

A52 Nottingham Junctions

U-Turn Ban Trial Summary

Stragglethorpe Road Junction

Dec 2020

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1 Introduction

1.1 Background

- 1.1.1 The A52 Gamston to Bingham junctions scheme comprises improvements to five junctions along the A52 corridor. One of these junctions is the A52 Stragglethorpe Road signal controlled junction where a ban is proposed on A52 eastbound to westbound U-turn movement. The ban will enable the signal operation to be optimised which will deliver significant benefits in terms of reduced queues and delays on the A52 westbound and Stragglethorpe Road.
- 1.1.2 Several residents have expressed concerns regarding the impact of the proposed U-turn ban with regards to the length of detour necessary and the availability of gaps in traffic for drivers to join the A52 westbound safely from properties fronting the A52 and from Bassingfield Lane.
- 1.1.3 Investigations have therefore been undertaken to understand the implications of the U-turn ban and this report summarises the findings of those investigations.

1.2 Scope

- 1.2.1 The investigations involved:
 - An initial one-day trial U-turn ban
 - Road Safety Review
 - A subsequent seven-day trial U-turn ban

2 Existing Conditions

2.1 Introduction

- 2.1.1 The A52 trunk road is a significant east-west link across the East Midlands connecting the A50 at Derby via the M1 at Junction 25 to Nottingham, then east to the A46 at Saxondale and the A1 at Grantham. The A52 serves as a key radial route into Nottingham from the east providing a strategic connection into the city from the A1 and the A46 trunk roads.

2.2 Characteristics

- 2.2.1 The A52 between Nottingham Road at Radcliffe-on-Trent and the Gamston roundabout is a dual two lane all-purpose (D2AP) road that is subject to the national speed limit (70mph for dual carriageways). This section of the A52 has average vehicle speed enforcement cameras and is lit.



- 2.2.2 The A52 Stragglethorpe Road junction is a three-arm signal controlled junction located approximately 700m west of the A52 Nottingham Road junction at Radcliffe-on-Trent. Stragglethorpe Road is a single carriageway 'C'-road that provides a link between the A46 and the A52 and provides a connection to the village of Cotgrave to the south.
- 2.2.3 Approximately 1km west of the A52 Stragglethorpe Road junction there are several private residential dwellings that take direct vehicular access to/from the A52 westbound via eight driveways with dropped kerbs.
- 2.2.4 Immediately to the west of these dwellings is the A52 Bassingfield Lane junction. Bassingfield Lane is a narrow rural road that serves as the eastern access to the hamlet of Bassingfield and continues west through the hamlet to join the A52 Gamston Lings Bar road at Gamston.

2.2.5 Near Bassingfield Lane there are existing pedestrian and cyclist facilities located along the eastbound A52, and a footway located adjacent to the A52 westbound carriageway connecting the residential properties to bus stops approximately 150m east and 90m west of the properties. Vehicular accesses to the existing properties cross these footways.

2.3 Traffic Flows

2.3.1 Traffic flows on the A52 are summarised below. Details can be found in **Appendix A**.

Table 1 – 5-Day Average Traffic Flows – November 2019 - Vehicles Per Hour (VPH)¹

	Eastbound			Westbound			2-Way		
	AM	Inter Peak	PM	AM	Inter Peak	PM	AM	Inter Peak	PM
	0800-0900	1200-1300	1700 - 1800	0800-0900	1200-1300	1700 - 1800	0800-0900	1200-1300	1700 - 1800
Nearside Lane	700	804	895	789	813	779	1,489	1,617	1,674
Offside Lane	695	643	1,219	923	571	682	1,618	1,214	1,901
Both Lanes	1,395	1,447	2,114	1,712	1,384	1,461	3,107	2,831	3,575

2.3.2 The data in **Table 1** shows that:

- Approximately 55% of the total two-way flow is westbound towards Nottingham in the AM peak and approximately 59% of the total two-way flow is eastbound out of Nottingham in the PM peak.
- The total two-way volume across the AM and PM peaks is similar, whilst the inter-peak flow is lower.

¹ Source: NCC permanent ATC site ID 000080206137 located on the A52 300m west of Bassingfield Lane

2.4 Vehicle Speeds

2.4.1 Traffic speeds on the A52 are summarised below. Details can be found in **Appendix A**.

Table 2 – Traffic Speeds – November 2019 (MPH)²

	Eastbound			Westbound		
	AM 0800-0900	Inter Peak 1200-1300	PM 1700-1800	AM 0800-0900	Inter Peak 1200-1300	PM 1700-1800
Average (Mean) Speeds						
Nearside Lane	56.8	55.6	50.1	35.8	52.9	53.2
Offside Lane	64.4	64.1	57.6	35.8	57.8	60.4
85 th Percentile Speeds ³						
Nearside Lane	65.5	63.3	59.0	60.5	63.4	63.0
Offside Lane	70.0	69.8	67.4	64.7	69.2	68.5

Table 3 – Traffic Speeds – November 2020 (MPH)⁴

	Westbound		
	AM 0800-0900	Inter Peak 1200-1300	PM 1700-1800
Average (Mean) Speeds			
Both Lanes Combined	62.8	61.4	63.6
85 th Percentile Speeds			
Both Lanes Combined	72.7	72.1	75.2

2.4.2 The data in **Table 2** and **Table 3** shows that overall traffic speeds are generally in accordance with the 70mph speed limit. However, the 85th percentile speeds recorded in November 2020 do exceed the mandatory 70mph limit.

2.4.3 This section of the A52 has average vehicle speed enforcement cameras in both directions. On the westbound carriageway the closest speed camera to the properties fronting the A52 is located at Radcliffe on Trent (approximately 140m west of the Nottingham Road junction). Any traffic joining the A52 westbound at the A52 Stragglethorpe Road junction therefore enters between cameras and is not subject to speed enforcement. Anecdotal evidence suggests that local drivers are aware and take advantage of this gap in the camera enforcement.

2.4.4 Similarly, there is a perception that A52 westbound drivers who get stopped at a red light at the Stragglethorpe Road junction also know they can speed downstream when the lights change without exceeding an average journey time. Drivers at the front of the queue who have been waiting the longest have the greatest confidence in being able to speed without being caught and this is also likely to be contributing towards higher speeds past the properties fronting the A52 and shorter

² Source: NCC permanent ATC site ID 000080206137 located on the A52 300m west of Bassingfield Lane

³ The 85th Percentile Speed is the speed not exceeded by 85% of the total number recorded.

⁴ Source: 7-Day radar survey undertaken on the A52 westbound approach to the frontage properties (opposite the PFS access)

gaps in oncoming traffic (as drivers speeding from the lights are likely to close the gap to the end of the platoon of traffic that has just turned left from Stragglethorpe Road).

- 2.4.5 Traffic speed has been raised as a specific concern by some residents, so this issue is addressed later in this report through a proposed mitigation measure.

2.5 Road Safety

- 2.5.1 Collision data provided by Highways England (see **Appendix B** for details) shows that on the westbound A52 carriageway near the frontage properties there has been a total of five personal injury collisions recorded within the most recently available ten-year period covering 01/08/2010 to 31/07/2020. All of these were categorised as 'slight' collisions⁵ and are referenced as 6, 17, 27, 28 and 41 on the plan in **Appendix B** and summarised as follows.

- **Ref 6** – (slight) – occurred when a car slowed to turn left into the driveway of No. 4 Radcliffe Road in fog/mist conditions at night. The car behind decelerated and was hit from behind by a following car. The turning car was not struck.
- **Ref 17** – (slight) – occurred 40m west of Bassingfield Lane and involved a single car losing control in wet conditions at night and colliding with the central reserve barrier.
- **Ref 27** – (slight) – occurred approximately 440m east of Bassingfield Lane and involved a collision between two pedal cyclists.
- **Ref 28** – (slight) - occurred approximately 450m east of Bassingfield Lane and involved a single vehicle losing control in the wet at night and colliding with the central reserve barrier.
- **Ref 41** – (slight) – occurred 25m west of Bassingfield Lane and involved a rear-end collision caused by a car in the nearside lane changing lane to avoid flooding, losing control and the two following cars colliding.

- 2.5.2 One collision (Ref 6) was associated with a vehicle turning between the A52 westbound and a frontage property, this collision occurred on a Sunday in January 2013 during fog/mist conditions at night.

- 2.5.3 No collisions have been recorded that are associated with movements to/from Bassingfield Lane during this period and no collisions have been recorded that are associated with vehicles joining the A52 westbound from frontage properties or Bassingfield Lane that can be attributed to gap acceptance issues.

⁵ Slight collisions are where at least one person is slightly injured but no person is killed or seriously injured. The definition of a slight injury is an injury of a minor character such as a sprain (including neck whiplash injury), bruise or cut which are not judged to be severe, or slight shock requiring roadside attention. This definition includes injuries not requiring medical treatment.

2.5.4 On the eastbound carriageway there has been a total of five collisions recorded during the same time period within the vicinity of the properties fronting the A52 on the eastbound carriageway. All of these were categorised as 'slight' collisions except for one, which was 'serious'. These are collision references 3, 9, 26, 33 and 44 on the plan in **Appendix B** and summarised as follows.

- **Ref 3** – (slight) - A car turning left into the petrol filling station collided with an eastbound cyclist on the cycleway.
- **Ref 9** – (slight) - A goods vehicle collided with the rear of a bus as it decelerated to pull into the bus layby approximately 74m east of the petrol filling station.
- **Ref 26** – (slight) - A rear-end collision between two cars exiting the petrol station caused by the car behind moving off while the car in front was still stationary.
- **Ref 33** – (serious) - Involved a motorcyclist losing control while turning left out of the private access to The Cottage (next door but one east of the petrol filling station). No other vehicles were involved.
- **Ref 44** – (slight) – Involved a rear-end collision between two eastbound cars while negotiating a goods vehicle stopped in the nearside lane.

2.5.5 No collisions have been recorded between eastbound A52 traffic and vehicles joining the A52 eastbound from the petrol filling station or adjacent properties.

3 Proposed Signal Alterations

3.1 A52 Stragglethorpe Road junction

- 3.1.1 The current signal operation of the A52 Stragglethorpe Road junction includes a dedicated stage for traffic turning right from the A52 eastbound into Stragglethorpe Road and traffic U-turning from the A52 eastbound to the A52 westbound.
- 3.1.2 The proposed improvement at the junction will ban the A52 eastbound to westbound U-turn movement which will enable the A52 eastbound right turn into Stragglethorpe Road to run at the same time as the Stragglethorpe Road left turn onto the A52 westbound.

3.2 Scheme Benefits

- 3.2.1 By combining these two turning movements into a single signal stage, spare traffic capacity is released which is beneficial for all movements at the junction, particularly the A52 westbound and Stragglethorpe Road movements where the most significant queueing and delays are observed.
- 3.2.2 During peak hours traffic currently queues on the A52 westbound and on Stragglethorpe Road where the predominant movement is the left turn onto the A52 westbound. Queues also form on the right turn from the A52 eastbound into Stragglethorpe Road and can extend back towards the offside eastbound A52 ahead lane.
- 3.2.3 The planned modifications to the signal operation will help to address these issues, reducing queues and delays on the A52 and Stragglethorpe Lane, which will benefit in excess of 46,226 motorists who pass through the junction every day⁶.
- 3.2.4 These benefits were highlighted after the trial U-turn bans, described later in this report, when six motorists contacted Highways England and Nottinghamshire County Council to ask why the temporary U-turn ban had been removed. All these motorists had experienced significant improvements in traffic conditions whilst driving through the junction during peak hours on the A52 and Stragglethorpe Road while the trial was in place.
- 3.2.5 The improvements proposed to the A52 Stragglethorpe Road junction also form part of the A52 Nottingham Junctions scheme. This scheme comprises of eight junctions along the A52 that are being improved to address existing queuing and delay problems along the A52 corridor to provide capacity for future year traffic flows. So, whilst the planned improvements to the A52 Stragglethorpe Road junction appear very modest in isolation, they form an integral part of a wider strategy to manage future traffic conditions on this important east-west Trunk Road route.

⁶ 2019 average two-way Monday-Friday daily traffic flow on the A52, excludes Stragglethorpe Lane flows.

3.3 Junction Performance

3.3.1 A summary of the forecast operation of the junction is presented in the tables below. The tables refer to the 'Do Minimum' and 'Do Something' scenarios which are standard terms used in transport modelling where the 'Do Minimum' is the situation that will exist without the planned improvement in place (i.e. the situation that will occur anyway) and the 'Do Something' is the situation that will exist with the planned improvement in place. By comparing these results, the operational benefits of the scheme can be seen.

Table 4 – 2020 Opening Year Junction Performance

Junction Arm	Lane	Do Minimum - 2020								
		AM (0800 - 0900)			Inter-Peak (1200 - 1300)			PM (1700 - 1800)		
		Queue	Total Delay	Degree of Saturation	Queue	Total Delay	Degree of Saturation	Queue	Total Delay	Degree of Saturation
A52 E/B	1	9.4	1.2	50.5%	10.2	2.3	57.6%	18.6	4.0	74.0%
	2	8.7	3.6	89.4%	6.2	1.4	44.8%	11.7	2.7	75.3%
	3	-	2.7	89.4%	-	1.8	90.3%	-	3.9	86.1%
A52 W/B	1	121.3	84.7	110.6%	17.6	6.0	81.0%	22.1	8.5	87.3%
	2	22.7	5.4	66.3%	8.5	2.5	41.8%	10.5	3.4	52.7%
Stragglethorpe Rd	1	-	36.8	114.3%	-	3.7	78.9%	-	5.0	87.9%
	2	50.3	5.6	114.3%	7.2	1.0	78.9%	9.8	2.2	87.9%

Junction Arm	Lane	Do Something - 2020								
		AM (0800 - 0900)			Inter-Peak (1200 - 1300)			PM (1700 - 1800)		
		Queue	Total Delay	Degree of Saturation	Queue	Total Delay	Degree of Saturation	Queue	Total Delay	Degree of Saturation
A52 E/B	1	9.5	1.3	51.6%	7.9	1.3	49.1%	10.8	1.8	58.6%
	2	5.2	0.7	38.1%	4.9	0.8	44.3%	13.0	2.4	72.2%
	3	-	1.6	39.8%	-	1.8	59.8%	-	3.9	90.2%
A52 W/B	1	83.9	45.7	103.9%	16.7	4.4	69.2%	13.7	3.8	62.4%
	2	19.5	4.2	62.5%	8.4	2.0	41.7%	11.5	3.1	52.3%
Stragglethorpe Rd	1	-	26.9	108.5%	-	3.1	63.6%	-	2.7	52.2%
	2	38.4	4.3	108.5%	7.1	1.0	59.2%	6.6	1.6	74.7%

Notes:

1. Queues are presented as mean max queues in Passenger Car Unit (PCU), which represents the maximum queue within a typical cycle averaged over all the cycles within the modelled time period.
2. PCU is a metric used in traffic modelling to represent different vehicle types in relation to the equivalent carriageway space taken up by a car (e.g. a queue length of 5 PCU is equivalent to the length of 5 cars) where one PCU is equivalent to 5.75m.
3. Total Delay is expressed in PCU/Hr, which is the total aggregate delay suffered by traffic using the modelled arm.
4. Degree of Saturation %, which is the ratio of Flow to Capacity for the Link.
5. Cells containing "-" represent Flare Lanes where individual queue lengths are not reported by the LinSIG software used to test the junction operation.

Table 5 – 2032 Forecast Year Junction Performance

Junction Arm	Lane	Do Minimum - 2032								
		AM (0800 - 0900)			Inter-Peak (1200 - 1300)			PM (1700 - 1800)		
		Queue	Total Delay	Degree of Saturation	Queue	Total Delay	Degree of Saturation	Queue	Total Delay	Degree of Saturation
A52 E/B	1	11.8	1.6	57.5%	20.4	5.4	81.7%	16.1	3.8	68.4%
	2	18.5	9.4	97.9%	10.4	1.9	54.3%	21.4	10.0	98.9%
	3	-	5.6	97.9%	-	4.6	102.2%	-	7.9	98.9%
A52 W/B	1	144.3	90.3	116.4%	57.6	41.3	105.5%	114.2	98.9	120.3%
	2	30.9	2.0	80.3%	10.0	3.1	55.6%	14.0	4.9	67.2%
Stragglethorpe Rd	1	-	35.5	112.0%	-	13.2	102.1%	-	23.4	106.7%
	2	52.5	9.0	112.0%	21.2	4.5	102.1%	38.4	9.9	106.7%

Junction Arm	Lane	Do Something - 2032								
		AM (0800 - 0900)			Inter-Peak (1200 - 1300)			PM (1700 - 1800)		
		Queue	Total Delay	Degree of Saturation	Queue	Total Delay	Degree of Saturation	Queue	Total Delay	Degree of Saturation
A52 E/B	1	17.4	2.7	71.1%	14.9	2.6	68.5%	16.8	3.2	71.1%
	2	18.2	1.5	60.6%	6.6	1.3	61.5%	13.5	4.4	91.3%
	3	-	2.9	62.7%	-	2.5	72.7%	-	5.0	91.3%
A52 W/B	1	37.6	65.3	107.3%	27.0	8.3	87.1%	34.1	14.6	95.8%
	2	41.7	6.3	74.3%	9.6	2.4	45.9%	11.7	3.3	53.5%
Stragglethorpe Rd	1	-	25.9	106.8%	-	5.4	84.8%	-	6.4	83.7%
	2	20.0	6.6	106.8%	11.5	2.2	80.1%	14.9	3.5	96.9%

3.3.2 At the 2020 opening year the planned improvement is forecast to reduce queues on the A52 Westbound arm of the junction in the AM peak by 37.4 PCU, which is equivalent to a reduction in queue length of 215m. On the Stragglethorpe Road arm of the junction queue lengths are predicted to reduce by 11.9 PCU in the AM peak which is equivalent to a queue length reduction of 68m.

3.3.3 At the 2032 Forecast Year the planned improvement is predicted to reduce queues on the A52 Westbound arm of the junction in the AM peak by 107.7 PCU, which is equivalent to a reduction in queue length of 613m. On the Stragglethorpe Road arm of the junction queue lengths are predicted to reduce by 32.5 PCU in the AM peak which is equivalent to a queue length reduction of 187m.

3.3.4 The scheme will therefore deliver significant benefits at the junction in terms of reduced queues and delays in comparison to the Do Minimum scenario and is therefore also expected to help reduce adverse environmental impacts caused by standing traffic at the junction. These improvements will help circa 46,000⁷ drivers who travel through this junction each day.

⁷ 2019 average two-way Monday-Friday daily traffic flow on the A52, excluding Stragglethorpe Lane flows.

3.4 Alternative U-Turn Facility

- 3.4.1 The next available U-turn facility is at the A52 Nottingham Road signal controlled junction in Radcliffe-on-Trent where a separately signalled U-turn facility was provided as part of the A52 Nottingham Junctions scheme improvement works delivered in 2017. This junction is located approximately 700m to the east of Stragglethorpe Road. The diversion distance for U-turning traffic is 1.42km (0.88miles) as shown in the image below:



- 3.4.2 The additional time taken to travel this distance is between 45 and 63 seconds assuming average speeds of between 50mph and 70mph.
- 3.4.3 Anyone already making the U-turn must pass through the A52 Stragglethorpe Road junction once. With the planned improvement in place they will also have to pass through the A52 Nottingham Road junction and a second time through the A52 Stragglethorpe Road junction to make the U-turn.
- 3.4.4 On the first pass through the A52 Stragglethorpe Road junction (eastbound) there is a much greater chance of arriving on a green signal as the ahead movement is typically green for over half the cycle time and significantly more than for the right turn into Stragglethorpe Road. Ultimately resulting in a shorter maximum potential wait time here.
- 3.4.5 At the A52 Nottingham Road junction if drivers arrive at the worst time (i.e. just as the signals turn red), they will have to wait for the signal cycle time less the green time for the U-turn movement. Assuming a 70 second cycle time and a seven second minimum green time for the U-turn gives a worst case wait of 63 seconds.

- 3.4.6 On the second pass through the A52 Stragglethorpe Road junction (westbound), the green time for the A52 westbound ahead is typically 20 to 30 seconds depending on traffic conditions, which using the same logic equates to a maximum delay of 40-50 seconds.
- 3.4.7 The 'worst case' situation will be if a driver stops for a red light in both directions when passing through the Stragglethorpe Road junction. It is estimated that this will add a further delay of 40-50 seconds (applying the same logic as for the A52 westbound). Although this will only happen infrequently and the additional capacity that the A52 Stragglethorpe Road improvement will deliver will help to mitigate against any delays experienced in taking the revised U-turn route.

Table 6 – Summary of Additional Journey Time

Scenario	A52 Stragglethorpe Road Eastbound Signal Wait Time	A52 Nottingham Road Junction Signal Wait Time	A52 Stragglethorpe Road Westbound Signal Wait Time	Total Travel & Wait Times Combined	
				Seconds	Minutes
Best Case	Green Signal (0 seconds)	Green Signal (0 seconds)	Green Signal (0 seconds)	45 – 63	1
Typical Case	Green Signal (0 seconds)	Red Signal (63 Seconds)	Green Signal (0 seconds)	108 – 126	2
Intermediate Case	Green Signal (0 seconds)	Red Signal (63 Seconds)	Red Signal (40 – 50 Seconds)	148 - 176	3
Worst Case	Red Signal (40 – 50 Seconds)	Red Signal (63 Seconds)	Red Signal (40 – 50 Seconds)	188 - 226	4

- 3.4.8 The A52 Stragglethorpe Road junction operates an intelligent adaptive control method (MOVA) which can choose the most appropriate signal staging sequence depending on the traffic conditions. As the highest traffic demands are on the A52 approaches the signal operation will, in most cases, allocate most capacity to the A52 ahead movements so the 'typical case' summarised in the table above is the one most likely to be encountered during peak periods.

4 Initial one-day trial & Road Safety Review

4.1 Introduction

- 4.1.1 To investigate the likely implications of the proposed improvement an initial one-day trial of the proposed U-turn ban was undertaken on Monday 7 October 2019. This was accompanied by a road safety review undertaken by AECOM on behalf of Highways England.

4.2 Trial U-Turn Ban

- 4.2.1 The trial U-turn ban was implemented by ViaEM⁸ and involved a Temporary Traffic Regulation Order and associated signage being implemented at the A52 Stragglethorpe Road junction to ban the A52 eastbound to westbound U-turn. The signal operation was also adjusted to reflect the benefits that the proposed improvement scheme will deliver for westbound A52 traffic movements through the junction.

4.3 Observed Traffic Conditions

- 4.3.1 During the initial one day trial traffic was observed queuing in front of the A52 westbound properties in the morning peak as a result of traffic congestion at Gamston roundabout. Queueing on the A52 westbound approach to the Gamston roundabout is understood to be an existing issue and sometimes queues back to these properties, although it is possible that the trial worsened this slightly. However, it should be noted that the planned improvements at the Gamston roundabout will help to significantly reduce queuing and therefore make it much less likely to affect these properties.

4.4 Road Safety Review

- 4.4.1 A road safety review was undertaken before and during the one-day U-turn trial following the principles of GG119⁹. A site inspection was undertaken before the trial was implemented and then again on the day that the trial was put in place.
- 4.4.2 A site visit was undertaken on Friday 4 October 2019 between the hours of 0600 and 0945 during which the weather was overcast and drizzly with a wet road surface. A second site visit took place on Monday 7 October 2019 between the hours of 0600 and 0945 and the weather during this site visit was clear and sunny with a dry road surface. There were no road works or incidents observed during either site visit that could affect highway operation.

⁸ Via East Midlands is private Company that carries out highway services on behalf of Nottinghamshire County Council.

⁹ The standard for Road Safety Audits – Part of the Design Manual for Roads and Bridges

- 4.4.3 Nottinghamshire Police were consulted and offered no concerns about the scheme or the operational aspect of the change in road layout.
- 4.4.4 A representative from Highways England attended site with AECOM on Friday 4 October 2019 and visited the site independently on Monday 7 October 2019.
- 4.4.5 Traffic observations were recorded from the lay-by located on the eastbound carriageway, opposite Bassingfield Lane and the AECOM Road Safety Team also drove the A52, exiting and entering the westbound carriageway from the frontage properties in question and Bassingfield Lane.
- 4.4.6 The AECOM Road Safety Team manually recorded the length of time A52 westbound traffic was observed in both lanes and recorded the duration of gaps available for vehicles to leave the properties along the A52.
- 4.4.7 The number of vehicles travelling along the A52 westbound carriageway was observed to be higher during the U-turn trial, with both westbound lanes having traffic present for longer periods of time and shorter gaps than before the trial, but gaps in the A52 westbound traffic flow were still observed. However, the data set was very small being based on observations over only a two hour period before and during the one day trial U-turn ban.
- 4.4.8 The AECOM Road Safety Team also recorded the length of time that drivers had to wait when joining the A52 westbound from frontage properties and from Bassingfield Lane. Before the U-turn trial three vehicles were observed leaving frontage properties on the A52 and three vehicles were observed leaving Bassingfield Lane. During the trial three vehicles were observed leaving frontage properties and six vehicles leaving Bassingfield Lane. The results are shown in **Table 7**. Zero waiting times indicate that vehicles joined the A52 unopposed without having to wait for a gap.

Table 7 – A52 Westbound - Observed Waiting Times

Movement	Vehicle Numbers	Before Trial	During Trial
		Waiting Time (Seconds)	
Exiting Frontage Properties	Vehicle 1	20	60
	Vehicle 2	30	0
	Vehicle 3	90	0
Exiting Bassingfield Lane	Vehicle 1	20	65
	Vehicle 2	60	65
	Vehicle 3	0	65
	Vehicle 4	-	65
	Vehicle 5	-	0
	Vehicle 6	-	0

- 4.4.9 The data in **Table 7** is inconclusive as the data set is too small to draw any firm conclusions.

4.4.10 The AECOM Road Safety Team noted that:

“Whilst the amount of time that drivers had to wait to access the A52 westbound carriageway after the U-turn ban had been implemented has increased, there are still sufficient gaps in traffic to allow for vehicles to enter the A52.

However, due to the length of time drivers may be waiting, there are concerns that frustration may lead to drivers attempting to enter the westbound carriageway in unsafe gaps, increasing the likelihood of collisions occurring with approaching vehicles.

Additionally, if drivers do get frustrated and attempt to enter lane 1 of the westbound carriageway, with vehicles approaching in lane 1, lane change collisions (between lane 1 and 2) may also be experienced.”

4.4.11 The final recommendations of the road safety review were that evidence from a one day trial U-turn ban was insufficient to draw any firm conclusions and a more extensive trial should be undertaken.

5 Seven-day trial U-turn ban

5.1 INTRODUCTION

- 5.1.1 Following the initial one-day trial U-turn ban and the recommendations of the road safety review a seven-day trial was undertaken between 4 November 2019 and 11 November 2019.

5.2 Seven-Day Trial U-Turn Ban

- 5.2.1 The methodology for the seven-day trial was the same as the initial one-day trial and involved a Temporary Traffic Regulation Order and associated signage being implemented at the A52 Stragglethorpe Road junction to ban the A52 eastbound to westbound U-turn. The signal operation was also adjusted to reflect the benefits that the proposed improvement scheme will deliver for westbound A52 traffic movements through the junction.

5.3 Video GAP Surveys

- 5.3.1 For a seven-day period covering 23 to 29 September 2019 video surveys were undertaken on the A52 westbound to obtain gap data before the U-turn trial was implemented. Video gap surveys were also undertaken during the seven-day trial between 4 and 11 November 2019.
- 5.3.2 Video cameras were installed to monitor gaps in both lanes of westbound A52 traffic at a point upstream of the properties fronting the A52. The camera footage was processed electronically and recorded each passing vehicle with a timestamp and from this the gaps between vehicles were calculated. Manual checks were undertaken by ViaEM onsite to validate the calculated gap lengths.

5.4 Gap length requirements

- 5.4.1 The length of gap required for a vehicle to safely join the A52 westbound from a frontage property will depend on variables including the speed of oncoming traffic, the rate of acceleration of the joining vehicle, prevailing weather conditions, the driver's willingness to accept different gaps etc. Gap acceptability will therefore vary from driver to driver and from day to day.
- 5.4.2 However, regardless of these variables, the maximum gap length that drivers joining the A52 westbound can see and respond to is dictated by how far they can see vehicles approaching from the east.
- 5.4.3 Design standards setting out the requirements for visibility at new priority junctions onto all-purpose trunk roads are set out in the Design Manual for Roads and Bridges in the following documents:
- CD109 - Highway Link Design
 - CD123 – Geometric Design of at-grade Priority and Signal-Controlled Junctions

- 5.4.4 An existing all-purpose trunk road with a 70mph speed limit is subject to a Design Speed of 120kph. Table 2.10 of CD109 identifies a desirable minimum Stopping Sight Distance (SSD) of 295m for a 120kph Design Speed. CD123 identifies that visibility to the right from a new access or side road junction onto a 70mph all-purpose road should be available over the desirable minimum SSD of 295m.
- 5.4.5 For new roads the desirable minimum 295m SSD should also be available on the major road approach to side road junctions to ensure that drivers have enough reaction and braking time to avoid an obstruction in the road ahead.
- 5.4.6 To take into account a vehicle that has just turned left out of an access or side road and is still accelerating up to speed the design standard for new highways requires the desirable minimum SSD to be available over 1.5 times SSD ($1.5 \times 295\text{m} = 442.5\text{m}$) on the approach to and through the junction.
- 5.4.7 The A52 is an existing carriageway and the proposed scheme makes no modifications to the carriageway alignment, side road junctions or accesses. Nevertheless, on the A52 westbound approach to and past the frontage properties and Bassingfield Lane the available SSD is within acceptable parameters for the design speed of the road.
- 5.4.8 The side road visibility available to the east from 1 Radcliffe Road (eastern most frontage property) and from Bassingfield Lane is indicated on the plan in **Appendix C**. Measured from the minimum setback distances¹⁰ (2.0m for direct accesses and 2.4m for side roads) visibility to the east is available over 332m from 1 Radcliffe Road and 358m from Bassingfield Lane which exceeds the standard 295m requirement for the design speed of the road.
- 5.4.9 Visibility to the east from 1 Radcliffe Road is shown in **Image 1** on the next page and an uninterrupted view of an approaching vehicle in the nearside lane is available as far as the slight bend in the A52 carriageway, approximately at the point where the A52 crosses Polser Brook.

¹⁰ Para' 3.8 of CD123 Geometric Design of at-grade Priority and Signal-Controlled Junctions

Image 1 - Visibility to the east from 1 Radcliffe Road



5.4.10 Visibility to the east from Bassingfield Lane is shown in **Image 2** below and an uninterrupted view of an approaching vehicle in the nearside lane is available as far as the slight bend in the A52 carriageway, approximately to the bus stop/layby.

Image 2 - Visibility to the east from Bassingfield Lane



5.4.11 As a comparison the visibility available to the west from the egress points of the adjacent petrol filling station (**Image 3**) and neighbouring property on the A52 eastbound has also been indicated on the plan in **Appendix A**. Visibility to the west is available over distances of between 195m and 215m for these properties (i.e. over 100m less than from the A52 westbound frontage properties).

Image 3 - Visibility to the west from the Petrol Filling Station

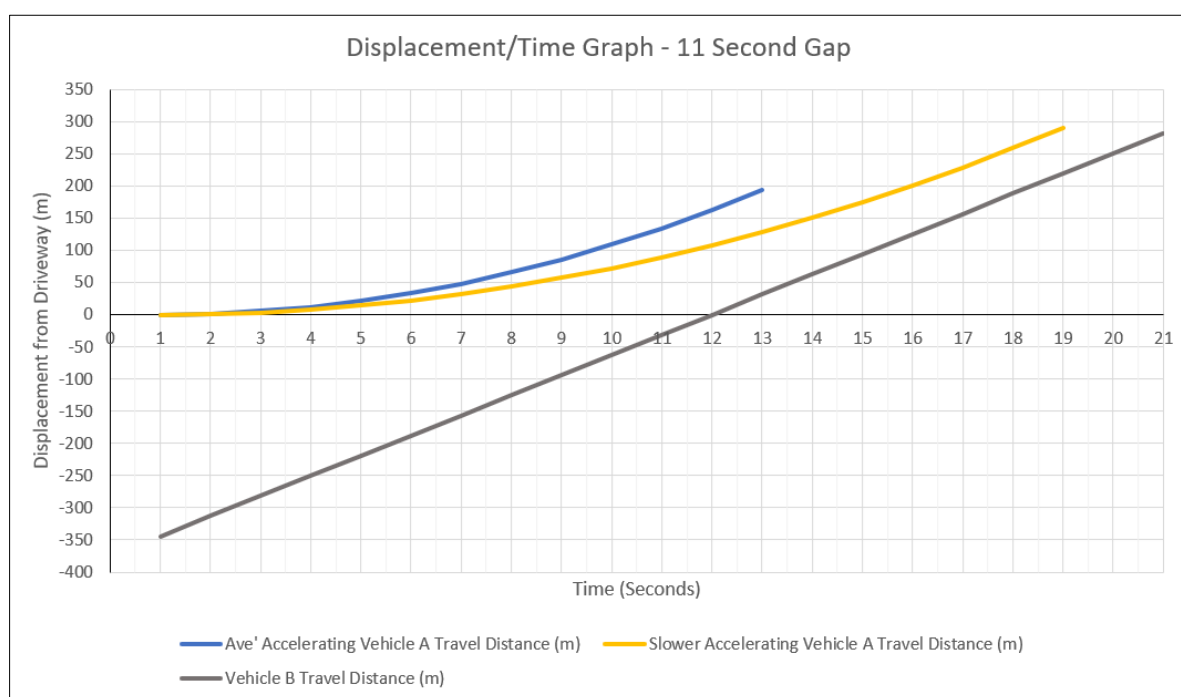
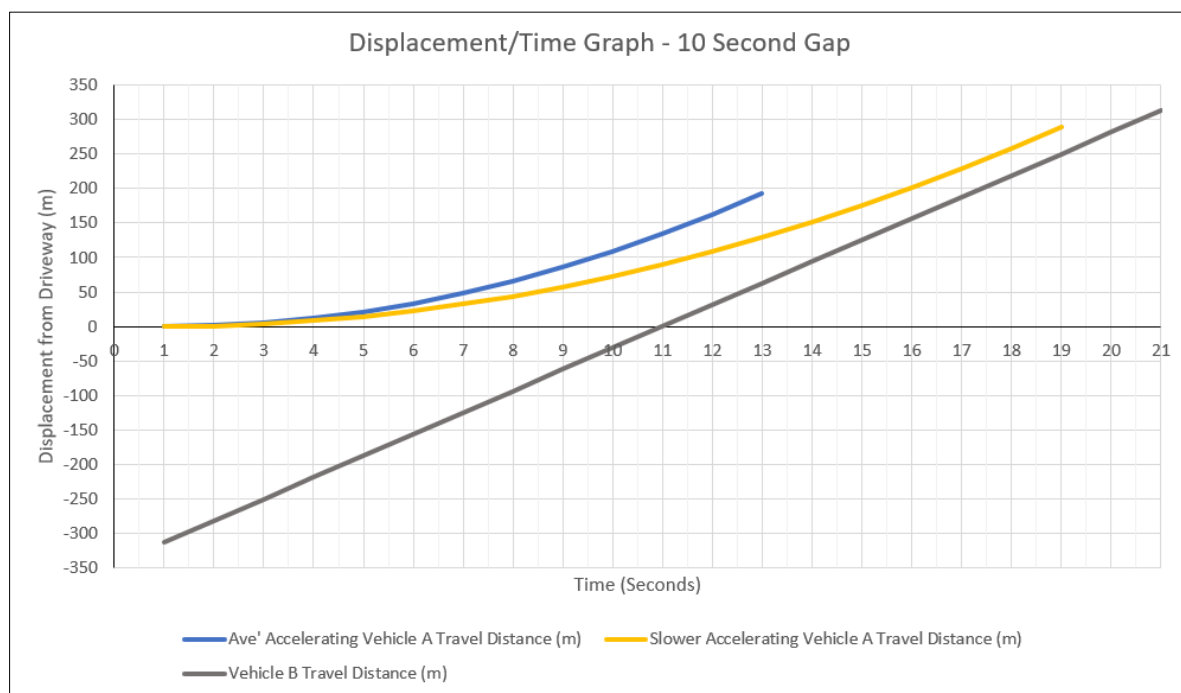


- 5.4.12 A vehicle travelling at 70mph covers 31.29 metres per second. Therefore, a westbound vehicle on the A52 travelling at a constant speed of 70mph will take 10.6 seconds to cover the 332m distance that a driver leaving 1 Radcliffe Road can see. From Bassingfield Lane the maximum visible distance is 358m and an approaching westbound vehicle would take 11.4 seconds to cover this distance at 70mph.
- 5.4.13 By comparison the maximum distance visible for drivers leaving the petrol filling station and frontage properties on the A52 eastbound are much shorter and equate to travel times of between 6.2 and 6.9 seconds for an eastbound vehicle approaching at 70mph. In practice the available visibility distance is even shorter than indicated on the plan in **Appendix A** because the advertising signs positioned within the verge in front of the petrol filling station (PFS) reduce the available visibility distance, as can be seen in the image above.
- 5.4.14 Based on the available visibility and the absence of any recorded collisions involving drivers joining the A52 over the last 10 years it is reasonable to assume that gaps in approaching traffic of circa 10 to 11 seconds are therefore adequate for vehicles to safely join the A52 westbound, and shorter gaps can and do get used, as demonstrated on the A52 eastbound. This is reinforced by site observations which confirm that drivers typically wait for a gap of this duration before pulling out onto the A52 westbound.
- 5.4.15 Further analysis has been undertaken to examine the time and distance taken for a car to accelerate from a standstill to 70mph. Acceleration rates vary by vehicle, so a range of average acceleration rates have been applied for typical family cars. These range between 1.79 m/s/s and 2.68 m/s/s which is equivalent to 0-60mph acceleration times of between 10 and 15 seconds. The

analysis assumes that the accelerating vehicle starts from a standstill and accelerates at a constant rate to 70mph. The displacement/time graphs below show the results of this analysis.

5.4.16 The graphs below plot the displacement over time of vehicles accelerating at a typical rate (blue) and at a slower rate (yellow). The displacement of a vehicle approaching on the A52 westbound at a constant 70mph is also shown (grey).

Figure 1 – Displacement - Time Graphs



- 5.4.17 The vertical separation between the lines equates to the separation in metres between the accelerating vehicles and the vehicle approaching at constant speed. Once 70mph is reached by the accelerating vehicle the separation will remain constant, until either vehicle changes speed.
- 5.4.18 The graphs show that for a 10 second gap in approaching traffic the minimum separation distance between the accelerating and approaching vehicles would be between 40m and 130m depending on the rate of acceleration (equivalent to a gap of between 1.3 and 4.2 seconds at 70mph). For an 11 second gap the minimum separation would be between 71m and 162m depending on the rate of acceleration (equivalent to a gap of between 2.3 and 5.2 seconds at 70mph)¹¹.
- 5.4.19 The analysis supports the assumption that gaps in approaching traffic of circa 10 to 11 seconds duration are therefore adequate for modern cars to accelerate and safely join the A52 westbound, if approaching traffic is travelling no faster than the 70mph speed limit.

5.5 Gap comparison - before and during trial

- 5.5.1 Analysis has been undertaken of the gap data recorded during the seven-day trial. At the start of the trial the performance of the A52 Stragglethorpe Road junction was monitored together with the availability of downstream gaps on the A52 westbound. During the first day of the trial (Monday) it was apparent that the initial signal timings were resulting in reduced gap availability, so the inter-green timings¹² were manually adjusted to create additional gaps. Due to this change the gap data collected on the Monday cannot be used for comparison purposes and has been excluded from the analysis. On the Friday of the trial a camera outage occurred so no data is available for comparison. The analysis therefore compares data covering Tuesday to Thursday.
- 5.5.2 For ease of interpretation the data has been analysed and converted into the average time a driver would have had to wait for a gap of 10 and 11 seconds or greater in A52 westbound traffic. The results are presented in the graphs on the following pages where the x-axis represents the time of day (24hr) and the y-axis represents the average (mean) wait time in seconds for a gap.
- 5.5.3 Graphs are presented showing the average wait times for gaps in the nearside A52 westbound lane (i.e. the lane that a driver joining the road would pull into) and for gaps in both A52 westbound lanes simultaneously. As could be expected the availability of simultaneous gaps in both lanes is lower and the average waiting times for simultaneous gaps to occur greater.

¹¹ Distances rounded to whole numbers. Times rounded to one decimal.

¹² The clearance time between conflicting signal stages receiving a green signal.

Figure 2 – Average Wait Times for Gaps of 10 Seconds or Greater in Nearside Lane

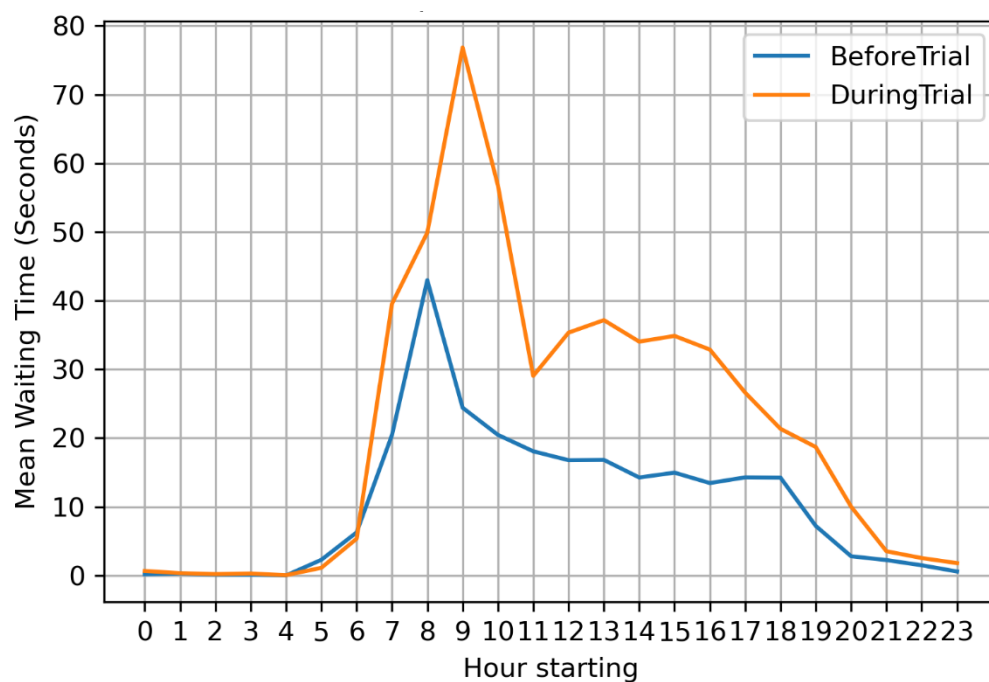


Figure 3 – Average Wait Times for Gaps of 11 Seconds or Greater in Nearside Lane

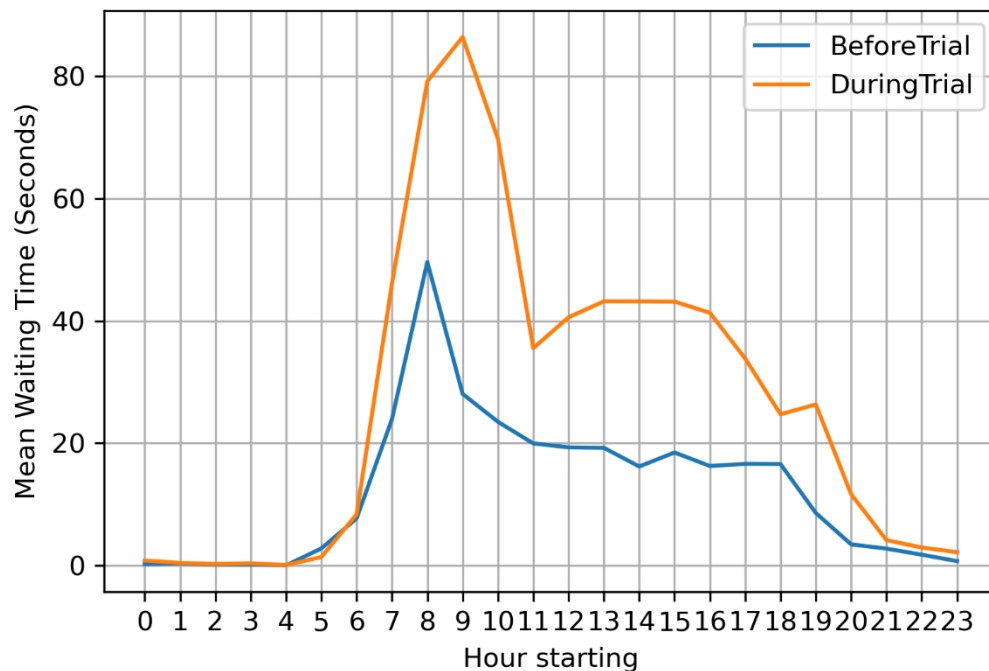


Figure 4 – Average Wait Times for Gaps of 10 Seconds or Greater in Both Lanes

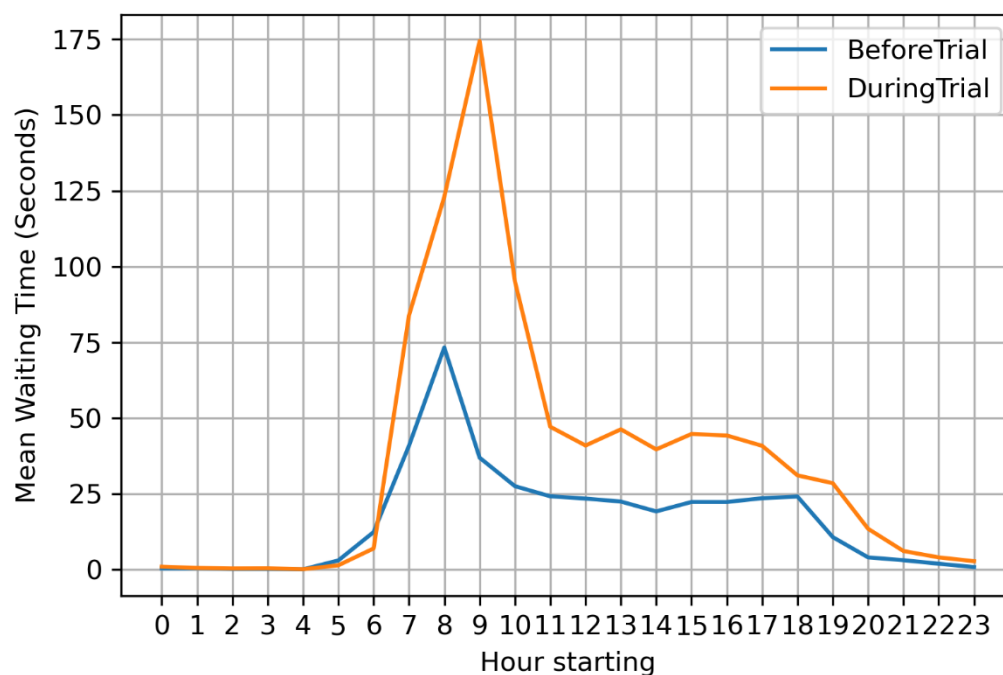
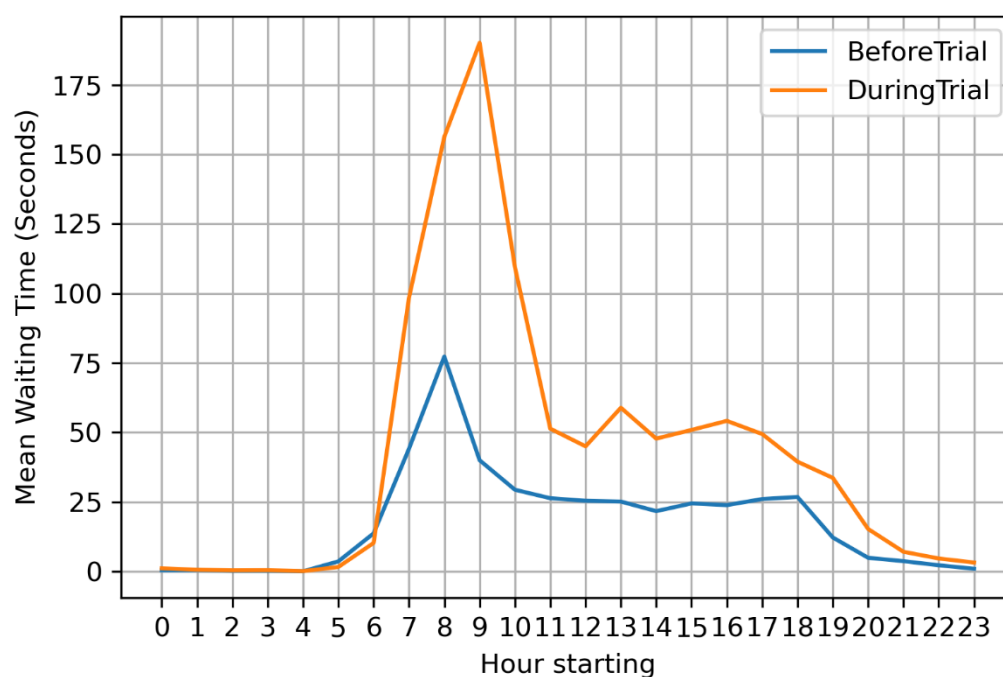


Figure 5 – Average Wait Times for Gaps of 11 Seconds or Greater in Both Lanes



5.5.4 The graphs show that the increase in average wait time times are greatest in the AM peak, typically at 0800 hrs in the pre-trial and 0900 hrs while the trial was in place. This corresponds to the time

periods when the recorded westbound traffic flow was greatest in the pre-trial and during the trial and corresponds with peak flows towards Nottingham in the morning.

- 5.5.5 A comparison between the recorded maximum average wait times in the AM peak is presented in the table below.

Gaps Observed on A52 Westbound	Comparison of Maximum Average Wait Times (Seconds)					
	10 Second Gap			11 Second Gap		
	Pre-Trial	During Trial	Increase	Pre-Trial	During Trial	Increase
Nearside Lane Only	43	76	33	49	86	37
Both Lanes	73	174	101	77	190	113

- 5.5.6 The increases in the maximum average wait times for gaps in the nearside lane are modest at 33 and 37 seconds (for 10 and 11 second gaps respectively). During the trial this gave maximum wait times of 76 and 86 seconds, meaning the longest average wait time for a gap in the nearside lane was less than one and a half minutes.
- 5.5.7 The increases in the maximum average wait times for simultaneous gaps in both A52 westbound lanes are greater at 101 and 113 seconds (for 10 and 11 second gaps respectively). During the trial this gave maximum wait times of 174 and 190 seconds, meaning the longest average wait time for a gap in both lanes simultaneously was just over three minutes.
- 5.5.8 In the context of the A52 being a major trunk road carrying circa 46,000 vehicles per day two-way maximum average wait times of this magnitude are not considered excessive and are comparable to the wait times drivers may experience at priority side road junctions, or traffic signal junctions on the trunk road network during peak hours. The maximum averages summarised above also only occur for a short period during the busiest AM peak. At all other times of the day wait times are significantly less.

6 Conclusions

6.1 Introduction

- 6.1.1 The quantitative assessments presented in this summary note are consistent with and support the comments made in the road safety review that was undertaken in support of the initial one-day trial U-turn ban:

“Whilst the amount of time that drivers had to wait to access the A52 westbound carriageway after the U-turn ban had been implemented has increased, there are still sufficient gaps in traffic to allow for vehicles to enter the A52.”

- 6.1.2 With regards to the subsequent comment in the road safety review:

“However, due to the length of time drivers may be waiting, there are concerns that frustration may lead to drivers attempting to enter the westbound carriageway in unsafe gaps, increasing the likelihood of collisions occurring with approaching vehicles.”

The findings of the seven-day trial and subsequent analysis presented in this summary confirm:

- Traffic flows and speeds east and westbound on this section of the A52 are very similar.
- No collisions have been recorded associated with vehicles joining the A52 westbound from frontage properties or Bassingfield Lane during the most recent 10 year period.
- No collisions have been recorded between ahead traffic on the A52 eastbound and vehicles joining the A52 eastbound from the petrol filling station or adjacent properties in the last 10 years.
- Observed vehicle speeds on the A52 westbound are generally consistent with the mandatory 70 mph speed limit. Although 85th percentile speeds recorded in 2020 near the frontage properties exceeded 70mph.
- Based on the visibility available to the east from the frontage properties a gap of circa 10 to 11 seconds is considered appropriate for a vehicle to safely join the A52 westbound. This is reinforced by site observations which confirm that drivers typically wait for a gap of this duration before pulling out and an analysis of acceleration for typical modern family cars.
- The available visibility for vehicles joining the A52 eastbound from the petrol filling station and adjacent frontage properties is significantly less and equates to a gap length of circa 6 to 7 seconds.
- On the A52 eastbound there are no traffic signal junctions upstream of the petrol filling station to create gaps in eastbound traffic. Yet drivers manage to join the A52 eastbound with significantly less visibility of gaps in oncoming traffic.

- Comparison between the maximum average wait times for gaps in the A52 westbound nearside lane before the trial and during the trial U-turn ban show modest increases of 33 and 37 seconds (for 10 and 11 second gaps respectively).
 - The increases in the maximum average wait times for simultaneous gaps in both A52 westbound lanes are greater at 101 and 113 seconds but these increases are still considered reasonable in the context that they only occur for a short period during the busiest peak on a major trunk road.
 - At all other times of the day the increase in average waiting time for gaps of 10 or 11 seconds is in the order of 20 to 25 seconds or less, for gaps in either the nearside lane only or both lanes together.
 - The next available U-turn facility is located approximately 700m to the east of Stragglethorpe Road at the A52 Nottingham Road signal controlled junction where a separately signalled U-turn facility was provided as part of the A52 Nottingham Junctions scheme improvement works delivered in 2017.
 - The increased journey time to complete a U-turn at the A52 Nottingham Road junction ranges between one and four minutes, depending on the operation of the traffic signals at the A52 Stragglethorpe Road and A52 Nottingham Road junctions. However, the typical increased journey time is expected to be circa two minutes.
- 6.1.3 The trial has demonstrated that the improvement scheme will result in increased waiting times for appropriate gaps to join the A52 westbound from frontage properties and Bassingfield Lane however, there will still be gaps available throughout the day and the increase in waiting times is not considered to be large enough to result in significant driver frustration.
- 6.1.4 Observationally the trial U-turn ban also achieved its objective of reducing congestion at the A52 Stragglethorpe Road junction and improving traffic flow along the A52. This was further supported by feedback received from members of the public who contacted Highways England and Nottinghamshire County Council to comment on the improvement in traffic conditions they had experienced when driving through the junction during peak hours on the A52 and Stragglethorpe Road.

7 Recommendations

7.1 Introduction

- 7.1.1 The results of the seven-day trial indicate that the U-turn ban can be implemented whilst still allowing vehicles to safely join the A52 westbound from the properties fronting the A52 and from Bassingfield Lane, with modest increased waiting times.
- 7.1.2 It is therefore recommended that the scheme be implemented to help reduce queuing traffic at the A52 Stragglethorpe Road junction and to contribute towards the wider benefits that the A52 Nottingham Junctions scheme has been designed to achieve along the A52 corridor to provide capacity for future year traffic flows.
- 7.1.3 However, it is acknowledged that several residents have raised concerns regarding the proposed improvement, so the following mitigation will be considered to help address their concerns.

7.2 Mitigation

Speed Enforcement

- 7.2.1 Given the concerns raised by residents regarding vehicle speeds modifications to the existing average vehicle speed enforcement equipment on this section of the A52 will be considered by Highways England to complement the U-turn ban.
- 7.2.2 The provisional modifications for consideration will include relocating the cameras at the start of the A52 westbound average speed section to a point west of the A52 Stragglethorpe Road junction to ensure that drivers joining the A52 westbound at this junction are also monitored for speed offences. The relocated cameras will also monitor and deter drivers from speeding away from the lights on the A52 westbound at the A52 Stragglethorpe Road junction.
- 7.2.3 In addition, consideration will be given to the average speed cameras on this section of the A52 being replaced with more up to date camera technology to improve detection rates and prosecution of speeding offences.
- 7.2.4 Case study evidence from camera manufacturers demonstrate that the proposed average speed camera systems help to improve safety performance by encouraging better driver behaviour and improved levels of speed limit compliance. Average speed cameras also contribute towards additional benefits including the reduction of incident frequency and impact, while also improving journey time reliability.

Signal Timings

- 7.2.5 To address concerns raised regarding the availability of gaps in A52 westbound traffic flows the signal timings will be set to replicate those of the adjusted timings implemented during the seven-day trial¹³ to ensure that gaps equivalent to those recorded during the trial are created.

Signs

- 7.2.6 Yellow backing boards will be provided to the existing 'Junction Ahead' warning signs on the A52 westbound on the approach to Bassingfield Lane to raise overall visibility of the signs and improve driver awareness of the likelihood of vehicles turning ahead.

Vegetation

- 7.2.7 Any overgrown vegetation within the A52 westbound verge and central reserve will be trimmed back and maintained at regular intervals to ensure that visibility to the east from frontage properties and Bassingfield Lane is maximised.
- 7.2.8 The vegetation on the eastern corner of the A52 Bassingfield Lane junction will be trimmed back to maximise available visibility to the east at the junction (see **Image 4** below).

Image 4 – Overgrown Vegetation at the Bassingfield Lane Junction



¹³ As noted in para' 5.1.1 the signal timings were adjusted at the beginning of the seven day trial to create longer gaps than would have been created by the originally proposed signal timings.

7.3 Monitoring

- 7.3.1 The operation of the A52 Stragglethorpe Road junction will be monitored following installation of the improvement scheme, together with monitoring of the availability of downstream gaps in A52 westbound traffic.
- 7.3.2 The monitoring regime is envisaged to take place for seven days following initial installation, including gap cameras adjacent to the frontage properties. If necessary, further adjustments will be made to the signal timings to create additional gaps. This process will be repeated for seven day periods at three, six and 12 months post installation. The final details and frequency of the monitoring will be finalised over the coming months.
- 7.3.3 Road safety records will be monitored annually for a period of three years post implementation to ensure no changes to historic collision patterns are observed that can be attributed to the scheme.

Appendices

Appendix A – Traffic Data

Weekly Volume Report NOTTSPERMANENT 000080206137 2019-11-01 to 2019-11-30

Site Name: A52 Bassingfield Site ID: 000080206137 Grid: 461519337789 Description: A52 RADCLIFFE ROAD BASSINGFIELD

Setup: 206137_Class Each Lane Bins: Total Time Period: 1 hour Precision: Normal Exclude data: None

All directions										
	<-- Mon	Tue	Average of each			Sat	--> Sun	Average		Total Count
			Wed	Thu	Fri			Workday	7 Day	
00:00	186	194	196	205	235	400	471	205	269	8182
01:00	111	122	137	124	147	239	293	129	167	5073
02:00	104	105	96	98	106	181	218	102	129	3919
03:00	134	120	132	118	136	173	186	128	143	4300
04:00	276	229	244	229	225	215	177	240	228	6819
05:00	763	652	635	658	571	312	206	652	542	16082
06:00	2045	2004	1912	1906	1570	644	408	1872	1491	44170
07:00	3611	3720	3686	3614	2970	1072	667	3494	2751	81404
08:00	3228	3144	3262	3147	2827	1834	1004	3108	2638	78447
09:00	2970	3026	3082	2975	2605	2506	1921	2916	2725	81450
10:00	2764	2766	2823	2622	2554	2898	2596	2698	2717	81542
11:00	2770	2679	2776	2715	2633	3175	2886	2711	2807	84346
12:00	2859	2796	2817	2836	2845	3300	3138	2831	2945	88510
13:00	2876	2843	2839	2910	2957	3238	3204	2888	2984	89657
14:00	2967	2984	3095	3007	3160	3043	2988	3048	3040	91177
15:00	3269	3350	3352	3282	3298	2952	2929	3309	3204	95976
16:00	3665	3754	3736	3363	3400	2901	2974	3575	3392	101474
17:00	3821	3829	3791	3238	3269	2902	2533	3574	3335	99702
18:00	3176	3418	3263	2887	2743	2320	2034	3080	2827	84427
19:00	2019	2172	2200	2022	2175	1662	1660	2121	1989	59484
20:00	1185	1306	1308	1317	1369	1151	1168	1301	1260	37737
21:00	860	952	933	904	936	968	840	918	916	27477
22:00	630	878	828	841	859	946	577	810	802	24040
23:00	460	536	458	445	646	753	404	516	539	16210
07-19	37975	38309	38522	36596	35261	32142	28873	37234	35364	1058112
06-22	44084	44744	44874	42745	41312	36566	32950	43445	41021	1226980
06-24	45174	46158	46160	44031	42817	38266	33931	44770	42361	1267230
00-24	46748	47580	47602	45464	44236	39785	35482	46226	43840	1311605
am Peak	07:00	07:00	07:00	07:00	07:00	11:00	11:00	07:00	11:00	
Peak Volume	3611	3720	3686	3614	2970	3175	2886	3494	2807	
pm Peak	17:00	17:00	17:00	16:00	16:00	12:00	13:00	16:00	16:00	
Peak Volume	3821	3829	3791	3363	3400	3300	3204	3575	3392	

Westboundn/s										
	<-- Mon	Tue	Average of each			Sat	--> Sun	Average		Total Count
			Wed	Thu	Fri			Workday	7 Day	
00:00	73	38	41	40	41	90	185	46	71	2161
01:00	42	25	32	23	24	54	121	29	45	1362
02:00	46	22	24	20	19	42	85	26	36	1091
03:00	64	28	30	26	27	54	81	35	44	1321
04:00	132	53	60	60	57	88	84	72	76	2280
05:00	323	285	260	267	214	142	87	267	224	6665
06:00	663	680	645	647	479	258	168	616	502	14898
07:00	1024	1043	1036	1009	774	411	278	968	792	23486
08:00	836	760	804	786	767	684	413	789	725	21646
09:00	905	873	936	905	774	874	737	874	856	25664
10:00	921	886	934	803	765	920	935	857	877	26339
11:00	889	858	870	846	745	980	956	837	875	26301
12:00	875	838	768	855	747	981	782	813	836	25108
13:00	879	853	804	856	738	973	955	822	863	25939
14:00	875	852	852	843	751	911	892	831	851	25564
15:00	831	835	839	808	705	823	855	799	810	24315
16:00	824	821	817	723	704	801	827	774	785	23579
17:00	828	859	841	713	678	757	788	779	777	23293
18:00	781	816	791	712	662	674	681	748	728	21807
19:00	565	600	592	463	590	517	574	563	557	16706
20:00	190	188	191	134	238	386	437	190	253	7677
21:00	137	153	132	110	170	319	335	142	194	5912
22:00	99	114	111	101	126	300	209	111	153	4664
23:00	58	69	70	62	108	255	137	75	112	3401
07-19	10467	10293	10290	9860	8811	9790	9099	9890	9774	293041
06-22	12022	11913	11849	11215	10287	11270	10613	11402	11281	338234
06-24	12180	12095	12030	11378	10521	11824	10959	11588	11545	346299
00-24	12860	12546	12478	11814	10903	12295	11601	12062	12040	361179
am Peak	07:00	07:00	07:00	07:00	07:00	11:00	11:00	07:00	10:00	
Peak Volume	1024	1043	1036	1009	774	980	956	968	877	
pm Peak	13:00	17:00	14:00	13:00	14:00	12:00	13:00	14:00	13:00	
Peak Volume	879	859	852	856	751	981	955	831	863	

Westboundo/s										
	<-- Mon	Tue	Average of each			Sat	--> Sun	Average		Total Count
			Wed	Thu	Fri			Workday	7 Day	
00:00	14	56	61	64	64	108	41	52	60	1807
01:00	7	47	50	43	50	66	20	40	41	1243
02:00	6	32	25	31	32	48	16	26	28	842
03:00	8	42	40	42	38	32	8	34	31	915
04:00	15	74	72	62	55	13	10	56	43	1276

05:00	74	63	72	72	53	20	14	66	52	1548
06:00	424	424	418	402	292	56	23	387	289	8509
07:00	1109	1169	1155	1135	829	144	58	1068	793	23374
08:00	994	920	984	974	780	426	128	923	743	22030
09:00	850	916	872	857	678	645	424	827	747	22292
10:00	655	674	667	643	596	749	655	644	662	19897
11:00	591	570	621	574	538	803	653	577	622	18736
12:00	583	572	630	535	541	777	796	571	632	19059
13:00	556	565	583	528	558	739	664	558	600	18069
14:00	593	584	604	543	598	659	590	585	597	17943
15:00	635	638	630	617	587	497	497	620	585	17493
16:00	691	724	706	644	632	475	497	677	622	18589
17:00	710	769	738	683	543	435	434	682	611	18228
18:00	589	672	644	624	499	379	357	601	534	15933
19:00	371	402	375	434	430	240	258	404	359	10710
20:00	358	420	382	459	407	136	145	405	330	9776
21:00	260	279	295	280	311	91	88	286	230	6817
22:00	186	210	221	194	250	80	46	214	172	5086
23:00	94	101	114	107	178	62	21	122	99	2951
07-19	8557	8775	8837	8357	7378	6727	5754	8333	7751	231643
06-22	9970	10301	10307	9932	8817	7251	6267	9816	8958	267455
06-24	10250	10612	10642	10234	9246	7394	6335	10152	9229	275492
00-24	10374	10926	10963	10550	9538	7681	6445	10426	9484	283123
am Peak	07:00	07:00	07:00	07:00	07:00	11:00	10:00	07:00	07:00	
Peak Volume	1109	1169	1155	1135	829	803	655	1068	793	
pm Peak	17:00	17:00	17:00	17:00	16:00	12:00	12:00	17:00	12:00	
Peak Volume	710	769	738	683	632	777	796	682	632	

Eastboundn/s	<--		Average of each			-->		Average		Total Count
	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Workday	7 Day	
00:00	86	86	82	89	110	169	200	91	118	3565
01:00	54	45	48	50	64	100	128	53	70	2121
02:00	44	46	42	42	48	76	98	45	56	1712
03:00	56	44	54	44	60	72	82	52	59	1776
04:00	112	88	96	90	98	101	70	97	94	2819
05:00	288	240	237	250	232	127	90	249	209	6212
06:00	554	524	508	500	483	253	179	512	429	12741
07:00	708	699	694	708	675	372	266	696	590	17535
08:00	704	722	718	689	673	484	354	700	622	18541
09:00	709	699	738	704	688	623	522	707	670	20041
10:00	720	714	745	708	723	737	648	722	715	21438
11:00	755	734	754	773	770	788	772	758	765	22946
12:00	796	784	787	807	837	836	880	804	819	24584
13:00	800	767	808	831	855	833	859	814	823	24697
14:00	809	823	842	828	892	799	836	841	834	25009
15:00	877	896	896	872	924	843	850	895	881	26402
16:00	936	916	945	881	911	839	858	917	897	26893
17:00	941	939	924	805	871	856	745	895	870	26055
18:00	810	834	819	711	762	716	616	786	753	22553
19:00	624	648	660	612	645	572	538	638	615	18408
20:00	428	457	479	460	459	428	423	457	448	13424
21:00	336	370	361	357	338	401	307	352	354	10619
22:00	269	385	358	380	354	406	255	349	346	10383
23:00	240	268	206	212	274	328	205	242	251	7536
07-19	9566	9527	9671	9316	9582	8727	8206	9535	9238	276694
06-22	11509	11526	11678	11245	11507	10381	9653	11494	11083	331886
06-24	12018	12180	12241	11836	12135	11115	10113	12085	11680	349805
00-24	12658	12729	12801	12401	12746	11760	10782	12671	12286	368010
am Peak	11:00	11:00	11:00	11:00	11:00	11:00	11:00	11:00	11:00	
Peak Volume	755	734	754	773	770	788	772	758	765	
pm Peak	17:00	17:00	16:00	16:00	15:00	17:00	12:00	16:00	16:00	
Peak Volume	941	939	945	881	924	856	880	917	897	

Eastboundo/s	<--		Average of each			-->		Average		Total Count
	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Workday	7 Day	
00:00	13	14	12	12	20	33	45	15	21	649
01:00	8	5	8	8	9	18	24	8	11	347
02:00	9	4	4	4	7	15	18	6	9	274
03:00	6	6	8	6	11	15	15	7	9	288
04:00	17	15	16	16	15	13	12	16	15	444
05:00	79	65	66	70	72	24	15	70	56	1657
06:00	404	376	341	358	315	76	38	357	272	8022
07:00	770	809	801	762	691	145	65	763	576	17009
08:00	693	742	756	697	608	240	110	695	548	16230
09:00	506	538	536	510	465	364	238	509	451	13453
10:00	468	492	477	468	470	492	358	475	463	13868
11:00	535	517	532	522	581	604	504	539	545	16363
12:00	606	602	631	639	719	706	680	643	658	19759
13:00	641	658	644	694	807	694	725	694	698	20952
14:00	690	726	797	793	919	673	670	791	757	22661
15:00	926	981	986	984	1082	789	726	996	929	27766
16:00	1214	1293	1268	1115	1153	785	792	1206	1086	32413
17:00	1342	1262	1288	1036	1176	854	565	1219	1078	32126
18:00	996	1095	1009	840	819	551	381	945	811	24134
19:00	460	523	574	513	511	333	290	516	458	13660
20:00	209	242	255	264	266	201	162	248	230	6860
21:00	126	150	146	156	118	156	111	138	138	4129
22:00	75	170	138	166	128	160	67	135	130	3907
23:00	68	98	68	65	86	108	40	77	77	2322
07-19	9384	9713	9725	9062	9490	6897	5816	9476	8602	256734
06-22	10582	11004	11041	10352	10700	7664	6417	10734	9699	289405
06-24	10725	11271	11246	10583	10915	7932	6524	10946	9906	295634
00-24	10857	11379	11360	10699	11049	8050	6654	11068	10028	299293

am Peak	07:00	07:00	07:00	07:00	07:00	11:00	11:00	07:00	07:00
Peak Volume	770	809	801	762	691	604	504	763	576
pm Peak	17:00	16:00	17:00	16:00	17:00	17:00	16:00	17:00	16:00
Peak Volume	1342	1293	1288	1115	1176	854	792	1219	1086

Event key:

QC failure

Atypical (QC)

Events

Special

Holiday

Offline

Weekends and defined holidays

Notes on data:

Weekly (7-day) averages are calculated as the average of workday values and weekend values, weighted in the proportion 5:2.

Holidays & Events:

None

Data prepared by Drakewell Cloud Hosting (Powered by C2-CLOUD) November 24, 2020 19:25:03.

C2-Cloud Traffic Data ©2003-2020 Drakewell Ltd.

Version 20.10.26.080042

Speed Statistics Report NOTTSPERMANENT 000080206137 2019-11-01 to 2019-11-30

Site Name: A52 Bassingfield Site ID: 000080206137 Grid: 461519337789 Description: A52 RADCLIFFE ROAD BASSINGFIELD																
Setup: Setup0870 (14SPD) Each Lane Time Period: 1 hour Speed units: mph Precision: Normal Exclude data: None																
All directions																
	Total Flow	Mean Speed	Std Dev	<-- 5th	15th	25th	Percentile bins			90th	--> 95th	% over limit (70mph) by:				# > ACPO
							50th	75th	85th			0mph	10mph	15mph	20mph	
00:00	8182	58.0	8.7	44.4	49.2	51.8	57.5	64.4	67.8	69.4	73.6	8.3	6.7	6.2	5.7	553
01:00	5073	57.2	8.8	43.0	48.0	51.1	56.8	63.4	67.2	69.0	72.8	7.4	5.9	5.5	5.0	304
02:00	3919	56.3	8.8	42.1	47.4	50.6	55.9	61.9	66.2	68.3	71.2	6.0	4.8	4.5	4.1	192
03:00	4300	56.7	8.5	43.6	48.6	51.1	56.0	62.0	66.3	68.5	71.8	6.4	5.2	4.8	4.4	226
04:00	6819	57.5	8.7	44.5	49.5	51.7	56.8	63.4	67.2	69.1	73.0	7.5	6.1	5.6	5.2	420
05:00	16082	59.6	8.6	46.0	50.7	53.2	59.0	65.9	68.9	70.7	75.4	11.3	9.2	8.5	7.8	1502
06:00	44170	60.5	8.2	46.5	51.3	54.4	60.6	66.6	69.1	70.5	75.3	11.1	8.9	8.3	7.6	4005
07:00	81404	58.1	9.1	43.9	48.8	51.9	58.2	64.9	67.7	69.2	72.3	7.1	5.5	5.1	4.7	4565
08:00	78446	46.7	22.0	5.7	13.0	27.7	54.6	63.2	66.8	68.6	71.5	6.3	5.0	4.6	4.2	3965
09:00	81449	54.8	14.9	15.5	46.0	50.5	57.4	64.4	67.5	69.0	72.1	6.9	5.4	5.0	4.6	4449
10:00	81541	57.8	10.1	44.8	49.1	51.9	58.0	64.7	67.6	69.1	72.3	7.0	5.5	5.1	4.7	4550
11:00	84345	57.3	10.4	42.7	48.3	51.4	57.7	64.5	67.5	69.0	72.0	6.8	5.3	4.9	4.5	4565
12:00	88509	57.2	11.2	42.0	48.4	51.6	58.0	64.7	67.7	69.1	72.3	7.0	5.5	5.1	4.7	4945
13:00	89657	58.4	9.1	44.8	49.3	52.2	58.4	65.1	67.9	69.3	72.9	7.6	6.0	5.5	5.1	5425
14:00	91177	58.8	8.4	45.2	49.8	52.5	58.7	65.3	68.0	69.4	73.2	7.9	6.2	5.8	5.3	5769
15:00	95976	58.7	8.2	45.3	49.8	52.5	58.5	65.1	67.8	69.2	72.4	7.2	5.6	5.2	4.7	5426
16:00	101474	56.9	9.6	42.9	48.1	51.2	57.2	63.7	66.8	68.4	70.0	4.9	3.7	3.4	3.1	3810
17:00	99701	55.1	11.4	39.9	46.5	50.0	56.0	62.4	66.0	67.8	69.6	4.0	3.0	2.7	2.5	2987
18:00	84427	56.6	11.8	41.1	47.9	51.3	57.6	64.3	67.3	68.8	70.7	6.0	4.6	4.3	3.9	3941
19:00	59484	59.0	9.5	45.0	50.0	52.9	59.3	65.8	68.5	69.8	74.2	9.1	7.2	6.7	6.1	4365
20:00	37737	58.8	9.1	44.8	49.7	52.5	58.8	65.6	68.4	69.8	74.3	9.3	7.4	6.9	6.3	2851
21:00	27477	59.0	8.9	44.9	49.8	52.6	58.9	65.7	68.5	69.9	74.5	9.5	7.6	7.1	6.5	2130
22:00	24040	58.7	8.7	44.8	49.5	52.2	58.5	65.3	68.2	69.7	74.0	8.8	7.1	6.5	6.0	1723
23:00	16210	58.5	8.5	45.1	49.7	52.2	58.2	65.0	68.0	69.5	73.5	8.2	6.6	6.1	5.6	1078
07-19	1058106	56.5	12.1	39.9	47.7	51.2	57.6	64.4	67.4	68.9	70.9	12.3	5.1	4.7	4.3	54395
06-22	1226974	56.9	11.8	40.6	48.0	51.4	57.9	64.6	67.6	69.1	71.1	13.2	5.4	5.0	4.6	67747
06-24	1267224	56.9	11.7	40.8	48.1	51.5	57.9	64.7	67.6	69.1	71.2	13.3	5.5	5.1	4.7	70548
00-24	1311599	56.9	11.6	40.9	48.1	51.5	57.9	64.6	67.6	69.1	71.2	13.4	5.5	5.1	4.7	73746
am Peak	11:00	06:00	08:00	06:00	06:00	06:00	06:00	06:00	06:00	05:00	05:00	05:00	05:00	05:00	05:00	07:00
Peak Value	84345	60.5	22.0	46.5	51.3	54.4	60.6	66.6	69.1	70.7	75.4	11.3	9.2	8.5	7.8	4565
pm Peak	16:00	19:00	18:00	15:00	19:00	19:00	19:00	19:00	21:00	21:00	21:00	21:00	21:00	21:00	21:00	14:00
Peak Value	101474	59.0	11.8	45.3	50.0	52.9	59.3	65.8	68.5	69.9	74.5	9.5	7.6	7.1	6.5	5769
Westboundn/s																
	Total Flow	Mean Speed	Std Dev	<-- 5th	15th	25th	Percentile bins			90th	--> 95th	% over limit (70mph) by:				# > ACPO
							50th	75th	85th			0mph	10mph	15mph	20mph	
00:00	2161	55.7	9.0	41.4	46.6	49.7	55.2	61.5	65.9	68.1	70.7	5.8	4.6	4.3	3.9	101
01:00	1362	55.2	9.2	40.7	45.9	48.9	54.8	60.7	65.5	67.9	70.8	5.7	4.6	4.3	3.9	64
02:00	1091	54.5	9.2	40.3	45.5	49.0	54.4	59.7	64.3	67.0	69.8	4.7	3.8	3.5	3.2	42
03:00	1321	55.6	9.1	40.4	47.1	50.4	55.4	60.5	65.3	67.7	70.1	5.3	4.2	3.9	3.6	57
04:00	2280	56.7	9.2	42.5	48.2	51.1	56.4	63.0	66.8	68.7	72.0	6.7	5.3	4.9	4.5	123
05:00	6665	58.9	8.3	45.9	50.5	52.9	58.3	65.0	68.1	69.6	74.0	8.8	7.1	6.5	6.0	479
06:00	14898	58.3	8.3	45.6	49.7	52.1	57.7	64.5	67.8	69.4	73.4	8.0	6.4	5.9	5.4	966
07:00	23486	54.0	9.5	40.7	45.2	47.4	53.3	60.0	64.7	67.2	69.6	4.2	3.3	3.0	2.8	777
08:00	21646	35.8	22.9	3.3	7.8	12.0	42.7	55.5	60.5	64.4	68.3	2.9	2.3	2.1	1.9	497
09:00	25664	49.3	16.2	10.9	40.2	45.9	52.3	59.0	63.4	66.2	69.1	3.3	2.6	2.4	2.2	670
10:00	26339	53.6	10.3	41.2	45.9	48.1	53.3	59.3	63.8	66.4	69.1	3.4	2.6	2.4	2.2	693
11:00	26301	52.6	10.8	39.4	45.1	47.2	52.6	58.8	62.9	65.8	68.8	2.9	2.2	2.1	1.9	597
12:00	25107	52.9	11.0	40.2	45.4	47.6	53.0	59.1	63.4	66.2	69.0	3.2	2.5	2.3	2.1	629
13:00	25939	53.9	9.5	41.0	45.7	47.9	53.4	59.5	64.1	66.7	69.3	3.7	2.9	2.7	2.5	766
14:00	25564	54.5	8.6	41.6	46.0	48.3	53.6	59.8	64.4	67.0	69.5	4.0	3.2	2.9	2.7	819
15:00	24315	54.6	8.5	41.8	46.1	48.4	53.7	59.9	64.6	67.1	69.6	4.2	3.3	3.1	2.8	817
16:00	23579	53.7	8.6	40.9	45.1	47.2	52.7	59.2	63.7	66.5	69.3	3.7	2.9	2.7	2.5	700
17:00	23293	53.2	8.6	40.7	44.9	46.9	52.3	58.7	63.0	66.0	68.9	3.1	2.4	2.2	2.1	572
18:00	21807	54.5	8.4	41.8	45.9	48.2	53.7	59.9	64.5	66.9	69.4	3.7	2.8	2.6	2.4	627
19:00	16706	56.5	8.3	44.3	47.7	50.4	55.7	62.4	66.3	68.3	70.2	5.5	4.4	4.0	3.7	738
20:00	7677	56.3	9.0	42.6	47.3	50.2	55.7	62.5	66.4	68.4	71.1	6.1	4.8	4.4	4.1	374
21:00	5912	56.3	8.7	42.2	47.0	50.1	55.7	62.6	66.4	68.3	70.4	5.7	4.5	4.1	3.8	267
22:00	4664	56.3	9.0	41.9	46.9	50.0	55.8	62.6	66.5	68.5	71.4	6.2	4.9	4.6	4.2	234
23:00	3401	56.6	8.9	42.3	47.2	50.3	56.1	62.8	66.7	68.7	72.0	6.6	5.3	4.9	4.5	183
07-19	293040	52.0	12.6	26.1	44.5	47.0	52.8	59.2	63.7	66.5	69.2	6.7	2.7	2.5	2.3	8163
06-22	338233	52.7	12.3	34.2	45.0	47.4	53.2	59.7	64.3	66.9	69.4	7.4	3.1	2.8	2.6	10509
06-24	346298	52.8	12.2	34.9	45.0	47.5	53.3	59.7	64.4	66.9	69.5	7.6	3.1	2.9	2.6	10926
00-24	361178	53.0	12.1	35.5	45.1	47.6	53.5	59.9	64.5	67.0	69.6	7.8	3.2	3.0	2.7	11791
am Peak	10:00	05:00	08:00	05:00	05:00	05:00	05:00	05:00	05:00	05:00	05:00	05:00	05:00	05:00	05:00	06:00
Peak Value	26339	58.9	22.9	45.9	50.5	52.9	58.3	65.0	68.1	69.6	74.0	8.8	7.1	6.5	6.0	966
pm Peak	13:00	23:00	12:00	19:00	19:00	19:00	23:00	23:00	23:00	23:00	23:00	23:00	23:00	23:00	23:00	14:00
Peak Value	25939	56.6	11.0	44.3	47.7	50.4	56.1	62.8	66.7	68.7	72.0	6.6	5.3	4.9	4.5	819
Westboundo/s																
	Total Flow	Mean Speed	Std Dev	<-- 5th	15th	25th	Percentile bins			90th	--> 95th	% over limit (70mph) by:				# >

05:00	1548	64.8	8.2	50.2	56.6	60.5	65.2	70.0	73.9	76.0	78.1	25.1	20.9	19.3	17.8	328
06:00	8509	64.7	6.6	53.2	57.8	60.6	64.8	68.9	71.6	74.4	77.3	18.7	15.2	14.0	12.9	1312
07:00	23374	59.7	9.0	46.3	51.4	54.2	59.7	66.0	68.5	69.8	74.2	9.2	7.3	6.8	6.2	1733
08:00	22029	35.8	24.3	4.0	9.8	12.6	32.0	59.2	64.7	67.5	70.4	5.5	4.5	4.1	3.8	996
09:00	22291	54.0	18.8	12.3	24.3	51.5	59.9	66.2	68.7	70.0	74.7	10.0	8.0	7.4	6.8	1804
10:00	19897	60.9	11.6	48.5	54.7	57.1	62.1	67.3	69.4	71.1	75.7	12.1	9.6	8.9	8.2	1943
11:00	18735	59.8	12.4	40.0	52.4	56.1	61.5	67.0	69.2	70.6	75.4	11.4	9.1	8.4	7.7	1723
12:00	19059	57.8	15.7	15.8	50.7	55.7	61.4	67.0	69.2	70.8	75.5	11.6	9.3	8.6	7.9	1790
13:00	18069	61.6	9.3	47.7	54.2	57.0	62.3	67.5	69.6	71.8	76.0	13.0	10.4	9.6	8.9	1913
14:00	17943	62.5	7.5	50.3	55.3	57.4	62.6	67.7	69.8	72.5	76.3	14.0	11.3	10.4	9.6	2051
15:00	17493	62.2	7.7	49.1	54.7	57.2	62.5	67.6	69.7	72.2	76.2	13.5	10.9	10.1	9.2	1930
16:00	18589	60.9	7.8	47.8	52.8	55.9	60.9	66.7	69.0	70.1	74.9	10.5	8.3	7.7	7.1	1567
17:00	18228	60.4	7.9	47.2	52.2	55.4	60.4	66.2	68.5	69.7	73.7	8.7	6.7	6.2	5.7	1248
18:00	15933	61.5	8.1	48.7	53.8	56.7	61.9	67.1	69.2	70.4	75.3	11.3	8.9	8.2	7.6	1442
19:00	10710	61.7	9.4	44.5	53.9	57.2	62.8	67.8	69.8	72.5	76.3	14.1	11.4	10.5	9.7	1235
20:00	9776	57.5	10.3	40.0	48.1	51.6	58.1	64.9	67.9	69.4	73.3	8.0	6.4	5.9	5.4	631
21:00	6817	58.7	9.4	43.5	49.8	52.7	59.0	65.6	68.4	69.7	74.1	8.9	7.1	6.6	6.0	492
22:00	5086	58.9	9.1	43.9	49.3	52.4	58.9	65.8	68.7	70.1	75.0	10.5	8.5	7.8	7.2	437
23:00	2951	59.4	8.6	45.4	50.2	53.1	59.1	65.8	68.7	70.1	74.9	10.3	8.3	7.7	7.0	248
07-19	231640	57.7	15.1	15.4	50.3	54.8	60.7	66.6	69.0	70.2	72.5	20.6	8.6	7.9	7.3	20141
06-22	267452	58.1	14.5	17.7	50.5	54.9	60.9	66.7	69.1	70.2	72.6	21.0	8.8	8.1	7.5	23810
06-24	275489	58.1	14.4	18.1	50.5	54.8	60.8	66.7	69.0	70.2	72.6	21.0	8.8	8.1	7.4	24495
00-24	283120	58.1	14.3	18.6	50.5	54.7	60.8	66.7	69.0	70.3	72.6	21.1	8.8	8.1	7.5	25248

am Peak	07:00	05:00	08:00	06:00	06:00	06:00	05:00	05:00	05:00	05:00	05:00	05:00	05:00	05:00	05:00	10:00
Peak Value	23374	64.8	24.3	53.2	57.8	60.6	65.2	70.0	73.9	76.0	78.1	25.1	20.9	19.3	17.8	1943
pm Peak	12:00	14:00	12:00	14:00	14:00	14:00	19:00	19:00	19:00	19:00	19:00	19:00	19:00	19:00	19:00	14:00
Peak Value	19059	62.5	15.7	50.3	55.3	57.4	62.8	67.8	69.8	72.5	76.3	14.1	11.4	10.5	9.7	2051

Eastboundn/s

	Total Flow	Mean Speed	Std Dev	<-- 5th	15th	25th	Percentile bins				85th	90th	--> 95th	% over limit (70mph) by:				# > ACPO
							50th	75th						0mph	10mph	15mph	20mph	
00:00	3565	58.0	8.1	45.3	50.0	52.1	57.4	64.0	67.4	69.0	72.5	71.2	71.2	7.1	5.6	5.2	4.8	204
01:00	2121	57.5	8.3	43.9	48.9	51.6	57.2	63.6	67.0	68.7	71.2	71.2	71.2	6.2	4.9	4.5	4.1	104
02:00	1712	56.6	8.0	43.9	48.2	51.0	56.1	61.7	65.8	67.9	70.0	70.0	70.0	4.9	3.8	3.5	3.2	66
03:00	1776	56.4	7.8	44.8	49.0	51.1	55.5	60.7	65.3	67.7	70.0	70.0	70.0	5.0	4.0	3.7	3.4	72
04:00	2819	56.6	7.9	44.0	49.2	51.4	56.0	61.4	65.7	67.9	70.0	70.0	70.0	5.1	4.0	3.7	3.4	114
05:00	6212	57.5	8.0	45.2	49.8	51.8	56.8	63.0	66.8	68.7	72.0	72.0	72.0	6.6	5.3	4.9	4.5	334
06:00	12741	57.2	7.6	45.4	49.6	51.7	56.7	62.7	66.2	68.0	69.8	69.8	69.8	4.3	3.2	3.0	2.8	419
07:00	17535	56.2	7.5	44.9	48.3	50.8	55.5	60.9	65.1	67.3	69.4	69.4	69.4	3.5	2.7	2.5	2.3	472
08:00	18541	56.8	7.3	45.5	49.3	51.4	56.1	61.5	65.5	67.5	69.4	69.4	69.4	3.6	2.7	2.5	2.3	502
09:00	20041	56.3	7.1	45.5	49.1	51.2	55.6	60.2	64.6	66.9	69.1	69.1	69.1	3.0	2.2	2.1	1.9	451
10:00	21438	55.8	6.9	45.4	48.7	50.9	55.0	59.8	63.9	66.3	68.8	68.8	68.8	2.5	1.8	1.6	1.5	381
11:00	22946	55.7	7.0	45.3	48.7	50.9	55.0	59.6	63.7	66.2	68.8	68.8	68.8	2.6	1.9	1.7	1.6	436
12:00	24584	55.6	6.8	45.3	48.6	50.8	54.8	59.5	63.3	65.9	68.6	68.6	68.6	2.3	1.6	1.5	1.4	409
13:00	24697	55.8	6.9	45.3	48.8	50.9	55.0	59.7	63.7	66.2	68.7	68.7	68.7	2.4	1.7	1.6	1.5	435
14:00	25009	55.8	6.9	45.2	48.7	50.9	55.1	59.7	63.7	66.2	68.7	68.7	68.7	2.5	1.8	1.7	1.5	461
15:00	26402	55.2	6.7	45.2	48.3	50.5	54.5	59.1	62.5	65.4	68.2	68.2	68.2	1.9	1.4	1.2	1.1	362
16:00	26893	52.7	9.2	41.6	46.3	48.8	53.0	57.6	59.9	63.1	66.9	66.9	66.9	1.0	0.7	0.6	0.6	181
17:00	26054	50.1	11.8	19.3	44.8	46.9	51.6	56.1	59.0	60.6	65.8	65.8	65.8	1.0	0.7	0.6	0.6	173
18:00	22553	52.2	12.4	18.0	45.9	48.6	53.4	58.6	61.9	65.0	68.1	68.1	68.1	1.9	1.4	1.3	1.2	317
19:00	18408	56.1	8.8	44.5	48.3	50.9	55.8	61.6	65.6	67.6	69.6	69.6	69.6	3.9	3.0	2.7	2.5	551
20:00	13424	57.8	7.8	45.4	49.7	51.9	57.3	63.6	66.9	68.5	70.2	70.2	70.2	5.5	4.3	3.9	3.6	581
21:00	10619	58.1	8.0	45.3	49.7	52.1	57.6	64.1	67.3	68.8	71.2	71.2	71.2	6.2	4.8	4.5	4.1	520
22:00	10383	57.5	8.0	45.0	49.0	51.5	57.0	63.6	66.9	68.5	70.2	70.2	70.2	5.6	4.3	4.0	3.7	455
23:00	7536	57.4	7.9	45.2	49.2	51.5	56.8	63.1	66.6	68.4	70.1	70.1	70.1	5.3	4.1	3.8	3.5	312
07-19	276693	54.7	8.6	44.0	47.6	50.2	54.4	59.3	63.1	65.8	68.5	68.5	68.5	4.1	1.6	1.5	1.4	4580
06-22	331885	55.1	8.6	44.3	47.8	50.4	54.7	59.7	63.9	66.4	68.9	68.9	68.9	5.0	2.0	1.8	1.7	6652
06-24	349804	55.2	8.5	44.4	47.9	50.5	54.8	59.8	64.1	66.5	69.0	69.0	69.0	5.2	2.1	1.9	1.8	7418
00-24	368009	55.3	8.5	44.4	47.9	50.5	54.9	59.9	64.2	66.6	69.0	69.0	69.0	5.6	2.2	2.1	1.9	8313

am Peak	11:00	00:00	01:00	08:00	00:00	00:00	00:00	00:00	00:00	00:00	00:00	00:00	00:00	00:00	00:00	00:00	08:00	
Peak Value	22946	58.0	8.3	45.5	50.0	52.1	57.4	64.0	67.4	69.0	72.5	72.5	72.5	7.1	5.6	5.2	4.8	502
pm Peak	16:00	21:00	18:00	20:00	21:00	21:00	21:00	21:00	21:00	21:00	21:00	21:00	21:00	21:00	21:00	21:00	20:00	
Peak Value	26893	58.1	12.4	45.4	49.7	52.1	57.6	64.1	67.3	68.8	71.2	71.2	71.2	6.2	4.8	4.5	4.1	581

Eastboundo/s

	Total Flow	Mean Speed	Std Dev	<-- 5th	15th	25th	Percentile bins				85th	90th	--> 95th	% over limit (70mph) by:				# > ACPO
							50th	75th						0mph	10mph	15mph	20mph	
00:00	649	63.7	7.9	49.9	55.7	58.6	64.1	69.0	72.4	75.0	77.6	77.6	77.6	20.2	16.7	15.4	14.2	110
01:00	347	62.7	8.6	48.3	53.2	56.5	62.6	68.9	72.7	75.2	77.7	77.7	77.7	20.7	17.3	16.0	14.7	61
02:00	274	62.4	9.0	46.3	53.2	56.8	63.0	68.6	71.8	74.6	77.4	77.4	77.4	18.8	15.6	14.4	13.3	43
03:00	288	61.8	8.5	47.0	52.2	55.6	61.8	68.1	71.0	74.1	77.1	77.1	77.1	17.2	14.2	13.2	12.1	42
04:00	444	62.8	8.7	49.1	54.0	57.2	63.2	68.6	71.7	74.5	77.3	77.3	77.3	18.6	15.3	14.2	13.0	69
05:00	1657	65.1	7.3	52.0	57.0	60.1	65.2	70.1	74.1	76.1	78.1	78.1	78.1	25.7	21.5	19.9	18.2	361
06:00	8022	65.2	6.2	54.8	58.4	61.0	65.0	69.1	72.1	74.8	77.5	77.5	77.5	19.7	16.1	14.9	13.7	1308
07:00	17009	63.6	6.0	52.5	56.9	59.3	63.7	67.8	69.5	70.7	75.4	75.4	75.4	11.8	9.2	8.5	7.8	1583
08:00	16230	64.4	5.9	54.1	57.7	60.4	64.4	68.4	70.0	72.9	76.5	76.5	76.5	15.0	12.0	11.1	10.2	1969
09:00	13453	64.3	5.8	54.4	57.6	60.1	64.2	68.2	69.9	72.4	76.3	76.3	76.3	14.1	11.2	10.3	9.5	1523
10:00	13867	64.2	5.8	54.2	57.6	60.2	64.2	68.2	69.8	72.2	76.2	76.2	76.2	13.8	10.9	10.1	9.2	1532
11:00	13636	64.2	5.9	53.6	57.5	60.2	64.2	68.2	69.8	72.2	76.2	76.2	76.2	13.8	10.9	10.1	9.3	1808
12:00	19759	64.1	5.8	53.6	57.5	60.1	64.2	68.2	69.8	71.9	76.1	76.1	76.1	13.4	10.6	9.8	9.0	2117
13:00	20952	64.2	5.9	53.8	57.5	60.1	64.2	68.2	69.8	72.2	76.2	76.2	76.2	13.8	10.9	10.0	9.2	2311
14:00	22661	64.1	6.0	53.1	57.4	60.1	64.1	68.2	69.8	72.0	76.1	76.1	76.1	13.5	10.6	9.8	9.0	2439
15:00	27766	63.3	6.0	52.2	56.6	59.0	63.5	67.6	69.3	70.1	74.9	74.9	74.9	10.7	8.2	7.6	7.0	2317
16:00	32413	60.4	9.4	49.7	54.2	56.7	61.3	66.2	68.2	69.2	70.2	70.2	70.2	5.8	4.1	3.8	3.5	1362
17:00	32126	57.6	12.5	28.6	51.3	54.7	59.3	65.0	67.4	68.6	69.8	69.8	69.8	4.4	3.1	2.8	2.6	995
18:00	24134	59.3	13.7	15.7	53.6	56.7	61.8	66.7	68.7	69.7	73.3	73.3	73.3	8.4	6.4	5.9	5.4	1556
19:00	13660	63.8	9.1	52.4	57.5	60.4	64.5	68.6	70.4	73.6	76.9	76.9	76.9	16.5	13.3	12.3	11.3	1841
20:00	6860	65.5	6.3	54.8	58.8	61.2	65.4	69.5	73.0	75.4	77.8	77.8	77.8	22.1	18.2	16.8	15.4	1266
21:00	4129	65.5	6.9	52.8	58.2	61.0	65.5	69.9	73.8	75.9	78.0	78.0	78.0	24.5	20.3	18.8	17.2	850
22:00	3907	64.4	6.7	52.1	57.1	60.1	64.5	68.9	71.5	74.4	77.3	77.3	77.3	18.5	15.1	13.9	12.8	597
23:00	2322	64.2	6.8	51.8	56.9	59.7	64.3	68.7	71.0	74.1	77.1	77.1	77.1	17.5	14.2	13.2	12.1	335
07-19	256733	62.3	8.8	50.8	56.0	58.2	63.1	67.5	69.2	70.1	72.4	72.4	72.4	20.2	8.3	7.6	7.0	21511
06-22	289404	62.6	8.7	51.0	56.1	58.5	63.3	67.7	69.4	70.4	72.7	72.7	72.7	22.1	9.1	8.4	7.7	26776
06-24	295633	62.6	8.7	51.0	56.2	58.5	63.3	67.7	69.4	70.5	72.7	72.7	72.7	22.4	9.2	8.5	7.8	27709
00-24	299292	62.6	8.7	51.0	56.2	58.5	63.3	67.7	69.5	70.5	72.7	72.7	72.7	22.7	9.3	8.6	7.9	28399

am Peak	07:00	06:00	02:00	06:00	06:00	06:00	05:00	05:00	05:00	05:00	05:00	05:00	05:00	05:00	05:00	08:00
Peak Value	17009	65.2	9.0	54.8	58.4	61.0	65.2	70.1	74.1	76.1	78.1	25.7	21.5	19.9	18.2	1969
pm Peak	16:00	20:00	18:00	20:00	20:00	20:00	21:00	21:00	21:00	21:00	21:00	21:00	21:00	21:00	21:00	14:00
Peak Value	32413	65.5	13.7	54.8	58.8	61.2	65.5	69.9	73.8	75.9	78.0	24.5	20.3	18.8	17.2	2439

Event key:

QC failure

Atypical (QC)

Events

Special

Holiday

Offline

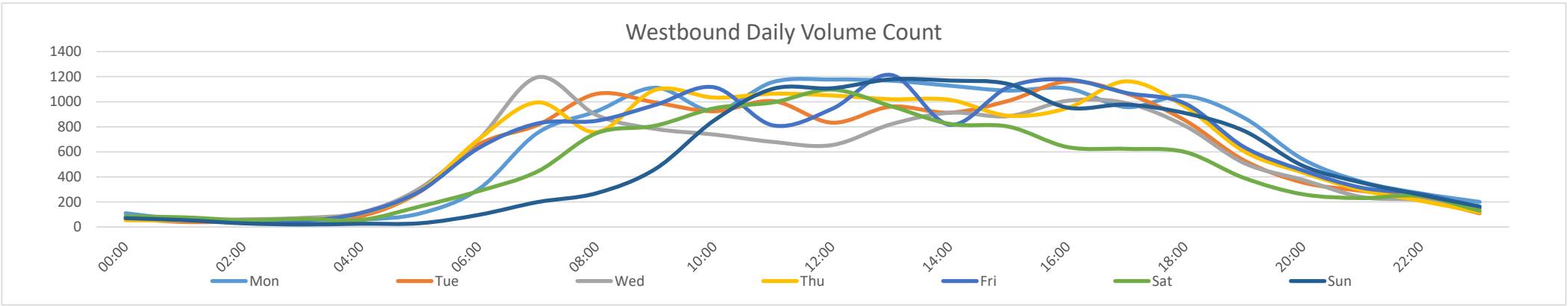
Weekends and defined holidays

Holidays & Events:
None

Data prepared by Drakewell Cloud Hosting (Powered by C2-CLOUD) November 24, 2020 19:45:20.

C2-Cloud Traffic Data ©2003-2020 Drakewell Ltd.

Version 20.10.26.080042



On a 7-day average		
-	-	-
26.3%	4.5%	1.5%
26.3%	4.5%	1.5%
of vehicles are travelling over proscribed speed limit	of vehicles are traveling 10% +2 over the speed limit (79mph)	of vehicles are 15mph over the speed limit (85mph)

Direction	7-Day Average Speed	7-Day 85th %ile Speed
Eastbound	-	-
Westbound	62.6	72.7
Bi-directional	62.6	72.7
	mph	mph

Direction	Weekday Average Total Traffic	7-Day Average Traffic	Weekday Traffic Total
Eastbound	0	0	0
Westbound	14598	13887	72988
Bi-directional	14598	13887	72988



Incidents/Observations
No incidents or observations during the survey period.



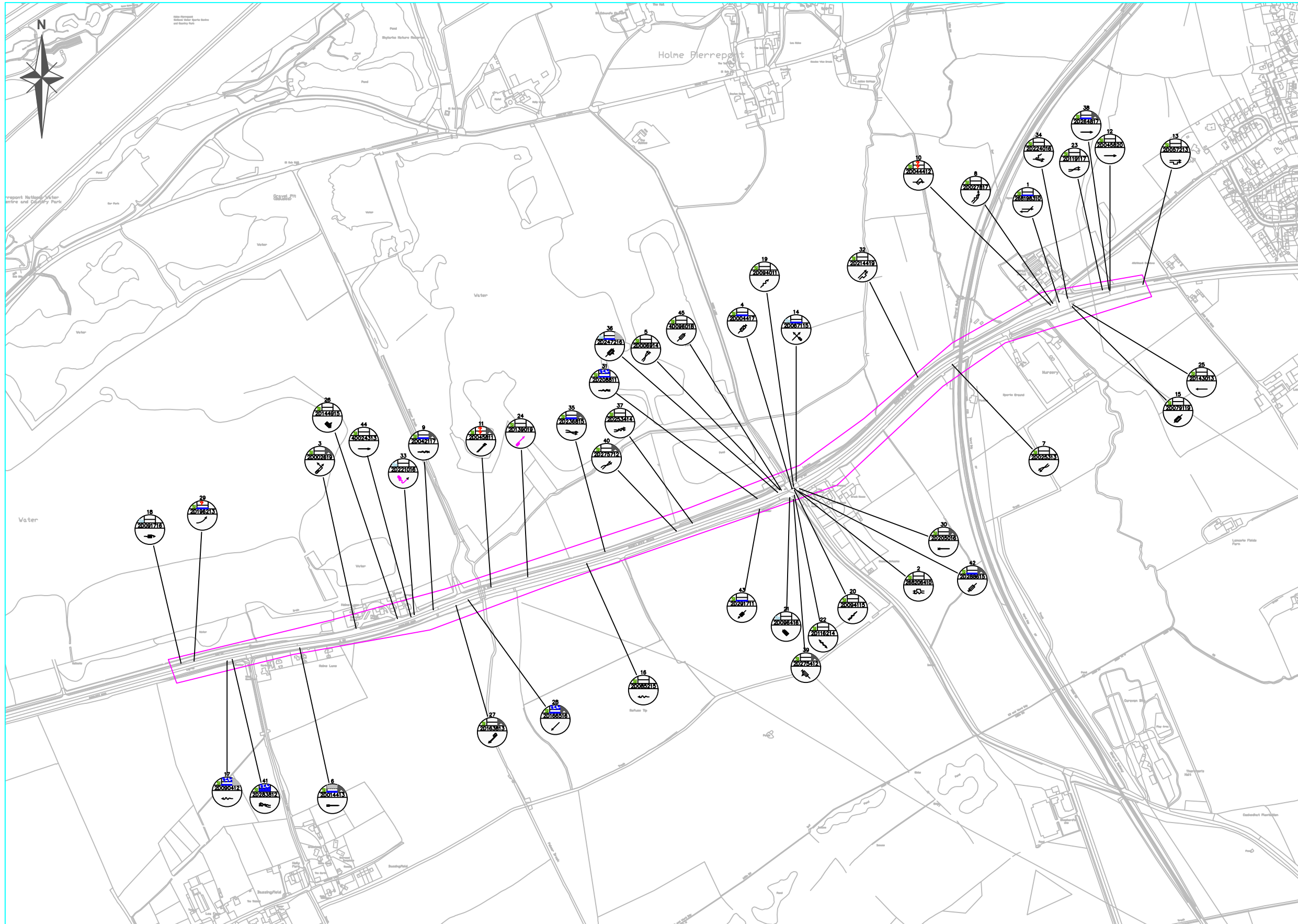
Client: WYG
Project: 8372 - A52 Nottingham
Site: 1
Start Date: 20-Oct-2020

Time	Eastbound									Westbound									Bi-directional								
	Mon	Tue	Wed	Thu	Fri	Sat	Sun	5 Day Avg	7 Day Avg	Mon	Tue	Wed	Thu	Fri	Sat	Sun	5 Day Avg	7 Day Avg	Mon	Tue	Wed	Thu	Fri	Sat	Sun	5 Day Avg	7 Day Avg
00:00	0	0	0	0	0	0	0	0	0	110	69	59	54	80	85	70	74	75	110	69	59	54	80	85	70	74	75
01:00	0	0	0	0	0	0	0	0	0	56	40	51	54	57	77	55	52	56	56	40	51	54	57	77	55	52	56
02:00	0	0	0	0	0	0	0	0	0	38	46	61	53	47	55	29	49	47	38	46	61	53	47	55	29	49	47
03:00	0	0	0	0	0	0	0	0	0	46	69	72	55	49	65	20	58	54	46	69	72	55	49	65	20	58	54
04:00	0	0	0	0	0	0	0	0	0	58	88	115	108	111	56	26	96	80	58	88	115	108	111	56	26	96	80
05:00	0	0	0	0	0	0	0	0	0	108	281	310	289	286	164	30	255	210	108	281	310	289	286	164	30	255	210
06:00	0	0	0	0	0	0	0	0	0	303	659	699	701	631	287	97	599	482	303	659	699	701	631	287	97	599	482
07:00	0	0	0	0	0	0	0	0	0	752	815	1196	995	827	444	199	917	747	752	815	1196	995	827	444	199	917	747
08:00	0	0	0	0	0	0	0	0	0	924	1063	893	757	848	749	270	897	786	924	1063	893	757	848	749	270	897	786
09:00	0	0	0	0	0	0	0	0	0	1112	994	783	1095	975	809	464	992	890	1112	994	783	1095	975	809	464	992	890
10:00	0	0	0	0	0	0	0	0	0	926	924	738	1033	1115	948	852	947	934	926	924	738	1033	1115	948	852	947	934
11:00	0	0	0	0	0	0	0	0	0	1158	1005	679	1064	811	995	1104	943	974	1158	1005	679	1064	811	995	1104	943	974
12:00	0	0	0	0	0	0	0	0	0	1177	833	654	1050	943	1097	1108	931	980	1177	833	654	1050	943	1097	1108	931	980
13:00	0	0	0	0	0	0	0	0	0	1168	961	820	1020	1214	965	1179	1037	1047	1168	961	820	1020	1214	965	1179	1037	1047
14:00	0	0	0	0	0	0	0	0	0	1128	913	912	1015	816	823	1169	957	968	1128	913	912	1015	816	823	1169	957	968
15:00	0	0	0	0	0	0	0	0	0	1089	1008	885	888	1117	801	1141	997	990	1089	1008	885	888	1117	801	1141	997	990
16:00	0	0	0	0	0	0	0	0	0	1107	1163	1008	950	1177	638	953	1081	999	1107	1163	1008	950	1177	638	953	1081	999
17:00	0	0	0	0	0	0	0	0	0	957	1066	989	1163	1070	624	977	1049	978	957	1066	989	1163	1070	624	977	1049	978
18:00	0	0	0	0	0	0	0	0	0	1046	850	806	959	985	598	909	929	879	1046	850	806	959	985	598	909	929	879
19:00	0	0	0	0	0	0	0	0	0	871	531	510	603	638	391	767	631	616	871	531	510	603	638	391	767	631	616
20:00	0	0	0	0	0	0	0	0	0	540	355	376	434	451	261	488	431	415	540	355	376	434	451	261	488	431	415
21:00	0	0	0	0	0	0	0	0	0	361	288	239	294	313	231	354	299	297	361	288	239	294	313	231	354	299	297
22:00	0	0	0	0	0	0	0	0	0	268	225	214	209	264	248	257	236	241	268	225	214	209	264	248	257	236	241
23:00	0	0	0	0	0	0	0	0	0	200	109	124	117	152	130	164	140	142	200	109	124	117	152	130	164	140	142
07-19	0	0	0	0	0	0	0	0	0	13415	12126	10873	12592	12536	9882	11092	12308	11788	13415	12126	10873	12592	12536	9882	11092	12308	11788
06-22	0	0	0	0	0	0	0	0	0	14887	13653	12401	14230	14195	10909	12288	13873	13223	14887	13653	12401	14230	14195	10909	12288	13873	13223
06-00	0	0	0	0	0	0	0	0	0	15087	13762	12525	14347	14347	11039	12452	14014	13366	15087	13762	12525	14347	14347	11039	12452	14014	13366
00-00	0	0	0	0	0	0	0	0	0	15503	14355	13193	14960	14977	11541	12682	14598	13887	15503	14355	13193	14960	14977	11541	12682	14598	13887

		Total	0-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85-89	90-94	95-99	100+	70		79		85						
																							-FSL	ACPO		DFT				Avg	85th	95th	
Monday	00:00	80	0	0	0	0	0	0	0	0	3	8	25	17	11	18	19	5	2	0	1	1	46	42%	9	8%	4	4%	66.5	77.1	80.2		
	01:00	86	0	0	0	0	0	0	0	2	2	0	10	20	6	8	6	2	0	0	0	0	16	29%	2	4%	0	0%	64.2	73.9	78.3		
	02:00	88	0	0	0	0	0	0	0	0	3	4	0	10	6	11	4	0	1	1	2	0	4	11%	3	8%	2	5%	60.0	65.5	81.9		
	03:00	86	0	0	0	0	0	0	0	0	2	4	3	6	10	4	10	3	4	0	0	0	17	27%	4	9%	0	0%	63.7	73.3	80.2		
	04:00	86	0	0	0	0	0	0	0	0	2	4	6	18	7	9	7	4	1	0	0	0	21	36%	5	9%	1	2%	65.7	75.2	83.4		
	05:00	86	0	0	0	0	0	0	0	1	0	4	11	26	32	6	9	11	7	0	0	1	28	26%	8	7%	1	1%	63.1	75.2	80.2		
	06:00	86	0	0	0	0	0	0	0	1	10	9	36	42	39	48	47	15	12	3	0	1	126	43%	31	10%	5%	67.4	75.3	80.2			
	07:00	86	0	0	0	0	0	0	0	1	4	17	44	112	119	135	132	128	44	11	4	1	320	43%	60	8%	16	2%	67.1	77.1	80.8		
	08:00	86	0	0	0	0	0	0	0	1	18	96	95	137	169	142	112	108	34	8	4	0	0	266	29%	46	5%	12	1%	63.3	75.2	78.9	
	09:00	86	0	0	0	0	0	0	0	1	4	13	16	120	167	225	189	165	101	35	5	7	1	251	20%	49	1%	1%	61.6	72.7	78.9		
	10:00	86	0	1	0	0	0	0	0	0	25	93	141	197	142	102	55	23	6	2	0	0	188	20%	31	3%	8	1%	61.3	72.1	77.1		
	11:00	86	0	0	1	0	0	0	0	0	23	113	177	176	223	190	131	84	27	10	0	0	0	252	22%	37	3%	10	1%	61.7	72.1	78.3	
	12:00	86	0	0	0	0	0	1	4	13	161	156	200	206	169	132	75	18	6	3	1	2	1	251	20%	28	1%	10%	60.5	70.8	75.1		
	13:00	86	0	0	0	0	0	1	2	43	139	162	174	191	191	140	96	21	6	0	1	1	1	265	23%	29	2%	8	1%	61.3	72.1	77.1	
	14:00	86	0	0	0	0	1	1	1	26	161	136	173	233	180	126	67	17	5	0	1	0	1	216	19%	23	2%	6	1%	60.9	70.8	75.8	
	15:00	86	0	0	0	0	0	1	18	109	137	194	133	153	123	75	27	12	1	0	0	1	1	232	19%	28	4%	0	1%	61.6	72.1	77.1	
	16:00	86	2	0	0	1	0	0	2	32	101	156	173	216	185	124	83	20	6	4	2	0	0	239	22%	32	3%	12	1%	61.6	72.1	77.1	
	17:00	86	0	0	0	0	0	0	1	15	108	142	146	175	151	101	72	30	9	4	2	1	1	219	23%	46	5%	16	2%	62.0	72.7	78.9	
	18:00	86	0	0	0	0	0	0	0	10	51	130	112	143	195	159	130	77	26	4	0	0	1	244	23%	37	4%	11	1%	61.3	72.1	78.3	
	19:00	86	0	0	0	0	0	0	0	0	15	74	84	128	169	153	120	79	30	13	4	2	1	249	29%	50	6%	20	2%	63.8	73.9	80.2	
	20:00	86	0	0	0	0	0	0	0	7	20	30	81	96	94	99	74	31	4	2	2	0	0	212	39%	39	7%	8	1%	64.2	75.2	80.2	
	21:00	86	0	0	0	0	0	0	0	0	6	14	26	65	81	59	41	53	9	4	2	1	0	1	110	36%	16	7	2%	64.7	75.2	78.9	
	22:00	86	0	1	0	0	0	0	0	1	0	9	18	43	55	51	41	29	12	4	1	2	1	1	90	34%	20	7%	8	3%	65.6	75.2	81.6
	23:00	86	0	0	0	0	0	0	0	1	4	11	32	34	27	34	8	6	2	5	0	0	0	79	40%	21	11%	3	7%	66.3	75.1	85.9	
07-19	12663	2	1	2	2	2	5	21	334	1371	1632	1954	2432	2004	1499	972	308	92	33	50	7	292	24%	460	4%	138	1%	62.5	72.7	78.3			
08-22	14887	2	2	2	2	2	5	23	332	1441	1759	2291	2865	2382	1860	1303	419	127	45	16	9	3689	25%	596	4%	189	1%	62.5	72.7	78.3			
09-20	15087	2	2	2	2	2	5	24	336	1452	1772	2323	2899	2459	1894	1127	427	133	47	21	9	3858	26%	637	4%	210	1%	62.6	72.7	78.3			
09-20	15087	1	1	2	2	2	1	18	182	1047	1865	2181	2568	2043	1174	372	127	47	2	0	0	0	1	3552	26%	588	4%	198	1%	62.6	72.7	78.3	

Monday	00:00	80	0	0	0	0	0	0	0	0	0	1	4	11	11	16	10	3	9	3	1	0	0	0	16	23%	4	6%	1	1%	63.0	75.2	78.9		
01:00	80	0	0	0	0	0	0	0	0	0	0	0	3	4	16	7	2	4	0	1	3	0	0	0	8	10%	4	10%	3	8%	61.5	72.2	85.1		
02:00	80	0	0	0	0	0	0	0	0	0	0	2	3	6	16	8	4	4	0	1	0	0	0	0	11	24%	1	2%	1	2%	63.9	72.7	76.6		
03:00	80	0	0	0	0	0	0	0	0	0	0	1	9	20	16	7	8	7	0	1	0	0	0	0	16	23%	1	1%	1	1%	62.6	72.1	75.2		
04:00	80	0	0	0	0	0	0	0	0	0	0	9	14	11	31	10	10	2	1	0	0	0	0	0	13	15%	1	1%	0	0%	60.6	67.7	72.5		
05:00	80	0	0	0	0	0	0	0	0	0	1	11	27	48	72	46	26	32	11	5	2	0	0	0	76	27%	18	6%	7	2%	64.4	75.2	80.2		
06:00	80	0	0	0	0	0	0	0	0	1	7	36	54	88	159	122	94	71	18	4	3	1	0	0	191	29%	26	4%	8	1%	64.4	73.9	78.3		
07:00	80	0	0	0	0	0	0	0	0	11	87	144	147	145	113	90	62	10	3	1	1	0	0	1	167	20%	15	2%	5	1%	61.0	72.1	77.1		
08:00	80	0	0	0	0	0	0	0	0	4	15	105	140	181	200	106	79	20	8	4	0	0	0	0	217	20%	32	3%	12	1%	61.9	72.1	77.1		
09:00	80	0	0	0	0	2	2	28	104	113	173	175	183	111	71	22	8	1	0	1	0	1	0	0	214	22%	32	3%	10	1%	61.8	72.1	78.3		
10:00	80	0	1	0	0	0	0	3	33	98	132	165	183	134	100	52	19	1	3	0	0	0	0	0	175	19%	23	2%	4	0%	60.6	70.8	75.8		
11:00	80	0	1	0	0	0	0	40	115	126	136	126	136	73	22	6	1	0	0	0	0	0	0	0	1	241	24%	22	2%	10	1%	61.5	72.1	78.9	
12:00	80	0	0	0	2	6	0	5	37	107	113	140	156	125	78	49	8	6	1	0	0	0	0	0	0	142	17%	15	2%	7	1%	59.8	70.2	75.4	
13:00	80	0	0	0	0	0	1	11	105	127	136	215	137	118	72	20	9	4	0	0	0	0	0	0	0	223	23%	33	3%	13	1%	61.8	72.7	77.1	
14:00	80	0	0	0	0	0	1	16	43	116	120	173	178	142	108	78	3	2	0	0	0	0	0	0	0	215	24%	32	4%	9	1%	62.6	72.7	78.3	
15:00	80	1	0	2	1	2	0	1	12	56	89	140	218	178	152	104	31	9	6	2	3	0	0	0	0	3	307	30%	51	5%	20	2%	64.3	75.2	79.8
16:00	80	0	0	0	0	0	2	4	22	68	118	204	211	169	176	122	42	16	2	5	1	3	3	3	366	31%	68	6%	26	2%	64.0	75.2	80.2		
17:00	80	1	1	0	0	0	1	14	85	121	148	184	148	142	66	13	7	0	0	0	0	0	0	0	1	358	34%	69	13	1%	65.2	76.2	80.2		
18:00	80	0	0	2	0	1	0	3	20	81	86	133	153	133	110	87	29	10	2	0	0	0	0	0	0	238	28%	41	5%	12	1%	63.0	74.8	78.9	
19:00	80	0	0	0	0	0	0	8	34	41	78	118	98	67	63	15	4	1	4	0	0	0	0	0	0	154	29%	24	5%	9	2%	64.3	75.2	78.3	
20:00	80	1	0	0	0	0	0	5	18	43	61	87	50	47	41	9	10	30	17	5%	8	1	0	0	0	100	30%	17	5%	8	1%	64.3	75.2	78.9	
21:00	80	0	0	0	0	0	1	2	2	11	29	54	63	36	45	19	16	5	2	0	3	9	0	0	0	3	90	31%	26	9%	10	3%	64.6	75.2	83.3
22:00	80	0	0	0	0	0	1	0	1	17	30	30	44	42	33	13	4	3	0	2	0	0	0	0	0	55	24%	9	4%	5	2%	61.8	72.3	78.0	
23:00	80	2	2	0	0	0	1	9	11	17	22	12	16	12	1	0	0	0	0	0	0	0	0	0	0	1	63	27%	1	0%	0	0%	62.7	77.1	77.1
07-19	11311	1	1	5	3	13	5	34	260	989	1294	1816	2204	1829	1430	991	297	66	31	14	4	2868	295	443	6	151	15	1	1%	61.8	72.7	78.3			
06-22	13653	7	4	5	4	15	3	28	286	1158	2196	2884	2592	1739	1139	554	136	37	18	20	3408	255	536	4	186	1	1	1%	62.6	72.7	78.3				
11-16	11762	9	4	5	4	16	7	39	344	1167	2050	2213	2706	2204	1751	1111	311	267	10	20	3458	266	547	4	182	12	1	1%	62.6	72.7	78.3				

Appendix B – Road Safety Summary



NOTES:

EXCEPT WHERE STATED OTHERWISE, PERSONAL INJURY COLLISION DATA REQUESTS ANSWERED BY HIGHWAYS ENGLAND ARE NOT MET FROM NATIONAL VALIDATED ACCIDENT STATISTICS BUT ARE SOURCED FROM ORIGINAL DATA SUPPLIED BY POLICE FORCES AND/OR LOCAL AUTHORITIES. AS THESE HAVE NOT BEEN VALIDATED BY DFT THEY MAY SUBSEQUENTLY BE FOUND TO BE INCOMPLETE OR CONTAIN INACCURACIES. THE LACK OF SUFFICIENTLY CURRENT NATIONAL VALIDATED DATA AND REQUIREMENT FOR UP TO DATE INFORMATION FOR OPERATIONAL OR ROAD SAFETY PURPOSES WERE CONSIDERATIONS WHEN DECIDING TO USE THESE DATA AND THEY ARE SUFFICIENTLY ROBUST FOR USE IN THIS CONTEXT.



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Rev	By	Chk	App	Date	Description
PRELIMINARY					

Project A52 Stragglethorpe Road Junction Collision Plot		Drawing Unvalidated Data 01/08/2010 - 31/07/2020		Project Ref	
Drawing No. PIN		Originator - GEN -		Volume Location (12 Digit Grid Ref)	
		Type - DE -		Role C	
		Number		Revision	
		Checked : CG		Date: 01/12/2020	
		Designed :		Date:	
		Approved :		Date:	
		Drawing Scale: 1:xxxx		Sheet Size A3	

[illegible][illegible]

41	42	43	44	45
2D28 3812	2D28 8615	2D29 1711	4D02 4313	4D09 6018
Su 25	We 23	We 14	We 20	Mo 18
Nov	Dec	Dec	Feb	Jun
2012	2015	2011	2013	2018
0945	1759	1400	1349	1531
SI	SI	SI	SI	SI
26	13	17	77	77
32	21	46	63	55
14				
30 	21 	18 	63 	77 55
SSS				
V1** V2** 103 103	V1** V1** 406 308	V1 *V1 * 410 405	V1** 406	V1** V1** 403 405
V3** 103		V1 * 403		
I	I	I	I	I

						Approved :	Date:
Rev	By	Chk	App	Date	Description	Drawing Scale: 1:xxx	Sheet Size A3
Project A52 Stragglethorpe Road Junction Stick Diagrams						Drawing Unvalidated Data 01/08/2010 - 31/07/2020	
Drawing No.							
PIN	Originator	Volume	Location	Type	Role	Number	Revision
554695	- HE	- GEN	LOCATION	- DE	- C	-	



Appendix C – Visibility Summary

Appendix D – Glossary of terms and abbreviations

Acronym/Term	Description
AADT	Annual Average Daily Traffic
ALR	All Lane Running
AMI	Advanced Motorway Indicator
AQMA	Air Quality Management Area
AST	Appraisal Summary Table
ATC	Automatic Traffic Count
ATM	Active Traffic Management
Auxiliary Lane	An additional lane at the side of the mainline carriageway to provide increased merge or diverge opportunity or additional space for weaving traffic
BAS	Biodiversity Alert Site
BT	British Telecom
CDM Regulations	Construction (Design and Management) Regulations
Central Reserve	The area that separates the carriageways of a dual carriageway / motorway exclusive of any hard strips
CM	Controlled Motorway
COBA	Cost Benefit Analysis
CSR	Client Scheme Requirements
CWS	Country Wildlife Site
D3M	Dual three lane motorway
D4M	Dual four lane motorway
DHS	Dynamic Use of the Hard Shoulder
DfT	DfT Department for Transport
DMRB	Design Manual for Roads and Bridges
DROBB	Double Rail Open Box Beam (safety barrier)
DSR	Design Strategy Record
EAR	Environmental Assessment Report
EcAR	Economic Appraisal Report
EIA	Environmental Impact Assessment
EMMR1TAM	East Midlands M1 Traffic Assessment Model
EMMR	Existing Motorway Minimum Requirements
ERA	Emergency Refuge Area
ERT	Emergency Roadside Telephone
ES	Environmental Statement
ESS	Entry Stop Signal
European Union	European Union
FWI	Fatal Weighted Injury
Ghost Island	An area of the carriageway suitably marked to separate lanes of traffic travelling in the same direction on both merge and diverge layouts.

Acronym/Term	Description
HADECS	Highways Agency Digital Enforcement Cameras
HE	Highways England
Headroom	The minimum distance between the surface of the highway cross- section and the deflected structure
HGV	Heavy Goods Vehicle
HSWA	Health and Safety at Work etc. Act 1974
HIB	Highways Investment Board
HVCB	Higher Vertical Concrete Barrier
IAN	Interim Advice Note
INCA	Incident Cost-benefit Assessment – economics tools for calculating delays and travel time variability costs
ITR	Indirect Tax Revenue
JTDB	Journey Time Database
KSI	Killed or Seriously Injured
LBS	Lane Below Signal; refer to terminology at the end of this list
LMVR	Local Model Validation Report
LGV	Light Goods Vehicle
LWS	Local Wildlife Sites
MAC	Managing Agent Contractor
Mainline	Mainline The carriageway carrying the main flow of traffic (generally traffic passing straight through a junction or interchange)
Maintained Headroom	The minimum value of Headroom that must be preserved at all times
MCDHW	Manual of Contract Documents for Highway Work
MHS	Maintenance Hard Standing
MIDAS	Motorway Incident and Automated Signals
MMDO	Managed Motorways Delivery Office
MMSG	Managed Motorways Steering Group
MRSS	Maintenance and Repair Strategy Statement
MSA	Motorway Service Area
MS4	Message Sign version 4
NDD	HA Network Delivery and Development Directorate
North facing slip roads	The merge and diverge on the north side of a junction
Nose	A paved area, approximately triangular in shape, between the connector road and the mainline at a merge or diverge.
NRTS	National Roads Telecommunications Services
NSCRG	National Safety & Control Review Group
NTEM	National Trip End Model
OBB	Open Box Beam (safety barrier)
OD	Operations Directorate

Acronym/Term	Description
Overbridge	Overbridge A bridge that spans the road under consideration
Parallel Merge / Diverge	A layout where an auxiliary lane is provided alongside the mainline carriageway
PCF	Project Control Framework
PIA	Personal Injury Accident
PIE	Public Information Exhibition
P4L	Permanent Four Lanes
PL	Project Leader
POP	Police Observation Platforms
POPE	Post Opening Project Evaluation
PSSR	Preliminary Sources Study Report
PSCRG	Project Safety and Control Review Group
PTJR	Permanent Through Junction Running
PTZ	Pan Tilt Zoom (CCTV)
QUADRO	QUADRO QUEues And Delays at ROadworks – economics programme to evaluate delay impacts during construction
Ramp Metering	Ramp Metering The control of vehicles joining the main carriageway from slip roads by the means of traffic lights or similar
RCC	RCC Regional Control Centre
RPI	RPI Retail Price Index
RRRAP	Road Restraint Risk Assessment Process
SAR	Scheme Assessment Report
SBI	Site of Biological Importance
SFAIRP	So Far As Is Reasonably Practicable
SES	Safety Environment and Standards Directorate
SGAR	Stage Gate Assessment Reviews
SM	Smart Motorway
SM-ALR	Smart Motorways All Lanes Running
SMS	Safety Management System
SoS	Secretary of State
South facing slip roads	The merge and diverge on the south side of the junction
SoW	Start of Works
SPZ	Source Protection Zone
SRO	SRO Senior Responsible Owner (Highways England)
SSD	Stopping Sight Distance
SSSI	Site of Special Scientific Interest
Taper Merge / Diverge	A layout where merging or diverging traffic joins or leaves the mainline carriageway through an area forming a funnel to or flare from the mainline carriageway
TCB	Tensioned Corrugated Beam (safety barrier)

Acronym/Term	Description
TIS	Traffic Impact Study
TERN	Trans European Road Network
TFR	Traffic Forecasting Report
TJR	Through Junction Running
TOS	Traffic Officer Service
RIS	Road Improvement Strategy
TRADS	Traffic Information Data base, containing traffic flows for motorways and major trunk roads in England
TM	Traffic Management
TMD	Highways England Traffic Management Directorate
TUBA	Transport Users Benefit Appraisal
Underbridge	A bridge that carries the road under consideration
VCB	Vertical Concrete Barrier
Verge	Any nominally flat area between the edge of the paved width and either the start of an adjacent side or slope, in the absence of a side slope, the highway boundary or bridge parapet
VMS	Variable Message Signs
VMSL	Variable Mandatory Speed Limit
VOC	Vehicle Operating Costs
VPH	Vehicles per Hour
VRS	Vehicle Restraint System
Weaving Section	The length of the carriageway between a successive merge or lane gain and diverge or lane drop
WebTAG	Website for Transport Analysis Guidance