Memorandum



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From: Victoria Merrill

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Shropshire Council Survey of HGVs in Wem 2016

Summary

A detailed survey of HGV movements has been undertaken in Wem and its hinterland to respond to local concerns about the presence of HGVs in Wem town centre, in particular Mill Street and High Street, and requests for an Environmental Weight Restriction to limit the number of HGVs accessing these locations.

The survey results suggest that there are relatively low numbers of HGVs in relation to overall traffic flows and that the majority of trips have a legitimate local access requirement and are therefore not through trips. Approximately 10% of HGV trips recorded within the study area are through trips and not all travel via Mill Street and / or High Street. This means that an Environmental Weight Limit would have limited impact on the number of HGVs travelling through Wem.

This briefing note provides an overview of the key results of the HGV surveys. It is intended that a presentation of the facts and potential next steps will be made to Wem Town Council in 2017 followed by a drop in session for the general public to consider the information and to provide feedback.

1. Introduction

The use of Mill Street in Wem by Heavy Goods Vehicles (HGVs) has been a long-standing issue locally, and the perception is that these vehicles are the result of inappropriate through trips. In response to concerns raised to Shropshire Council through Wem's Economic Forum, Shropshire Council commissioned a detailed survey of HGV movements in Wem to reasonably determine the scale and type of intervention, if any. The survey was commissioned with the following objectives:

- To understand the nature of HGV movements through Wem, in particular on Mill Street, differentiating local access and through trips.
- To enable Shropshire Council to determine appropriate interventions, if any, based upon robust background data.

2. The survey

Video cameras have been used to record two way traffic movements at a number of cordon locations, shown in Appendices A and B. Automatic Number Plate Recognition (ANPR) software has been used to capture the registration plate details of every vehicle recorded, noting the direction of travel and time. The ANPR system identifies HGVs as being all goods vehicles above 7.5 tonnes including buses and agricultural vehicles. Using this information, a picture of the routes and journey times of specific vehicle types passing through the survey area can be built up.

The surveys were undertaken between 07:00 and 19:00 on Wednesday 29th and Thursday 30th June and on Friday 1st July.

3. Summary of key numbers of HGVs recorded within the survey area

The following key findings have been derived from the survey results (Table 2):

- The highest average numbers of HGVs was recorded on Mill Street and High Street, however at these sites HGVs accounted for some of the lowest proportions of overall traffic.
- The high percentages of HGVs recorded at Sites 2 and 3 are likely to be linked to access trips to Wem Industrial Estate.
- The high percentage of HGVs recorded at Site 7, Burlton, may suggest that traffic accessing the western side of Wem from the south travels via Loppington rather than via Mill Street.

Table 1: Traffic volumes and HGV percentages (3 day average of 12 hour traffic flow)

		All vehicles	HGVs inbound		HGVs outbound		
	Description	Inbound	Outbound	No.	%	No.	%
1	B5476 at A41 north of Tilstock	1545	1580	76	5	77	5
2	B5065 at A49 Prees Green	910	857	104	11	88	10
3	C2091 at A49 Weston	310	294	21	7	25	8
4	B5063 at A49 Preston Brockhurst	1164	1601	79	5	79	5
5	B5476 at A528 Harmer Hill	1782	1937	49	3	54	3
6	C2075 at A528 Myddle	542	543	38	7	36	7
7	B4397 at A528 Burlton	371	365	33	9	34	9
8	B5063 at A495 Welshampton	664	709	41	6	34	5
		Eastbound	Westbound	Eastbound		Westbound	
9	B5065 town side of Industrial Estate	1306	1367	99	8	75	6
		Northbound	Southbound	Northbound		Southbound	
10	B5476 town side of Creamore Bank	1460	1466	72	5	66	5
11	Mill Street	3412	3803	152	4	126	3
		Eastbound	Westbound	Eastbound		Westbound	
11	High Street	3572	3835	118	3	108	3

4. The nature of HGV trips within the survey area

Establishing whether the HGV trips recorded are through trips or local access trips is key in determining appropriate intervention.

Through trips have been taken as those vehicles which took up to 30 minutes to travel between outer cordon sites and that did not exit the survey area by an adjacent outer cordon site.

The total number of HGVs entering the study area (3 day average, 12 hour flows) was 434, just under 10% (42) of these are through trips across the survey area, suggesting that the majority of HGVs have a legitimate access requirement within the survey area.

Table 2: Through trips between Outer Cordon sites (3 day average of 12 hour traffic flow)

HGV	s entering via external cordon	HGVs exiting via other external cordon			
Site	Description No. inbound HGVs No. thr		No. through trips	Key exit findings	
1	B5476 at A41 north of Tilstock	76	3	-	
2	B5065 at A49 Prees Green	104	7	60% at Site 6	
3	C2091 at A49 Weston	21	2	-	
4	B5063 at A49 Preston Brockhurst	79	3	100% at Site 5	
5	B5476 at A528 Harmer Hill	49	11	60% at Site 4	
6	C2075 at A528 Myddle	38	1	-	
7	B4397 at A528 Burlton	33	6	-	
8	B5063 at A495 Welshampton	41	9	50% at Site 4	
	Total	441	42	-	

On an average week day (over the 12 hour survey period), the data suggests that there are potentially 29 one-way HGV trips from outside the survey area that travel through Wem town centre to or from Wem Industrial Estate. Advisory route signing already exists at Outer Cordon Site 4 (Preston Brockhurst), and the survey data suggests that the signage is working as few vehicles access the Industrial Estate this way.

5. The nature of HGV trips on Mill Street and High Street

Using the through trip information generated from the Outer Cordon sites, it has been possible to carry out a more detailed assessment of those HGV through trips that specifically route via Mill Street and/or High Street:

- The total number of HGV through trips on Mill Street (3 day average, two way) over a 12 hour period is 25, which represents 8.9 % of the total HGV flow of 278, shown in Table 2. Of these trips:
 - 11 trips were northbound with 6 turning right onto High Street / town centre
 - 14 trips were southbound with 8 turning left from High Street / town centre
- The total number of HGV through trips on High Street (3 day average, two way) over a 12 hour period is 33, which represents 14.6 % of the total HGV flow of 226, shown in Table 2. Of these trips:
 - 15 trips were eastbound (towards town centre) with 6 turning right from Mill Street
 - 18 trips were westbound with 8 turning left into Mill Street

This data suggests that the majority of HGVs on Mill Street and High Street are local access trips to Wem or its hinterland.

Over the 12 hour survey period, rigid and articulated HGVs accounted for 67% of recorded HGVs. 25% were buses and coaches and the remainder were agricultural vehicles.

6. Considering appropriate next steps

Local perception appears to suggest that an Environmental Weight Limit would be a suitable intervention to reduce the number of HGVs using Mill Street and High Street. However, where there is a high number of local access trips, as the results of this survey suggest, this type of intervention is likely to have a limited impact on the presence of HGVs:

- The restriction would not apply to buses or agricultural vehicles;
- Enforcement would be difficult as the majority of HGVs would have a legitimate local access requirement, and
- The limited number of suitable alternative routes. Any alternative routes should not transfer HGVs to other environmentally sensitive locations or introduce a major increase in distance for HGV operators.

It is intended that a presentation of the facts and potential options available will be made to Wem Town Council in 2017. This will be followed by a drop in session for the general public to consider the information and to provide feedback.

Appendix A: HGV Cordon Locations

	Site	Road No.	Description	
Outer	1	B5476	Tilstock Road at A41	
cordon	2	B5065	At A49, Prees Green	
	3	C2091	At A49	
	4	B5063	At A49, Preston Brockhurst	
	5	B5476	At A528, Harmer Hill	
	6	C2075	At A528, Myddle	
	7	B4397	At A528, Burlton	
	8	B5063	At A495, Welshampton	
Inner cordon	9	B5065	Between Church Lane and entrance to Wem Industri Estate	
	10	B5476	Between edge of Wem and C2067 Creamore Bank	
	11	Mill Street / High Street	All movements between Mill Street and High Street	