Calibration	295	295	0	0.0	0.0	✓	✓
Heighington Rd	119524079	119521125	Validation	343	245	98	-0.3	5.7	✓	✗
B1188 Lincoln Rd	119542251	119545512	Calibration	681	650	32	0.0	1.2	✓	✓
A15 Sleaford Rd	119542296	119545503	Calibration	555	555	0	0.0	0.0	✓	✓
Screenline Total				3,385	3,029	356	-0.11	6.3	✓	✗
Screenline 2 - Westbound										
A158 Wragby Rd	119512694	119532410	Calibration	542	575	33	0.1	1.4	✓	✓
Hawthorn Rd	119531885	119545621	Calibration	108	108	0	0.0	0.0	✓	✓
Greetwell Rd	119545527	119516693	Calibration	127	97	30	-0.2	2.8	✓	✓
B1190 Washingborough Rd	119545520	119525748	Calibration	272	272	0	0.0	0.0	✓	✓
Heighington Rd	119521125	119524079	Calibration	88	88	0	0.0	0.0	✓	✓
B1188 Lincoln Rd	119545512	119542251	Calibration	349	337	12	0.0	0.6	✓	✓
A15 Sleaford Rd	119545503	119542296	Calibration	388	461	72	0.2	3.5	✓	✓
Screenline Total				1,875	1,938	63	0.03	1.4	✓	✓

PM Screenlines Calibration & Validation – Screenline 3

Road Name	A Node	B Node	Calibration/ Validation	Observed (pcu)	Modelled (pcu)	Abs Diff	% Diff	GEH	Pass on Flows	Pass on GEH
Screenline 3 - Northbound										
Bloxholm Ln	119525811	119545622	Calibration	76	68	8	-0.1	1.0	✓	✓
A15 Sleaford Rd	119529229	119545504	Calibration	312	393	81	0.3	4.3	✓	✓
A607 Grantham Rd	119535799	119544516	Calibration	545	486	59	-0.1	2.6	✓	✓
Brant Rd	119518650	119526790	Calibration	463	429	34	-0.1	1.6	✓	✓
Screenline Total				1,396	1,376	20	-0.01	0.5	✓	✓
Screenline 3 - Southbound										
Bloxholm Ln	119545622	119525811	Validation	108	69	40	-0.4	4.2	✓	✓
A15 Sleaford Rd	119545504	119529229	Calibration	447	487	40	0.1	1.9	✓	✓
A607 Grantham Rd	119544516	119535799	Calibration	500	391	109	-0.2	5.2	✗	✗
Brant Rd	119526790	119518650	Calibration	437	437	0	0.0	0.0	✓	✓
Screenline Total				1,492	1,383	109	-0.07	2.9	✓	✓

PM Screenlines Calibration & Validation – Screenline 4

Road Name	A Node	B Node	Calibration/ Validation	Observed (pcu)	Modelled (pcu)	Abs Diff	% Diff	GEH	Pass on Flows	Pass on GEH
Screenline 4 - Eastbound										
Lincoln Rd	119513975	119524365	Calibration	351	400	49	0.1	2.5	✓	✓
A1434 Newark Rd	119531204	165	Calibration	776	587	189	-0.2	7.2	✗	✗
B1190 Doddington Rd	119545645	119530811	Validation	670	825	156	0.2	5.7	✗	✗
B1378 Skellingthorpe Rd	119536558	119516921	Validation	398	668	270	0.7	11.7	✗	✗
A46	119514146	119536562	Calibration	1786	1315	471	-0.3	12.0	✗	✗
A57 Saxilby Rd	119520663	119530689	Calibration	590	685	95	0.2	3.8	✓	✓
Fen Ln	119523323	119538005	Calibration	117	44	73	-0.6	8.1	✓	✗
Screenline Total				4,687	4,524	163	-0.03	2.4	✓	✓
Screenline 4 - Westbound										
Lincoln Rd	119524365	119513975	Calibration	359	264	95	-0.3	5.4	✓	✗
A1434 Newark Rd	165	119531204	Calibration	665	457	208	-0.3	8.8	✗	✗
B1190 Doddington Rd	119530811	119545645	Validation	649	904	254	0.4	9.1	✗	✗
B1378 Skellingthorpe Rd	119516921	119536558	Validation	587	468	119	-0.2	5.2	✗	✗
A46	119531738	119529131	Calibration	1873	1560	313	-0.2	7.5	✗	✗
A57 Saxilby Rd	119530689	119520663	Calibration	749	541	208	-0.3	8.2	✗	✗
Fen Ln	119538005	119523323	Validation	81	56	25	-0.3	3.0	✓	✓
Screenline Total				4,963	4,250	713	-0.14	10.5	✗	✗

PM Screenlines Calibration & Validation – Screenline 5

Road Name	A Node	B Node	Calibration/ Validation	Observed (pcu)	Modelled (pcu)	Abs Diff	% Diff	GEH	Pass on Flows	Pass on GEH
Screenline 5 - Northbound										
A15 Canwick Rd	119532688	119522918	Calibration	1146	1367	221	0.2	6.2	x	x
B1262 High St	119516576	119514127	Calibration	295	362	67	0.2	3.7	✓	✓
B1003 Brayford Wharf East	119517044	119518823	Validation	104	0	104	-1.0	14.4	x	x
Brayford Way	119526713	119527712	Calibration	1027	1194	167	0.2	5.0	x	x
A46	119514146	119536562	Calibration	1786	1315	471	-0.3	12.0	x	x
Screenline Total				4,358	4,238	120	-0.03	1.8	✓	✓
Screenline 5 - Southbound										
A15 Canwick Rd	119522918	119532688	Calibration	1774	1655	119	-0.1	2.9	✓	✓
B1262 High St	119514127	119516576	Calibration	282	664	382	1.4	17.6	x	x
B1003 Brayford Wharf East	119518823	119517044	Calibration	262	562	300	1.1	14.8	x	x
Brayford Way	119527712	119526713	Calibration	1077	945	132	-0.1	4.1	✓	✓
A46	119531738	119529131	Calibration	1873	1560	313	-0.2	7.5	x	x
Screenline Total				5,269	5,387	119	0.02	1.6	✓	✓

PM Screenlines Calibration & Validation – Screenline 6

Road Name	A Node	B Node	Calibration/ Validation	Observed (pcu)	Modelled (pcu)	Abs Diff	% Diff	GEH	Pass on Flows	Pass on GEH
Screenline 6 - Eastbound										
A46	119529186	119528632	Validation	1120	624	496	-0.4	16.8	✘	✘
Scopwick Pl	119524096	119536786	Validation	233	230	3	0.0	0.2	✓	✓
B1273 Longdales Rd	119527203	119545636	Validation	837	704	133	-0.2	4.8	✘	✓
Broadway	119525820	119528801	Validation	121	121	0	0.0	0.0	✓	✓
Newport	119525571	119529003	Validation	59	59	0	0.0	0.0	✓	✓
Mildmay St	119533604	119536871	Validation	55	55	0	0.0	0.0	✓	✓
Burton Rd	119518285	119515671	Validation	154	154	0	0.0	0.0	✓	✓
Upper Long Leys Rd	119519544	119529869	Validation	0	0	0	0.0	0.0	✓	✓
Carline Rd	119528366	119539263	Validation	12	12	0	0.0	0.0	✓	✓
B1308 West Parade	119524201	119524200	Validation	332	335	3	0.0	0.1	✓	✓
A57 Newland	119532301	119525809	Validation	719	910	191	0.3	6.7	✘	✘
Brayford Wharf North	119534515	119514190	Validation	3	0	3	-1.0	2.5	✓	✓
B1003 Ropewalk	119541066	119528600	Validation	365	277	88	-0.2	4.9	✓	✓
Beevor St	119512888	119535466	Validation	29	86	58	2.0	7.6	✓	✘
B1360 Valentine Rd	119518113	119519166	Validation	777	417	360	-0.5	14.7	✘	✘
Skellingthorpe Rd	119525974	5198	Validation	435	456	21	0.0	1.0	✓	✓
Moorland Ave	119526358	119536569	Validation	241	241	0	0.0	0.0	✓	✓
B1190 Doddington Rd	119532776	119534353	Validation	385	230	155	-0.4	8.8	✘	✘
A1434 Newark Rd	119526471	171	Validation	558	779	221	0.4	8.6	✘	✘
Hykeham Rd	119538384	119521800	Validation	407	407	0	0.0	0.0	✓	✓
A46	119514146	119536562	Calibration	1120	624	496	-0.4	16.8	✘	✘
Screenline Total				6843	6098	745	-0.11	9.3	✘	✘

Road Name	A Node	B Node	Calibration/ Validation	Observed (pcu)	Modelled (pcu)	Abs Diff	% Diff	GEH	Pass on Flows	Pass on GEH
Screenline 6 - Westbound										
A46	119528632	119529186	Validation	870	1034	164	0.2	5.3	✗	✗
Scopwick Pl	119536786	119524096	Validation	196	185	12	-0.1	0.8	✓	✓
B1273 Longdales Rd	119545636	119527203	Validation	593	763	170	0.3	6.5	✗	✗
Broadway	119528801	119525820	Validation	28	28	0	0.0	0.0	✓	✓
Newport	119529003	119525571	Validation	273	273	0	0.0	0.0	✓	✓
Mildmay St	119536871	119533604	Validation	49	49	0	0.0	0.0	✓	✓
Burton Rd	119515671	119518285	Validation	129	129	0	0.0	0.0	✓	✓
Upper Long Leys Rd	119529869	119519544	Validation	110	110	0	0.0	0.0	✓	✓
Carline Rd	119539263	119528366	Validation	40	40	0	0.0	0.0	✓	✓
B1308 West Parade	119524200	119524201	Validation	419	792	373	0.9	15.2	✗	✗
A57 Newland	119525809	119532301	Validation	684	288	396	-0.6	18.0	✗	✗
Brayford Wharf North	119514190	119534515	Validation	62	0	62	-1.0	11.1	✓	✗
B1003 Ropewalk	119528600	119524325	Validation	701	1012	311	0.4	10.6	✗	✗
Beevor St	119535466	119512888	Validation	85	173	88	1.0	7.7	✓	✗
B1360 Valentine Rd	119519166	119518113	Validation	624	214	410	-0.7	20.1	✗	✗
Skellingthorpe Rd	5198	119525974	Validation	270	279	10	0.0	0.6	✓	✓
Moorland Ave	119536569	119526358	Validation	186	186	0	0.0	0.0	✓	✓
B1190 Doddington Rd	119534353	119532776	Validation	318	207	111	-0.3	6.9	✗	✗
A1434 Newark Rd	171	119526471	Validation	428	148	279	-0.7	16.5	✗	✗
Hykeham Rd	119521800	119538384	Validation	408	408	0	0.0	0.0	✓	✓
Screenline Total				6474	6319	155	-0.02	1.9	✓	✓

PM Screenlines Calibration & Validation – Screenline 7

Road Name	A Node	B Node	Calibration/ Validation	Observed (pcu)	Modelled (pcu)	Abs Diff	% Diff	GEH	Pass on Flows	Pass on GEH
Screenline 7 - Eastbound										
A158	119516326	119515142	Calibration	745	469	276	-0.4	11.2	✘	✘
Wolsey Way	119519162	5124	Validation	183	183	0	0.0	0.0	✓	✓
Outer Circle Dr	119519672	119529037	Calibration	339	125	214	-0.6	14.0	✘	✘
Oval Approach	119535701	119514617	Validation	51	51	0	0.0	0.0	✓	✓
B1182 Ruskin Ave	119513411	119515357	Calibration	823	571	252	-0.3	9.6	✘	✘
Byron Ave	119524094	119524093	Validation	176	176	0	0.0	0.0	✓	✓
Lee Rd	119534350	119536525	Validation	399	399	0	0.0	0.0	✓	✓
East Gate	119524011	119526595	Validation	58	58	0	0.0	0.0	✓	✓
A15 Wragby Rd	119529580	119523371	Validation	929	929	0	0.0	0.0	✓	✓
B1308 Monks Rd	119524816	119517474	Calibration	392	449	58	0.1	2.8	✓	✓
Croft St	119516165	119522506	Calibration	181	56	126	-0.7	11.6	✘	✘
Waterside North	119535794	119527059	Validation	5	92	87	16.4	12.4	✓	✘
Waterside South	119537117	119541695	Validation	102	54	47	-0.5	5.4	✓	✘
Great Northern Terrace	119521029	119531615	Calibration	100	175	76	0.8	6.5	✓	✘
Washingborough Rd	119534820	3533	Calibration	312	295	17	-0.1	1.0	✓	✓
Heightington Rd	119518310	2821	Validation	245	245	0	0.0	0.0	✓	✓
B1188 Lincoln Rd	119542251	119545512	Calibration	681	650	32	0.0	1.2	✓	✓
A15 London Rd	119542296	119545503	Calibration	555	555	0	0.0	0.0	✓	✓
Screenline Total				6275	5531	743	-0.12	9.7	✘	✘

Road Name	A Node	B Node	Calibration/ Validation	Observed (pcu)	Modelled (pcu)	Abs Diff	% Diff	GEH	Pass on Flows	Pass on GEH
Screenline 7 - Westbound										
A158	119515142	119516326	Calibration	895	672	223	-0.2	8.0	✘	✘
Wolsey Way	5124	119519162	Validation	210	210	0	0.0	0.0	✓	✓
Outer Circle Dr	119529037	119519672	Calibration	377	265	112	-0.3	6.2	✘	✘
Oval Approach	119514617	119535701	Validation	21	21	0	0.0	0.0	✓	✓
B1182 Ruskin Ave	119515357	119513411	Calibration	574	458	116	-0.2	5.1	✘	✘
Byron Ave	119524093	119524094	Validation	0	0	0	0.0	0.0	✓	✓
Lee Rd	119536525	119534350	Validation	282	282	0	0.0	0.0	✓	✓
East Gate	119526595	119524011	Calibration	186	186	0	0.0	0.0	✓	✓
A15 Wragby Rd	119523371	119529580	Calibration	1277	1277	0	0.0	0.0	✓	✓
Lindum Terrace	119533260	119537871	Validation	193	0	193	-1.0	19.6	✘	✘
B1308 Monks Rd	119517474	119524816	Calibration	461	491	31	0.1	1.4	✓	✓
Croft St	119522506	119516165	Calibration	296	242	54	-0.2	3.3	✓	✓
Waterside North	119527059	119535794	Calibration	119	181	62	0.5	5.1	✓	✘
Waterside South	119541695	119537117	Calibration	64	61	3	0.0	0.4	✓	✓
Great Northern Terrace	119531615	119521029	Calibration	212	183	29	-0.1	2.1	✓	✓
Washingborough Rd	3533	119534820	Calibration	308	272	35	-0.1	2.1	✓	✓
Heightington Rd	2821	119518310	Validation	88	88	0	0.0	0.0	✓	✓
B1188 Lincoln Rd	119545512	119542251	Calibration	349	337	12	0.0	0.6	✓	✓
A15 London Rd	119545503	119542296	Calibration	388	461	72	0.2	3.5	✓	✓
Screenline Total				6299	5687	612	-0.10	7.9	✘	✘

Appendix H – Observed / Modelled JT Distance

Route	Description	Direction	Observed Distance (km)	Modelled Distance (km)	Diff. %
1	B1182 Ruskin Ave/A15 Wragby Rd to A1434 Newark Rd/B1003 Tritton Rd	SB	8.63	8.48	-1.75%
		NB	8.57	8.43	-1.63%
2	Greetwell Rd/Fiskerton Rd to A113/A46	WB	47.22	46.82	-0.86%
		EB	46.98	46.90	-0.16%
3	B1189 Moor Ln to A57 Gainsborough Rd/B1190 Tom Otters Ln	NB	36.53	36.38	-0.40%
		SB	36.60	36.42	-0.49%
4	Hopyard Ln/Navenby Ln to A1133 Newark Rd/A156	NB	34.53	34.32	-0.61%
		SB	34.66	34.42	-0.67%
5	B1189/B1191 Main St/Station Rd to A46 Lincoln Rd/Washdyke Ln	NB	26.04	25.88	-0.60%
		SB	25.99	26.14	0.59%
6	B1191 Main St/B1189/Station Rd to A1434 Newark Rd/Boundary Ln	WB	28.78	28.74	-0.11%
		EB	28.84	28.74	-0.33%
7	A46/A1434 Newark Rd to Moor Ln/Fiskerton Rd	EB	19.55	19.52	-0.15%
		WB	19.53	19.50	-0.16%
8	A607 Cliff Rd/Skinnand Ln to A1500 Stow Park Rd/railway	NB	36.34	36.52	0.50%
		SB	37.38	36.66	-1.93%
9	B1190 Branston Causway at river to B1378 Skellingthorpe Rd/Lincoln Rd	WB	21.39	21.34	-0.28%
		EB	21.58	21.48	-0.44%
10	B1190 Branston Causeway at river to A1500 Horncastle Ln/A15	NB	23.80	23.72	-0.34%
		EB	23.85	23.70	-0.60%

Appendix I – Journey Time Validation

Journey Time Validation Summary – AM

Route	Description	Direction	Modelled Distance (km)	Journey Times (mm:ss)				
				Observed	Modelled	Difference	% Diff	Pass DMRB
Route 1	B1182 Ruskin Ave/A15 Wragby Rd and A1434 Newark Rd/B1003 Tritton Rd	SB	8.6292	1,231	1,345	114	9%	✓
		NB	8.5735	1,115	1,198	83	7%	✓
Route 2	Ferry Rd/Short Ferry Rd and A1133/A46	WB	47.224	3,052	3,344	292	10%	✓
		EB	46.975	3,381	3,662	281	8%	✓
Route 3	B1189 Moor Ln and A57 Gainsborough Rd/B1190 Tom Otters Ln	NB	36.529	2,727	3,320	593	22%	✗
		SB	36.599	2,947	2,962	15	1%	✓
Route 4	Hopyard Ln/Navenby Ln and A1133 Newark Rd/A156	NB	34.53	2,511	2,761	250	10%	✓
		SB	34.657	2,978	2,864	114	-4%	✓
Route 5	B1189/B1191 Main St/Station Rd and A46 Lincoln Rd/Washdyke Ln	NB	26.038	2,044	2,281	237	12%	✓
		SB	25.989	1,957	2,202	245	13%	✓
Route 6	B1191 Main St/B1189/Station Rd and A1434 Newark Rd/Boundary Ln	WB	28.778	1,678	1,726	48	3%	✓
		EB	28.839	1,724	1,644	80	-5%	✓
Route 7	A46/A1434 Newark Rd and Moor Ln/Fiskerton Rd	EB	19.551	1,263	1,122	141	-11%	✓
		WB	19.531	1,369	1,593	224	16%	✗
Route 8	A607 Cliff Rd/Skinnand Ln and A1500 Stow Park Rd/High St	NB	36.337	2,688	2,724	36	1%	✓
		SB	37.376	2,824	3,162	338	12%	✓
Route 9	B1190 Branston Causeway at river and B1378 Skellingthorpe Rd/Lincoln Rd	WB	21.394	1,793	1,860	67	4%	✓
		EB	21.577	2,049	2,065	16	1%	✓
Route 10	B1190 Branston Causeway at river and A1500 Horncastle Ln/A15	NB	23.8	2,218	2,487	269	12%	✓
		EB	23.846	2,181	2,030	151	-7%	✓
Number of routes passing DMRB criteria								18 / 20
Percentage of routes passing DMRB criteria								90%

Journey Time Validation Summary – IP

Route	Description	Direction	Modelled Distance (km)	Journey Times (mm:ss)				
				Observed	Modelled	Difference	% Diff	Pass DMRB
Route 1	B1182 Ruskin Ave/A15 Wragby Rd and A1434 Newark Rd/B1003 Tritton Rd	SB	8.650	1,151	1,040	111	-10%	✓
		NB	8.580	1,073	963	110	-10%	✓
Route 2	Ferry Rd/Short Ferry Rd and A1133/A46	WB	47.070	3,030	2,913	117	-4%	✓
		EB	47.100	3,002	2,847	155	-5%	✓
Route 3	B1189 Moor Ln and A57 Gainsborough Rd/B1190 Tom Otters Ln	NB	36.430	2,514	2,477	37	-1%	✓
		SB	36.460	2,736	2,530	206	-8%	✓
Route 4	Hopyard Ln/Navenby Ln and A1133 Newark Rd/A156	NB	34.520	2,444	2,558	114	5%	✓
		SB	34.610	2,654	2,387	267	-10%	✓
Route 5	B1189/B1191 Main St/Station Rd and A46 Lincoln Rd/Washdyke Ln	NB	26.050	1,866	1,921	55	3%	✓
		SB	24.670	1,825	1,950	125	7%	✓
Route 6	B1191 Main St/B1189/Station Rd and A1434 Newark Rd/Boundary Ln	WB	28.760	1,640	1,493	147	-9%	✓
		EB	28.830	1,664	1,479	185	-11%	✓
Route 7	A46/A1434 Newark Rd and Moor Ln/Fiskerton Rd	EB	19.770	1,118	916	202	-18%	✗
		WB	19.690	1,169	958	211	-18%	✗
Route 8	A607 Cliff Rd/Skinnand Ln and A1500 Stow Park Rd/High St	NB	36.630	2,488	2,510	22	1%	✓
		SB	36.930	2,608	2,670	62	2%	✓
Route 9	B1190 Branston Causway at river and B1378 Skellingthorpe Rd/Lincoln Rd	WB	21.300	1,777	1,730	47	-3%	✓
		EB	29.770	1,872	1,792	80	-4%	✓
Route 10	B1190 Branston Causeway at river and A1500 Horncastle Ln/A15	NB	27.940	2,221	1,890	331	-15%	✓
		EB	27.940	2,036	1,856	180	-9%	✓
Number of routes passing DMRB criteria								18 / 20
Percentage of routes passing DMRB criteria								90%

Journey Time Validation Summary – PM Peak

Route	Description	Direction	Modelled Distance (km)	Journey Times (mm:ss)				
				Observed	Modelled	Difference	% Diff	Pass DMRB
Route 1	B1182 Ruskin Ave/A15 Wragby Rd and A1434 Newark Rd/B1003 Tritton Rd	SB	8.650	1,320	1,329	9	1%	✓
		NB	8.580	1,174	1,175	1	0%	✓
Route 2	Ferry Rd/Short Ferry Rd and A1133/A46	WB	47.070	3,315	3,463	148	4%	✓
		EB	47.100	2,904	3,220	316	11%	✓
Route 3	B1189 Moor Ln and A57 Gainsborough Rd/B1190 Tom Otters Ln	NB	36.430	2,863	3,209	346	12%	✓
		SB	36.460	2,912	3,102	190	7%	✓
Route 4	Hopyard Ln/Navenby Ln and A1133 Newark Rd/A156	NB	34.520	2,651	2,975	324	12%	✓
		SB	34.610	2,746	3,006	260	9%	✓
Route 5	B1189/B1191 Main St/Station Rd and A46 Lincoln Rd/Washdyke Ln	NB	26.050	2,064	2,447	383	19%	✗
		SB	24.670	2,025	2,252	227	11%	✓
Route 6	B1191 Main St/B1189/Station Rd and A1434 Newark Rd/Boundary Ln	WB	28.760	1,656	1,742	86	5%	✓
		EB	28.830	1,668	1,725	57	3%	✓
Route 7	A46/A1434 Newark Rd and Moor Ln/Fiskerton Rd	EB	19.770	1,274	1,096	178	-14%	✓
		WB	19.690	1,338	996	342	-26%	✗
Route 8	A607 Cliff Rd/Skinnand Ln and A1500 Stow Park Rd/High St	NB	36.630	2,782	2,864	82	3%	✓
		SB	36.930	2,836	2,963	127	4%	✓
Route 9	B1190 Branston Causway at river and B1378 Skellingthorpe Rd/Lincoln Rd	WB	21.300	2,158	2,089	69	-3%	✓
		EB	29.770	1,968	1,717	251	-13%	✓
Route 10	B1190 Branston Causeway at river and A1500 Horncastle Ln/A15	NB	27.940	2,374	2,227	147	-6%	✓
		EB	27.940	2,247	2,171	76	-3%	✓
Number of routes passing DMRB criteria								18 / 20
Percentage of routes passing DMRB criteria								90%

Appendix J – Routing Plots