

Suffolk County Council

**B1078/B1079 HEAVY GOODS
VEHICLES TRAFFIC
SURVEYS**

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Environment and Transport

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Contents

1. Introduction
2. Data Collection
3. Data Analysis
4. Conclusions

Below are not included in this summary.

Figures

1. Census points (CP) and automatic traffic counter (ATC) locations.
2. Vehicle Classifications details.
3. Average Daily HGV flows (ATC derived).
4. Most Frequently Undertaken Journeys (east).
5. Most Frequently Undertaken Journeys (West).

Appendices

- A. Automatic Traffic Counter Survey Results.
- B. Automatic Traffic Counter Summary Data.
- C. Vehicle Registration Survey (Raw Data).
- D. HGV Operators.
- E. Journey Combinations.
- F. HGV Journeys per Flow.
- G. HGV Journeys per Operator.

1.0 Introduction

- 1.1 In September 2004 Suffolk County Council in conjunction with members of the S.O.R.R. (Save Our Rural Roads) group, carried out surveys of Heavy Goods Vehicles using the B1078 and B1079 between Coddendam, Wickham Market and Woodbridge. The survey included the parishes of Coddendam, Hemingstone, Ashbocking, Otley, Clopton, Bredfield, Swilland, Debach, Burgh, Wickham Market and Woodbridge.

- 1.2 The objective of the survey was to determine Heavy Goods Vehicle movements within the area described above. Details of local destinations and through traffic movements were of particular interest.

- 1.3 This report describes the survey methodology and the analysis that has been undertaken.

2.0 Data Collection

2.1 Two methods of data collection were used:

- i) Manual collection of vehicle registrations.
- ii) Automatic Traffic Counters.

2.2 Consideration was initially given to undertaking roadside interview surveys but following a site inspection it was apparent that although suitable locations existed for enumerators to park and record traffic movements the narrow road widths meant it was unsafe to conduct roadside interview surveys. In addition, operators tend to avoid interview survey sites by using alternative routes resulting in non-typical results for the survey.

2.3 On Wednesday 15th September 2004 a Vehicle Registration Survey was carried out for a 12-hour period between 07:00 and 19:00 hours at the ten census points (CP) shown on Figure 1.

2.4 The vehicle registration census points were located as follows:

CP1	B 1078 Coddendam at the junction of Needham Road and Church Road
CP2	The junction of the B 1078 with the C441 and the C448 at Hemingstone.
CP3	The junction of the B1078 with the B1077 at Ashbocking.
CP4	The junction of the B 1078 with the C301 at Otley.
CP5	The junction of the B 1079 with B 1078 at Clopton.
CP6	The junction of the B 1078 with Debach Industrial Estate access road west of the U3401 at Clopton Corner.
CP7	The junction of the C309 with U3407 at Debach.
CP8	The junction of the B 1079 with the U3401 at Burgh.
CP9	The junction of the B 1078 with the U3430 at Wickham Market.
CP10	On the B1079 between the U3412 and the C313 junctions, Woodbridge.

- 2.5 At each census point the following information was recorded: time of passing; registration number; vehicle classification (refer to Figure 2) and operator details.
- 2.6 Automatic traffic counters (ATC) were installed at the nine locations shown on Figure 1 and ran from 15th to 28th September 2004. Due to shortages of equipment site A2075 was installed later and ran for the period 19th October to 1st November 2004.
- 2.7 The automatic traffic counters were located as follows:
- | | |
|-------|--------------------------------------|
| A1215 | B1078 - High Street, Coddendam |
| A1217 | U4713 - Rectory Road, Coddendam |
| A1220 | C309 - Bredfield. |
| A1223 | 1079 - Grundisburgh Road, Woodbridge |
| A1225 | B 1079 - Clopton |
| A1226 | B 1079 - Otley Bottom |
| A1227 | B1078 - Clopton Corner |
| A1507 | B1078 - Needham Road, Coddendam |
| A2075 | B1 078 - Main Road, Wickham Market |
- 2.8 Due to counter failure there is no data available for site A1225. Available historical data from this site has been included in the report.

3.0 Data Analysis

3.1 To ensure the validity of the Vehicle Registration Survey it is necessary to confirm that the day chosen is typical of an average weekday flow. The table below gives details of the average daily weekday flow, based on the full two week survey period at each of the ATC sites and compares that with the flow for 15th September 2004.

Site	Average Daily Flow	Daily Flow – 15 th Sept	Difference
A1 215	2801	2832	+1%
A1 217	834	861	+3%
A1220	1800	1772	-2%
A1 223	6910	6995	+1%
A1 226	4466	4448	0%
A1227	2751	2719	-1%
A1 504	3495	3425	-2%
A2075	NIA	NIA	NIA

With a maximum difference of +3% this clearly confirms that the survey date chosen is typical of an average weekday flow.

3.2 Checks are undertaken to ensure that data obtained from automatic traffic counters is reliable. It is widely accepted that pneumatic tube based ATC's such as those used in this survey have an accuracy of +10% and that generally they will tend to over-count. All ATC equipment held by Suffolk County Council is checked annually to ensure compliance with this figure. In addition to this, checks have been made between the ATC derived data and data from the manual counts. Where it has been possible to make direct comparison between ATC derived data and figures from the Vehicle Registration Survey these have been tabulated below. As the manual counts did not record buses, coaches or tractor/trailer combinations the comparisons with the ATC data will not be 100% accurate but will still serve to confirm reliability of the ATC derived data.

Site A1226 – B1079, Otley Bottom			
	HGV C1.2	HGV C1.3	Total
<i>Southbound</i>			
Manual (CP5)	21	16	37
ATC	23	17	40
Difference	+2	+1	+3 (8%)

Site A1227 - B1078, Clopton Cnr.			
	HGV C1.2	HW C1.3	Total
<i>Eastbound</i>			
Manual (CP5)	15	16	31
ATC	19	13	34
Difference	+4	-3	+3 (10%)
<i>Westbound</i>			
Manual (CP5)	19	20	39
ATC	17	22	39
Difference	-2	+2	0 (0%)

Site A1223 - B1079, Woodbridge			
	HGV C1.2	HGV C1.3	Total
<i>Westbound</i>			
Manual (CP10)	27	5	32
ATC	26	7	33
Difference	-1	+2	+1 (3%)

It is clear from the tables that the ATC data follows the expected pattern of over-counting but still within the accuracy stipulated above. Therefore reasonable confidence can be placed on the data derived from the remaining ATC sites.

- 3.3 The results of the ATC surveys are given at Appendix A of this report. Flows are listed by day and direction and cover the full two week period. For the purpose of this report an HW is defined as a vehicle of gross weight greater than 7.5 tonnes. The HW figures quoted in these tables include buses, coaches and tractor/trailer combinations - as it is difficult to separate these with any degree of certainty. As the historical data will also include these vehicles any comparisons made will compare like with like.

- 3.4 Appendix B contains tables that summarise the ATC data into average daily flows at each site and also include any historical data that is available. The HGV figures from the tables have also been shown graphically in Figure 3.
- 3.5 A comparison has been made between the September 2004 survey and the previous set of surveys undertaken in April/May 2000. The ATC figures show a general increase in HGV numbers throughout the survey area during this period. To put the figures into perspective the average HGV growth figure for the Suffolk 'B' road network over the same period is +18%.
- 3.6 Coddendam has seen an increase of 32% which corresponds with a 30% increase at Otley Bottom. This indicates an increase in the order of 30% on the B1078 corridor between Coddendam and Clopton.
- 3.7 HGV traffic between the A12 and the Debach Industrial Estate has shown an increase in the region of 50%, with an increase of 66% on the C309 at Bredfield where vehicles leave the A12 and an increase of 43% on the B1079 at Woodbridge where they join the A12.
- 3.8 Site A1227 at Clopton Corner has seen an overall increase in traffic of 38%. The majority of this increase is in the westbound direction, which also corresponds with the higher northbound flow, at site A1226, Otley Bottom.
- 3.9 The raw data from the Vehicle Registration Survey has been input into one spreadsheet to allow editing and sorting of the information. A total of 218 journeys were recorded during the course of the survey. Details of this spreadsheet can be found at Appendix C.
- 3.10 Appendix D contains a list of all HGV operators recorded on the day of the survey.

- 3.11 Prior to extracting journey information from the spreadsheet each potential journey was assigned a flow number. Details of these journey combinations can be found at Appendix E.
- 3.12 The data was sorted to give the number of journeys per flow number and then listed with the highest number of journeys first. This information can be found at Appendix F.
- 3.13 The top eleven flows contain the bulk of all journeys. The two highest flows are shown in Figure 4 and correspond to the official route from the A12 to Debach Industrial Estate via the C309 and back to the A12 via Grundisburgh and the B1079.
- 3.14 The next nine highest flows are shown in Figure 5 and correspond to the route between Coddendam and Debach Industrial Estate.
- 3.15 Flow numbers below the highest eleven flows are all low in comparison and are spread throughout the survey area.
- 3.16 During the course of the survey only three vehicles were detected as through journeys and two of these stopped on route.
- 3.17 The top sixteen flow numbers have been sorted to show the operators with the highest number of journeys and this information can be found at Appendix G.

4.0 Conclusions.

- 4.1 HGV numbers have grown considerably over the last four years. This growth is centred on the Debach Industrial Estate which is the origin and destination of the bulk of traffic in the area. Of the total number of journeys recorded, 91 (42% of the total) either started or finished at the Debach Industrial Estate.
- 4.2 The majority of vehicles using the Debach Industrial Estate are adhering to the designated route of clockwise via the C309, B 1078 and the B1079. Most vehicles exiting the Industrial Estate use the U3401 (Drab's Lane) rather than travelling via Clopton Corner.
- 4.3 Only three vehicles were recorded as through journeys during the course of the survey and only one of these passed through the area without stopping.
- 4.4 All other journeys recorded are using the surveyed roads as part of a local trip, entering and leaving the B 1 078/B 1079 within short sections of the roads.
- 4.5 Compared to the rest of the B1078 the section between CP6 and CP9 has relatively low HW flows.
- 4.6 Although the one-way system in Coddensham is generally adhered to there are a number of vehicles that do flout this restriction.

