

## Bunn, Nick

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**From:** Wakenshaw, Gareth  
**Sent:** 30 November 2023 15:56  
**To:** Chadha, Adrian  
**Cc:** Patrick Thomas; Morris, Chris; Bunn, Nick; [REDACTED] Jane Hodgetts'; 'Edward Hodgetts'  
**Subject:** FW: Land NE of M42 J10 2023 - Baseline Transyt Validation Report & Consildated Modelling Strategy Note NH review  
**Attachments:** M42 Jn10 and A5 - Exist With Ref Case Pen Way & Dordon v5.1.t16; Table 4.1 2023 TRANSYT Model Results.pdf; MHC-110-23 Signal Cycle Count Survey - Sites 1 - 3.xlsx

Hi Adrian,

Many thanks for your email.

### Consolidated Methodology Note v2

Thank you for confirming the amendments to Figure 22 are acceptable. We take this as confirmation the Strategy Note is fully accepted by National Highways.

### A5/ Meridian Drive (Core 42)

We have reviewed the signal timings, please see the attached excel sheet.

Table 1 below summarises the frequency of stage calls during the AM peak hour, together with the average green time for the key phase.

Table 1 – 2023 AM Peak Hour Stage Frequency

Summary	Frequency	Percentage	Average Green Time		Average Green Time	
Stage 1	47	100%	00:00:54	Phase B		
Stage 2	31	66%	00:00:08	Phase C		
Stage 3	7	15%	00:00:11	Phase D		
Stage 4	9	19%	00:00:09	Phase D	00:00:08	Phase C
Stage 5	6	13%	00:00:07	Phase E	00:00:12	Phase D
Stage 6	1	1%	00:00:36	Phase B		

As Stage 6 is only called once in the peak hour it has been omitted from the model.

Table 2 below summarises the frequency of stage calls during the PM peak hour, together with the average green time for the key phase.

Table 2 – 2023 PM Peak Hour Stage Frequency

Summary	Frequency	Percentage	Average Green Time		Average Green Time	
Stage 1	55	100%	00:00:40	Phase B		
Stage 2	10	18%	00:00:07	Phase C		
Stage 3	13	24%	00:00:08	Phase D		
Stage 4	26	47%	00:00:10	Phase D	00:00:11	Phase C
Stage 5	13	24%	00:00:08	Phase E	00:00:21	Phase D
Stage 6	4	7%	00:01:06	Phase B		

As Stage 6 is only called four times (7%) in the peak hour it has been omitted from the model.

Please see the attached TRANSYT 5.1 model which has been updated to reflect the demand dependant stages as shown in Tables 1 and 2 at the A5/ Core 42 junction.

Note - The Transyt model file cannot be printed and attached to this print of the email.

Table 4.1 attached summarises the revised 2023 modelled answers alongside the observed queues. The modelled queues (like previously presented and accepted) are a close match to the observed queues and it is considered the model is a good base for future predictions.

It would be appreciated if you could review and confirm the model is now acceptable.

Kind Regards

**Gareth Wakenshaw** | Associate Transport Planner

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**From:** Adrian Chadha <[REDACTED]>  
**Sent:** Monday, November 27, 2023 11:24 AM  
**To:** Wakenshaw, Gareth <[REDACTED]>  
**Cc:** Patrick Thomas <[REDACTED]>; Morris, Chris <[REDACTED]>  
**Subject:** RE: Land NE of M42 J10 2023 - Baseline Transyt Validation Report & Consildated Modelling Strategy Note NH review

Hi Gareth,

Thank you for your email, please find our comments as below.

**Consolidated Modelling Strategy Note:**

We note the Consolidated Modelling Strategy Note has been updated to correct a discrepancy found in the PM development trip figure (Figure 22). We note that the error has now been corrected in the revised note (Version 2, dated Nov 2023) and is now in line with the agreed trip generation. National Highways agree that there are no further comments for the applicant to address regarding trip generation associated with the development.

# A5/ Core 42 Signal Timings Survey

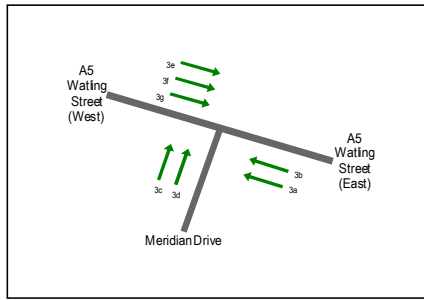
Tamworth  
Signal Cycle Count Survey

Site 3 of 6  
A5 Watling Street (East)  
Meridian Drive  
A5 Watling Street (West)

Date  
Tuesday 04 July 2023

Weather  
Sunny Interval  
Temp: 18°C

0700 - 1000 (Weekday AM Peak)



Approach 3a, 3b				Phase B	Approach 3c				Phase D
Sample	Start of Green Time	End of Green Time	Duration	Cycle Time	Sample	Start of Green Time	End of Green Time	Duration	Cycle Time
7	07:08:25	07:08:38	00:00:13	Stage 1	7	07:12:28	07:12:39	00:00:11	Stage 3
8	07:08:55	07:12:12	00:03:17	Stage 6	8	07:13:26	07:13:37	00:00:11	Stage 4
9	07:12:44	07:13:11	00:00:27		9	07:15:44	07:15:52	00:00:08	Stage 5
10	07:13:43	07:13:59	00:00:15		10	07:17:15	07:17:27	00:00:12	
11	07:14:15	07:15:37	00:01:22		11	07:17:53	07:18:01	00:00:08	
12	07:15:59	07:16:21	00:00:22		12	07:19:02	07:19:10	00:00:08	
13	07:16:38	07:17:07	00:00:29		13	07:21:11	07:21:19	00:00:08	
14	07:17:32	07:17:46	00:00:14		14	07:24:36	07:24:44	00:00:08	
15	07:18:05	07:18:55	00:00:50		15	07:31:07	07:31:15	00:00:08	
16	07:19:14	07:21:03	00:01:49		16	07:34:35	07:34:46	00:00:11	00:03:28
17	07:21:23	07:21:58	00:00:35		17	07:37:54	07:38:01	00:00:07	00:03:19
18	07:22:17	07:22:43	00:00:26		18	07:42:03	07:42:14	00:00:11	00:04:09
19	07:23:03	07:24:28	00:01:25		19	07:43:43	07:43:54	00:00:11	00:01:40
20	07:24:49	07:26:12	00:01:23		20	07:47:17	07:47:28	00:00:11	00:03:34
21	07:26:28	07:27:16	00:00:48		21	07:50:07	07:50:18	00:00:11	00:02:50
22	07:27:36	07:30:21	00:02:45		22	07:51:28	07:51:36	00:00:08	00:01:21
23	07:30:40	07:31:00	00:00:20		23	07:54:03	07:54:09	00:00:06	00:02:35
24	07:31:20	07:34:28	00:03:08	00:00:40	24	07:54:47	07:54:55	00:00:08	00:00:44
25	07:34:51	07:35:27	00:00:36	00:00:31	25	07:56:42	07:56:51	00:00:09	00:01:55
26	07:35:45	07:36:41	00:00:56	00:00:54	26	07:58:12	07:58:20	00:00:08	00:01:30
27	07:37:00	07:37:09	00:00:09	00:01:15	27	08:01:46	08:01:55	00:00:09	00:03:34
28	07:37:28	07:37:48	00:00:20	00:00:28	28	08:12:48	08:13:00	00:00:12	00:11:02
29	07:38:07	07:38:33	00:00:26	00:00:39	29	08:14:42	08:14:48	00:00:06	00:01:54
30	07:38:50	07:40:00	00:01:10	00:00:43	30	08:15:28	08:15:36	00:00:08	00:00:46
31	07:40:18	07:40:39	00:00:21	00:01:28	31	08:20:09	08:20:27	00:00:18	00:04:41
32	07:40:57	07:41:30	00:00:33	00:00:39	32	08:23:08	08:23:15	00:00:07	00:02:59
33	07:41:49	07:41:56	00:00:07	00:00:52	33	08:25:02	08:25:21	00:00:19	00:01:54
34	07:42:20	07:43:36	00:01:16	00:00:31	34	08:28:03	08:28:16	00:00:13	00:03:01
35	07:44:00	07:44:22	00:00:22	00:01:40	35	08:29:17	08:29:25	00:00:08	00:01:14
36	07:44:42	07:45:18	00:00:36	00:00:42	36	08:32:22	08:32:32	00:00:10	
37	07:45:37	07:47:02	00:01:25	00:00:55	37	08:33:20	08:33:25	00:00:06	
38	07:47:35	07:48:16	00:00:41	00:01:58	38	08:33:54	08:34:02	00:00:08	
39	07:48:39	07:49:55	00:01:16	00:01:04	39	08:36:26	08:36:33	00:00:07	
40	07:50:25	07:51:21	00:00:56	00:01:46	40	08:38:16	08:38:26	00:00:10	
41	07:51:43	07:52:08	00:00:25	00:01:18	41	08:40:53	08:41:00	00:00:07	
42	07:52:26	07:52:55	00:00:29	00:00:43	42	08:41:21	08:41:30	00:00:09	
43	07:53:13	07:53:54	00:00:41	00:00:47	43	08:42:32	08:42:43	00:00:11	
44	07:54:15	07:54:40	00:00:25	00:01:02	44	08:43:22	08:43:29	00:00:07	
45	07:55:00	07:55:49	00:00:49	00:00:45	45	08:46:30	08:46:53	00:00:23	
46	07:56:08	07:56:34	00:00:26	00:01:08	46	08:47:32	08:47:38	00:00:06	
47	07:56:56	07:57:32	00:00:36	00:00:48	47	08:48:34	08:48:43	00:00:09	
48	07:57:51	07:58:05	00:00:14	00:00:55	48	08:49:18	08:49:39	00:00:21	
49	07:58:26	08:00:39	00:02:13	00:00:35	49	08:51:42	08:51:49	00:00:07	
50	08:01:00	08:01:38	00:00:38	00:02:34	50	08:54:02	08:54:10	00:00:08	
51	08:02:00	08:03:00	00:01:00	00:01:00	51	08:54:51	08:54:58	00:00:07	
52	08:03:20	08:03:56	00:00:36	00:01:20	52	08:56:03	08:56:12	00:00:09	
53	08:04:15	08:07:58	00:03:43	00:00:55	53	08:59:07	08:59:14	00:00:07	
54	08:08:17	08:08:42	00:00:25	00:04:02	54	09:00:02	09:00:13	00:00:11	
55	08:09:01	08:11:21	00:02:20	00:00:44	55	09:01:05	09:01:13	00:00:08	
56	08:11:40	08:12:41	00:01:01	00:02:39	56	09:01:36	09:01:51	00:00:15	
57	08:13:08	08:14:34	00:01:26	00:01:28	57	09:07:46	09:07:53	00:00:07	
58	08:14:53	08:15:21	00:00:28	00:01:45	58	09:10:54	09:11:00	00:00:06	
59	08:15:41	08:16:16	00:00:35	00:00:48	59	09:12:26	09:12:42	00:00:16	
60	08:16:36	08:17:08	00:00:32	00:00:55	60	09:13:39	09:13:47	00:00:08	
61	08:17:26	08:18:12	00:00:46	00:00:50	61	09:14:45	09:14:53	00:00:08	
62	08:18:30	08:20:02	00:01:32	00:01:04	62	09:16:16	09:16:23	00:00:07	
63	08:20:32	08:21:44	00:01:12	00:02:02	63	09:23:18	09:23:26	00:00:08	
64	08:22:03	08:23:00	00:00:57	00:01:31	64	09:25:01	09:25:10	00:00:09	
65	08:23:21	08:24:06	00:00:45	00:01:18	65	09:31:58	09:32:10	00:00:12	
66	08:24:25	08:24:57	00:00:32	00:01:04	66	09:33:00	09:33:09	00:00:09	
67	08:25:26	08:26:03	00:00:37	00:01:01	67	09:33:38	09:33:46	00:00:08	
68	08:26:22	08:27:46	00:01:24	00:00:56	68	09:34:08	09:34:15	00:00:07	
69	08:28:21	08:29:10	00:00:49	00:01:59	69	09:34:35	09:34:47	00:00:12	
70	08:29:30	08:32:07	00:02:37	00:01:09	70	09:41:19	09:41:33	00:00:14	
71	08:32:38	08:33:10	00:00:32		71	09:46:04	09:46:12	00:00:08	
72	08:33:33	08:33:47	00:00:14		72	09:47:31	09:47:40	00:00:09	

07:30 to 08:30      00:00:54      00:01:15  
Cycle Time  
Stages in peak hc      47

07:30 to 08:30      00:00:10      00:02:55  
Cycle Time  
Stages in peak hc      20

Approach 3a, 3b				Phase B	Approach 3c				Phase D
Sample	Start of Green Time	End of Green Time	Duration	Cycle Time	Sample	Start of Green Time	End of Green Time	Duration	Cycle Time
1	16:00:18	16:01:12	00:00:54	Stage 1	1	16:00:04	16:00:12	00:00:08	Stage 3
2	16:01:42	16:01:49	00:00:07	Stage 6	2	16:01:19	16:01:36	00:00:17	Stage 4
3	16:02:08	16:04:51	00:02:43		3	16:01:57	16:02:04	00:00:07	Stage 5
4	16:05:35	16:05:46	00:00:11		4	16:04:58	16:05:29	00:00:31	
5	16:06:06	16:06:34	00:00:28		5	16:05:53	16:06:00	00:00:07	
6	16:06:55	16:08:13	00:01:18		6	16:06:42	16:06:49	00:00:07	
7	16:08:41	16:09:16	00:00:35		7	16:08:21	16:08:35	00:00:14	
8	16:09:34	16:10:14	00:00:40		8	16:09:22	16:09:29	00:00:07	
9	16:10:29	16:10:47	00:00:18		9	16:10:54	16:11:00	00:00:06	
10	16:11:06	16:11:38	00:00:32		10	16:11:45	16:11:52	00:00:07	
11	16:11:58	16:12:32	00:00:34		11	16:12:41	16:13:03	00:00:22	
12	16:13:08	16:14:34	00:01:26		12	16:14:41	16:15:10	00:00:29	
13	16:15:14	16:15:51	00:00:37		13	16:15:57	16:16:05	00:00:08	
14	16:16:10	16:16:56	00:00:46		14	16:17:03	16:17:14	00:00:11	
15	16:17:24	16:17:40	00:00:16		15	16:17:47	16:18:00	00:00:13	
16	16:18:06	16:18:29	00:00:23		16	16:18:34	16:18:43	00:00:09	
17	16:18:47	16:19:28	00:00:41		17	16:20:01	16:20:07	00:00:06	
18	16:19:45	16:19:53	00:00:08		18	16:27:35	16:27:44	00:00:09	
19	16:20:13	16:21:05	00:00:52		19	16:28:20	16:28:29	00:00:09	
20	16:21:23	16:21:36	00:00:13		20	16:29:19	16:29:25	00:00:06	
21	16:21:54	16:22:03	00:00:09		21	16:29:51	16:29:59	00:00:08	
22	16:22:20	16:23:51	00:01:31		22	16:30:49	16:30:55	00:00:06	
23	16:24:09	16:25:32	00:01:43		23	16:31:54	16:33:01	00:01:07	
24	16:25:09	16:26:52	00:01:43		24	16:33:32	16:33:39	00:00:07	
25	16:27:10	16:27:31	00:00:21		25	16:35:45	16:35:51	00:00:06	
26	16:27:49	16:28:15	00:00:26		26	16:36:36	16:37:11	00:00:35	
27	16:28:33	16:29:11	00:00:38		27	16:39:10	16:39:17	00:00:07	
28	16:29:31	16:29:46	00:00:15		28	16:39:50	16:39:56	00:00:06	
29	16:30:04	16:30:42	00:00:38		29	16:41:20	16:41:28	00:00:08	
30	16:31:01	16:31:49	00:00:48		30	16:42:03	16:42:11	00:00:08	
31	16:32:07	16:33:26	00:01:19		31	16:43:54	16:44:09	00:00:15	
32	16:33:45	16:33:53	00:00:08		32	16:47:30	16:47:38	00:00:08	
33	16:34:11	16:34:54	00:00:43		33	16:50:36	16:50:52	00:00:16	00:00:06
34	16:35:12	16:35:38	00:00:26		34	16:51:29	16:51:37	00:00:08	00:00:53
35	16:35:56	16:36:30	00:00:34		35	16:52:37	16:52:49	00:00:12	00:01:03
36	16:37:17	16:39:03	00:01:46		36	16:53:37	16:53:46	00:00:09	00:01:05
37	16:39:21	16:39:43	00:00:22		37	16:54:50	16:54:56	00:00:06	00:01:13
38	16:40:00	16:41:13	00:01:13		38	16:55:42	16:55:48	00:00:06	00:00:52
39	16:41:33	16:41:58	00:00:25		39	16:56:25	16:56:33	00:00:08	00:00:43
40	16:42:17	16:43:49	00:01:32		40	16:59:33	16:59:47	00:00:14	00:03:08
41	16:44:15	16:47:24	00:03:09		41	17:00:59	17:01:22	00:00:23	00:01:26
42	16:47:43	16:48:46	00:01:03		42	17:01:47	17:02:11	00:00:24	00:00:48
43	16:49:04	16:49:32	00:00:28	00:01:21	43	17:02:51	17:03:00	00:00:09	00:01:04
44	16:49:49	16:50:31	00:00:42	00:00:45	44	17:04:26	17:04:32	00:00:06	00:01:35
45	16:50:58	16:51:24	00:00:26	00:01:09	45	17:05:03	17:05:12	00:00:09	00:00:37
46	16:51:42	16:52:25	00:00:43	00:00:44	46	17:05:36	17:06:23	00:00:47	00:00:33
47	16:52:58	16:53:31	00:00:28	00:01:04	47	17:07:29	17:07:36	00:00:07	00:01:53
48	16:53:53	16:54:43	00:00:50	00:01:00	48	17:08:27	17:08:42	00:00:15	00:00:58
49	16:55:02	16:55:34	00:00:32	00:01:09	49	17:09:24	17:09:30	00:00:06	00:00:57
50	16:55:53	16:56:20	00:00:27	00:00:51	50	17:10:40	17:10:48	00:00:08	00:01:16
51	16:56:39	16:57:13	00:00:34	00:00:46	51	17:11:26	17:11:33	00:00:07	00:00:46
52	16:57:30	16:59:28	00:01:58	00:00:51	52	17:15:05	17:15:37	00:00:32	00:03:39
53	16:59:51	17:00:53	00:01:02	00:02:21	53	17:17:17	17:17:38	00:00:21	00:02:12
54	17:01:26	17:01:39	00:00:13	00:01:35	54	17:18:06	17:18:13	00:00:07	00:00:49
55	17:02:16	17:02:46	00:00:30	00:00:50	55	17:18:47	17:18:57	00:00:10	00:00:41
56	17:03:05	17:03:23	00:00:18	00:00:49	56	17:20:02	17:20:10	00:00:08	00:01:15
57	17:03:46	17:04:17	00:00:31	00:00:41	57	17:22:27	17:22:37	00:00:10	00:02:25
58	17:04:38	17:04:58	00:00:20	00:00:52	58	17:23:09	17:23:16	00:00:07	00:00:42
59	17:05:16	17:05:29	00:00:13	00:00:38	59	17:23:42	17:23:55	00:00:13	00:00:33
60	17:06:30	17:07:20	00:00:50	00:01:14	60	17:24:25	17:24:34	00:00:09	00:00:43
61	17:07:42	17:08:19	00:00:37	00:01:12	61	17:26:19	17:26:27	00:00:08	00:01:54
62	17:08:48	17:09:16	00:00:28	00:01:06	62	17:27:31	17:27:39	00:00:08	00:01:12
63	17:09:37	17:10:02	00:00:25	00:00:49	63	17:29:54	17:30:01	00:00:07	00:02:23
64	17:10:19	17:10:34	00:00:15	00:00:42	64	17:32:08	17:32:13	00:00:05	00:02:14
65	17:10:52	17:11:21	00:00:29	00:00:33	65	17:32:43	17:32:52	00:00:09	00:00:35
66	17:11:40	17:13:36	00:01:56	00:00:48	66	17:33:21	17:33:28	00:00:07	00:00:38
67	17:13:53	17:14:59	00:01:06	00:02:13	67	17:33:49	17:33:56	00:00:07	00:00:28
68	17:15:43	17:17:13	00:01:30	00:01:50	68	17:34:17	17:34:23	00:00:06	00:00:28
69	17:17:43	17:17:57	00:00:14	00:02:00	69	17:35:20	17:35:28	00:00:08	00:01:03
70	17:18:17	17:18:43	00:00:26	00:00:34	70	17:37:27	17:37:46	00:00:19	00:02:07
71	17:19:04	17:19:54	00:00:50	00:00:47	71	17:38:51	17:39:37	00:00:46	00:01:24
72	17:20:15	17:22:22	00:02:07	00:01:11	72	17:40:39	17:40:49	00:00:10	00:01:48
73	17:22:43	17:23:03	00:00:20	00:02:28	73	17:41:40	17:41:47	00:00:07	00:01:01
74	17:23:23	17:23:34	00:00:11	00:00:40	74	17:43:17	17:43:24	00:00:07	00:01:37
75	17:24:01	17:24:18	00:00:17	00:00:38	75	17:44:16	17:44:23	00:00:07	00:00:59
76	17:24:39	17:25:17	00:00:38	00:00:38	76	17:45:23	17:45:30	00:00:07	
77	17:25:36	17:26:09	00:00:33	00:00:57	77	17:49:00	17:49:08	00:00:08	
78	17:26:33	17:27:23	00:00:50	00:00:57	78	17:50:32	17:50:40	00:00:08	
79	17:27:43	17:28:46	00:01:03	00:01:10	79	17:51:01	17:51:08	00:00:07	
80	17:29:09	17:29:46	00:00:37	00:01:26	80	17:52:13	17:52:21	00:00:08	
81	17:30:06	17:30:21	00:00:15	00:00:57	81	17:52:47	17:52:54	00:00:07	
82	17:30:38	17:31:59	00:01:21	00:00:32	82	17:53:38	17:53:46	00:00:08	
83	17:32:19	17:32:38	00:00:19	00:01:41	83	17:54:36	17:54:43	00:00:07	
84	17:32:59	17:33:13	00:00:14	00:00:40	84	17:55:12	17:55:20	00:00:08	
85	17:33:33	17:33:40	00:00:07	00:00:34	85	17:56:41	17:56:49	00:00:08	
86	17:34:01	17:34:08	00:00:07	00:00:28	86	17:57:01	17:57:09	00:00:08	
87	17:34:28	17:35:14	00:00:46	00:00:27	87	17:57:54	17:58:21	00:00:27	
88	17:35:34	17:36:18	00:00:44	00:01:06	88	17:59:00	17:59:10	00:00:10	
89	17:36:35	17:37:22	00:00:47	00:01:01	89	18:00:35	18:00:44	00:00:09	
90	17:37:51	17:38:45	00:00:54	00:01:16	90	18:01:34	18:01:41	00:00:07	
91	17:39:43	17:40:33	00:00:50	00:01:52	91	18:03:24	18:03:37	00:00:13	
92	17:40:56	17:41:28	00:00:32	00:01:13	92	18:03:58	18:04:26	00:00:28	
93	17:41:58	17:42:18	00:00:20	00:01:02	93	18:05:16	18:05:24	00:00:08	
94	17:42:35	17:43:04	00:00:29	00:00:37	94	18:06:28	18:06:38	00:00:10	
95	17:43:30	17:44:06	00:00:36	00:00:55	95	18:07:15	18:07:25	00:00:10	
96	17:44:30	17:45:17	00:00:47	00:01:00	96	18:07:55	18:08:01	00:00:06	
97	17:45:36	17:45:57	00:00:21		97	18:08:46	18:08:54	00:00:08	

16:45 to 17:45      00:00:39      00:01:03  
 Stages in peak hc      Cycle Time  
 54

16:45 to 17:45      00:00:12      00:01:19  
 Stages in peak hc      Cycle Time  
 43

Approach 3a, 3b      Phase B

Approach 3c      Phase D

Approach 3d				Phase E	Approach 3e, 3f				Phase A
Sample	Start of Green Time	End of Green Time	Duration	Cycle Time	Sample	Start of Green Time	End of Green Time	Duration	Cycle Time
7	07:21:10	07:21:18	00:00:08	Stage 5	7	07:21:24	07:37:45	00:16:21	
8	07:37:54	07:38:02	00:00:08		8	07:38:07	07:47:18	00:09:11	
9	07:47:22	07:47:28	00:00:06		9	07:47:34	07:50:07	00:02:33	00:09:27
10	07:50:12	07:50:19	00:00:07		10	07:50:25	08:03:28	00:13:03	00:02:51
11	08:12:54	08:13:01	00:00:07		11	08:03:47	08:12:52	00:09:05	00:13:22
12	08:25:15	08:25:22	00:00:07		12	08:13:07	08:25:09	00:12:02	00:09:20
13	08:28:07	08:28:15	00:00:08		13	08:25:28	08:28:04	00:02:36	00:12:21
14	08:32:25	08:32:33	00:00:08		14	08:28:22	08:32:21	00:03:59	00:02:54
15	08:33:54	08:34:02	00:00:08		15	08:32:43	08:33:49	00:01:06	
16	08:41:21	08:41:31	00:00:10		16	08:34:09	08:41:17	00:07:08	
17	08:42:35	08:42:42	00:00:07		17	08:41:36	08:42:31	00:00:55	
18	08:46:44	08:46:53	00:00:09		18	08:42:50	08:45:46	00:02:56	
19	09:00:06	09:00:14	00:00:08		19	08:46:13	08:46:41	00:00:28	
20	09:16:17	09:16:24	00:00:07		20	08:46:59	09:00:00	00:13:01	
21	09:46:04	09:46:11	00:00:07		21	09:00:19	09:16:11	00:15:52	
22	09:53:15	09:53:23	00:00:08		22	09:16:30	09:23:46	00:07:16	
23	09:54:23	09:54:32	00:00:09		23	09:24:05	09:45:59	00:21:54	
24			00:00:00		24	09:46:19	09:53:12	00:06:53	
25			00:00:00		25	09:53:30	09:54:22	00:00:52	
26			00:00:00		26	09:54:37	10:02:52	00:08:15	
27			00:00:00		27			00:00:00	
28			00:00:00		28			00:00:00	
29			00:00:00		29			00:00:00	
30			00:00:00		30			00:00:00	
31			00:00:00		31			00:00:00	
32			00:00:00		32			00:00:00	
33			00:00:00		33			00:00:00	
34			00:00:00		34			00:00:00	
35			00:00:00		35			00:00:00	
36			00:00:00		36			00:00:00	
37			00:00:00		37			00:00:00	
38			00:00:00		38			00:00:00	
39			00:00:00		39			00:00:00	
40			00:00:00		40			00:00:00	
41			00:00:00		41			00:00:00	
42			00:00:00		42			00:00:00	
43			00:00:00		43			00:00:00	
44			00:00:00		44			00:00:00	
45			00:00:00		45			00:00:00	
46			00:00:00		46			00:00:00	
47			00:00:00		47			00:00:00	
48			00:00:00		48			00:00:00	
49			00:00:00		49			00:00:00	
50			00:00:00		50			00:00:00	
51			00:00:00		51			00:00:00	
52			00:00:00		52			00:00:00	
53			00:00:00		53			00:00:00	
54			00:00:00		54			00:00:00	
55			00:00:00		55			00:00:00	
56			00:00:00		56			00:00:00	
57			00:00:00		57			00:00:00	
58			00:00:00		58			00:00:00	
59			00:00:00		59			00:00:00	
60			00:00:00		60			00:00:00	
61			00:00:00		61			00:00:00	
62			00:00:00		62			00:00:00	
63			00:00:00		63			00:00:00	
64			00:00:00		64			00:00:00	
65			00:00:00		65			00:00:00	
66			00:00:00		66			00:00:00	
67			00:00:00		67			00:00:00	
68			00:00:00		68			00:00:00	
69			00:00:00		69			00:00:00	
70			00:00:00		70			00:00:00	
71			00:00:00		71			00:00:00	
72			00:00:00		72			00:00:00	

07:30 to 08:30 00:00:07 00:10:03  
Stages in peak hc Cycle Time  
5

07:30 to 08:30 00:08:05 00:08:22  
Stages in peak hc Cycle Time  
6

Approach 3d				Phase E	Approach 3e, 3f				Phase A
Sample	Start of Green Time	End of Green Time	Duration	Cycle Time	Sample	Start of Green Time	End of Green Time	Duration	Cycle Time
1	16:01:29	16:01:37	00:00:08	00:04:20	1	15:58:52	16:01:27	00:02:35	00:03:28
2	16:05:21	16:05:29	00:00:08	00:04:20	2	16:01:43	16:05:15	00:03:32	00:03:28
3	16:08:29	16:08:36	00:00:07	00:04:20	3	16:05:36	16:08:25	00:02:49	00:03:28
4	16:12:55	16:13:03	00:00:08	00:04:20	4	16:08:41	16:12:53	00:04:12	00:03:28
5	16:15:01	16:15:08	00:00:07	00:04:20	5	16:13:09	16:15:00	00:01:51	00:03:28
6	16:33:31	16:33:39	00:00:08	00:04:20	6	16:15:15	16:33:27	00:18:12	00:03:28
7	16:37:03	16:37:11	00:00:08	00:04:20	7	16:33:47	16:34:25	00:00:38	00:03:28
8	16:41:18	16:41:26	00:00:08	00:04:20	8	16:34:48	16:37:01	00:02:13	00:03:28
9	16:42:02	16:42:10	00:00:08	00:04:20	9	16:37:18	16:41:16	00:03:58	00:03:28
10	16:44:01	16:44:09	00:00:08	00:04:20	10	16:41:34	16:41:59	00:00:25	00:03:28
11	16:47:28	16:47:36	00:00:08	00:04:20	11	16:42:17	16:44:03	00:01:46	00:03:28
12	16:55:40	16:55:48	00:00:08	00:04:20	12	16:44:16	16:47:24	00:03:08	00:03:28
13	16:59:38	16:59:45	00:00:07	00:04:20	13	16:47:43	16:52:51	00:05:08	00:03:28
14	17:01:13	17:01:20	00:00:07	00:04:20	14	16:53:10	16:55:36	00:02:26	00:03:28
15	17:02:04	17:02:12	00:00:08	00:04:20	15	16:55:55	16:59:37	00:03:42	00:03:28
16	17:02:50	17:02:58	00:00:08	00:04:20	16	16:59:52	17:01:10	00:01:18	00:03:28
17	17:05:02	17:05:10	00:00:08	00:04:20	17	17:01:27	17:02:01	00:00:34	00:03:28
18	17:06:13	17:06:22	00:00:09	00:04:20	18	17:02:17	17:02:48	00:00:31	00:03:28
19	17:15:30	17:15:38	00:00:08	00:04:20	19	17:03:05	17:04:58	00:01:53	00:03:28
20	17:17:29	17:17:37	00:00:08	00:04:20	20	17:05:18	17:06:09	00:00:51	00:03:28
21	17:32:05	17:32:13	00:00:08	00:04:20	21	17:06:47	17:07:45	00:00:58	00:03:28
22	17:37:39	17:37:47	00:00:08	00:04:20	22	17:08:06	17:13:06	00:05:00	00:03:28
23	17:39:30	17:39:38	00:00:08	00:04:20	23	17:13:28	17:15:29	00:02:01	00:03:28
24	17:51:00	17:51:08	00:00:08	00:04:20	24	17:15:44	17:17:28	00:01:44	00:03:28
25	17:55:11	17:55:19	00:00:08	00:04:20	25	17:17:44	17:32:01	00:14:17	00:03:28
26	17:58:14	17:58:21	00:00:07	00:04:20	26	17:32:22	17:37:36	00:05:14	00:03:28
27	18:04:18	18:04:26	00:00:08	00:04:20	27	17:37:52	17:39:27	00:01:35	00:03:28
28	18:06:28	18:06:36	00:00:08	00:04:20	28	17:39:43	17:50:57	00:11:14	00:03:28
29	18:07:14	18:07:24	00:00:10	00:04:20	29	17:51:16	17:55:07	00:03:51	00:03:28
30	18:08:45	18:08:53	00:00:08	00:04:20	30	17:55:26	17:58:11	00:02:45	00:03:28
31	18:10:05	18:10:12	00:00:07	00:04:20	31	17:58:29	18:04:17	00:05:48	00:03:28
32	18:17:40	18:17:48	00:00:08	00:04:20	32	18:04:32	18:06:23	00:01:51	00:03:28
33	18:18:26	18:18:34	00:00:08	00:04:20	33	18:06:43	18:07:10	00:00:27	00:03:28
34	18:21:27	18:21:35	00:00:08	00:04:20	34	18:07:31	18:08:40	00:01:09	00:03:28
35	18:23:59	18:24:08	00:00:09	00:04:20	35	18:08:59	18:10:01	00:01:02	00:03:28
36	18:27:53	18:28:02	00:00:09	00:04:20	36	18:10:36	18:17:38	00:07:02	00:03:28
37	18:35:06	18:35:15	00:00:09	00:04:20	37	18:17:53	18:18:22	00:00:29	00:03:28
38	18:38:34	18:38:42	00:00:08	00:04:20	38	18:18:44	18:21:23	00:02:39	00:03:28
39	18:48:40	18:48:48	00:00:08	00:04:20	39	18:21:42	18:23:55	00:02:13	00:03:28
40	18:53:02	18:53:09	00:00:07	00:04:20	40	18:24:15	18:27:50	00:03:35	00:03:28
41			00:00:00	00:04:20	41	18:28:08	18:35:03	00:06:55	00:03:28
42			00:00:00	00:04:20	42	18:35:21	18:38:32	00:03:11	00:03:28
43			00:00:00	00:04:20	43	18:38:48	18:48:36	00:09:48	00:03:28
44			00:00:00	00:04:20	44	18:49:14	18:52:58	00:03:44	00:03:28
45			00:00:00	00:04:20	45	18:53:16	19:23:21	00:30:05	00:03:28
46			00:00:00	00:04:20	46			00:00:00	00:03:28
47			00:00:00	00:04:20	47			00:00:00	00:03:28
48			00:00:00	00:04:20	48			00:00:00	00:03:28
49			00:00:00	00:04:20	49			00:00:00	00:03:28
50			00:00:00	00:04:20	50			00:00:00	00:03:28
51			00:00:00	00:04:20	51			00:00:00	00:03:28
52			00:00:00	00:04:20	52			00:00:00	00:03:28
53			00:00:00	00:04:20	53			00:00:00	00:03:28
54			00:00:00	00:04:20	54			00:00:00	00:03:28
55			00:00:00	00:04:20	55			00:00:00	00:03:28
56			00:00:00	00:04:20	56			00:00:00	00:03:28
57			00:00:00	00:04:20	57			00:00:00	00:03:28
58			00:00:00	00:04:20	58			00:00:00	00:03:28
59			00:00:00	00:04:20	59			00:00:00	00:03:28
60			00:00:00	00:04:20	60			00:00:00	00:03:28
61			00:00:00	00:04:20	61			00:00:00	00:03:28
62			00:00:00	00:04:20	62			00:00:00	00:03:28
63			00:00:00	00:04:20	63			00:00:00	00:03:28
64			00:00:00	00:04:20	64			00:00:00	00:03:28
65			00:00:00	00:04:20	65			00:00:00	00:03:28
66			00:00:00	00:04:20	66			00:00:00	00:03:28
67			00:00:00	00:04:20	67			00:00:00	00:03:28
68			00:00:00	00:04:20	68			00:00:00	00:03:28
69			00:00:00	00:04:20	69			00:00:00	00:03:28
70			00:00:00	00:04:20	70			00:00:00	00:03:28
71			00:00:00	00:04:20	71			00:00:00	00:03:28
72			00:00:00	00:04:20	72			00:00:00	00:03:28
73			00:00:00	00:04:20	73			00:00:00	00:03:28
74			00:00:00	00:04:20	74			00:00:00	00:03:28
75			00:00:00	00:04:20	75			00:00:00	00:03:28
76			00:00:00	00:04:20	76			00:00:00	00:03:28
77			00:00:00	00:04:20	77			00:00:00	00:03:28
78			00:00:00	00:04:20	78			00:00:00	00:03:28
79			00:00:00	00:04:20	79			00:00:00	00:03:28
80			00:00:00	00:04:20	80			00:00:00	00:03:28
81			00:00:00	00:04:20	81			00:00:00	00:03:28
82			00:00:00	00:04:20	82			00:00:00	00:03:28
83			00:00:00	00:04:20	83			00:00:00	00:03:28
84			00:00:00	00:04:20	84			00:00:00	00:03:28
85			00:00:00	00:04:20	85			00:00:00	00:03:28
86			00:00:00	00:04:20	86			00:00:00	00:03:28
87			00:00:00	00:04:20	87			00:00:00	00:03:28
88			00:00:00	00:04:20	88			00:00:00	00:03:28
89			00:00:00	00:04:20	89			00:00:00	00:03:28
90			00:00:00	00:04:20	90			00:00:00	00:03:28
91			00:00:00	00:04:20	91			00:00:00	00:03:28
92			00:00:00	00:04:20	92			00:00:00	00:03:28
93			00:00:00	00:04:20	93			00:00:00	00:03:28
94			00:00:00	00:04:20	94			00:00:00	00:03:28
95			00:00:00	00:04:20	95			00:00:00	00:03:28
96			00:00:00	00:04:20	96			00:00:00	00:03:28
97			00:00:00	00:04:20	97			00:00:00	00:03:28

16:45 to 17:45 00:00:08 00:04:20  
Stages in peak hr Cycle Time  
12

16:45 to 17:45 00:03:09 00:03:28  
Stages in peak hr Cycle Time  
15

Approach 3d

Phase E

Approach 3e, 3f

Phase A

Sample	Approach 3g			Phase C
	Start of Green Time	End of Green Time	Duration	
7	07:12:18	07:12:25	00:00:07	Cycle Time
8	07:13:16	07:13:24	00:00:08	Stage 2 When Phase D on Red
9	07:14:03	07:14:11	00:00:08	Stage 4 When Phase D on green
10	07:15:40	07:15:52	00:00:12	
11	07:16:25	07:16:32	00:00:07	
12	07:22:04	07:22:10	00:00:06	
13	07:22:51	07:22:57	00:00:06	
14	07:26:17	07:26:22	00:00:05	
15	07:27:21	07:27:30	00:00:09	
16	07:30:26	07:30:33	00:00:07	
17	07:35:33	07:35:49	00:00:16	00:05:07
18	07:36:47	07:36:54	00:00:07	00:01:14
19	07:37:14	07:37:21	00:00:07	00:00:27
20	07:38:36	07:38:44	00:00:08	00:01:22
21	07:40:04	07:40:12	00:00:08	00:01:28
22	07:40:44	07:40:52	00:00:08	00:00:40
23	07:41:36	07:41:43	00:00:07	00:00:52
24	07:43:48	07:43:55	00:00:07	00:02:12
25	07:44:28	07:44:35	00:00:07	00:00:40
26	07:45:23	07:45:30	00:00:07	00:00:55
27	07:47:08	07:47:16	00:00:08	00:01:45
28	07:48:22	07:48:33	00:00:11	00:01:14
29	07:50:02	07:50:07	00:00:05	00:01:40
30	07:51:27	07:51:36	00:00:09	00:01:25
31	07:52:13	07:52:19	00:00:06	00:00:46
32	07:52:58	07:53:07	00:00:09	00:00:45
33	07:53:59	07:54:07	00:00:08	00:01:01
34	07:54:45	07:54:54	00:00:09	00:00:46
35	07:56:55	07:56:03	00:00:08	00:01:10
36	07:56:41	07:56:49	00:00:08	00:00:46
37	07:57:37	07:57:45	00:00:08	00:00:56
38	07:58:10	07:58:19	00:00:09	00:00:33
39	08:00:45	08:00:52	00:00:07	00:02:35
40	08:01:46	08:01:54	00:00:08	00:01:01
41	08:03:05	08:03:12	00:00:07	00:01:19
42	08:04:01	08:04:09	00:00:08	00:00:56
43	08:08:03	08:08:11	00:00:08	00:04:02
44	08:08:47	08:08:54	00:00:07	00:00:44
45	08:11:26	08:11:34	00:00:08	00:02:39
46	08:15:27	08:15:36	00:00:09	00:04:01
47	08:16:23	08:16:29	00:00:06	00:00:56
48	08:17:11	08:17:19	00:00:08	00:00:48
49	08:18:17	08:18:24	00:00:07	00:01:06
50	08:20:21	08:20:26	00:00:05	00:02:04
51	08:21:49	08:21:57	00:00:08	00:01:28
52	08:24:11	08:24:18	00:00:07	00:02:22
53	08:25:00	08:25:09	00:00:09	00:00:49
54	08:26:07	08:26:15	00:00:08	00:01:07
55	08:27:51	08:28:02	00:00:11	00:01:44
56	08:29:14	08:29:23	00:00:09	00:01:23
57	08:32:12	08:32:19	00:00:07	
58	08:33:15	08:33:27	00:00:12	
59	08:35:24	08:35:32	00:00:08	
60	08:37:28	08:37:34	00:00:06	
61	08:38:17	08:38:27	00:00:10	
62	08:40:47	08:40:59	00:00:12	
63	08:42:21	08:42:28	00:00:07	
64	08:43:18	08:43:30	00:00:12	
65	08:45:07	08:45:15	00:00:08	
66	08:45:34	08:45:42	00:00:08	
67	08:46:28	08:46:39	00:00:11	
68	08:47:29	08:47:37	00:00:08	
69	08:48:33	08:48:42	00:00:09	
70	08:49:31	08:49:39	00:00:08	
71	08:50:40	08:50:52	00:00:12	
72	08:51:36	08:51:49	00:00:11	

Summary	Frequency	Percentage	Average Green Time	Average Green Time	Average Green Time
Stage 1	47	100%	00:00:54	Phase B	
Stage 2	31	66%	00:00:08	Phase C	
Stage 3	7	15%	00:00:11	Phase D	
Stage 4	9	19%	00:00:09	Phase D	00:00:08
Stage 5	6	13%	00:00:07	Phase E	00:00:12
Stage 6	1	1%	00:00:36	Phase B	Phase D

07:30 to 08:30      00:00:08      00:01:28  
 Stages in peak hc      Cycle Time  
 40

Sample	Approach 3g			Phase C
	Start of Green Time	End of Green Time	Duration	
1	16:00:01	16:00:11	00:00:10	Cycle Time
2	16:04:56	16:05:13	00:00:17	Stage 2
3	16:10:16	16:10:23	00:00:07	Stage 4
4	16:12:38	16:12:48	00:00:10	
5	16:14:49	16:14:56	00:00:07	
6	16:17:53	16:18:00	00:00:07	
7	16:19:31	16:19:39	00:00:08	
8	16:21:08	16:21:15	00:00:07	
9	16:21:41	16:21:47	00:00:06	
10	16:22:07	16:22:14	00:00:07	
11	16:23:54	16:24:02	00:00:08	
12	16:28:55	16:28:02	00:00:07	
13	16:28:57	16:27:04	00:00:07	
14	16:29:14	16:29:25	00:00:11	
15	16:33:57	16:34:05	00:00:08	
16	16:35:00	16:35:05	00:00:05	
17	16:36:34	16:36:58	00:00:24	
18	16:48:49	16:48:56	00:00:07	
19	16:49:36	16:49:43	00:00:07	
20	16:50:44	16:50:49	00:00:05	00:00:47
21	16:52:31	16:52:46	00:00:15	00:01:08
22	16:53:40	16:53:46	00:00:06	00:01:47
23	16:55:26	16:55:34	00:00:08	00:01:09
24	16:57:16	16:57:23	00:00:08	00:02:46
25	17:01:02	17:01:07	00:00:05	00:00:49
26	17:01:45	17:01:57	00:00:12	00:03:47
27	17:03:29	17:03:39	00:00:10	00:00:43
28	17:04:23	17:04:31	00:00:08	00:01:44
29	17:05:36	17:06:07	00:00:31	00:00:54
30	17:07:25	17:07:35	00:00:10	00:01:13
31	17:08:25	17:08:45	00:00:20	00:01:49
32	17:10:06	17:10:14	00:00:08	00:01:00
33	17:11:24	17:11:34	00:00:10	00:01:41
34	17:13:39	17:13:47	00:00:08	00:01:18
35	17:15:03	17:15:25	00:00:22	00:02:15
36	17:18:51	17:18:57	00:00:06	00:01:24
37	17:20:01	17:20:08	00:00:07	00:03:48
38	17:22:28	17:22:36	00:00:08	00:01:10
39	17:23:08	17:23:17	00:00:09	00:02:27
40	17:23:46	17:23:54	00:00:08	00:00:40
41	17:24:24	17:24:33	00:00:09	00:00:38
42	17:25:24	17:25:31	00:00:07	00:00:38
43	17:26:14	17:26:26	00:00:12	00:01:00
44	17:28:52	17:29:03	00:00:11	00:00:50
45	17:30:24	17:30:31	00:00:07	00:02:38
46	17:32:45	17:32:52	00:00:07	00:01:32
47	17:35:22	17:35:28	00:00:07	00:02:21
48	17:37:26	17:37:33	00:00:07	00:03:57
49	17:40:39	17:40:48	00:00:09	00:01:04
50	17:41:32	17:41:47	00:00:15	00:03:13
51	17:42:21	17:42:29	00:00:08	00:00:53
52	17:43:07	17:43:23	00:00:16	00:00:49
53	17:44:08	17:44:23	00:00:15	00:00:46
54	17:45:21	17:45:30	00:00:09	00:01:01
55	17:46:02	17:46:10	00:00:08	
56	17:47:02	17:47:09	00:00:07	
57	17:48:01	17:48:08	00:00:07	
58	17:48:59	17:49:07	00:00:08	
59	17:51:36	17:51:45	00:00:09	
60	17:56:57	17:57:08	00:00:11	
61	17:57:55	17:58:09	00:00:14	
62	17:59:41	17:59:48	00:00:07	
63	18:00:36	18:00:43	00:00:07	
64	18:03:30	18:03:37	00:00:07	
65	18:07:52	18:08:00	00:00:08	
66	18:09:26	18:10:00	00:00:34	
67	18:14:28	18:14:36	00:00:08	
68	18:15:13	18:15:19	00:00:06	
69	18:18:12	18:18:20	00:00:08	
70	18:22:54	18:23:09	00:00:15	
71	18:25:03	18:25:15	00:00:12	
72	18:25:58	18:26:14	00:00:16	
73	18:28:49	18:28:53	00:00:04	
74	18:28:27	18:28:34	00:00:07	
75	18:29:16	18:29:22	00:00:06	
76	18:31:05	18:31:13	00:00:08	
77	18:31:59	18:32:06	00:00:07	
78	18:37:02	18:37:09	00:00:07	
79	18:39:13	18:39:20	00:00:07	
80	18:46:15	18:46:21	00:00:06	
81	18:48:27	18:48:33	00:00:06	
82	18:50:11	18:50:19	00:00:08	
83	18:52:39	18:52:55	00:00:16	
84	18:53:51	18:53:58	00:00:07	
85	18:57:15	18:57:22	00:00:07	
86			00:00:00	
87			00:00:00	
88			00:00:00	
89			00:00:00	
90			00:00:00	
91			00:00:00	
92			00:00:00	
93			00:00:00	
94			00:00:00	
95			00:00:00	
96			00:00:00	
97			00:00:00	

Phase C

Cycle Time

Stage 2 When Phase D on Red

Stage 4 When Phase D on green

00:00:47

00:01:08

00:01:47

00:01:09

00:02:46

00:00:49

00:03:47

00:00:43

00:01:44

00:00:54

00:01:13

00:01:49

00:01:00

00:01:41

00:01:18

00:02:15

00:01:24

00:03:48

00:01:10

00:02:27

00:00:40

00:00:38

00:00:38

00:01:00

00:00:50

00:02:38

00:01:32

00:02:21

00:03:57

00:01:04

00:03:13

00:00:53

00:00:49

00:00:46

00:01:01

Summary	Frequency	Percentage	Average Green Time	Average Green Time
Stage 1	55	100%	00:00:40	Phase B
Stage 2	10	18%	00:00:07	Phase C
Stage 3	13	24%	00:00:08	Phase D
Stage 4	26	47%	00:00:10	Phase E
Stage 5	13	24%	00:00:08	Phase E
Stage 6	4	7%	00:01:06	Phase B

16:45 to 17:45 00:00:10 00:01:35

Stages in peak hour Cycle Time

35

Approach 3g Phase C



Table 4.1: M42/ Junction 10 + A5/ Birch Coppice + A5/ Core 42, 2023 Surveyed Year

Traffic Stream(s)	Lane	Saturation Flow pcu/hr	Model Output	AM Peak		PM Peak	
				Observed Queue	Results	Observed Queue	Results
<b>B5080 Pennine Way North/ A5 Eastbound On/ Off Slip Road</b>							
54/1 + 55/1	Pennine Way North Lane 1	N/A	Queue Aver Delay	5	4 32 secs	0	1 14 secs
54/2	Pennine Way South Lane 2	N/A	Queue Aver Delay	2	1 7 secs	1	0 5 secs
60/1	A5 Eastbound Off Slip Lane 1	N/A	Queue Aver Delay	0	0 4 secs	0	0 4 secs
60/2	A5 Eastbound Off Slip Lane 2	N/A	Queue Aver Delay	0	0 4 secs	0	0 4 secs
64/1 + 66/1	Northbound Overbridge Lane 1	N/A	Queue Aver Delay	0	1 5 secs	1	2 8 secs
64/2	Northbound Overbridge Lane 2	N/A	Queue Aver Delay	0	0 4 secs	0	0 7 secs
68/1 + 59/1	A5 Eastbound On-Slip Merge	N/A	Queue Aver Delay	4	9 1m 3s	0	0 2 secs
<b>B5080 Pennine Way South/ A5 Westbound On/ Off Slip Road/ Quarry Hill</b>							
89/1	Southbound Overbridge Lane 1	N/A	Queue Aver Delay	0	0 5 secs	0	0 4 secs
89/2	Southbound Overbridge Lane 2	N/A	Queue Aver Delay	0	0 5 secs	0	0 5 secs
76/1	A5 Westbound Off Slip Lane 1	N/A	Queue Aver Delay	0	0 6 secs	1	1 8 secs
76/2 + 75/1	A5 Westbound Off Slip Lane 2	N/A	Queue Aver Delay	1	0 6 secs	1	3 16 secs
81/1	Centurion Way Lane 1	N/A	Queue Aver Delay	0	0 6 secs	2	0 7 secs
81/2	Centurion Way Lane 2	N/A	Queue Aver Delay	0	0 4 secs	1	0 5 secs
86/1	Quarry Hill Lane 1	N/A	Queue Aver Delay	1	1 6 secs	6	6 41 secs
86/2	Quarry Hill Lane 2	N/A	Queue Aver Delay	0	0 4 secs	0	0 4 secs
<b>M42 Junction 10</b>							
1/1 + 2/1	M42 Northbound Offslip Lane 1	1740	Queue Aver Delay	6	3 16 secs	15	18 1m 19s
1/2	M42 Northbound Offslip Lane 2	1740	Queue Aver Delay	3	2 15 secs	5	5 32 secs
1/3	M42 Northbound Offslip Lane 3	1740	Queue Aver Delay	2	1 13 secs	2	2 21 secs
3/1	M42 Northbound Offslip Lane 4	1849	Queue Aver Delay	7	4 17 secs	9	6 28 secs
3/2	M42 Northbound Offslip Lane 5	1849	Queue Aver Delay	8	3 17 secs	9	6 26 secs
7/1	M42 Northbound Circulating Lane 1	2039	Queue Aver Delay	10	13 17 secs	16	24 22 secs
7/2	M42 Northbound Circulating Lane 2	1840	Queue Aver Delay	7	10 14 secs	14	15 18 secs
8/1 + 9/1 + 11/1 + 69/1 + 70/1	A5 Eastbound Lane 1	1828	Queue Aver Delay	47	63 4m 30s	12	13 53 secs
8/2	A5 Eastbound Lane 2	1900	Queue Aver Delay	10	3 20 secs	9	5 20 secs
8/3 + 9/2 + 11/2 + 69/2 + 70/2	A5 Eastbound Lane 3	1900	Queue Aver Delay	32	46 3m 5s	9	9 33 secs
12/1	A5 Eastbound Circulating Lane 1	1846	Queue Aver Delay	5	2 14 secs	3	4 18 secs
12/2	A5 Eastbound Circulating Lane 2	1878	Queue Aver Delay	6	4 15 secs	6	8 19 secs
12/3	A5 Eastbound Circulating Lane 3	1878	Queue Aver Delay	6	2 14 secs	7	7 18 secs
12/4	A5 Eastbound Circulating Lane 4	1878	Queue Aver Delay	2	1 12 secs	2	2 15 secs
14/1	Green Lane Lane 1	1602	Queue Aver Delay	4	3 40 secs	8	5 37 secs
14/2	Green Lane Lane 2	1602	Queue Aver Delay	4	5 55 secs	8	12 1m 37s
15/1	Green Lane Circulating Lane 1	1950	Queue Aver Delay	7	7 4 secs	6	9 9 secs
15/2	Green Lane Circulating Lane 2	1745	Queue Aver Delay	8	4 5 secs	6	8 11 secs

15/3	Green Lane Circulating Lane 3	1745	Queue Aver Delay	2	1 3 secs	1	1 3 secs
18/1	M42 Southbound Offslip Lane 1	1804	Queue Aver Delay	1	1 25 secs	3	1 19 secs
18/2	M42 Southbound Offslip Lane 2	1813	Queue Aver Delay	1	2 27 secs	3	4 33 secs
18/3	M42 Southbound Offslip Lane 3	1813	Queue Aver Delay	2	1 26 secs	4	3 25 secs
17/1	M42 Southbound Circulating Lane 1	1956	Queue Aver Delay	3	3 5 secs	5	4 7 secs
17/2	M42 Southbound Circulating Lane 2	1956	Queue Aver Delay	4	7 6 secs	6	10 10 secs
17/3	M42 Southbound Circulating Lane 3	1800	Queue Aver Delay	5	8 7 secs	5	7 9 secs
17/4	M42 Southbound Circulating Lane 4	1800	Queue Aver Delay	1	1 4 secs	3	1 5 secs
23/1	A5 Westbound Lane 1	1930	Queue Aver Delay	7	6 21 secs	6	4 20 secs
23/2	A5 Westbound Lane 2	1851	Queue Aver Delay	6	3 18 secs	5	3 18 secs
23/3 + 24/1 + 25/1	A5 Westbound Lane 3	1851	Queue Aver Delay	10	9 31 secs	13	18 58 secs
23/4 + 24/1	A5 Westbound Lane 4	1851	Queue Aver Delay	6	2 18 secs	6	4 22 secs
22/1	A5 Westbound Circulating Lane 1	1797	Queue Aver Delay	6	4 14 secs	6	10 19 secs
22/2	A5 Westbound Circulating Lane 2	1797	Queue Aver Delay	8	2 11 secs	5	2 14 secs
22/3	A5 Westbound Circulating Lane 3	1902	Queue Aver Delay	2	2 11 secs	5	3 13 secs
22/4	A5 Westbound Circulating Lane 4	1902	Queue Aver Delay	1	2 11 secs	5	3 13 secs
28/1 + 29/1	Trinity Road Lane 1	1669	Queue Aver Delay	8	4 30 secs	9	7 54 secs
28/2	Trinity Road Lane 2	1669	Queue Aver Delay	7	5 34 secs	7	4 32 secs
27/1	Trinity Road Circulating Lane 1	1846	Queue Aver Delay	3	9 9 secs	3	5 8 secs
27/2	Trinity Road Circulating Lane 2	1846	Queue Aver Delay	8	8 9 secs	6	5 10 secs
27/3	Trinity Road Circulating Lane 3	1878	Queue Aver Delay	3	13 10 secs	8	3 7 secs
27/4	Trinity Road Circulating Lane 4	1878	Queue Aver Delay	2	7 8 secs	4	3 8 secs
<b>A5/ Birch Coppice</b>							
31/1	A5 Eastbound Ahead Lane 1	1814	Queue Aver Delay	5	1 16 secs	9	9 25 secs
31/2	A5 Eastbound Ahead Lane 2	2082	Queue Aver Delay	4	1 13 secs	5	1 14 secs
32/1	A5 Eastbound Right Turn Lane 3	1960	Queue Aver Delay	5	8 56 secs	4	5 55 secs
32/2	A5 Eastbound Right Turn Lane 4	1667	Queue Aver Delay	8	10 1m 33s	4	4 50 secs
37/1	A5 Westbound Ahead Lane 1	1751	Queue Aver Delay	2	3 24 secs	2	1 22 secs
37/2 + 38/1 + 53/1	A5 Westbound Ahead Lane 2	2015	Queue Aver Delay	16	10 33 secs	13	12 47 secs
37/3 + 38/2 + 53/2	A5 Westbound Ahead Lane 3	2015	Queue Aver Delay	14	11 47 secs	13	18 1m 13s
42/1	Birch Coppice Left Turn Lane 1	1695	Queue Aver Delay	5	4 27 secs	6	5 22 secs
42/2	Birch Coppice Left Turn Lane 2	1983	Queue Aver Delay	6	3 25 secs	9	6 21 secs
43/1	Birch Coppice Right Turn Lane 3	1690	Queue Aver Delay	3	2 27 secs	5	3 23 secs
<b>A5/ Core 42</b>							
46/1	A5 Eastbound Ahead Lane 1	1833	Queue Aver Delay	2	2 3 secs	6	2 6 secs
46/2	A5 Eastbound Ahead Lane 2	2082	Queue Aver Delay	1	1 1 sec	3	1 2 secs
47/1	A5 Eastbound Right Turn Lane 3	1667	Queue Aver Delay	2	2 59 secs	1	1 1m 2s
49/1	A5 Westbound Ahead & Left Turn Lane 1	1957	Queue Aver Delay	6	7 9 secs	8	5 9 secs
49/2	A5 Westbound Ahead Lane 2	1909	Queue Aver Delay	4	5 8 secs	7	4 9 secs

51/1	Core 42 Left Turn Lane 1	1695	Queue Aver Delay	1	2 2m 35s	2	2 57 secs
52/1	Core 42 Right Turn Lane 2	1690	Queue Aver Delay	0	0 8m 47s	1	1 3m 23s
<b>A5/ Dordon Roundabout</b>							
91/1	A5 Eastbound Lane 1	N/A	Queue Aver Delay	2	3 15 secs	2	7 18 secs
91/2	A5 Eastbound Lane 2	N/A	Queue Aver Delay	0	0 5 secs	0	0 7 secs
92/1 + 92/2 + 93/1	Long Street	N/A	Queue Aver Delay	3	1 30 secs	2	1 34 secs
97/1 + 98/1	A5 Westbound Lane 1	N/A	Queue Aver Delay	3	6 18 secs	1	4 13 secs
97/2	A5 Westbound Lane 2	N/A	Queue Aver Delay	0	1 12 secs	0	1 13 secs
100/1 + 100/2	Gypsy Lane	N/A	Queue Aver Delay	1	0 21 secs	1	0 19 secs
			Network PI	5780.99		5247.57	