

Tritax Symmetry (Hinckley) Limited

HINCKLEY NATIONAL RAIL FREIGHT INTERCHANGE

The Hinckley National Rail Freight Interchange Development Consent Order

Project reference TR050007

Narborough Level Crossing Note

Document reference: 18.5.3

Revision: 1

14 November 2023

Planning Act 2008

The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009
Regulation 5(2)(q)

NARBOROUGH LEVEL CROSSING

1. BACKGROUND

- 1.1 There has been local concern that the current experience locally of the Narborough Level Crossing downtime will exacerbate an existing perceived problem with cars queuing at the level crossing at peak times.
- 1.2 Prior to the submission of the application Leicestershire County Council requested details of the barrier downtime for the AM and PM peak and shoulder peaks (7AM-10AM) and (4PM – 7PM).
- 1.3 Network Rail have assessed the available train paths to and from HNRFI, via Narborough and Network Rail advised that there was only one available path in the morning peak and two available paths one hour apart in the evening peak. This was agreed with the TWG as part of the modelling brief part 8 of 20 (document reference 6.2.8.1 APP-145), based on data supplied by Network Rail and agreed with Leicestershire County Council.
- 1.4 Network Rail also advised that an HNRFI train should run through Narborough at 75mph, which at 775m max length train, would mean a crossing downtime of 2minutes 31 seconds.
- 1.5 Network Rail have been clear with the TWG and in its liaison with Leicestershire County Council, that the level of crossing downtime experienced at Narborough is well below the threshold at which it would normally expect to have to intervene.
- 1.6 Notwithstanding Network Rail's position the local concern has persisted. In a Rule 17 letter dated 22 September 2023 the ExA requested a study be undertaken for a full 7-day period using current use and adding in 4 trains per day and adding in 16 trains per day. As advised at Deadline 2 , the capacity study is only for 10 trains per day as 10 trains per day passes through Narborough not 16 as per paragraph 3.3 of the Rail Operations Report (document reference 6.2.3.1 APP131). y.In addition a 7 day camera survey was undertaken from Wednesday 11th October 2023 through to Tuesday 17th October 2023 to show the interaction of traffic with Narborough level Crossing. Notwithstanding Network Rail's position the local concern has persisted. In a Rule 17 letter dated 22 September 2023 the ExA requested a study be undertaken for a full 7-day period using current use and adding in 4 trains per day and adding in 16 trains per day. As advised at Deadline 2 submission, the capacity study is only for 10 trains per day as 10 trains per day passes through Narborough not 16 as per paragraph 3.3 of the Rail Operations Report (document reference 6.2.3.1 APP131). T y.
- 1.7 The new study commenced on Wednesday 11th October 2023 through to Tuesday 17th October 2023. This paper reflects the findings as presented in the Summary Analysis including the aspects requested by the ExA, to which this refers. This paper deals with the rail component and the representations made associated with Network Rail's operation of the Level Crossing.

2. METHODOLOGY

- 2.1 BWB organised for video cameras to be located to record the operation of the level crossing and its use, including whether queued vehicles could not clear the crossing between closing events.
- 2.2 The timings of the red stop light coming on and the raising of the barrier have been recorded to identify the period during which the level crossing has been closed. This is more accurate than using NR systems which are triggered as notifications to the signalman at Derby. Using Network Rail data, the individual train identities and direction of travel have been utilised to check the base video data.

In the Summary, for the ExA the following has been extracted:

- 2.2.1 **The number of trains in each hour.** The actual assessed number and time for each hour is shown to reflect that events frequently start before and end after a precise hour. So, all assessments will be for slightly longer or shorter periods.
 - 2.2.2 **The total minutes closed,** in the assessed period of c 1hour, which is the length of time that the crossing has been closed to vehicles and pedestrians.
 - 2.2.3 **The minimum period the level crossing is open for** as requested. This picks up occasions when there has been a short opening between two closely running train events.
 - 2.2.4 **The mean average open time,** which provides the average time the level crossing is open by dividing the total open time by the number of events.
 - 2.2.5 **The median average open time,** which provides the middle time between the shortest and longest openings.
 - 2.2.6 **The maximum minutes open time,** which is the longest opening time in any hour.
 - 2.2.7 **The total or cumulative open times,** which is the length of time vehicles and pedestrians are able to cross the railway in the assessed period.
 - 2.2.8 **The total time closed and total time open.** It has identified the minimum minutes the level crossing has been open in each hour.
- 2.3 In addition to the hourly breakdown for each of the 7 days, over 24 hours, the analysis of the current position, an assumption of 4 trains per day (8 paths) has been made to create a second analysis as requested. This assumes that three of the trains will operate during the peak period, to stress test the conclusions.
 - 2.4 Then a third analysis has been produced which assumes 10 trains per day (20 paths).

- 2.5 In order to tie back this new research to Network Rail's position based on previous timetables and activities, the current position has been set out showing the number of trains, the mean and median averages and the cumulative down and open times, as both time and as a percentage of each assessed period.
- 2.6 The additional assessed periods are for 24 hours, the capacity study period between 06:00 to 23:00; and the morning and evening peaks as requested by the Transport Working Group, for each of the 7 days, from the 11th to the 17th October 2023.

3. CONCLUSIONS

- 3.1 The variations between the weekdays are generally nominal as the railway operates generally to a working timetable, with variations and special services. It is clear from the data that Network Rail's assessment of impacts at peak time, as requested by the Transport Working Group, is supported in this review of current usage.
- 3.2 We recognise the concerns made in representations that an underestimation of barrier down time following HNRFI has been made. However, the results show that the additional down time throughout the peak period, at 10 HNRFI trains per day, provides vehicles and pedestrians with 70% open over the three hours.
- 3.3 It has been noted that the timings of individual passenger trains are variable due to their cross-country running, particularly Cambridge / Stanstead to and from Birmingham. These do at times cause longer down times in the peak if they come through close together, with level crossing closed times in excess of 6 minutes.
- 3.4 It is appreciated that this element of unpredictability could prove frustrating for those running to tight commuting times, but this is irrespective of HNRFI. What is noticeable from the paths used is that the freight use is both wide ranging (minerals, aggregates, maintenance and intermodal); and generally, runs to time.
- 3.5 Blaby District Council instructed Arup to review the operation of the level crossing. It did demonstrate that on occasions the level crossing closure in an hour could exceed 20 minutes. This is a fact which is confirmed by the new analysis and does not require extensive further research. This level of use is well below the 45 minutes downtime, at which Network Rail would expect to have to intervene.
- 3.6 Arup referred to work being required to consider the increased workload of the Signalman at Derby due to HNRFI, as this might impact reaction time at Narborough Level Crossing. This has been reviewed as part of the Applicant's work on signalling with Network Rail. The Signalman's Screen at Derby is going to be split to provide a reduced workload and better service. We understand this change due to be implemented in November 2024.
- 3.7 Arup's reference to the Level Crossing having a high-risk rating does not explain the technical background to this. A higher rating of a controlled level crossing relates

primarily to the impact on the operation of the rail network, if there was an incident, not the risk of there being an incident. This level crossing has a risk rating of J5, which is low to users and reflects the importance of this cross-country connecting section of the railway. HNRFI does not increase this risk.

- 3.8 Blaby District Council also instructed Icenl to consider the health and socio-economic and health impacts of the additional barrier down time, on Narborough and Littlethorpe. Icenl concluded *“This assessment concludes that the increased barrier downtime of the barrier at Narborough Crossing is not considered to have an overall material impact on quality of life of residents. Nevertheless, there will be occasions when the effect will be noticeable and would likely to influence daily routines causing delays.”*
- 3.9 Network Rail and the Applicant have undertaken all their work in good faith throughout. Network Rail has done so from a position of considerable experience and expertise. It has consistently concluded that HNRFI does not materially impact the public’s use of this level crossing and the full 24/7 review based on current use, with HNRFI traffic added, again justifies this.

NARBOROUGH LEVEL CROSSING OPEN & CLOSED TIMES BASED ON VIDEO RECORDED CLOSING TIMES FROM RED LIGHT ON TO BARRIER LIFTED INCLUDES FOR EXTENDED DOWN TIMES WHEN TRAINS PASSING BASED ON EVENTS ON WEDNESDAY 11th OCTOBER 2023

CURRENT SITUATION									Wednesday 11th October 2023								
TIME PERIOD	TRAINS	MEAN AV DOWN	MEDIAN AV DOWN	CUMULATIVE DOWN	MEAN AV OPEN	MEDIAN AV OPEN	CUMULATIVE OPEN	ASSESSED	TIME PERIOD	TRAINS	MEAN AV DOWN	MEDIAN AV DOWN	CUMULATIVE DOWN	MEAN AV OPEN	MEDIAN AV OPEN	CUMULATIVE OPEN	ASSESSED
24 HOURS	90	00:03:31	00:02:58	04:54:43	00:13:38	00:09:27	19:05:16	23:59:59	24 HOURS	98	00:03:28	00:02:56	05:12:38	00:12:32	00:07:29	18:47:21	23:59:59
				20%			80%						22%			78%	
Capacity Stud	82	00:03:33	00:02:59	04:30:09	00:09:53	00:08:54	12:31:40	17:01:49	Capacity Stud	90	00:03:31	00:02:56	04:48:04	00:08:57	00:07:17	12:13:45	17:01:49
06:00 - 23:00				26%			74%		06:00 - 23:00				28%			72%	
Morning Peak	14	00:04:13	00:04:20	00:46:23	00:11:51	00:12:54	02:10:19	02:56:42	Morning Peak	15	00:04:04	00:04:18	00:48:54	00:10:39	00:09:12	02:07:48	02:56:42
07:00 - 10:00				26%			74%		07:00 - 10:00				28%			72%	
Evening Peak	16	00:03:11	00:02:50	00:50:54	00:08:27	00:07:52	02:15:09	03:06:03	Evening Peak	18	00:03:17	00:02:52	00:55:54	00:07:39	00:07:29	02:10:09	03:06:03
16:00 - 19:00				27%			73%		16:00 - 19:00				30%			70%	

WITH 4 HNRFI TRAINS EACH WAY								
TIME PERIOD	TRAINS	MEAN AV DOWN	MEDIAN AV DOWN	CUMULATIVE DOWN	MEAN AV OPEN	MEDIAN AV OPEN	CUMULATIVE OPEN	ASSESSED
24 HOURS	98	00:03:28	00:02:56	05:12:38	00:12:32	00:07:29	18:47:21	23:59:59
Capacity Stud	90	00:03:31	00:02:56	04:48:04	00:08:57	00:07:17	12:13:45	17:01:49
06:00 - 23:00				28%			72%	
Morning Peak	15	00:04:04	00:04:18	00:48:54	00:10:39	00:09:12	02:07:48	02:56:42
07:00 - 10:00				28%			72%	
Evening Peak	18	00:03:17	00:02:52	00:55:54	00:07:39	00:07:29	02:10:09	03:06:03
16:00 - 19:00				30%			70%	

WITH 10 HNRFI TRAINS EACH WAY								
TIME PERIOD	TRAINS	MEAN AV DOWN	MEDIAN AV DOWN	CUMULATIVE DOWN	MEAN AV OPEN	MEDIAN AV OPEN	CUMULATIVE OPEN	ASSESSED
24 HOURS	108	00:03:29	00:02:55	05:31:16	00:11:40	00:06:18	18:28:43	23:59:59
Capacity Stud	100	00:03:32	00:02:55	05:06:42	00:08:13	00:06:05	11:55:07	17:01:49
06:00 - 23:00				30%			70%	
Morning Peak	15	00:04:04	00:04:18	00:48:54	00:10:39	00:09:12	02:07:48	02:56:42
07:00 - 10:00				28%			72%	
Evening Peak	18	00:03:17	00:02:52	00:55:54	00:07:39	00:07:29	02:10:09	03:06:03
16:00 - 19:00				30%			70%	

HOURS	Number of trains in hours	TOTAL Minutes CLOSED	MINIMUM Minutes OPEN between events	MEAN AVERAGE Minutes OPEN between events	MEDIAN AVERAGE Minutes OPEN between events	MAXIMUM Minutes OPEN between events	TOTAL Minutes OPEN	ACTUAL ASSESSED PERIOD
00:00-06:00	4	00:13:19	00:01:16	01:10:01	00:47:40	02:33:14	05:50:03	06:03:22
06:00-07:00	6	00:20:24	00:02:12	00:07:10	00:06:55	00:13:11	00:43:02	01:03:26
07:00-08:00	4	00:16:01	00:00:55	00:15:36	00:21:17	00:24:35	00:46:47	01:02:48
08:00-09:00	5	00:18:51	00:04:05	00:08:21	00:05:56	00:17:29	00:33:25	00:52:16
09:00-10:00	5	00:11:31	00:03:29	00:12:32	00:14:22	00:17:54	00:50:07	01:01:38
10:00-11:00	3	00:20:41	00:06:12	00:13:00	00:10:20	00:22:28	00:39:00	00:59:41
11:00-12:00	4	00:11:32	00:00:44	00:11:18	00:12:55	00:18:36	00:45:10	00:56:42
12:00-13:00	8	00:23:13	00:02:11	00:03:19	00:03:03	00:04:28	00:37:16	01:00:29
13:00-14:00	5	00:13:06	00:02:23	00:12:25	00:12:31	00:22:14	00:49:39	01:02:45
14:00-15:00	3	00:09:46	00:06:32	00:16:02	00:18:35	00:23:00	00:48:07	00:57:53
15:00-16:00	6	00:22:51	00:00:57	00:06:19	00:03:06	00:21:01	00:37:54	01:00:45
16:00-17:00	5	00:15:00	00:02:50	00:08:39	00:09:35	00:14:02	00:43:13	00:58:13
17:00-18:00	6	00:19:16	00:00:51	00:07:23	00:05:58	00:17:34	00:44:17	01:03:33
18:00-19:00	5	00:16:38	00:02:57	00:09:32	00:07:34	00:17:27	00:47:39	01:04:17
19:00-20:00	3	00:09:18	00:10:32	00:15:08	00:17:05	00:17:46	00:45:23	00:54:41
20:00-21:00	7	00:18:00	00:00:19	00:07:16	00:05:28	00:19:47	00:50:52	01:08:52
21:00-22:00	5	00:15:20	00:03:52	00:10:27	00:10:11	00:17:34	00:41:49	00:57:09
22:00-23:00	2	00:08:41	00:23:37	00:24:00	00:24:00	00:24:23	00:48:00	00:56:41
23:00-24:00	4	00:11:15	00:01:58	00:14:31	00:06:18	00:35:17	00:43:33	00:54:48
							23:59:59	23:59:59

HOURS	Number of trains in hours	TOTAL Minutes CLOSED	MINIMUM Minutes OPEN between events	MEAN AVERAGE Minutes OPEN between events	MEDIAN AVERAGE Minutes OPEN between events	MAXIMUM Minutes OPEN between events	TOTAL Minutes OPEN	ACTUAL ASSESSED PERIOD
00:00-06:00	4	00:13:19	00:01:16	01:10:01	00:47:40	02:33:14	05:50:03	06:03:22
06:00-07:00	7	00:22:55	00:01:43	00:05:47	00:04:32	00:11:11	00:40:31	01:03:26
07:00-08:00	4	00:16:01	00:00:55	00:15:36	00:21:17	00:24:35	00:46:47	01:02:48
08:00-09:00	5	00:18:51	00:04:05	00:08:21	00:05:56	00:17:29	00:33:25	00:52:16
09:00-10:00	6	00:14:02	00:01:00	00:09:31	00:12:19	00:17:54	00:47:36	01:01:38
10:00-11:00	3	00:20:41	00:06:12	00:13:00	00:10:20	00:22:28	00:39:00	00:59:41
11:00-12:00	6	00:16:34	00:00:44	00:06:41	00:05:29	00:11:17	00:40:08	00:56:42
12:00-13:00	9	00:23:33	00:02:31	00:03:22	00:02:48	00:04:28	00:36:56	01:00:29
13:00-14:00	6	00:15:37	00:02:23	00:09:26	00:11:04	00:13:58	00:47:08	01:02:45
14:00-15:00	3	00:09:46	00:06:32	00:16:02	00:18:35	00:23:00	00:48:07	00:57:53
15:00-16:00	6	00:22:51	00:00:57	00:06:19	00:03:06	00:21:01	00:37:54	01:00:45
16:00-17:00	6	00:17:29	00:02:50	00:08:09	00:07:06	00:14:02	00:40:44	00:58:13
17:00-18:00	7	00:21:47	00:00:51	00:05:58	00:04:26	00:15:53	00:41:46	01:03:33
18:00-19:00	5	00:16:38	00:02:57	00:09:32	00:07:34	00:17:27	00:47:39	01:04:17
19:00-20:00	3	00:09:18	00:10:32	00:15:08	00:17:05	00:17:46	00:45:23	00:54:41
20:00-21:00	7	00:18:00	00:00:19	00:07:16	00:05:28	00:19:47	00:50:52	01:08:52
21:00-22:00	5	00:15:20	00:03:52	00:10:27	00:10:11	00:17:34	00:41:49	00:57:09
22:00-23:00	2	00:08:41	00:23:37	00:24:00	00:24:00	00:24:23	00:48:00	00:56:41
23:00-24:00	4	00:11:15	00:01:58	00:14:31	00:06:18	00:35:17	00:43:33	00:54:48
							23:59:59	23:59:59

HOURS	Number of trains in hours	TOTAL Minutes CLOSED	MINIMUM Minutes OPEN between events	MEAN AVERAGE Minutes OPEN between events	MEDIAN AVERAGE Minutes OPEN between events	MAXIMUM Minutes OPEN between events	TOTAL Minutes OPEN	ACTUAL ASSESSED PERIOD
00:00-06:00	4	00:13:19	00:01:16	01:10:01	00:47:40	02:33:14	05:50:03	06:03:22
06:00-07:00	6	00:20:24	00:02:12	00:07:10	00:06:55	00:13:11	00:43:02	01:03:26
07:00-08:00	4	00:16:01	00:00:55	00:15:36	00:21:17	00:24:35	00:46:47	01:02:48
08:00-09:00	5	00:18:51	00:04:05	00:08:21	00:05:56	00:17:29	00:33:25	00:52:16
09:00-10:00	5	00:11:31	00:03:29	00:12:32	00:14:22	00:17:54	00:50:07	01:01:38
10:00-11:00	3	00:20:41	00:06:12	00:13:00	00:10:20	00:22:28	00:39:00	00:59:41
11:00-12:00	4	00:11:32	00:00:44	00:11:18	00:12:55	00:18:36	00:45:10	00:56:42
12:00-13:00	8	00:23:13	00:02:11	00:03:19	00:03:03	00:04:28	00:37:16	01:00:29
13:00-14:00	5	00:13:06	00:02:23	00:12:25	00:12:31	00:22:14	00:49:39	01:02:45
14:00-15:00	3	00:09:46	00:06:32	00:16:02	00:18:35	00:23:00	00:48:07	00:57:53
15:00-16:00	6	00:22:51	00:00:57	00:06:19	00:03:06	00:21:01	00:37:54	01:00:45
16:00-17:00	5	00:15:00	00:02:50	00:08:39	00:09:35	00:14:02	00:43:13	00:58:13
17:00-18:00	6	00:19:16	00:00:51	00:07:23	00:05:58	00:17:34	00:44:17	01:03:33
18:00-19:00	5	00:16:38	00:02:57	00:09:32	00:07:34	00:17:27	00:47:39	01:04:17
19:00-20:00	3	00:09:18	00:10:32	00:15:08	00:17:05	00:17:46	00:45:23	00:54:41
20:00-21:00	7	00:18:00	00:00:19	00:07:16	00:05:28	00:19:47	00:50:52	01:08:52
21:00-22:00	5	00:15:20	00:03:52	00:10:27	00:10:11	00:17:34	00:41:49	00:57:09
22:00-23:00	2	00:08:41	00:23:37	00:24:00	00:24:00	00:24:23	00:48:00	00:56:41
23:00-24:00	4	00:11:15	00:01:58	00:14:31	00:06:18	00:35:17	00:43:33	00:54:48
							23:59:59	23:59:59

IMPORTANT NOTES

The Crossing Down Time has not been taken from the time the barrier is lowered, but by the longer period starting from when the red lights flash and legally restrict the use of the crossing, through to the barrier being raised.

THis assessment is based on video evidence of each closing event, recorded for the purpose of assessing the immediate impact on the highway.

Network Rail data is assessed at remote points linked to advise to the signaller and is not specific to the highway restriction. The actual train crossing events are interpolated from Network Rail data of trains passing through Hincley and Crat.

In the Peak Periods there are only three train paths identified for HNRFI, one in the morning and two in the evening. Whilst they may never be used, for robustness they have been assumed to have been utilised in the 4 trains per day scenario.

NARBOROUGH LEVEL CROSSING OPEN & CLOSED TIMES BASED ON VIDEO RECORDED CLOSING TIMES FROM RED LIGHT ON TO BARRIER LIFTED INCLUDES FOR EXTENDED DOWN TIMES WHEN TRAINS PASSING BASED ON EVENTS ON THURSDAY 12th OCTOBER 2023

CURRENT SITUATION									Thursday 12th October 2023								
TIME PERIOD	TRAINS	MEAN AV DOWN	MEDIAN AV DOWN	CUMULATIVE DOWN	MEAN AV OPEN	MEDIAN AV OPEN	CUMULATIVE OPEN	ASSESSED	TIME PERIOD	TRAINS	MEAN AV DOWN	MEDIAN AV DOWN	CUMULATIVE DOWN	MEAN AV OPEN	MEDIAN AV OPEN	CUMULATIVE OPEN	ASSESSED
24 HOURS	81	00:03:19	00:03:00	04:15:18	00:13:23	00:07:54	19:44:41	23:59:59	24 HOURS	81	00:03:19	00:03:00	04:15:18	00:13:23	00:07:54	19:44:41	23:59:59
				18%			82%										
Capacity Stud	76	00:03:22	00:03:00	03:59:05	00:11:23	00:07:51	13:50:41	17:49:46	Capacity Stud	76	00:03:22	00:03:00	03:59:05	00:11:23	00:07:51	13:50:41	17:49:46
06:00 - 23:00				22%			78%		06:00 - 23:00				22%			78%	
Morning Peak	17	00:03:42	00:03:24	00:51:48	00:07:26	00:05:45	01:58:51	02:50:39	Morning Peak	17	00:03:42	00:03:24	00:51:48	00:07:26	00:05:45	01:58:51	02:50:39
07:00 - 10:00				30%			70%		07:00 - 10:00				30%			70%	
Evening Peak	10	00:02:49	00:02:46	00:43:38	00:11:17	00:04:10	03:11:45	03:55:23	Evening Peak	10	00:02:49	00:02:46	00:43:38	00:11:17	00:04:10	03:11:45	03:55:23
16:00 - 19:00		see note		19%			81%		16:00 - 19:00		see note		19%			81%	

WITH 4 HNRFI TRAINS EACH WAY								
TIME PERIOD	TRAINS	MEAN AV DOWN	MEDIAN AV DOWN	CUMULATIVE DOWN	MEAN AV OPEN	MEDIAN AV OPEN	CUMULATIVE OPEN	ASSESSED
24 HOURS	87	00:03:17	00:02:56	04:35:30	00:13:52	00:07:16	19:24:39	23:59:59
				19%			81%	
Capacity Stud	82	00:03:19	00:02:55	04:19:07	00:10:08	00:07:14	13:30:39	17:49:46
06:00 - 23:00				24%			76%	
Morning Peak	17	00:03:37	00:02:52	00:54:19	00:06:51	00:05:21	01:56:20	02:50:39
07:00 - 10:00				32%			68%	
Evening Peak	10	00:03:02	00:03:00	00:46:03	00:11:08	00:04:10	03:09:20	03:55:23
16:00 - 19:00		see note		20%			80%	

WITH 10 HNRFI TRAINS EACH WAY								
TIME PERIOD	TRAINS	MEAN AV DOWN	MEDIAN AV DOWN	CUMULATIVE DOWN	MEAN AV OPEN	MEDIAN AV OPEN	CUMULATIVE OPEN	ASSESSED
24 HOURS	99	00:03:20	00:02:55	05:10:43	00:12:09	00:06:22	18:49:16	23:59:59
				22%			78%	
Capacity Stud	94	00:03:23	00:02:54	04:54:30	00:08:43	00:06:17	12:55:16	17:49:46
06:00 - 23:00				28%			72%	
Morning Peak	16	00:03:37	00:02:52	00:54:19	00:06:51	00:05:21	01:56:20	02:50:39
07:00 - 10:00				32%			68%	
Evening Peak	11	00:03:02	00:02:53	00:48:34	00:10:23	00:04:29	03:06:49	03:55:23
16:00 - 19:00		see note		21%			79%	

HOURS	Number of trains in hours	TOTAL Minutes CLOSED	MINIMUM Minutes OPEN between events	MEAN AVERAGE Minutes OPEN between events	MEDIAN AVERAGE Minutes OPEN between events	MAXIMUM Minutes OPEN between events	TOTAL Minutes OPEN	ACTUAL ASSESSED PERIOD
00:00-06:00	2	00:06:38	00:17:19	01:59:14	00:30:57	05:09:26	05:57:42	06:04:20
06:00-07:00	6	00:21:36	00:01:58	00:05:20	00:03:13	00:12:51	00:31:57	00:53:33
07:00-08:00	5	00:16:25	00:00:30	00:11:30	00:12:54	00:19:41	00:45:59	01:02:24
08:00-09:00	6	00:21:07	00:01:31	00:06:49	00:05:45	00:18:10	00:40:55	01:02:02
09:00-10:00	4	00:14:16	00:03:02	00:10:58	00:11:23	00:17:15	00:43:53	00:58:09
10:00-11:00	3	00:10:02	00:06:22	00:16:46	00:19:03	00:24:52	00:50:17	01:00:19
11:00-12:00	5	00:13:36	00:07:12	00:11:41	00:08:21	00:22:49	00:46:42	01:00:18
12:00-13:00	7	00:21:58	00:01:37	00:06:31	00:05:23	00:13:05	00:39:09	01:01:07
13:00-14:00	3	00:09:36	00:07:20	00:16:25	00:19:31	00:22:24	00:49:15	00:58:51
14:00-15:00	4	00:09:49	00:08:12	00:17:06	00:18:53	00:24:12	00:51:17	01:01:06
15:00-16:00	6	00:19:05	00:01:35	00:06:51	00:03:18	00:18:56	00:41:06	01:00:11
16:00-17:00	4	00:12:06	00:05:06	00:09:07	00:06:55	00:17:03	00:45:34	00:57:40
17:00-18:00	1	00:00:00	00:58:08	00:58:08	00:58:08	00:58:08	00:58:08	00:58:08
18:00-19:00	5	00:18:55	00:00:28	00:09:23	00:02:50	00:37:21	00:46:57	01:05:52
19:00-20:00	3	00:08:48	00:07:20	00:17:27	00:22:04	00:22:58	00:52:22	01:01:10
20:00-21:00	7	00:18:30	00:01:09	00:07:30	00:02:50	00:19:51	00:37:29	00:55:59
21:00-22:00	5	00:14:22	00:02:52	00:09:57	00:05:43	00:19:27	00:49:43	01:04:05
22:00-23:00	2	00:08:54	00:25:20	00:25:51	00:26:22	00:51:42	01:00:36	
23:00-24:00	3	00:09:35	00:03:30	00:14:51	00:20:15	00:20:49	00:44:34	00:54:09

HOURS	Number of trains in hours	TOTAL Minutes CLOSED	MINIMUM Minutes OPEN between events	MEAN AVERAGE Minutes OPEN between events	MEDIAN AVERAGE Minutes OPEN between events	MAXIMUM Minutes OPEN between events	TOTAL Minutes OPEN	ACTUAL ASSESSED PERIOD
00:00-06:00	2	00:06:38	00:17:19	01:59:14	00:30:57	05:09:26	05:57:42	06:04:20
06:00-07:00	6	00:24:07	00:00:44	00:04:12	00:02:19	00:12:51	00:29:26	00:53:33
07:00-08:00	5	00:16:25	00:00:30	00:11:30	00:12:54	00:19:41	00:45:59	01:02:24
08:00-09:00	6	00:21:07	00:01:31	00:06:49	00:05:45	00:18:10	00:40:55	01:02:02
09:00-10:00	5	00:16:47	00:03:52	00:08:16	00:07:15	00:15:31	00:41:22	00:58:09
10:00-11:00	3	00:10:02	00:06:22	00:16:46	00:19:03	00:24:52	00:50:17	01:00:19
11:00-12:00	7	00:18:38	00:01:42	00:06:57	00:07:18	00:12:54	00:41:40	01:00:18
12:00-13:00	8	00:24:29	00:01:37	00:05:14	00:03:45	00:13:05	00:36:38	01:01:07
13:00-14:00	4	00:12:07	00:06:17	00:11:41	00:10:28	00:19:31	00:46:44	00:58:51
14:00-15:00	4	00:09:49	00:08:12	00:17:06	00:18:53	00:24:12	00:51:17	01:01:06
15:00-16:00	6	00:19:05	00:01:35	00:06:51	00:03:18	00:18:56	00:41:06	01:00:11
16:00-17:00	4	00:14:31	00:05:06	00:08:38	00:06:30	00:16:30	00:43:09	00:57:40
17:00-18:00	1	00:00:00	00:58:08	00:58:08	00:58:08	00:58:08	00:58:08	00:58:08
18:00-19:00	5	00:18:55	00:00:28	00:09:23	00:02:50	00:37:21	00:46:57	01:05:52
19:00-20:00	4	00:11:19	00:07:20	00:17:28	00:09:46	00:22:58	00:49:51	01:01:10
20:00-21:00	7	00:18:30	00:01:09	00:07:30	00:02:50	00:19:51	00:37:29	00:55:59
21:00-22:00	5	00:14:22	00:02:52	00:09:57	00:05:43	00:19:27	00:49:43	01:04:05
22:00-23:00	2	00:08:54	00:25:20	00:25:51	00:26:22	00:51:42	01:00:36	
23:00-24:00	3	00:09:35	00:03:30	00:14:51	00:20:15	00:20:49	00:44:34	00:54:09

HOURS	Number of trains in hours	TOTAL Minutes CLOSED	MINIMUM Minutes OPEN between events	MEAN AVERAGE Minutes OPEN between events	MEDIAN AVERAGE Minutes OPEN between events	MAXIMUM Minutes OPEN between events	TOTAL Minutes OPEN	ACTUAL ASSESSED PERIOD
00:00-06:00	2	00:06:38	00:17:19	01:59:14	00:30:57	05:09:26	05:57:42	06:04:20
06:00-07:00	5	00:24:07	00:00:44	00:04:12	00:02:19	00:12:51	00:29:26	00:53:33
07:00-08:00	5	00:16:25	00:00:30	00:11:30	00:12:54	00:19:41	00:45:59	01:02:24
08:00-09:00	6	00:21:07	00:01:31	00:06:49	00:05:45	00:18:10	00:40:55	01:02:02
09:00-10:00	5	00:16:47	00:03:52	00:08:16	00:07:15	00:15:31	00:41:22	00:58:09
10:00-11:00	3	00:10:02	00:06:22	00:16:46	00:19:03	00:24:52	00:50:17	01:00:19
11:00-12:00	7	00:18:38	00:01:42	00:06:57	00:07:18	00:12:54	00:41:40	01:00:18
12:00-13:00	8	00:24:29	00:01:37	00:05:14	00:03:45	00:13:05	00:36:38	01:01:07
13:00-14:00	5	00:21:02	00:03:14	00:07:34	00:07:20	00:13:07	00:37:49	00:58:51
14:00-15:00	6	00:12:20	00:08:03	00:11:09	00:10:55	00:14:44	00:44:37	00:56:57
15:00-16:00	8	00:25:45	00:01:35	00:05:31	00:02:54	00:13:15	00:38:35	01:04:20
16:00-17:00	5	00:14:31	00:05:06	00:08:38	00:06:30	00:16:30	00:43:09	00:57:40
17:00-18:00	1	00:00:00	00:58:08	00:58:08	00:58:08	00:58:08	00:58:08	00:58:08
18:00-19:00	5	00:18:55	00:00:28	00:09:23	00:02:50	00:37:21	00:46:57	01:05:52
19:00-20:00	6	00:16:21	00:00:42	00:07:28	00:08:44	00:12:03	00:44:49	01:01:10
20:00-21:00	9	00:23:32	00:00:54	00:04:38	00:02:50	00:11:37	00:32:27	00:55:59
21:00-22:00	7	00:19:04	00:02:52	00:07:30	00:05:02	00:15:09	00:45:01	01:04:05
22:00-23:00	3	00:11:25	00:04:37	00:16:24	00:19:14	00:25:20	00:49:11	01:00:36
23:00-24:00	3	00:09:35	00:03:30	00:14:51	00:20:15	00:20:49	00:44:34	00:54:09

IMPORTANT NOTES

The Crossing Down Time has not been taken from the time the barrier is lowered, but by the longer period starting from when the red lights flash and legally restrict the use of the crossing, through to the barrier being raised.

This assessment is based on video evidence of each closing event, recorded for the purpose of assessing the immediate impact on the highway.

Network Rail data is assessed at remote points linked to advise to the signalman and is not specific to the highway restriction. The actual train crossing events are interpolated from Network Rail data of trains passing through Hinckley and Croft.

In the Peak Periods there are only three train paths identified for HNRFI, one in the morning and two in the evening. Whilst they may never be used, for robustness they have been assumed to have been utilised in the 4 trains per day scenario.

The line was closed due to disruption on the rail network for c 1 hour and the level crossing therefore remained open between 16:43 and 17:58

NARBOROUGH LEVEL CROSSING OPEN & CLOSED TIMES BASED ON VIDEO RECORDED CLOSING TIMES FROM RED LIGHT ON TO BARRIER LIFTED INCLUDES FOR EXTENDED DOWN TIMES WHEN TRAINS PASSING BASED ON EVENTS ON FRIDAY 13th OCTOBER 2023

CURRENT SITUATION								
Friday 13th October 2023								
TIME PERIOD	TRAINS	MEAN AV DOWN	MEDIAN AV DOWN	CUMULATIVE DOWN	MEAN AV OPEN	MEDIAN AV OPEN	CUMULATIVE OPEN	ASSESSED
24 HOURS	85	00:03:25	00:03:05	04:43:02	00:13:56	00:06:33	19:16:57	23:59:59
				20%			80%	
Capacity Study	81	00:03:27	00:03:05	04:29:41	00:09:37	00:06:14	12:30:30	17:00:11
06:00 - 23:00				26%			74%	
Morning Peak	15	00:03:35	00:03:29	00:50:06	00:10:57	00:08:51	02:23:14	03:23:30
07:00 - 10:00				25%			75%	
Evening Peak	15	00:03:18	00:02:56	00:49:28	00:09:06	00:06:17	02:16:32	03:06:00
16:00 - 19:00				27%			73%	

WITH 4 HNRFI TRAINS EACH WAY								
TIME PERIOD	TRAINS	MEAN AV DOWN	MEDIAN AV DOWN	CUMULATIVE DOWN	MEAN AV OPEN	MEDIAN AV OPEN	CUMULATIVE OPEN	ASSESSED
24 HOURS	93	00:03:22	00:03:04	04:55:41	00:13:00	00:06:22	19:04:18	23:59:59
				21%			79%	
Capacity Study	89	00:03:24	00:03:02	04:42:20	00:08:53	00:06:03	12:17:51	17:00:11
06:00 - 23:00				28%			72%	
Morning Peak	16	00:03:38	00:03:49	00:50:55	00:10:53	00:08:51	02:22:25	03:23:30
07:00 - 10:00				25%			75%	
Evening Peak	17	00:03:12	00:02:52	00:54:30	00:07:44	00:04:57	02:11:30	03:06:00
16:00 - 19:00				29%			71%	

WITH 10 HNRFI TRAINS EACH WAY								
TIME PERIOD	TRAINS	MEAN AV DOWN	MEDIAN AV DOWN	CUMULATIVE DOWN	MEAN AV OPEN	MEDIAN AV OPEN	CUMULATIVE OPEN	ASSESSED
24 HOURS	107	00:03:20	00:03:00	05:20:15	00:11:40	00:05:48	18:39:44	23:59:59
				22%			78%	
Capacity Study	103	00:03:22	00:02:58	05:06:54	00:07:50	00:05:25	11:53:17	17:00:11
06:00 - 23:00				30%			70%	
Morning Peak	16	00:03:38	00:03:49	00:50:55	00:10:53	00:08:51	02:22:25	03:23:30
07:00 - 10:00				25%			75%	
Evening Peak	17	00:03:12	00:02:52	00:54:30	00:07:44	00:04:57	02:11:30	03:06:00
16:00 - 19:00				29%			71%	

HOURS	Number of trains in hours	TOTAL Minutes CLOSED	MINIMUM Minutes OPEN between events	MEAN AVERAGE Minutes OPEN between events	MEDIAN AVERAGE Minutes OPEN between events	MAXIMUM Minutes OPEN between events	TOTAL Minutes OPEN	ACTUAL ASSESSED PERIOD
00:00-06:00	2	00:07:12	00:06:42	01:58:50	01:03:03	04:47:45	05:56:30	06:03:42
06:00-07:00	5	00:20:09	00:00:30	00:07:48	00:05:45	00:22:16	00:38:59	00:59:08
07:00-08:00	4	00:18:11	00:01:06	00:12:41	00:11:50	00:25:57	00:50:43	01:03:54
08:00-09:00	4	00:13:42	00:01:41	00:13:57	00:16:07	00:24:02	00:41:50	00:55:32
09:00-10:00	7	00:23:13	00:01:41	00:08:40	00:04:58	00:25:35	01:00:41	01:23:54
10:00-11:00	2	00:08:40	00:13:00	00:15:19	00:15:19	00:17:38	00:30:38	00:39:18
11:00-12:00	6	00:17:09	00:03:53	00:07:24	00:05:41	00:17:59	00:44:26	01:01:35
12:00-13:00	7	00:23:12	00:02:41	00:04:56	00:03:41	00:09:46	00:34:30	00:57:42
13:00-14:00	4	00:12:49	00:01:52	00:10:50	00:12:04	00:17:20	00:43:21	00:56:10
14:00-15:00	4	00:12:14	00:03:27	00:13:58	00:15:50	00:20:44	00:55:51	01:08:05
15:00-16:00	6	00:21:20	00:00:47	00:07:00	00:03:35	00:24:29	00:35:00	00:56:20
16:00-17:00	6	00:20:03	00:03:42	00:06:32	00:05:37	00:13:24	00:39:12	00:59:15
17:00-18:00	5	00:14:34	00:01:46	00:09:01	00:11:30	00:14:29	00:45:06	00:59:40
18:00-19:00	4	00:14:51	00:00:26	00:13:03	00:10:55	00:29:58	00:52:14	01:07:05
19:00-20:00	4	00:11:58	00:03:04	00:10:18	00:06:18	00:25:31	00:41:11	00:53:09
20:00-21:00	5	00:14:01	00:01:38	00:09:05	00:03:06	00:28:23	00:45:23	00:59:24
21:00-22:00	4	00:15:19	00:04:40	00:11:56	00:08:26	00:26:12	00:47:44	01:03:03
22:00-23:00	4	00:13:16	00:04:46	00:14:34	00:15:31	00:23:24	00:43:41	00:56:57
23:00-24:00	2	00:06:09	00:06:51	00:24:58	00:24:58	00:49:57	00:56:06	23:59:59

HOURS	Number of trains in hours	TOTAL Minutes CLOSED	MINIMUM Minutes OPEN between events	MEAN AVERAGE Minutes OPEN between events	MEDIAN AVERAGE Minutes OPEN between events	MAXIMUM Minutes OPEN between events	TOTAL Minutes OPEN	ACTUAL ASSESSED PERIOD
00:00-06:00	2	00:07:12	00:06:42	01:58:50	01:03:03	04:47:45	05:56:30	06:03:42
06:00-07:00	6	00:22:40	00:00:30	00:06:05	00:03:54	00:18:25	00:36:28	00:59:08
07:00-08:00	4	00:18:11	00:01:06	00:12:41	00:11:50	00:25:57	00:50:43	01:03:54
08:00-09:00	4	00:13:42	00:01:41	00:13:57	00:16:07	00:24:02	00:41:50	00:55:32
09:00-10:00	8	00:24:02	00:01:41	00:08:33	00:04:09	00:25:35	00:59:52	01:23:54
10:00-11:00	2	00:08:40	00:13:00	00:15:19	00:15:19	00:17:38	00:30:38	00:39:18
11:00-12:00	8	00:18:55	00:03:53	00:06:06	00:06:05	00:08:17	00:42:40	01:01:35
12:00-13:00	8	00:23:12	00:02:41	00:04:56	00:03:41	00:09:46	00:34:30	00:57:42
13:00-14:00	5	00:15:20	00:01:52	00:08:10	00:06:56	00:17:13	00:40:50	00:56:10
14:00-15:00	4	00:12:14	00:03:27	00:13:58	00:15:50	00:20:44	00:55:51	01:08:05
15:00-16:00	6	00:21:20	00:00:47	00:07:00	00:03:35	00:24:29	00:35:00	00:56:20
16:00-17:00	7	00:22:34	00:00:33	00:05:14	00:04:09	00:13:24	00:36:41	00:59:15
17:00-18:00	6	00:17:05	00:01:46	00:07:06	00:06:27	00:14:29	00:42:35	00:59:40
18:00-19:00	4	00:14:51	00:00:26	00:13:03	00:10:55	00:29:58	00:52:14	01:07:05
19:00-20:00	4	00:11:58	00:03:04	00:10:18	00:06:18	00:25:31	00:41:11	00:53:09
20:00-21:00	5	00:14:01	00:01:38	00:09:05	00:03:06	00:28:23	00:45:23	00:59:24
21:00-22:00	4	00:15:19	00:04:40	00:11:56	00:08:26	00:26:12	00:47:44	01:03:03
22:00-23:00	4	00:13:16	00:04:46	00:14:34	00:15:31	00:23:24	00:43:41	00:56:57
23:00-24:00	2	00:06:09	00:06:51	00:24:58	00:24:58	00:49:57	00:56:06	23:59:59

HOURS	Number of trains in hours	TOTAL Minutes CLOSED	MINIMUM Minutes OPEN between events	MEAN AVERAGE Minutes OPEN between events	MEDIAN AVERAGE Minutes OPEN between events	MAXIMUM Minutes OPEN between events	TOTAL Minutes OPEN	ACTUAL ASSESSED PERIOD
00:00-06:00	2	00:07:12	00:06:42	01:58:50	01:03:03	04:47:45	05:56:30	06:03:42
06:00-07:00	6	00:22:40	00:00:30	00:06:05	00:03:54	00:18:25	00:36:28	00:59:08
07:00-08:00	4	00:18:11	00:01:06	00:12:41	00:11:50	00:25:57	00:50:43	01:03:54
08:00-09:00	4	00:13:42	00:01:41	00:13:57	00:16:07	00:24:02	00:41:50	00:55:32
09:00-10:00	8	00:24:02	00:01:41	00:08:33	00:04:09	00:25:35	00:59:52	01:23:54
10:00-11:00	2	00:08:40	00:13:00	00:15:19	00:15:19	00:17:38	00:30:38	00:39:18
11:00-12:00	8	00:18:55	00:03:53	00:06:06	00:06:05	00:08:17	00:42:40	01:01:35
12:00-13:00	8	00:23:12	00:02:41	00:04:56	00:03:41	00:09:46	00:34:30	00:57:42
13:00-14:00	7	00:20:22	00:01:52	00:05:07	00:05:18	00:09:24	00:35:48	00:56:10
14:00-15:00	7	00:14:00	00:03:14	00:10:49	00:11:15	00:21:29	00:54:05	01:08:05
15:00-16:00	7	00:23:51	00:00:47	00:05:25	00:04:12	00:14:09	00:32:29	00:56:20
16:00-17:00	7	00:22:34	00:00:33	00:05:14	00:04:09	00:13:24	00:36:41	00:59:15
17:00-18:00	6	00:17:05	00:01:46	00:07:06	00:06:27	00:14:29	00:42:35	00:59:40
18:00-19:00	4	00:14:51	00:00:26	00:13:03	00:10:55	00:29:58	00:52:14	01:07:05
19:00-20:00	6	00:14:29	00:03:04	00:07:44	00:06:33	00:15:17	00:38:40	00:53:09
20:00-21:00	8	00:18:57	00:00:23	00:06:45	00:05:01	00:16:47	00:40:27	00:59:24
21:00-22:00	6	00:20:36	00:03:31	00:06:57	00:05:13	00:12:29	00:34:46	00:55:22
22:00-23:00	5	00:15:47	00:04:46	00:12:13	00:10:20	00:23:24	00:48:51	01:04:38
23:00-24:00	2	00:06:09	00:06:51	00:24:58	00:24:58	00:49:57	00:56:06	23:59:59

IMPORTANT NOTES

The Crossing Down Time has not been taken from the time the barrier is lowered, but by the longer period starting from when the red lights flash and legally restrict the use of the crossing, through to the barrier being raised.

This assessment is based on video evidence of each closing event, recorded for the purpose of assessing the immediate impact on the highway.

Network Rail data is assessed at remote points linked to the signalman and is not specific to the highway restriction. The actual train crossing events are interpolated from Network Rail data of trains passing through Hinckley and Croft.

In the Peak Periods there are only three train paths identified for HNRFI, one in the morning and two in the evening. Whilst they may never be used, for robustness they have been assumed to have been utilised in the 4 trains per day scenario.

NARBOROUGH LEVEL CROSSING OPEN & CLOSED TIMES BASED ON VIDEO RECORDED CLOSING TIMES FROM RED LIGHT ON TO BARRIER LIFTED INCLUDES FOR EXTENDED DOWN TIMES WHEN TRAINS PASSING BASED ON EVENTS ON SATURDAY 14th OCTOBER 2023

CURRENT SITUATION								
Saturday 14th October 2023								
TIME PERIOD	TRAINS	MEAN AV DOWN	MEDIAN AV DOWN	CUMULATIVE DOWN	MEAN AV OPEN	MEDIAN AV OPEN	CUMULATIVE OPEN	ASSESSED
24 HOURS	72	00:03:14	00:02:51	03:33:42	00:18:35	00:13:52	20:26:17	23:59:59
				15%			85%	
Capacity Study	69	00:03:18	00:02:51	03:28:04	00:13:02	00:11:29	13:41:26	17:09:30
06:00 - 23:00				20%			80%	
Morning Peak	15	00:03:04	00:02:45	00:39:51	00:10:58	00:09:29	02:22:29	03:02:20
07:00 - 10:00				22%			78%	
Evening Peak	13	00:03:49	00:03:57	00:42:00	00:13:02	00:11:29	02:23:25	03:05:25
16:00 - 19:00				23%			77%	

WITH 4 HNRFI TRAINS EACH WAY								
Saturday 14th October 2023								
TIME PERIOD	TRAINS	MEAN AV DOWN	MEDIAN AV DOWN	CUMULATIVE DOWN	MEAN AV OPEN	MEDIAN AV OPEN	CUMULATIVE OPEN	ASSESSED
24 HOURS	72	00:03:15	00:02:51	03:37:17	00:18:15	00:12:15	20:22:42	23:59:59
				15%			85%	
Capacity Study	69	00:03:18	00:02:51	03:31:39	00:12:47	00:10:51	13:37:51	17:09:30
06:00 - 23:00				21%			79%	
Morning Peak	15	00:03:04	00:02:45	00:39:51	00:10:58	00:09:29	02:22:29	03:02:20
07:00 - 10:00				22%			78%	
Evening Peak	14	00:03:49	00:03:57	00:42:00	00:13:02	00:11:29	02:23:25	03:05:25
16:00 - 19:00				23%			77%	

WITH 10 HNRFI TRAINS EACH WAY								
Saturday 14th October 2023								
TIME PERIOD	TRAINS	MEAN AV DOWN	MEDIAN AV DOWN	CUMULATIVE DOWN	MEAN AV OPEN	MEDIAN AV OPEN	CUMULATIVE OPEN	ASSESSED
24 HOURS	80	00:03:11	00:02:49	03:52:23	00:16:33	00:10:10	20:07:36	23:59:59
				16%			84%	
Capacity Study	77	00:03:14	00:02:49	03:46:45	00:11:28	00:09:43	13:22:45	17:09:30
06:00 - 23:00				22%			78%	
Morning Peak	16	00:03:02	00:02:42	00:42:22	00:10:00	00:09:43	02:19:58	03:02:20
07:00 - 10:00				23%			77%	
Evening Peak	14	00:03:43	00:03:37	00:44:31	00:11:44	00:08:51	02:20:54	03:05:25
16:00 - 19:00				24%			76%	

HOURS	Number of trains in hours	TOTAL Minutes CLOSED	MINIMUM Minutes OPEN between events	MEAN AVERAGE Minutes OPEN between events	MEDIAN AVERAGE Minutes OPEN between events	MAXIMUM Minutes OPEN between events	TOTAL Minutes OPEN	ACTUAL ASSESSED PERIOD
00:00-06:00	2	00:02:46	00:13:03	02:57:30	02:57:30	05:41:56	05:54:59	05:57:45
06:00-07:00	3	00:13:11	00:01:20	00:16:27	00:19:55	00:28:06	00:49:21	01:02:32
07:00-08:00	4	00:11:45	00:03:28	00:12:37	00:12:17	00:22:25	00:50:28	01:02:13
08:00-09:00	5	00:14:36	00:00:19	00:09:52	00:06:24	00:26:18	00:49:22	01:03:58
09:00-10:00	5	00:13:30	00:03:39	00:10:40	00:09:51	00:19:17	00:42:39	00:56:09
10:00-11:00	5	00:14:55	00:01:15	00:08:56	00:09:22	00:20:50	00:44:38	00:59:33
11:00-12:00	4	00:11:59	00:00:34	00:12:42	00:13:07	00:24:01	00:50:49	01:02:48
12:00-13:00	4	00:10:09	00:07:06	00:16:11	00:19:48	00:21:38	00:48:32	00:58:41
13:00-14:00	5	00:13:49	00:01:36	00:09:00	00:05:52	00:17:52	00:44:59	00:58:48
14:00-15:00	3	00:09:46	00:06:23	00:16:57	00:19:45	00:23:44	00:49:52	00:59:58
15:00-16:00	5	00:11:04	00:07:25	00:15:06	00:17:03	00:20:51	00:45:19	00:56:23
16:00-17:00	4	00:16:09	00:04:12	00:11:40	00:08:41	00:25:04	00:46:38	01:02:47
17:00-18:00	4	00:12:09	00:05:00	00:16:40	00:22:11	00:22:50	00:50:01	01:02:10
18:00-19:00	5	00:13:42	00:01:43	00:11:41	00:12:21	00:20:20	00:46:46	01:00:28
19:00-20:00	4	00:12:45	00:01:38	00:11:30	00:09:41	00:25:02	00:46:02	00:58:47
20:00-21:00	4	00:11:53	00:08:25	00:14:03	00:12:34	00:22:39	00:56:12	01:08:05
21:00-22:00	4	00:12:18	00:04:35	00:16:38	00:17:04	00:27:48	01:06:30	01:18:48
22:00-23:00	1	00:04:24	00:33:18	00:33:18	00:33:18	00:33:18	00:33:18	00:37:42
23:00-24:00	1	00:02:52	00:49:52	00:49:52	00:49:52	00:49:52	00:49:52	00:52:44
							23:59:59	

HOURS	Number of trains in hours	TOTAL Minutes CLOSED	MINIMUM Minutes OPEN between events	MEAN AVERAGE Minutes OPEN between events	MEDIAN AVERAGE Minutes OPEN between events	MAXIMUM Minutes OPEN between events	TOTAL Minutes OPEN	ACTUAL ASSESSED PERIOD
00:00-06:00	2	00:02:46	00:13:03	02:57:30	02:57:30	05:41:56	05:54:59	05:57:45
06:00-07:00	3	00:14:15	00:01:20	00:16:06	00:19:55	00:27:02	00:48:17	01:02:32
07:00-08:00	4	00:11:45	00:03:28	00:12:37	00:12:17	00:22:25	00:50:28	01:02:13
08:00-09:00	5	00:14:36	00:00:19	00:09:52	00:06:24	00:26:18	00:49:22	01:03:58
09:00-10:00	5	00:13:30	00:03:39	00:10:40	00:09:51	00:19:17	00:42:39	00:56:09
10:00-11:00	5	00:14:55	00:01:15	00:08:56	00:09:22	00:20:50	00:44:38	00:59:33
11:00-12:00	4	00:14:30	00:00:34	00:09:40	00:06:41	00:24:01	00:48:18	01:02:48
12:00-13:00	4	00:10:09	00:07:06	00:16:11	00:19:48	00:21:38	00:48:32	00:58:41
13:00-14:00	5	00:13:49	00:01:36	00:09:00	00:05:52	00:17:52	00:44:59	00:58:48
14:00-15:00	3	00:09:46	00:06:23	00:16:57	00:19:45	00:23:44	00:49:52	00:59:58
15:00-16:00	4	00:11:04	00:07:25	00:15:06	00:17:03	00:20:51	00:45:19	00:56:23
16:00-17:00	5	00:16:09	00:04:12	00:11:40	00:08:41	00:25:04	00:46:38	01:02:47
17:00-18:00	4	00:12:09	00:05:00	00:16:40	00:22:11	00:22:50	00:50:01	01:02:10
18:00-19:00	5	00:13:42	00:01:43	00:11:41	00:12:21	00:20:20	00:46:46	01:00:28
19:00-20:00	4	00:12:45	00:01:38	00:11:30	00:09:41	00:25:02	00:46:02	00:58:47
20:00-21:00	4	00:11:53	00:08:25	00:14:03	00:12:34	00:22:39	00:56:12	01:08:05
21:00-22:00	4	00:12:18	00:04:35	00:16:38	00:17:04	00:27:48	01:06:30	01:18:48
22:00-23:00	1	00:04:24	00:33:18	00:33:18	00:33:18	00:33:18	00:33:18	00:37:42
23:00-24:00	1	00:02:52	00:49:52	00:49:52	00:49:52	00:49:52	00:49:52	00:52:44
							23:59:59	

HOURS	Number of trains in hours	TOTAL Minutes CLOSED	MINIMUM Minutes OPEN between events	MEAN AVERAGE Minutes OPEN between events	MEDIAN AVERAGE Minutes OPEN between events	MAXIMUM Minutes OPEN between events	TOTAL Minutes OPEN	ACTUAL ASSESSED PERIOD
00:00-06:00	2	00:02:46	00:13:03	02:57:30	02:57:30	05:41:56	05:54:59	05:57:45
06:00-07:00	4	00:14:15	00:01:20	00:16:06	00:19:55	00:27:02	00:48:17	01:02:32
07:00-08:00	4	00:11:45	00:03:28	00:12:37	00:12:17	00:22:25	00:50:28	01:02:13
08:00-09:00	6	00:17:07	00:00:19	00:07:49	00:08:10	00:14:41	00:46:51	01:03:38
09:00-10:00	5	00:13:30	00:03:39	00:10:40	00:09:51	00:19:17	00:42:39	00:56:09
10:00-11:00	5	00:14:55	00:01:15	00:08:56	00:09:22	00:20:50	00:44:38	00:59:33
11:00-12:00	6	00:17:01	00:00:34	00:07:38	00:07:48	00:13:34	00:41:47	01:02:48
12:00-13:00	5	00:12:40	00:01:44	00:11:30	00:12:15	00:19:48	00:46:01	00:58:41
13:00-14:00	6	00:16:20	00:01:36	00:07:05	00:06:14	00:17:52	00:42:28	00:58:48
14:00-15:00	3	00:09:46	00:06:23	00:16:37	00:19:45	00:23:44	00:49:52	00:59:58
15:00-16:00	6	00:13:35	00:00:57	00:10:42	00:10:30	00:20:51	00:42:48	00:56:23
16:00-17:00	5	00:18:40	00:04:12	00:08:49	00:06:12	00:16:21	00:44:07	01:02:47
17:00-18:00	4	00:12:09	00:05:00	00:16:40	00:22:11	00:22:50	00:50:01	01:02:10
18:00-19:00	5	00:13:42	00:01:43	00:11:41	00:12:21	00:20:20	00:46:46	01:00:28
19:00-20:00	4	00:12:45	00:01:38	00:11:30	00:09:41	00:25:02	00:46:02	00:58:47
20:00-21:00	4	00:11:53	00:08:25	00:14:03	00:12:34	00:22:39	00:56:12	01:08:05
21:00-22:00	4	00:12:18	00:04:35	00:16:38	00:17:04	00:27:48	01:06:30	01:18:48
22:00-23:00	1	00:04:24	00:33:18	00:33:18	00:33:18	00:33:18	00:33:18	00:37:42
23:00-24:00	1	00:02:52	00:49:52	00:49:52	00:49:52	00:49:52	00:49:52	00:52:44
							23:59:59	

IMPORTANT NOTES

The Crossing Down Time has not been taken from the time the barrier is lowered, but by the longer period starting from when the red lights flash and legally restrict the use of the crossing, through to the barrier being raised.

This assessment is based on video evidence of each closing event, recorded for the purpose of assessing the immediate impact on the highway.

Network Rail data is assessed at remote points linked to advice to the signaller and is not specific to the highway restriction. The actual train crossing events are interpolated from Network Rail data of trains passing through Hinckley and Crat.

For the Saturday Service, this is increased to 1 train each way in the 4 trains per weekday analysis, and 4 trains on a Saturday, each way, in the 10 weekday train scenario

NARBOROUGH LEVEL CROSSING OPEN & CLOSED TIMES BASED ON VIDEO RECORDED CLOSING TIMES FROM RED LIGHT ON TO BARRIER LIFTED INCLUDES FOR EXTENDED DOWN TIMES WHEN TRAINS PASSING BASED ON EVENTS ON SUNDAY 16+th OCTOBER 2023

CURRENT SITUATION									Sunday 16th October 2023								
TIME PERIOD	TRAINS	MEAN AV DOWN	MEDIAN AV DOWN	CUMULATIVE DOWN	MEAN AV OPEN	MEDIAN AV OPEN	CUMULATIVE OPEN	ASSESSED	TIME PERIOD	TRAINS	MEAN AV DOWN	MEDIAN AV DOWN	CUMULATIVE DOWN	MEAN AV OPEN	MEDIAN AV OPEN	CUMULATIVE OPEN	ASSESSED
24 HOURS	45	00:03:09	00:02:51	02:18:37	00:29:35	00:19:08	21:41:22	23:59:59	24 HOURS	45	00:03:09	00:02:51	02:18:37	00:29:35	00:19:08	21:41:22	23:59:59
				10%			90%						10%			90%	
Capacity Study	45	00:03:13	00:02:52	02:18:37	00:16:19	00:18:42	11:41:22	13:59:59	Capacity Study	45	00:03:13	00:02:52	02:18:37	00:16:19	00:18:42	11:41:22	13:59:59
06:00 - 23:00				17%			83%		06:00 - 23:00				17%			83%	
Morning Peak	0	00:00:00	00:00:00	00:00:00	03:00:00	03:00:00	03:00:00	03:00:00	Morning Peak	0	00:00:00	00:00:00	00:00:00	03:00:00	03:00:00	03:00:00	03:00:00
07:00 - 10:00				0%			100%		07:00 - 10:00				0%			100%	
Evening Peak	12	00:03:05	00:02:52	00:33:57	00:13:06	00:16:35	02:24:01	02:57:58	Evening Peak	12	00:03:05	00:02:52	00:33:57	00:13:06	00:16:35	02:24:01	02:57:58
16:00 - 19:00				19%			81%		16:00 - 19:00				19%			81%	

WITH 4 HNRFI TRAINS EACH WAY									NO HNRFI TRAINS ARE PREDICATED FOR SUNDAY								
TIME PERIOD	TRAINS	MEAN AV DOWN	MEDIAN AV DOWN	CUMULATIVE DOWN	MEAN AV OPEN	MEDIAN AV OPEN	CUMULATIVE OPEN	ASSESSED	TIME PERIOD	TRAINS	MEAN AV DOWN	MEDIAN AV DOWN	CUMULATIVE DOWN	MEAN AV OPEN	MEDIAN AV OPEN	CUMULATIVE OPEN	ASSESSED
24 HOURS	45	00:03:09	00:02:51	02:18:37	00:29:35	00:19:08	21:41:22	23:59:59	24 HOURS	45	00:03:09	00:02:51	02:18:37	00:29:35	00:19:08	21:41:22	23:59:59
				10%			90%						10%			90%	
Capacity Study	45	00:03:13	00:02:52	02:18:37	00:16:19	00:18:42	11:41:22	13:59:59	Capacity Study	45	00:03:13	00:02:52	02:18:37	00:16:19	00:18:42	11:41:22	13:59:59
06:00 - 23:00				17%			83%		06:00 - 23:00				17%			83%	
Morning Peak	0	00:00:00	00:00:00	00:00:00	03:00:00	03:00:00	03:00:00	03:00:00	Morning Peak	0	00:00:00	00:00:00	00:00:00	03:00:00	03:00:00	03:00:00	03:00:00
07:00 - 10:00				0%			100%		07:00 - 10:00				0%			100%	
Evening Peak	12	00:03:05	00:02:52	00:33:57	00:13:06	00:16:35	02:24:01	02:57:58	Evening Peak	12	00:03:05	00:02:52	00:33:57	00:13:06	00:16:35	02:24:01	02:57:58
16:00 - 19:00				19%			81%		16:00 - 19:00				19%			81%	

WITH 10 HNRFI TRAINS EACH WAY									NO HNRFI TRAINS ARE PREDICATED FOR SUNDAY								
TIME PERIOD	TRAINS	MEAN AV DOWN	MEDIAN AV DOWN	CUMULATIVE DOWN	MEAN AV OPEN	MEDIAN AV OPEN	CUMULATIVE OPEN	ASSESSED	TIME PERIOD	TRAINS	MEAN AV DOWN	MEDIAN AV DOWN	CUMULATIVE DOWN	MEAN AV OPEN	MEDIAN AV OPEN	CUMULATIVE OPEN	ASSESSED
24 HOURS	45	00:03:09	00:02:51	02:18:37	00:29:35	00:19:08	21:41:22	23:59:59	24 HOURS	45	00:03:09	00:02:51	02:18:37	00:29:35	00:19:08	21:41:22	23:59:59
				10%			90%						10%			90%	
Capacity Study	45	00:03:13	00:02:52	02:18:37	00:16:19	00:18:42	11:41:22	13:59:59	Capacity Study	45	00:03:13	00:02:52	02:18:37	00:16:19	00:18:42	11:41:22	13:59:59
06:00 - 23:00				17%			83%		06:00 - 23:00				17%			83%	
Morning Peak	0	00:00:00	00:00:00	00:00:00	03:00:00	03:00:00	03:00:00	03:00:00	Morning Peak	0	00:00:00	00:00:00	00:00:00	03:00:00	03:00:00	03:00:00	03:00:00
07:00 - 10:00				0%			100%		07:00 - 10:00				0%			100%	
Evening Peak	12	00:03:05	00:02:52	00:33:57	00:13:06	00:16:35	02:24:01	02:57:58	Evening Peak	12	00:03:05	00:02:52	00:33:57	00:13:06	00:16:35	02:24:01	02:57:58
16:00 - 19:00				19%			81%		16:00 - 19:00				19%			81%	

HOURS	Number of Trains in hours	TOTAL Minutes CLOSED	MINIMUM Minutes OPEN between events	MEAN AVERAGE Minutes OPEN between events	MEDIAN AVERAGE Minutes OPEN between events	MAXIMUM Minutes OPEN between events	TOTAL Minutes OPEN	ACTUAL ASSESSED PERIOD
00:00 - 10:00	0	00:00:00	10:00:00	10:00:00	10:00:00	10:00:00	10:00:00	10:00:00
10:00 - 12:00	4	00:17:48	00:02:09	00:21:28	00:24:54	00:43:00	01:47:22	02:05:10
12:00 - 13:00	3	00:09:08	00:02:08	00:17:04	00:22:22	00:26:41	00:51:11	01:00:19
13:00 - 14:00	5	00:14:05	00:01:32	00:10:47	00:10:26	00:20:42	00:43:06	00:57:11
14:00 - 15:00	4	00:11:54	00:00:40	00:11:36	00:10:32	00:24:42	00:46:26	00:58:20
15:00 - 16:00	4	00:12:19	00:02:24	00:12:48	00:11:50	00:25:07	00:51:11	01:03:38
16:00 - 17:00	3	00:08:25	00:01:12	00:16:09	00:21:17	00:23:58	00:48:27	00:56:52
17:00 - 18:00	5	00:13:19	00:01:53	00:13:19	00:13:15	00:24:52	00:53:16	01:06:33
18:00 - 19:00	4	00:12:13	00:01:32	00:10:35	00:10:01	00:20:45	00:42:18	00:54:31
19:00 - 20:00	4	00:12:14	00:00:22	00:12:37	00:11:53	00:26:20	00:50:28	01:02:42
20:00 - 21:00	4	00:12:21	00:00:29	00:11:56	00:11:27	00:24:22	00:47:45	01:00:06
21:00 - 22:00	2	00:05:28	00:21:34	00:24:45	00:24:45	00:27:56	00:49:30	00:54:58
22:00 - 24:00	3	00:09:23	00:28:59	00:55:11	00:55:11	01:21:23	01:50:42	01:59:45

IMPORTANT NOTES

The Crossing Down Time has not been taken from the time the barrier is lowered, but by the longer period starting from when the red lights flash and legally restrict the use of the crossing, through to the barrier being raised.

This assessment is based on video evidence of each closing event, recorded for the purpose of assessing the immediate impact on the highway.

Network Rail data is assessed at remote points linked to advise to the signalman and is not specific to the highway restriction. The actual train crossing events are interpolated from Network Rail data of trains passing through Hinckley and Croft.

There are no HNRFI trains predicted to operate a Sunday service.

NARBOROUGH LEVEL CROSSING OPEN & CLOSED TIMES BASED ON VIDEO RECORDED CLOSING TIMES FROM RED LIGHT ON TO BARRIER LIFTED INCLUDES FOR EXTENDED DOWN TIMES WHEN TRAINS PASSING BASED ON EVENTS ON MONDAY 16th OCTOBER 2023

CURRENT SITUATION									Monday 16th October 2023								
TIME PERIOD	TRAINS	MEAN AV DOWN	MEDIAN AV DOWN	CUMULATIVE DOWN	MEAN AV OPEN	MEDIAN AV OPEN	CUMULATIVE OPEN	ASSESSED	TIME PERIOD	TRAINS	MEAN AV DOWN	MEDIAN AV DOWN	CUMULATIVE DOWN	MEAN AV OPEN	MEDIAN AV OPEN	CUMULATIVE OPEN	ASSESSED
24 HOURS	91	00:03:22	00:03:00	04:39:17	00:13:59	00:09:10	19:20:42	23:59:59	24 HOURS	99	00:03:19	00:02:59	04:54:56	00:12:52	00:07:44	19:05:03	23:59:59
				19%			81%						20%			80%	
Capacity Stud	84	00:03:23	00:03:01	04:17:04	00:10:02	00:09:12	12:42:11	16:59:15	Capacity Stud	92	00:03:20	00:03:00	04:32:43	00:09:06	00:07:31	12:26:32	16:59:15
06:00 - 23:00				25%			75%		06:00 - 23:00				27%			73%	
Morning Peak	16	00:03:15	00:02:59	00:51:56	00:07:50	00:06:22	02:05:22	02:57:18	Morning Peak	17	00:03:17	00:03:02	00:52:29	00:07:48	00:06:22	02:04:49	02:57:18
07:00 - 10:00				29%			71%		07:00 - 10:00				30%			70%	
Evening Peak	16	00:03:05	00:02:51	00:49:12	00:08:21	00:07:08	02:13:39	03:02:51	Evening Peak	18	00:03:01	00:02:50	00:54:14	00:07:09	00:06:53	02:08:37	03:02:51
16:00 - 19:00				27%			73%		16:00 - 19:00				30%			70%	

WITH 4 HNRFI TRAINS EACH WAY								
TIME PERIOD	TRAINS	MEAN AV DOWN	MEDIAN AV DOWN	CUMULATIVE DOWN	MEAN AV OPEN	MEDIAN AV OPEN	CUMULATIVE OPEN	ASSESSED
24 HOURS	99	00:03:19	00:02:59	04:54:56	00:12:52	00:07:44	19:05:03	23:59:59
Capacity Stud	92	00:03:20	00:03:00	04:32:43	00:09:06	00:07:31	12:26:32	16:59:15
06:00 - 23:00				27%			73%	
Morning Peak	17	00:03:17	00:03:02	00:52:29	00:07:48	00:06:22	02:04:49	02:57:18
07:00 - 10:00				30%			70%	
Evening Peak	18	00:03:01	00:02:50	00:54:14	00:07:09	00:06:53	02:08:37	03:02:51
16:00 - 19:00				30%			70%	

WITH 10 HNRFI TRAINS EACH WAY								
TIME PERIOD	TRAINS	MEAN AV DOWN	MEDIAN AV DOWN	CUMULATIVE DOWN	MEAN AV OPEN	MEDIAN AV OPEN	CUMULATIVE OPEN	ASSESSED
24 HOURS	111	00:03:15	00:02:57	05:21:49	00:11:18	00:07:09	18:38:10	23:59:59
Capacity Stud	104	00:03:15	00:02:57	04:59:36	00:07:49	00:06:53	11:59:39	16:59:15
06:00 - 23:00				29%			71%	
Morning Peak	17	00:03:17	00:03:02	00:52:29	00:07:48	00:06:22	02:04:49	02:57:18
07:00 - 10:00				30%			70%	
Evening Peak	18	00:03:01	00:02:50	00:54:14	00:07:09	00:06:53	02:08:37	03:02:51
16:00 - 19:00				30%			70%	

HOURS	Number of trains in hours	TOTAL Minutes CLOSED	MINIMUM Minutes OPEN between events	MEAN AVERAGE Minutes OPEN between events	MEDIAN AVERAGE Minutes OPEN between events	MAXIMUM Minutes OPEN between events	TOTAL Minutes OPEN	ACTUAL ASSESSED PERIOD
00:00-06:00	2	00:07:26	00:04:41	01:58:59	01:12:24	04:39:53	05:56:58	06:04:24
06:00-07:00	4	00:16:47	00:00:27	00:10:29	00:09:12	00:23:05	00:41:57	00:58:44
07:00-08:00	5	00:15:30	00:01:06	00:08:39	00:07:09	00:15:42	00:41:37	00:57:07
08:00-09:00	7	00:23:47	00:01:41	00:05:49	00:04:03	00:17:00	00:40:46	01:04:33
09:00-10:00	4	00:12:39	00:03:00	00:10:45	00:11:09	00:17:42	00:42:59	00:55:38
10:00-11:00	6	00:17:19	00:01:49	00:09:27	00:10:25	00:19:09	00:47:14	01:04:33
11:00-12:00	5	00:12:18	00:04:13	00:10:15	00:11:41	00:13:25	00:41:00	00:53:18
12:00-13:00	5	00:18:20	00:01:24	00:08:30	00:09:06	00:14:30	00:42:30	01:00:50
13:00-14:00	5	00:11:30	00:04:14	00:13:37	00:18:11	00:24:27	00:46:52	00:58:22
14:00-15:00	3	00:11:46	00:09:14	00:17:25	00:19:07	00:23:54	00:52:15	01:04:01
15:00-16:00	8	00:20:26	00:01:35	00:08:16	00:04:01	00:23:12	00:41:22	01:01:48
16:00-17:00	5	00:14:48	00:02:49	00:08:18	00:06:23	00:15:46	00:41:31	00:56:19
17:00-18:00	6	00:17:10	00:01:17	00:07:44	00:07:40	00:13:31	00:46:27	01:03:37
18:00-19:00	5	00:17:14	00:06:01	00:09:08	00:07:18	00:16:15	00:45:41	01:02:55
19:00-20:00	3	00:09:38	00:02:07	00:16:17	00:18:03	00:28:40	00:48:50	00:58:28
20:00-21:00	5	00:13:26	00:01:41	00:10:43	00:10:01	00:21:07	00:42:51	00:56:17
21:00-22:00	4	00:11:38	00:04:48	00:13:25	00:12:55	00:23:03	00:53:40	01:05:18
22:00-23:00	4	00:12:48	00:05:44	00:11:10	00:11:22	00:16:11	00:44:39	00:57:27
23:00-24:00	5	00:14:47	00:00:38	00:10:23	00:07:49	00:25:16	00:41:33	00:56:20
							23:59:59	

HOURS	Number of trains in hours	TOTAL Minutes CLOSED	MINIMUM Minutes OPEN between events	MEAN AVERAGE Minutes OPEN between events	MEDIAN AVERAGE Minutes OPEN between events	MAXIMUM Minutes OPEN between events	TOTAL Minutes OPEN	ACTUAL ASSESSED PERIOD
00:00-01:00	2	00:07:26	00:04:41	01:58:59	01:12:24	04:39:53	05:56:58	06:04:24
06:00-07:00	5	00:19:18	00:00:27	00:07:53	00:01:48	00:19:49	00:39:26	00:58:44
07:00-08:00	5	00:15:30	00:01:06	00:08:19	00:07:09	00:15:42	00:41:37	00:57:07
08:00-09:00	7	00:23:47	00:01:41	00:05:49	00:04:03	00:17:00	00:40:46	01:04:33
09:00-10:00	5	00:13:12	00:03:00	00:10:36	00:10:52	00:17:42	00:42:26	00:55:38
10:00-11:00	6	00:17:19	00:01:49	00:09:27	00:10:25	00:19:09	00:47:14	01:04:33
11:00-12:00	7	00:14:49	00:04:13	00:07:42	00:05:53	00:12:47	00:38:29	00:53:18
12:00-13:00	6	00:20:51	00:01:24	00:06:40	00:06:27	00:14:30	00:39:59	01:00:50
13:00-14:00	6	00:14:31	00:04:14	00:11:05	00:10:58	00:18:11	00:44:21	00:58:22
14:00-15:00	3	00:11:46	00:09:14	00:17:25	00:19:07	00:23:54	00:52:15	01:04:01
15:00-16:00	8	00:20:26	00:01:35	00:08:16	00:04:01	00:23:12	00:41:22	01:01:48
16:00-17:00	6	00:17:19	00:02:49	00:08:30	00:05:56	00:12:12	00:39:00	00:56:19
17:00-18:00	7	00:19:41	00:01:00	00:06:17	00:05:58	00:11:48	00:43:56	01:03:37
18:00-19:00	5	00:17:14	00:06:01	00:09:08	00:07:18	00:16:15	00:45:41	01:02:55
19:00-20:00	3	00:09:38	00:02:07	00:16:17	00:18:03	00:28:40	00:48:50	00:58:28
20:00-21:00	5	00:13:26	00:01:41	00:10:43	00:10:01	00:21:07	00:42:51	00:56:17
21:00-22:00	4	00:11:38	00:04:48	00:13:25	00:12:55	00:23:03	00:53:40	01:05:18
22:00-23:00	4	00:12:48	00:05:44	00:11:10	00:11:22	00:16:11	00:44:39	00:57:27
23:00-24:00	5	00:14:47	00:00:38	00:10:23	00:07:49	00:25:16	00:41:33	00:56:20
							23:59:59	

HOURS	Number of trains in hours	TOTAL Minutes CLOSED	MINIMUM Minutes OPEN between events	MEAN AVERAGE Minutes OPEN between events	MEDIAN AVERAGE Minutes OPEN between events	MAXIMUM Minutes OPEN between events	TOTAL Minutes OPEN	ACTUAL ASSESSED PERIOD
00:00-01:00	2	00:07:26	00:04:41	01:58:59	01:12:24	04:39:53	05:56:58	06:04:24
06:00-07:00	5	00:19:18	00:00:27	00:07:53	00:01:48	00:19:49	00:39:26	00:58:44
07:00-08:00	5	00:15:30	00:01:06	00:08:19	00:07:09	00:15:42	00:41:37	00:57:07
08:00-09:00	7	00:23:47	00:01:41	00:05:49	00:04:03	00:17:00	00:40:46	01:04:33
09:00-10:00	5	00:13:12	00:03:00	00:10:36	00:10:52	00:17:42	00:42:26	00:55:38
10:00-11:00	6	00:17:19	00:01:49	00:09:27	00:10:25	00:19:09	00:47:14	01:04:33
11:00-12:00	7	00:14:49	00:04:13	00:07:42	00:05:53	00:12:47	00:38:29	00:53:18
12:00-13:00	6	00:20:51	00:01:24	00:06:40	00:06:27	00:14:30	00:39:59	01:00:50
13:00-14:00	8	00:19:03	00:03:14	00:06:33	00:06:15	00:09:42	00:39:19	00:58:22
14:00-15:00	5	00:16:48	00:02:37	00:09:27	00:09:37	00:13:59	00:47:13	01:04:01
15:00-16:00	9	00:20:26	00:01:35	00:08:16	00:04:01	00:23:12	00:41:22	01:01:48
16:00-17:00	6	00:17:19	00:02:49	00:08:30	00:05:56	00:12:12	00:39:00	00:56:19
17:00-18:00	7	00:19:41	00:01:00	00:06:17	00:05:58	00:11:48	00:43:56	01:03:37
18:00-19:00	5	00:17:14	00:06:01	00:09:08	00:07:18	00:16:15	00:45:41	01:02:55
19:00-20:00	5	00:14:40	00:02:07	00:08:46	00:07:51	00:18:18	00:43:48	00:58:28
20:00-21:00	7	00:17:40	00:00:38	00:07:43	00:04:20	00:17:42	00:38:37	00:56:17
21:00-22:00	6	00:16:40	00:00:47	00:06:57	00:07:15	00:13:18	00:41:41	00:58:21
22:00-23:00	5	00:15:19	00:04:26	00:09:49	00:10:42	00:16:11	00:49:05	01:04:24
23:00-24:00	5	00:14:47	00:00:38	00:10:23	00:07:49	00:25:16	00:41:33	00:56:20
							23:59:59	

IMPORTANT NOTES

The Crossing Down Time has not been taken from the time the barrier is lowered, but by the longer period starting from when the red lights flash and legally restrict the use of the crossing, through to the barrier being raised.

This assessment is based on video evidence of each closing event, recorded for the purpose of assessing the immediate impact on the highway.

Network Rail data is assessed at remote points linked to advise the signaller and is not specific to the highway restriction. The actual train crossing events are interpolated from Network Rail data of trains passing through Hinckley and Croft.

In the Peak Periods there are only three train paths identified for HNRFI, one in the morning and two in the evening. Whilst they may never be used, for robustness they have been assumed to have been utilised in the 4 trains per day scenario.

NARBOROUGH LEVEL CROSSING OPEN & CLOSED TIMES BASED ON VIDEO RECORDED CLOSING TIMES FROM RED LIGHT ON TO BARRIER LIFTED INCLUDES FOR EXTENDED DOWN TIMES WHEN TRAINS PASSING BASED ON EVENTS ON TUESDAY 17th OCTOBER 2023

CURRENT SITUATION									Tuesday 17th October 2023								
TIME PERIOD	TRAINS	MEAN AV DOWN	MEDIAN AV DOWN	CUMULATIVE DOWN	MEAN AV OPEN	MEDIAN AV OPEN	CUMULATIVE OPEN	ASSESSED	TIME PERIOD	TRAINS	MEAN AV DOWN	MEDIAN AV DOWN	CUMULATIVE DOWN	MEAN AV OPEN	MEDIAN AV OPEN	CUMULATIVE OPEN	ASSESSED
24 HOURS	89	00:03:17	00:02:58	04:35:53	00:13:51	00:09:04	19:24:06	23:59:59	24 HOURS	89	00:03:17	00:02:58	04:35:53	00:13:51	00:09:04	19:24:06	23:59:59
				19%			81%										
Capacity Study	81	00:03:21	00:02:59	04:11:05	00:10:11	00:08:53	12:44:13	16:55:18	Capacity Study	81	00:03:21	00:02:59	04:11:05	00:10:11	00:08:53	12:44:13	16:55:18
06:00 - 23:00				25%			75%		06:00 - 23:00				25%			75%	
Morning Peak	15	00:03:14	00:02:54	00:48:33	00:08:33	00:06:21	02:08:12	02:56:45	Morning Peak	15	00:03:14	00:02:54	00:48:33	00:08:33	00:06:21	02:08:12	02:56:45
07:00 - 10:00				27%			73%		07:00 - 10:00				27%			73%	
Evening Peak	15	00:03:05	00:02:47	00:46:09	00:08:58	00:07:06	02:14:33	03:00:42	Evening Peak	15	00:03:05	00:02:47	00:46:09	00:08:58	00:07:06	02:14:33	03:00:42
16:00 - 19:00				26%			74%		16:00 - 19:00				26%			74%	

WITH 4 HNRFI TRAINS EACH WAY								
TIME PERIOD	TRAINS	MEAN AV DOWN	MEDIAN AV DOWN	CUMULATIVE DOWN	MEAN AV OPEN	MEDIAN AV OPEN	CUMULATIVE OPEN	ASSESSED
24 HOURS	97	00:03:16	00:02:57	04:54:20	00:12:44	00:07:59	19:05:39	23:59:59
				20%			80%	
Capacity Study	89	00:03:20	00:02:58	04:29:32	00:09:12	00:06:47	12:25:46	16:55:18
06:00 - 23:00				27%			73%	
Morning Peak	16	00:03:22	00:02:58	00:50:30	00:08:25	00:06:21	02:06:15	02:56:45
07:00 - 10:00				29%			71%	
Evening Peak	17	00:03:08	00:02:48	00:50:04	00:08:10	00:07:40	02:10:38	03:00:42
16:00 - 19:00				28%			72%	

WITH 10 HNRFI TRAINS EACH WAY								
TIME PERIOD	TRAINS	MEAN AV DOWN	MEDIAN AV DOWN	CUMULATIVE DOWN	MEAN AV OPEN	MEDIAN AV OPEN	CUMULATIVE OPEN	ASSESSED
24 HOURS	107	00:03:13	00:02:52	05:17:40	00:11:20	00:06:42	18:42:19	23:59:59
				22%			78%	
Capacity Study	99	00:03:15	00:02:53	04:52:52	00:08:02	00:06:18	12:02:26	16:55:18
06:00 - 23:00				29%			71%	
Morning Peak	16	00:03:22	00:02:58	00:50:30	00:08:25	00:06:21	02:06:15	02:56:45
07:00 - 10:00				29%			71%	
Evening Peak	18	00:03:08	00:02:48	00:50:04	00:08:10	00:07:40	02:10:38	03:00:42
16:00 - 19:00				28%			72%	

HOURS	Number of trains in hours	TOTAL Minutes CLOSED	MINIMUM Minutes OPEN between events	MEAN AVERAGE Minutes OPEN between events	MEDIAN AVERAGE Minutes OPEN between events	MAXIMUM Minutes OPEN between events	TOTAL Minutes OPEN	ACTUAL ASSESSED PERIOD
00:00-06:00	4	00:13:59	00:07:47	01:09:48	00:30:39	04:06:52	05:49:01	06:03:00
06:00-07:00	6	00:21:31	00:01:03	00:06:08	00:06:04	00:12:41	00:36:47	00:58:18
07:00-08:00	4	00:12:14	00:00:20	00:11:31	00:12:16	00:21:09	00:46:02	00:58:16
08:00-09:00	6	00:21:27	00:01:17	00:06:17	00:03:17	00:18:39	00:37:40	00:59:07
09:00-10:00	5	00:14:52	00:03:26	00:08:54	00:06:21	00:17:23	00:44:30	00:59:22
10:00-11:00	3	00:10:27	00:12:49	00:17:07	00:13:10	00:25:22	00:51:21	01:01:48
11:00-12:00	5	00:13:16	00:04:34	00:11:21	00:10:47	00:19:13	00:45:22	00:58:38
12:00-13:00	7	00:17:00	00:02:05	00:09:15	00:06:16	00:17:26	00:46:16	01:03:16
13:00-14:00	4	00:12:13	00:01:49	00:11:21	00:10:32	00:22:33	00:45:26	00:57:39
14:00-15:00	5	00:13:56	00:05:17	00:12:53	00:12:06	00:22:05	00:51:34	01:05:30
15:00-16:00	6	00:17:21	00:01:42	00:09:32	00:07:11	00:22:06	00:58:10	00:55:31
16:00-17:00	6	00:16:55	00:00:59	00:07:37	00:08:22	00:12:37	00:45:40	01:02:35
17:00-18:00	4	00:12:17	00:04:56	00:11:05	00:08:14	00:22:55	00:44:19	00:56:36
18:00-19:00	5	00:16:57	00:00:23	00:08:55	00:06:09	00:19:07	00:44:34	01:01:31
19:00-20:00	4	00:13:39	00:03:10	00:12:05	00:11:22	00:22:26	00:48:20	01:01:59
20:00-21:00	5	00:14:17	00:01:56	00:09:01	00:03:55	00:18:22	00:45:05	00:59:22
21:00-22:00	4	00:12:47	00:02:29	00:11:10	00:10:44	00:20:43	00:44:41	00:57:28
22:00-23:00	2	00:09:56	00:19:54	00:24:13	00:28:32	00:48:26	00:58:22	
23:00-24:00	4	00:10:49	00:01:02	00:12:43	00:09:12	00:31:26	00:50:52	01:01:41

HOURS	Number of trains in hours	TOTAL Minutes CLOSED	MINIMUM Minutes OPEN between events	MEAN AVERAGE Minutes OPEN between events	MEDIAN AVERAGE Minutes OPEN between events	MAXIMUM Minutes OPEN between events	TOTAL Minutes OPEN	ACTUAL ASSESSED PERIOD
00:00-01:00	4	00:13:59	00:07:47	01:09:48	00:30:39	04:06:52	05:49:01	06:03:00
06:00-07:00	7	00:24:02	00:01:03	00:04:34	00:03:57	00:12:41	00:34:16	00:58:18
07:00-08:00	4	00:12:14	00:00:20	00:11:31	00:12:16	00:21:09	00:46:02	00:58:16
08:00-09:00	6	00:21:27	00:01:17	00:06:17	00:03:17	00:18:39	00:37:40	00:59:07
09:00-10:00	6	00:16:49	00:01:29	00:08:31	00:06:21	00:17:23	00:42:33	00:59:22
10:00-11:00	3	00:10:27	00:12:49	00:17:07	00:13:10	00:25:22	00:51:21	01:01:48
11:00-12:00	6	00:18:18	00:03:18	00:06:43	00:06:26	00:10:37	00:40:20	00:58:38
12:00-13:00	9	00:19:31	00:02:55	00:07:17	00:05:58	00:17:26	00:43:45	01:03:16
13:00-14:00	5	00:14:44	00:01:49	00:08:35	00:05:58	00:16:06	00:42:55	00:57:39
14:00-15:00	5	00:13:56	00:05:17	00:12:53	00:12:06	00:22:05	00:51:34	01:05:30
15:00-16:00	6	00:17:21	00:01:42	00:09:32	00:07:11	00:22:06	00:58:10	00:55:31
16:00-17:00	7	00:18:19	00:00:59	00:07:23	00:07:40	00:12:37	00:44:16	01:02:35
17:00-18:00	5	00:14:48	00:04:56	00:08:22	00:09:48	00:10:36	00:41:48	00:56:36
18:00-19:00	5	00:16:57	00:00:23	00:08:55	00:06:09	00:19:07	00:44:34	01:01:31
19:00-20:00	4	00:13:39	00:03:10	00:12:05	00:11:22	00:22:26	00:48:20	01:01:59
20:00-21:00	5	00:14:17	00:01:56	00:09:01	00:03:55	00:18:22	00:45:05	00:59:22
21:00-22:00	4	00:12:47	00:02:29	00:11:10	00:10:44	00:20:43	00:44:41	00:57:28
22:00-23:00	2	00:09:56	00:19:54	00:24:13	00:28:32	00:48:26	00:58:22	
23:00-24:00	4	00:10:49	00:01:02	00:12:43	00:09:12	00:31:26	00:50:52	01:01:41

HOURS	Number of trains in hours	TOTAL Minutes CLOSED	MINIMUM Minutes OPEN between events	MEAN AVERAGE Minutes OPEN between events	MEDIAN AVERAGE Minutes OPEN between events	MAXIMUM Minutes OPEN between events	TOTAL Minutes OPEN	ACTUAL ASSESSED PERIOD
00:00-01:00	4	00:13:59	00:07:47	01:09:48	00:30:39	04:06:52	05:49:01	06:03:00
06:00-07:00	7	00:24:02	00:01:03	00:04:34	00:03:57	00:12:41	00:34:16	00:58:18
07:00-08:00	4	00:12:14	00:00:20	00:11:31	00:12:16	00:21:09	00:46:02	00:58:16
08:00-09:00	6	00:21:27	00:01:17	00:06:17	00:03:17	00:18:39	00:37:40	00:59:07
09:00-10:00	6	00:16:49	00:01:29	00:08:31	00:06:21	00:17:23	00:42:33	00:59:22
10:00-11:00	3	00:10:27	00:12:49	00:17:07	00:13:10	00:25:22	00:51:21	01:01:48
11:00-12:00	6	00:18:18	00:03:18	00:06:43	00:06:26	00:10:37	00:40:20	00:58:38
12:00-13:00	9	00:19:31	00:02:55	00:07:17	00:05:58	00:17:26	00:43:45	01:03:16
13:00-14:00	7	00:19:46	00:01:49	00:05:25	00:05:42	00:08:19	00:37:53	00:57:39
14:00-15:00	7	00:18:58	00:02:56	00:07:45	00:08:31	00:11:33	00:46:32	01:05:30
15:00-16:00	6	00:19:52	00:01:42	00:07:08	00:06:07	00:16:41	00:39:39	00:55:31
16:00-17:00	8	00:18:19	00:00:59	00:07:23	00:07:40	00:12:37	00:44:16	01:02:35
17:00-18:00	5	00:14:48	00:04:56	00:08:22	00:09:48	00:10:36	00:41:48	00:56:36
18:00-19:00	5	00:16:57	00:00:23	00:08:55	00:06:09	00:19:07	00:44:34	01:01:31
19:00-20:00	6	00:18:41	00:03:10	00:07:13	00:06:59	00:12:17	00:43:18	01:01:59
20:00-21:00	6	00:16:48	00:01:56	00:07:06	00:03:47	00:17:12	00:42:34	00:59:22
21:00-22:00	5	00:15:18	00:01:48	00:08:18	00:05:35	00:20:43	00:41:29	00:56:47
22:00-23:00	3	00:10:37	00:19:54	00:24:13	00:24:13	00:28:32	00:48:26	00:59:03
23:00-24:00	4	00:10:49	00:01:02	00:12:43	00:09:12	00:31:26	00:50:52	01:01:41

IMPORTANT NOTES

The Crossing Down Time has not been taken from the time the barrier is lowered, but by the longer period starting from when the red lights flash and legally restrict the use of the crossing, through to the barrier being raised.

This assessment is based on video evidence of each closing event, recorded for the purpose of assessing the immediate impact on the highway.

Network Rail data is assessed at remote points linked to advice to the signaller and is not specific to the highway restriction. The actual train crossing events are interpolated from Network Rail data of trains passing through Hinckley and Croft.

In the Peak Periods there are only three train paths identified for HNRFI, one in the morning and two in the evening. Whilst they may never be used, for robustness they have been assumed to have been utilised in the 4 trains per day scenario.