

A660 Otley Road



HEADINGLEY DEVELOPMENT TRUST A660 HGV COUNT – APRIL 2019

11/06/2019



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Executive Summary

On 16th April 2019 volunteers spent the day counting Heavy Goods Vehicles (HGVs) on the A660 in Headingley. The survey was the third in a series arranged by Headingley Development Trust in response to concerns at the increase in the number of HGVs, particularly large aggregate and roadstone trucks from the quarries in North Yorkshire using the Otley Road as a short cut to the motorway network.

Over a 12 hour period from 6am to 6pm we observed 523 HGVs, 264 traveling towards the city centre and a further 259 travelling in the Lawnswood direction.

During the survey our volunteers made a specific count of the numbers of roadstone/aggregates HGVs on the route. During this period we counted 102 such vehicles – almost 1 in 5 of all of the HGVs counted.

We do not believe that these vehicles need to be travelling through the centre of Headingley and Hyde Park on what is clearly a totally unsuitable road given the proximity of the shop frontages to the kerbside, the high volumes of pedestrians and cyclists and the already poor air quality.

Diverting them onto more appropriate routes, principally the Outer Ring Road, would immediately reduce the volume of HGVs through Headingley and Hyde Park Corner by around 20%.

Headingley Development Trust welcomes the imminent Clean Air Zone and its potential impact on air quality on the A660 but is concerned that this alone will not be sufficient to fully address the multi-dimensional impacts of HGVs travelling through the centre of Headingley.

We therefore call upon Leeds City Council to acknowledge that the A660 through Headingley is not an appropriate through-route for longer distance HGV traffic. With the installation of the technology required to enforce the Clean Air Zone from January 2020 this is the ideal time to instigate a restriction on all HGV traffic, except for local deliveries and vehicles whose journey starts or ends on the A660 between the Outer Ring Road and the Inner Ring Road.

We would welcome Leeds CC response and views on this report.

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1. INTRODUCTION

1.1 Background

Following counts of Heavy Goods Vehicles (HGVs) by Headingley residents in January 2018 and August 2018 which highlighted the extent of HGV traffic on the A660, Headingley Development Trust (HDT) arranged for a further count to be undertaken in April 2019.

The initial counts were prompted by concerns that there appeared to be an increase in HGV traffic through Headingley with many of these trucks carrying roadstone or aggregate. While it was recognised that some HGV traffic is largely unavoidable, for example deliveries to the businesses operating out of Headingley Central (the former Arndale Centre), it appeared that many lorries may be using Headingley as the shortest route to and from the M1 and M621.

The purpose of this third count was therefore to get a better understanding of the volumes of these roadstone vehicles amongst the HGVs using the A660 through Headingley.

Figure 1. Aggregate Lorry at North Lane Junction – 06.15 am 16th April 2019



1.2 The Count

The previous survey, in August 2018, was undertaken during the school holidays and we were keen to undertake this count during term time since anecdotal evidence suggested that HGV traffic levels (particularly the roadstone HGVs) might be higher on the A660 during school holiday periods, possibly because the A660 journey times are more reliable when there is less general traffic on the route.

This count was conducted in central Headingley on Tuesday 16th April 2019 during the Leeds school term time, although it should be noted that overall traffic volumes will still have been somewhat lower than usual due to the University holidays .

The count was undertaken by volunteers on behalf of HDT. They were provided with a briefing pack, including vehicle identification charts to ensure a consistent approach to the counting.

Appendix A contains the briefing pack, count forms and identification chart. Vehicles that fall into the categories of Other Goods Vehicles (OGV) 1 and OGV 2 were included in the count. All other vehicle types including Light Goods Vehicles (LGVs) were excluded. The enumerators were also asked to identify the roadstone carrying vehicles separately.

Counts were grouped into 15 minute time periods and then summed for the hour. The counters were situated in central Headingley, between North Lane and Shaw Lane Junction and adjacent to Headingley Central¹.

Appendix B contains the full set of counts in 15 minute segments, split by direction.

2. RESULTS

2.1 Overview

There were 523 HGV movements counted over the 12 hour period, 21% down on the 667 HGVs counted over the same period in August 2018 which might support the assertion that there is slightly less HGV traffic during term time. In a similar pattern to the August 2018 count there were slightly more vehicles travelling towards the city centre in the direction of the Inner Ring Road (IRR) than were travelling away from the city centre and towards the Outer Ring Road (ORR) at Lawnswood.

Prior to 8am this situation was reversed with more HGVs travelling outbound. As a number of them at this time of the day were empty aggregate lorries this is perhaps indicative of operators taking advantage of the relatively uncongested conditions on the A660 in that direction to route their journey back along the A660, compared to later in the day when congestion in Headingley makes other less-direct routes relatively more attractive. A similar pattern was observed in August 2019.

Table 1 summarises the hourly counts in both directions, totalling 264 HGVs inbound and 259 outbound across the 12 hours of the count with peaks of 71 vehicles in an hour (both directions combined) between 11.00-12.00 and again between 13.00-14.00.

¹ HDT would like to thank the following volunteers who provided their time to conduct the HGV count: D Frost, E Campbell, C Hill, G Redfearn, G Browning, J Fairley, J Norton, B Walton, H Seymour, A Beswick.

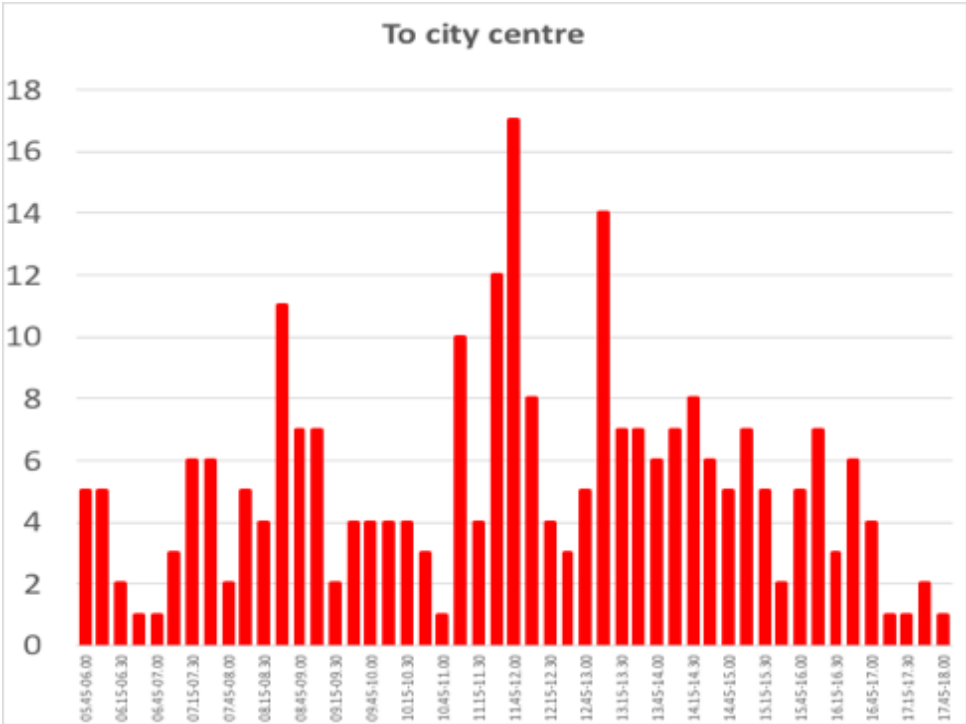
Table 1. Summary Hourly Counts

A660 HGV Count		16/04/2019	
	To city centre	To Lawnswood	
6.00-7.00	9	17	
7.00-8.00	17	21	
8.00-9.00	27	23	
9.00-10.00	17	25	
10.00-11.00	18	17	
11.00-12.00	43	28	
12.00-13.00	20	35	
13.00-14.00	34	37	
14.00-15.00	26	13	
15.00-16.00	28	21	
16.00-17.00	20	20	
17.00-18.00	5	2	
Total	264	259	

2.2 Detailed Analysis

Figures 2 to 4 break down the hourly totals into the 15 minute interval counts in each direction (Figures 2 and 3) and then into combined two-way flow (Figure 4)².

Figure 2. 15 Minute HGV Volumes – Towards City Centre

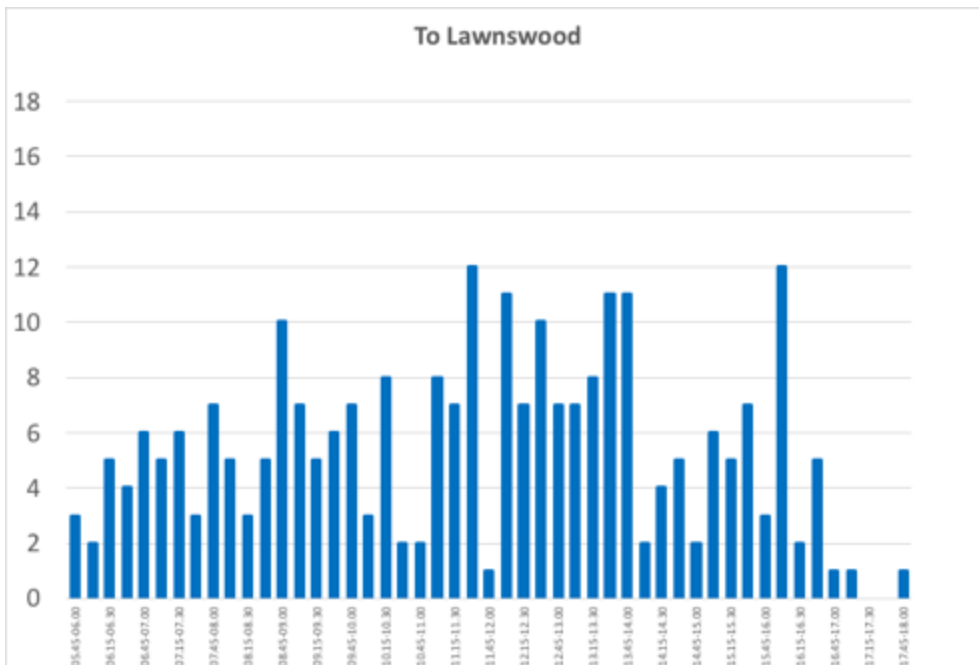


² Note that counting actually began at 05.45 and this additional 15 minutes is shown in the following figures and in the table in Appendix B

Inbound towards the city centre (Figure 2) it is noticeable that the distribution of HGV traffic across the day doesn't conform to the pattern for general traffic with little sign of distinct morning and evening peaks but with a noticeable spike in the late morning. Traffic begins early, with five HGVs recorded between 05.45 and 06.00 prior to the start of the official count, and builds up to 08.45, but then peaks sharply in the middle of the day. Volumes finally begin to tail off sharply after 17.00 in the evening.

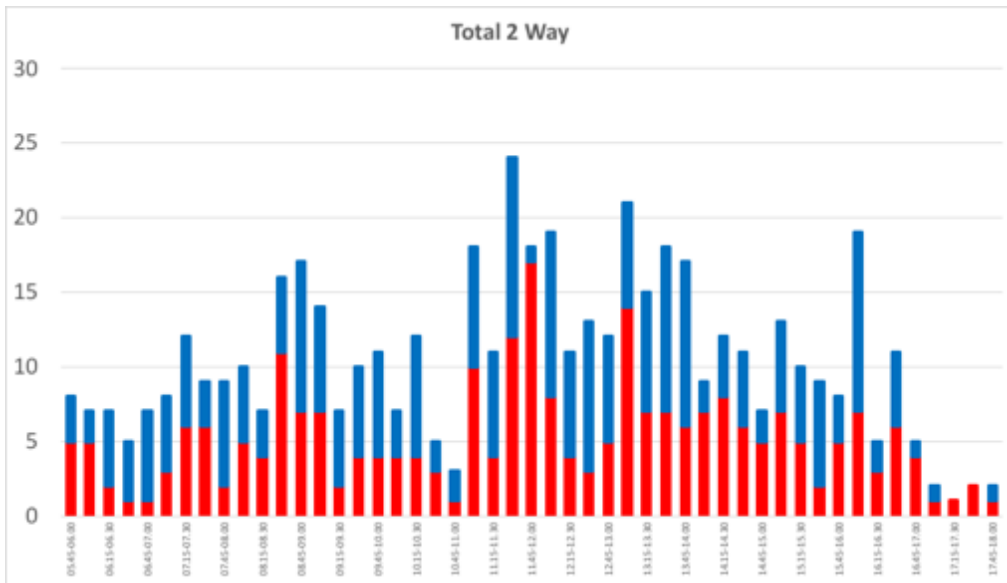
Outbound, shown in Figure 3 below, there is a noticeably different pattern, with early morning HGV traffic exceeding the inbound direction up to 10am with the flow quickly building up to a peak of a vehicle every minute between 08.30 and 09.15. Through the middle of the day outbound HGV traffic averages in excess of a vehicle every two minutes, before also tailing off sharply after 17.00.

Figure 3. 15 Minute HGV Volumes – Away from City Centre



When the flows in each direction are combined, (shown in Figure 4, where red is inbound, blue outbound), it is apparent that for significant periods of the day there is an HGV vehicle passing through Headingley every minute.

Figure 4. 15 Minute HGV Volumes – Two Way



2.3 Roadstone Lorries

Surveyors were specifically tasked with identifying the proportion of HGV traffic that appeared to consist of aggregate or roadstone lorries.

Figure 5 shows the numbers counted in-bound towards the city centre and Figure 6 those travelling outbound.

Figure 5. Roadstone Lorries – Towards City Centre

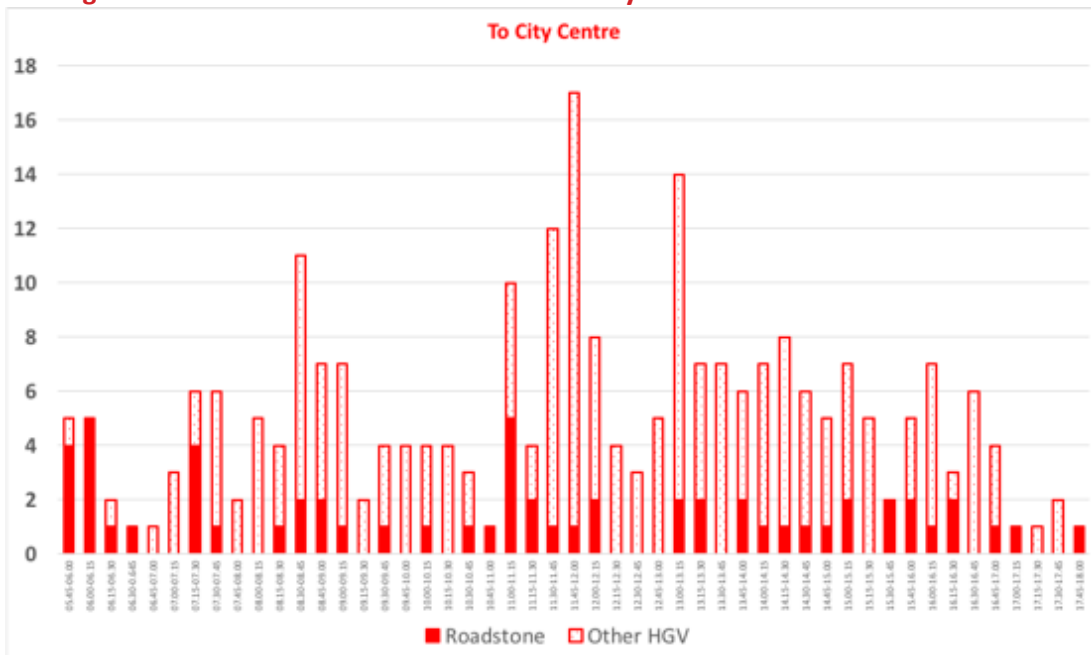
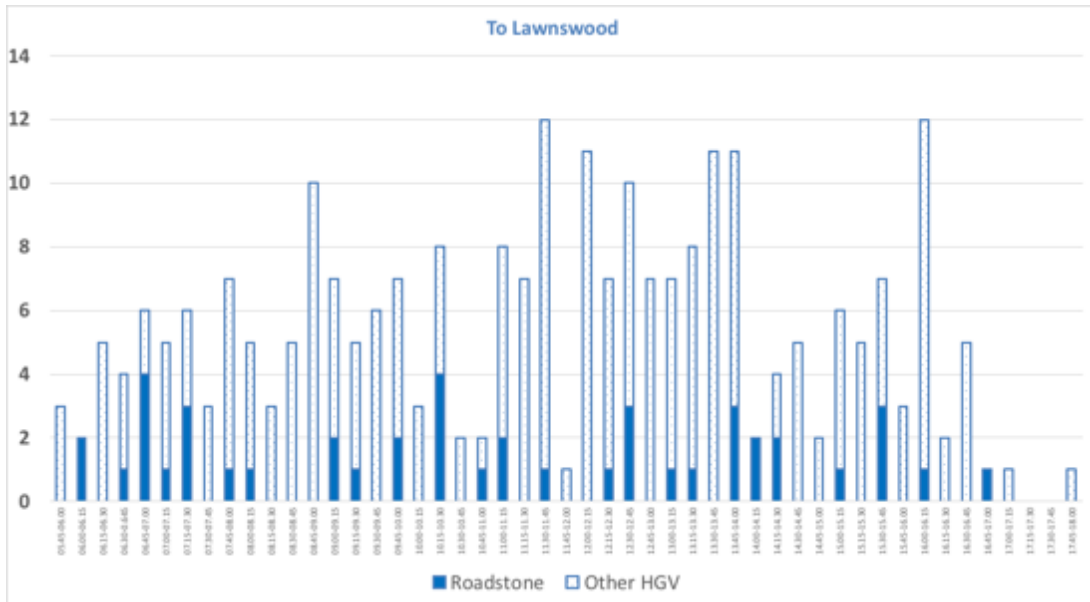


Figure 6. Roadstone Lorries – Away from City Centre



In the early hours of the day, from the start of counting at 05.45 until 07.30, the majority of the HGVs traveling towards the city centre were roadstone vehicles (65%). Residents living on the A660 report that these vehicles start to appear from before 5am. There is a steady flow of roadstone vehicles heading inbound throughout the day and across the 12 hour survey period they made up 22% of the total.

In the reverse direction roadstone lorries also make up a significant proportion of the total HGV traffic prior to 07.30 (35%), before settling down to an average of 18% of the total HGV traffic across the twelve hour period.

3. IMPACTS

We described the adverse impacts of the high volumes of HGV traffic on Headingley and Hyde Park in our August 2018 report and we briefly summarise them again here:

- **Street Environment** - The A660 is one of the busier roads in Leeds, carrying around 18,100 vehicles per day in 2017, and the environment for pedestrians and shoppers in the retail centre of Headingley is dominated and hugely degraded by its passing traffic;
- **Air Quality and Health Impacts** - these traffic volumes have a direct impact on the air quality. Central Headingley has a particulate matter (PM) monitoring station and figures presented by Alex Sobel MP show that it has recorded that particulate levels have exceeded World Health Organisation (WHO) guideline limits for PM2.5 every year since records began³.

³ <https://alexsobel.co.uk/wp-content/uploads/2018/02/Submission-for-CAZ.pdf>

- **Cyclists** - The A660 is the busiest road for cycling in Leeds despite the fact that there is no physical separation from the general traffic provided for cyclists and that even where advisory cycle lanes are provided they disappear at some of the places where they are most needed. The presence of large, often fast moving, HGVs is especially intimidating for cyclists.

4. POTENTIAL ACTIONS

4.1 Clean Air Zone

The Leeds City Council Clean Air Zone (CAZ) will begin operation in January 2020. The Outer Ring Road (ORR) and the M621 will form the boundaries of the scheme, inside of which HGVs, buses, coaches, taxis and private hire vehicles which don't meet minimum engine emission standards will be charged for travelling through the area. The A660 inside of the ORR, from the Lawnswood roundabout will be within the CAZ.

Headingley Development Trust welcomes the CAZ initiative, which should have a positive impact on HGVs in Headingley. Modelling⁴ by Leeds City Council has indicated that it should reduce the number of HGVs travelling on the A660, with some vehicles being diverted to the ORR.

Nevertheless it is important to note that the CAZ has some limitations. It does not ban vehicles, but charges them if they choose to travel within it. It only affects the most polluting vehicles and the proposed charges for the non-compliant HGVs were reduced from £100/day to £50/day following the initial consultation on the CAZ⁵. HGVs with the cleanest engines or operators of non-compliant vehicles who choose to pay the charge will still be able to use the A660. Between 74% and 90% of the local fleet are assumed to be compliant by 2022 in LCC modelling for example (previous ref).

Headingley Development Trust welcomes the proposed Clean Air Zone and its potential impact on air quality on the A660 but is concerned that this alone will not be sufficient to fully address the adverse impacts of HGVs travelling through the centre of Headingley

Thus, while the CAZ should have a welcome impact on the air quality in Headingley from HGVs and other non-compliant vehicles it may not necessarily have as much impact on the *volumes* of HGV traffic, particularly if operators react to the new charge by upgrading their fleet over time to ensure that they are compliant with emissions standards. The other benefits (of safety, noise, vibration etc to pedestrians, cyclists, shoppers and residents) of any reduction in HGV traffic could therefore be short term with volumes returning to current levels within a few years.

Our survey has identified that around 1 in 5 of all HGVs using the A660 are carrying roadstone/ aggregates from the quarries of North Yorkshire, or are travelling back empty to the quarries. It is our

⁴ <https://www.leeds.gov.uk/docs/Appendix%20SC8%20-%20Transport%20Modelling%20incl%20Apps%20a%20to%20j.pdf>

⁵ <https://www.leeds.gov.uk/docs/Clean%20Air%20Charging%20Zone%20FAQs.pdf>

belief that none of this traffic is destined for Headingley, indeed we would be surprised if much or any of it is bound for central Leeds⁶as the majority will be heading for the national motorway network. It is using the highly unsuitable Otley Road/Headingley Lane route in order to save a few minutes journey time, as evidenced by the higher numbers using this route when traffic congestion is lightest. This is not acceptable when a much higher standard route, more suitable for HGVs, exists in the form of the Outer Ring Road A1620 and A6110 to Junction 1 of the M621.

This route will become the default route for many vehicles avoiding the CAZ zone in future and there is now a unique opportunity to direct all HGVs that do not have a destination (or origin) within the Headingley / Hyde Park area between the ORR and the IRR to use the ORR instead bringing immediate benefit to pedestrians, cyclists and shoppers in central Headingley in addition to the air quality benefits that the CAZ seeks to deliver.

Headingley Development Trust ask Leeds City Council to acknowledge that the A660 through Headingley is not an appropriate through route for longer distance HGV traffic⁷ and instigate a restriction on all HGV traffic except for local deliveries and vehicles whose journey starts or ends on the A660 between the ORR and the IRR. With the imminent installation of Automatic Number Plate Recognition (ANPR) cameras and associated software for the CAZ we believe that this is the ideal time to introduce this restriction in a cost effective manner.

⁶ We have asked Leeds City Council for information on the origin and destination of HGV traffic on the A660 but have been advised that they do not currently have access to such data, although we note that their modelling of the CAZ impacts will implicitly contain some form of origin-destination information within its traffic matrices..

⁷ That the A660 is not a strategic route is shown by Leeds City Council surveys which show that only 10% of all traffic on the route originates from outside of the city boundaries

Appendix A

Briefing Note, Count Sheet and HGV Vehicle Classification Charts

Headingley Development Trust

Otley Road A660 HGV Traffic Count

Tuesday 16th April 2019

Purpose

Thank you very much for volunteering to help HDT with this count today. The purpose of the count is to see how many HGVs use Headingley to enable us to continue our dialogue with Leeds CC on the pollution, noise and air quality, damage to the road, danger to other road users, especially cyclists and general nuisance to us all that they cause.

What to count

We are only counting HGVs. A chart to help identify what the Department of Transport (DfT) categorises as an HGV is attached. Confusingly, HGVs are known in DfT-speak as OGVs (Other Good Vehicles). We are interested in the categories OGV1 and OGV2 on the attached chart.

Please note: Unlike last year's survey we are particularly interested in establishing how many of the HGVs are the large vehicles carrying road stone/ aggregates to/from the quarries north of Leeds as we believe these are using the A660 as a short-cut to/from the motorway network and that they have increased significantly in recent times. We will be asking you to try and identify these separately (see photos over the page).

We are **counting in both directions** – in-bound towards the city centre and out-bound towards the Lawnswood Ring Road roundabout.


Where and how to count

Ideally the count should be undertaken on the A660 somewhere between North Lane junction and Shaw Lane. For those people who live directly on the A660 you are welcome to count from your front garden or similar. **Please make a note of where you were located in the appropriate box on the count form.**

Most importantly, make sure that is somewhere safe. Do not stand near the carriageway. You are more likely to be able to count accurately if you are comfortable and relaxed, so sat down at a café table outdoor, (or indoor if the weather is poor), is a recommendation. Just remember that we need to count both directions so don't sit somewhere where your view of

the opposite direction might be obscured by a bus picking up passengers or a delivery van loading or unloading.

We are asking people to count for 1 hour, split into 15 minute segments. We would be grateful if you could make a manual tally, so that we retain the 'evidence' for our discussions with Leeds CC.

The most accurate way to do this is to count in groups of 5, noting the first four HGVs with vertical marks on the count form then crossing them for the 5th like so; 

Then repeat for the next 5. And so on

The count form will ask you to **note your start time** and also to sum the 15 minute counts for both directions at the end of the hour.



New for this survey: We are also asking you to make a note of how many of the vehicles appear to be roadstone or aggregate lorries, similar to those shown below. Tarmac, Hanson, Websters, RJ Howard and Longthorne's are amongst the regular operators, but anything that looks like one of the vehicles below should be included within this sub-category. They often have a sign saying Motorway Maintenance or Highway Maintenance on the back of the truck.



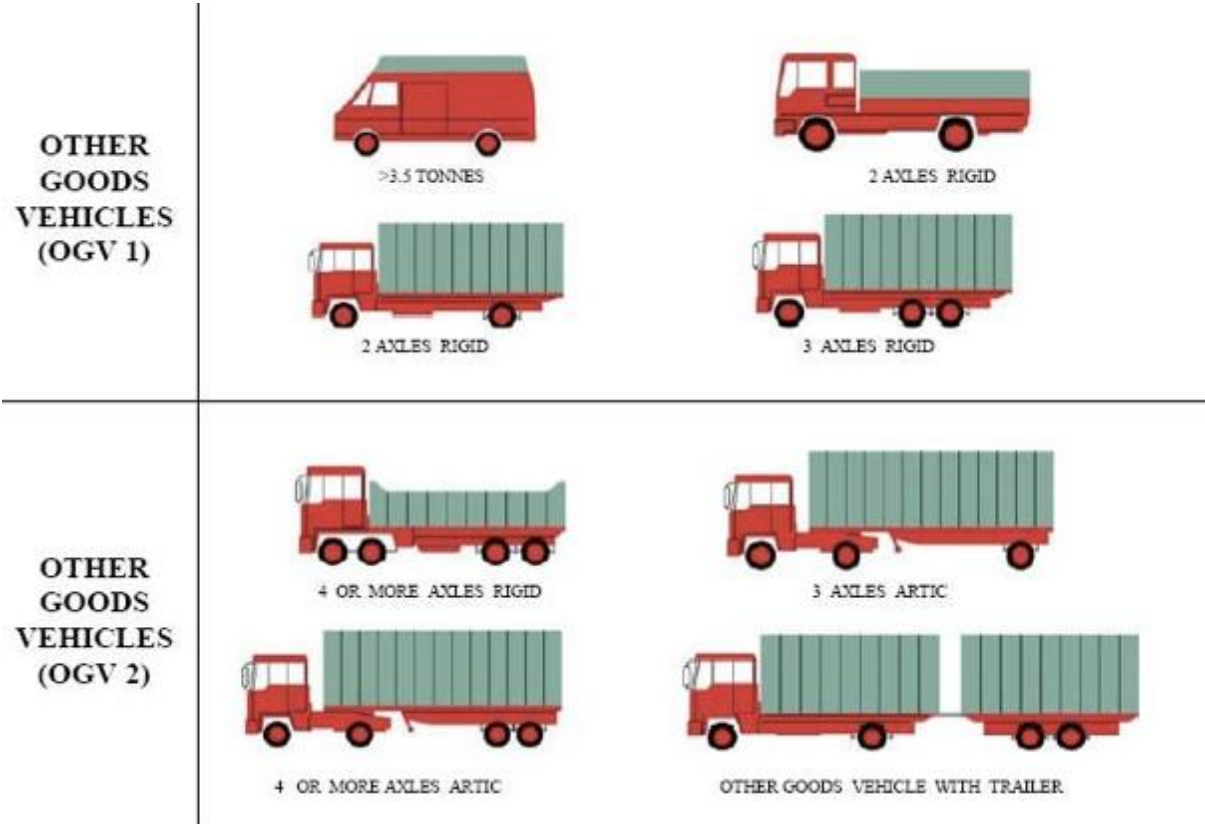
A660 HGV Count Form

Date: 16/04/2019

Location: Surveyor (initials):	Start Time: hr
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	Direction				
	Towards City Centre			Towards Lawnswood	
Time slot	ALL HGVs				
		Of which.... are 'Roadstone' HGVs		Of which.....are 'Roadstone' HGVs	
xx.00					
xx.15					
xx.30					
xx.45					
1 Hr total					

Vehicle Classification Guide for HDT HGV Survey



Please don't count vans or Council bin wagons

You will see from the diagram above some large vans are counted as HGV's (OGV1) if they are over 3.5 tonnes and have twin tyres at the back. We are not really interested in vans for this survey so ignore them and don't include them in your count.

Similarly, you will probably see a number of LCC bin wagons. Again, please ignore them for this count.

Appendix B

15 Minute Counts: 05.45 to 18.00 16th April 2019

Total				Roadstone Lorries only			
A660 HGV Count	16/04/2019			A660 HGV Count	16/04/2019		
Time	To city centre	To Lawnswood	Total 2-Way	Time	To city centre	To Lawnswood	Total 2-Way
05.45-06.00	5	3	8	05.45-06.00	4	0	4
06.00-06.15	5	2	7	06.00-06.15	5	2	7
06.15-06.30	2	5	7	06.15-06.30	1	0	1
06.30-0.645	1	4	5	06.30-0.645	1	1	2
06.45-07.00	1	6	7	06.45-07.00	0	4	4
07.00-07.15	3	5	8	07.00-07.15	0	1	1
07.15-07.30	6	6	12	07.15-07.30	4	3	7
07.30-07.45	6	3	9	07.30-07.45	1	0	1
07.45-08.00	2	7	9	07.45-08.00	0	1	1
08.00-08.15	5	5	10	08.00-08.15	0	1	1
08.15-08.30	4	3	7	08.15-08.30	1	0	1
08.30-08.45	11	5	16	08.30-08.45	2	0	2
08.45-09.00	7	10	17	08.45-09.00	2	0	2
09.00-09.15	7	7	14	09.00-09.15	1	2	3
09.15-09.30	2	5	7	09.15-09.30	0	1	1
09.30-09.45	4	6	10	09.30-09.45	1	0	1
09.45-10.00	4	7	11	09.45-10.00	0	2	2
10.00-10.15	4	3	7	10.00-10.15	1	0	1
10.15-10.30	4	8	12	10.15-10.30	0	4	4
10.30-10.45	3	2	5	10.30-10.45	1	0	1
10.45-11.00	7	4	11	10.45-11.00	2	2	4
11.00-11.15	10	8	18	11.00-11.15	5	2	7
11.15-11.30	4	7	11	11.15-11.30	2	0	2
11.30-11.45	12	12	24	11.30-11.45	1	1	2
11.45-12.00	17	1	18	11.45-12.00	1	0	1
12.00-12.15	8	11	19	12.00-12.15	2	0	2
12.15-12.30	4	7	11	12.15-12.30	0	1	1
12.30-12.45	3	10	13	12.30-12.45	0	3	3
12.45-13.00	5	7	12	12.45-13.00	0	0	0
13.00-13.15	14	7	21	13.00-13.15	2	1	3
13.15-13.30	7	8	15	13.15-13.30	2	1	3
13.30-13.45	7	11	18	13.30-13.45	0	0	0
13.45-14.00	6	11	17	13.45-14.00	2	3	5
14.00-14.15	7	2	9	14.00-14.15	1	2	3
14.15-14.30	8	4	12	14.15-14.30	1	2	3
14.30-14.45	6	5	11	14.30-14.45	1	0	1
14.45-15.00	5	2	7	14.45-15.00	1	0	1
15.00-15.15	7	6	13	15.00-15.15	2	1	3
15.15-15.30	5	5	10	15.15-15.30	0	0	0
15.30-15.45	11	7	18	15.30-15.45	2	3	5
15.45-16.00	5	3	8	15.45-16.00	2	0	2
16.00-16.15	7	12	19	16.00-16.15	1	1	2
16.15-16.30	3	2	5	16.15-16.30	2	0	2
16.30-16.45	6	5	11	16.30-16.45	0	0	0
16.45-17.00	4	1	5	16.45-17.00	1	1	2
17.00-17.15	1	1	2	17.00-17.15	1	0	1
17.15-17.30	1	0	1	17.15-17.30	0	0	0
17.30-17.45	2	0	2	17.30-17.45	0	0	0
17.45-18.00	1	1	2	17.45-18.00	1	0	1
269	262	531		60	46	106	