

Variations in Station Level Crossing timings, 1st June 2011

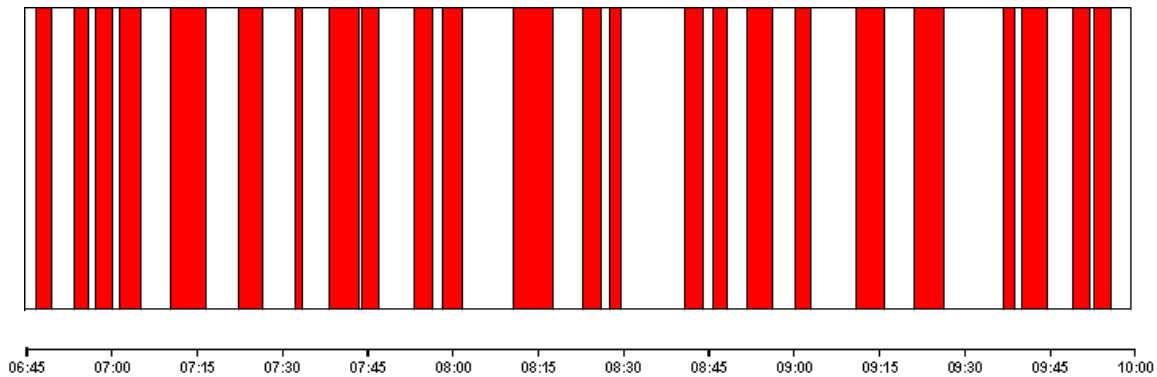
In order to show how level crossing timings vary during the day, this observation took place on 1st June 2011 over two peak periods of 3¼ hours, from 6:45 a.m. to 10 a.m. and from 4 p.m. to 7:15 p.m.

The basic timetable is for 2 electric trains per hour to and from Waterloo and two diesel trains per hour to and from Redhill / Gatwick, making 8 movements in all. There are additional trains in the peak, plus freight trains. Also, in the leaf-fall season, special trains pass at low speed, blasting slippery leaf material from the track, while in icy conditions special de-icing trains operate as needed. There will be four more train movements in both morning and evening peaks in 2014, and 'Airtrack' may eventually add half-hourly services.

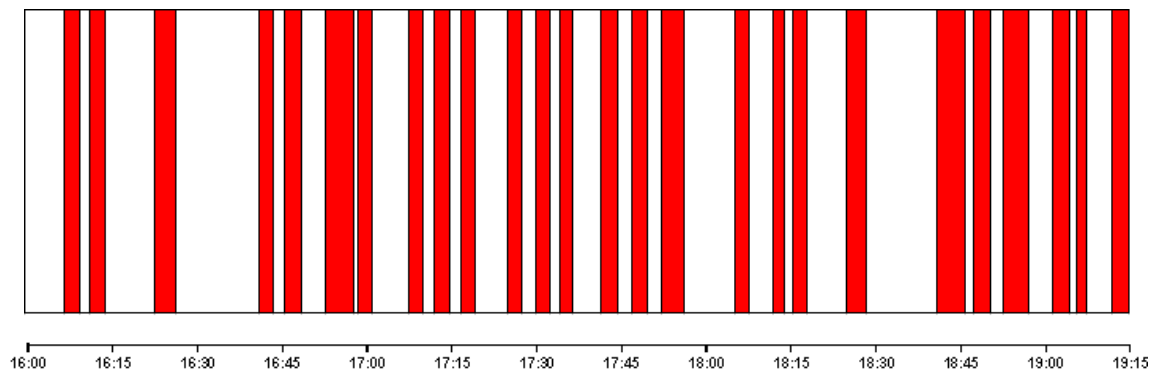
The electric trains to Waterloo are at 26 and 56 minutes past, while those from Waterloo are at 27 and 57 minutes past. In theory the barriers are down while both trains pass. The diesel train timings vary a little, but basically the Reading-bound trains are at 11 and 41 minutes past, while the Redhill-bound trains are at 13 and 43 minutes past; again, in theory the barriers are down while both trains pass.

In practice, minor delays are caused by a variety of reasons including temporary speed limits, longer times needed for passengers to board and leave trains, etc., while longer delays occur due to obstructions on the line, vehicles hitting bridges, vehicles obstructing level crossings, signalling problems and so on. Therefore, in practice, the barriers may be down for only one train at a time, or for three or more trains, causing potential variation throughout the day.

Morning peak (06:45 – 10:00):



Evening peak (16:00 – 19:15):



The table overleaf shows the timings in detail, from the initial amber flashing lights to the final clearance when the barriers were raised. During the morning, the barriers were down for 44% of the time. The maximum was 7 minutes at around 8:15, then 6 minutes at around 7:15, and 5 minutes between 9 a.m. and 9:30 a.m. On average, they were down for 4 minutes 40 seconds when two trains passed, and 2 minutes 41 seconds when only one passed. On a few occasions the amber lights flashed again within a minute of the barriers having been raised; it could take up to 7 seconds before the red lights flashed.

During the evening, the barriers were down for 40% of the time, with only one occasion exceeding 5 minutes, at around 6:45. On average, they were down for 4 minutes and 2 seconds when two trains passed, and 2 minutes 37 seconds when only one passed.

Details	Amber light	Red flashing light	Barriers down	Barriers up	Red lights off	Red time
FGW to Reading	06:46:55	06:47:00	06:47:20	06:49:45	06:49:50	00:02:50
SWT to Waterloo	06:53:45	06:53:50	06:54:15	06:56:15	06:56:20	00:02:30
SWT to Reading	06:57:27	06:57:35	06:57:55	07:00:30	07:00:35	00:03:00
SWT to Reading	07:01:47	07:01:53	07:02:15	07:05:35	07:05:40	00:03:47
FGW to Guildford 7:13; FGW to Reading 7:17	07:10:43	07:10:49	07:11:10	07:17:00	07:17:05	00:06:16
SWT to Reading 7:25; SWT to Waterloo 7:26	07:22:37	07:22:43	07:23:03	07:26:45	07:26:50	00:04:07
SWT to Waterloo	07:32:27	07:32:40	07:32:55	07:33:45	07:33:50	00:01:10
FGW to Reading 7:41; FGW to Guildford 7:43	07:38:35	07:38:40	07:39:00	07:43:45	07:43:50	00:05:10
Yeoman Mendip-Rail freight to Reading	07:44:20	07:44:25	07:44:35	07:47:13	07:47:18	00:02:53
SWT to Waterloo 7:56; SWT to Reading 7:57	07:53:32	07:53:37	07:53:58	07:56:45	07:56:53	00:03:16
FGW to Reading	07:58:28	07:58:33	07:58:48	08:01:50	08:01:58	00:03:25
FGW to Guildford 8:13; FGW to Reading 8:17	08:10:53	08:10:58	08:11:23	08:17:51	08:18:00	00:07:02
SWT to Reading 8:25; SWT to Waterloo 8:26	08:23:00	08:23:07	08:23:28	08:26:13	08:26:19	00:03:12
FGW to Guildford	08:27:38	08:27:45	08:28:05	08:29:38	08:29:45	00:02:00
FGW to Guildford	08:40:58	08:41:05	08:41:25	08:44:10	08:44:18	00:03:13
FGW to Reading	08:46:03	08:46:08	08:46:28	08:48:32	08:48:41	00:02:33
SWT to Reading 8:55; SWT to Waterloo 8:56	08:52:05	08:52:11	08:52:34	08:56:37	08:56:45	00:04:34
FGW to Reading	09:00:37	09:00:44	09:01:06	09:03:13	09:03:21	00:02:37
FGW to Guildford 9:13; SWT to Reading 9:16	09:11:14	09:11:20	09:11:40	09:16:18	09:16:25	00:05:05
SWT to Reading 9:24; SWT to Waterloo 9:26	09:21:35	09:21:40	09:22:06	09:26:47	09:26:55	00:05:15
SWT additional off-peak service to Waterloo	09:37:24	09:37:30	09:37:53	09:39:24	09:39:32	00:02:02
FGW to Guildford 9:43; SWT to Reading 9:45	09:40:44	09:40:49	09:41:10	09:45:10	09:45:16	00:04:27
FGW to Reading	09:49:44	09:49:52	09:50:13	09:52:42	09:52:47	00:02:55
SWT to Reading 9:56; SWT to Waterloo 9:56	09:53:26	09:53:32	09:53:54	09:56:21	09:56:28	00:02:56
Total red time, 06:45 to 10:00: 44% of peak						1:26:15
Average red time when 2 trains passing						00:04:40
Average red time when only 1 train crossing						00:02:41
FGW to Reading	16:06:49	16:06:55	16:07:18	16:09:30	16:09:36	00:02:41
FGW to Guildford	16:11:14	16:11:20	16:11:41	16:13:55	16:14:02	00:02:42
SWT to Reading 16:25; SWT to Waterloo 16:26	16:22:39	16:22:45	16:23:07	16:26:26	16:26:34	00:03:49
FGW to Guildford	16:41:13	16:41:19	16:41:38	16:43:38	16:43:43	00:02:24
FGW to Reading	16:45:36	16:45:42	16:46:04	16:48:34	16:48:41	00:02:59
SWT to Reading 16:55; SWT to Waterloo 16:57	16:52:47	16:52:52	16:53:13	16:57:39	16:57:46	00:04:54
FGW to Guildford	16:58:20	16:58:26	16:58:47	17:00:47	17:00:54	00:02:28
FGW to Reading	17:07:15	17:07:22	17:08:46	17:09:49	17:09:55	00:02:33
FGW to Guildford	17:11:51	17:11:56	17:12:18	17:14:40	17:14:46	00:02:50
SWT to Reading	17:16:38	17:16:45	17:17:05	17:19:13	17:19:18	00:02:33
SWT to Waterloo	17:24:51	17:24:57	17:25:19	17:27:26	17:27:32	00:02:35
SWT to Reading	17:29:57	17:30:02	17:30:24	17:32:32	17:32:37	00:02:35
SWT to Waterloo	17:34:19	17:34:24	17:34:47	17:36:30	17:36:36	00:02:12
FGW to Guildford 17:43; FGW to Reading 17:44	17:41:30	17:41:35	17:41:57	17:44:28	17:44:36	00:03:01
SWT to Reading, additional peak service	17:47:00	17:47:05	17:47:25	17:49:50	17:49:55	00:02:50
SWT to Reading 17:55; SWT to Waterloo 17:56	17:52:25	17:52:30	17:52:55	17:56:23	17:56:31	00:04:01
SWT to Waterloo	18:05:18	18:05:23	18:05:44	18:07:52	18:07:59	00:02:36
FGW to Guildford	18:12:05	18:12:12	18:12:34	18:14:02	18:14:07	00:01:55
FGW to Reading	18:15:27	18:15:34	18:15:58	18:18:00	18:18:05	00:02:31
SWT to Reading 18:27; SWT to Waterloo 18:28	18:24:53	18:24:58	18:25:21	18:28:19	18:28:27	00:03:29
FGW to Guildford 18:43; SWT to Reading 18:45	18:40:49	18:40:55	18:41:16	18:45:53	18:46:01	00:05:06
FGW to Reading	18:47:27	18:47:33	18:47:57	18:50:32	18:50:37	00:03:04
SWT to Reading 18:54; SWT to Waterloo 18:56	18:52:39	18:52:44	18:53:06	18:57:02	18:57:07	00:04:23
FGW to Reading	19:01:15	19:01:20	19:01:42	19:04:05	19:04:12	00:02:52
SWT to Waterloo	19:05:23	19:05:28	19:05:51	19:07:11	19:07:16	00:01:48
FGW to Guildford 19:13; FGW to Reading 19:14	19:11:44	19:11:50	19:14:10	19:14:42	19:14:48	00:02:58
Total red time, 16:00 to 19:15: 40% of peak						1:17:49
Average red time when 2 trains passing						00:04:02
Average red time when only 1 train crossing						00:02:37