

CONTENTS

CONTENTS	i
LIST OF TABLES	ii
LIST OF FIGURES	ii
1. SUMMARY OF MAIN POINTS	1
2. PURPOSE OF REPORT	2
3. METHODOLOGY	2
4. CALCULATION OF TOTAL TRAVEL	3
5. ANALYSIS	4
5.1 Traffic Growth or Decline	4
5.2 Seasonal Variations	9
5.3 Weekly Variations	10
5.4 Daily Variations.	11
5.5 Proportions of Non-Motorway Travel 1993	12
5.6 Traffic Compositions	12
5.7 Other Information	13
APPENDIX: Position of Hundred Point Sites	14

LIST OF TABLES

	<i>Page</i>
Table 1. Distribution of Hundred Point Census Sites	2
Table 2. Road Lengths by District and Road Type 1993	3
Table 3. Total Travel in 000's Vehicle-kilometres 1980-1993, Annual	4
Table 4. Traffic Growth Indices 1980-1993, West Midlands Roads	5
Table 5. Percentage Change - Overall Traffic Levels 1980-93 (Vehicle-kilometres travelled)	5
Table 6. Total Travel in 000's Vehicle-kilometres 1980-1993, 7am to 9am Monday to Friday Average Day	7
Table 7. Total Travel in 000's Vehicle-kilometres 1980-1993, 4pm to 6pm Monday to Friday Average Day	8
Table 8. Weekday Conversion Factors Calculated From 1993 Hundred Point Analysis	10
Table 9. Daily Conversion Factors Calculated From 1993 Hundred Point Analysis	10
Table 10. Percentage of 24 Hour 1993 Traffic Flows in Selected Periods of an Weekday	Average 11
Table 11. Proportions of Non-motorway Travel 1993	12

LIST OF FIGURES

Figure 1. Observed and Forecast Traffic Growth, 1980-93.	6
Figure 2. Total Travel in 000's Vehicle-kilometres ,7-9am & 4-6pm	6
Figure 3. Total Travel in 000's Vehicle-kilometres, 7-9am Monday to Friday Average Day	7
Figure 4. Total Travel in 000's Vehicle-kilometres, 4-6pm Monday to Friday Average Day	8
Figure 5. Seasonal Variations 1986. Motorways - 24 hour average day (Monday-Friday)	9
Figure 6. Seasonal Variations 1993. All Roads Except Motorways - 24 hour average day (Monday-Friday)	9
Figure 7 Total Hourly Travel, 7am-7pm (trunk & principal roads)	11
Figure 8. Traffic Compositions M6 Junctions 2-3, 1984-89 (based on 24hr flows)	12
Figure 9. Traffic Compositions on Roads excluding Motorways, 1984-92 (based on 12hr flows)	13
Figure 10. Heavy Goods Vehicles Composition excluding Motorways, 1984-92 (based on 12hr flows)	13

1. SUMMARY OF MAIN POINTS

The West Midlands Hundred Point Surveys have shown that:

1. Annual traffic in the West Midlands **increased** by **2.2%** during 1993 when looking at the figures for all roads excluding motorways (page 4)
2. In the West Midlands, traffic on trunk and principal roads **rose** by **1.7%** in 1993, classified non-principal roads by **3.1%** and unclassified roads by **2.3%**. (page 4).
3. West Midlands 'all roads' figures show that both the morning and evening peak hour traffic **increased** during 1993, by **1.0%** and **2.0%** respectively. (page 6)
4. Unclassified roads in the West Midlands have shown the **largest long term growth** of the three road types in both peak periods. (pages 7 & 8)
5. When comparing 1986 figures with 1993, the hour that showed the **lowest growth** was the hour from **8-9am**. (page 11)
6. The estimated total travel undertaken by **pedal cycles** has **reduced** dramatically between 1984 and 1993. (page 13)

Department of Transport reports have shown that :

1. Nationally, in 1993, there was an overall $\frac{1}{2}$ % **decrease** in the level of traffic on all roads compared with 1992 figures. (page 4)
2. The level of traffic on national motorways and trunk roads remained **unchanged** between 1992 and 1993. Traffic levels on principal and minor roads **decreased** by **1%**. (page 4)

2. PURPOSE OF REPORT

The first Hundred Point Census was undertaken in 1978 and has since been undertaken annually in order to provide information on the changes in the levels of vehicle movement.

The following report has been commissioned by the seven metropolitan District Councils under the terms of the Service Level Agreements with the Joint Data Team.

The purpose of the report is to monitor changes in vehicular movement on roads and motorways within the metropolitan area. Data presented in this report covers traffic growth figures; seasonal, weekly and daily variations; proportions of non-motorway travel and also traffic compositions. Further analyses from the hundred point surveys are available from the JDT.

The automatic data collection and analyses have been undertaken by the Joint Data Team.

3. METHODOLOGY

The methodology has remained consistent since the original survey in 1978 when grid references of one hundred census points were randomly generated from the computer. Within this random selection, different road classes within each district were kept proportional. Table 1 shows the distribution of the different road types among the seven districts, the exact location of which can be seen in Appendix 1.

Table 1. Distribution of Hundred Point Census Sites

	<i>Motorway</i>	<i>Trunk and Principal</i>	<i>Classified Non Principal</i>	<i>Un-Classified</i>	<i>Total</i>
Birmingham	1	8	7	17	33
Coventry		3	2	7	12
Dudley		2	2	7	11
Sandwell	1	2	2	7	12
Solihull		2	2	5	10
Walsall	1	2	2	7	12
Wolverhampton		2	1	7	10
West Midlands	3	21	19	57	100

Figures show the number of sites in each district authority area by road type.

Each site is surveyed annually by automatic machines to assess traffic growth, and biennially by manual surveys in order to present a breakdown of traffic composition.

Of the one hundred sites counted automatically, 21 are counted permanently. Four sites are counted one week in every four and the remaining sites are counted quarterly (four times per year). Originally, 3 motorway sites were also permanently counted but this data has not been presented since 1986 due to incomplete or unreliable data collected by the DoT.

Manual counts in the form of twelve category passage counts are carried out at least one twelve hour day every two years.

4. CALCULATION OF TOTAL TRAVEL

Once the information for all automatic sites is complete for the whole year, the results are run through a suite of in-house programs to produce estimates of total travel. This process is summarised as follows:

- i) From the permanent sites and those counted once a month, yearly estimating factors for each week in the year are produced.
- ii) These factors are applied to the counts that are undertaken four times per year to give four estimates of the yearly flow at these sites. Then, an average of these four yearly estimates is taken.

These steps result in approximately one hundred estimated yearly flows.

- iii) The average flow for each road type is then calculated, using the estimates derived as above.
- iv) This yearly flow for each road type is then multiplied by the total road length of that road type in the county. In this way, changes in total travel take into account both changing flow levels and changing network lengths.

Table 2. Road Lengths by District and Road Type 1993

	<i>Motorway</i>	<i>Trunk and Principal</i>	<i>Classified Non Principal</i>	<i>Un- Classified</i>	<i>Total</i>
Birmingham	15.1*	202.8	237.8	1755.1	2210.8
Coventry	3.5	59.2	109.1	611.5	783.3
Dudley	4.0	86.0	76.3	699.1	865.4
Sandwell	17.5	95.5	88.8	603.8	805.6
Solihull	18.8	61.5	161.0	551.4	792.7
Walsall	8.7	81.5	46.9	631.3	768.4
Wolverhampton	0.0	67.3	45.9	598.0	711.2
West Midlands	67.6	653.8	765.8	5450.2	6937.4

* Includes A38(M)

Source: Road lengths in Great Britain 1993, a Transport Statistics Report published by the Department of Transport.

Table 2 shows the lengths in kilometres of road type shown in each district authority area and are correct as at 1st April 1993.

5. ANALYSIS

5.1 Traffic Growth or Decline

The hundred point census data is useful to assess overall growth or decline in total travel in the West Midlands and is an estimate of annual total travel in terms of vehicle-kilometres. Since the Department of Transport took over the collection of motorway data in 1986, problems have been encountered with the validity of the data and, as a result, due to incomplete or unreliable data, no estimates of total travel on motorways have been produced since 1986.

Table 3. Total Travel in 000's Vehicle-kilometres 1980-1993, Annual

	<i>Motorway</i>	<i>Trunk and Principal</i>	<i>Class. Non-Principal</i>	<i>Un-Classified</i>	<i>Total Excluding Motorway</i>
1980	1,776,851	4,075,222	2,155,494	3,400,171	9,630,887
1981	1,624,960	3,987,477	2,097,470	3,399,898	9,484,845
1982	1,764,189	4,078,868	2,182,432	3,423,198	9,684,498
1983	1,840,883	4,186,100	2,254,160	3,482,665	9,922,925
1984	1,950,448	4,244,801	2,291,238	3,504,396	10,040,435
1985	1,962,631	4,378,726	2,306,552	3,605,439	10,290,717
1986	2,161,699	4,367,325	2,442,712	3,983,648	10,793,686
1987	N/A	4,638,617	2,520,186	3,973,346	11,132,149
1988	N/A	4,782,598	2,659,802	4,211,134	11,653,536
1989	N/A	5,009,939	2,807,702	4,353,600	12,171,240
1990	N/A	5,073,282	2,876,943	4,613,191	12,563,417
1991	N/A	5,005,381	2,862,662	4,678,833	12,546,878
1992	N/A	5,087,484	2,797,465	4,980,401	12,865,350
1993	N/A	5,173,235	2,885,546	5,095,403	13,154,184
1994	N/A	5,243,922	2,942,274	5,250,237	13,436,434

Table 3 shows the total travel on different types of road in the West Midlands over the twelve years 1980 to 1993 inclusive. After a period of no growth in traffic during 1991, West Midlands traffic overall rose by 2.5% in 1992 compared with 1991 and a further 2.2% in 1993 compared with 1992.

Traffic on trunk and principal roads rose by 1.7% in 1993, classified non-principal by 3.1% and unclassified by 2.3%. The rise of 3.1% on non-principal roads seems a large rise but is being compared with the drop in traffic on these roads in 1992. 1993 figures compared with 1991 figures on these roads show only a 0.8% rise.

Nationally, there has been a 0.5% decrease overall on all roads compared with 1992 according to Department of Transport figures¹. The level of traffic on national motorways and trunk roads remained unchanged between 1992 and 1993. Traffic levels on principal and minor roads decreased by 1%.

Table 4 overleaf shows the traffic growth indices for road types. These figures are based on an index of 100 in 1980. Percentage changes year on year are given in Table 5 for both West Midlands and National roads.

¹Source: Road Traffic Statistics Great Britain 1993

Table 4. Traffic Growth Indices 1980-1993, West Midlands Roads

	<i>Motorway</i>	<i>Trunk and Principal</i>	<i>Class. Non-Principal</i>	<i>Un-Classified</i>	<i>Total Excluding Motorway</i>
1980	100	100	100	100	100
1981	91	98	97	100	98
1982	99	100	101	101	101
1983	104	103	105	102	103
1984	110	104	106	103	104
1985	110	107	107	106	107
1986	122	107	113	117	112
1987	N/A	114	117	117	116
1988	N/A	117	123	124	121
1989	N/A	123	130	128	126
1990	N/A	124	133	136	130
1991	N/A	123	133	138	130
1992	N/A	125	130	146	133
1993	N/A	127	134	150	137

Table 5. Percentage Change - Overall Traffic Levels 1980-93 (Vehicle-kilometres travelled)

	<i>All Roads Excluding Motorways</i>		<i>Motorways</i>	
	<i>% change</i>		<i>% change</i>	
	<i>G.B.*</i>	<i>West Midlands</i>	<i>G.B.*</i>	<i>West Midlands</i>
1980/81	2.0	-1.5	0.0	-8.5
1981/82	2.7	2.1	3.0	8.6
1982/83	0.7	2.5	5.2	4.3
1983/84	4.1	1.2	13.7	5.9
1984/85	1.8	2.5	4.7	0.6
1985/86	4.7	4.9	7.3	10.2
1986/87	5.5	3.1	23.0	N/A
1987/88	7.0	4.7	8.6	N/A
1988/89	8.3	4.4	8.4	N/A
1989/90	0.4	3.2	4.4	N/A
1990/91	0.4	-0.1	-1.1	N/A
1991/92	-0.1	2.5	0.0	N/A
1992/93	-0.7	2.2	0.4	N/A
1983/93	34.8	32.6	91.8	N/A

* Figures supplied by Department of Transport - Transport Statistics Great Britain 1992 and Traffic in Great Britain 4th Quarter 1993. In certain years these may differ from figures published in previous reports following the revision of traffic figures for Great Britain by the Department of Transport. All 1993 Great Britain figures are provisional.

Figure 1. Observed and Forecast Traffic Growth, 1980-93.

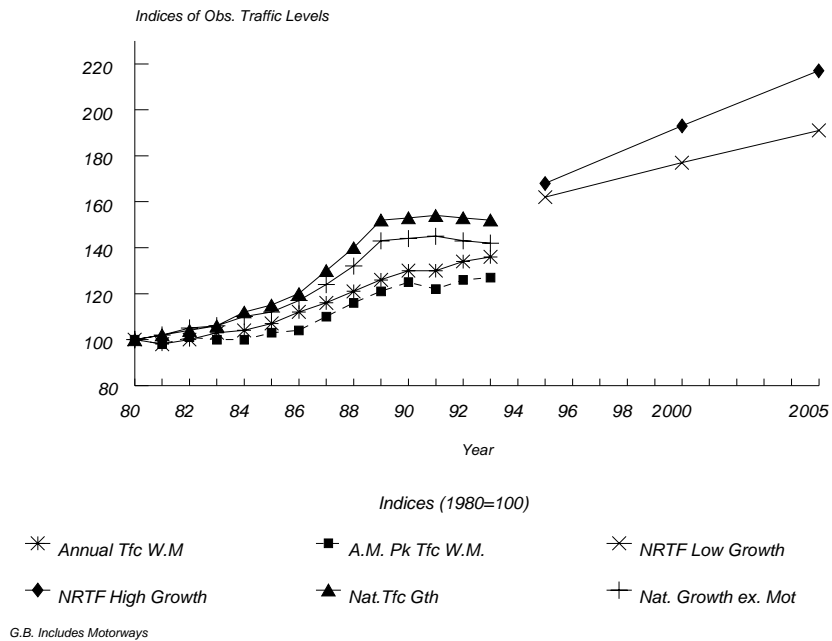


Figure 1 shows the national and West Midlands traffic growth. The morning peak growth is also shown for the West Midlands. The forecast figures are provided by the Department of Transport who give a low forecast and a high forecast for national traffic growth for the years 1995, 2000 and 2005. All the figures in this graph are based on an index of 100 in 1980.

Figure 2. Total Travel in 000's Vehicle-kilometres ,7-9am & 4-6pm

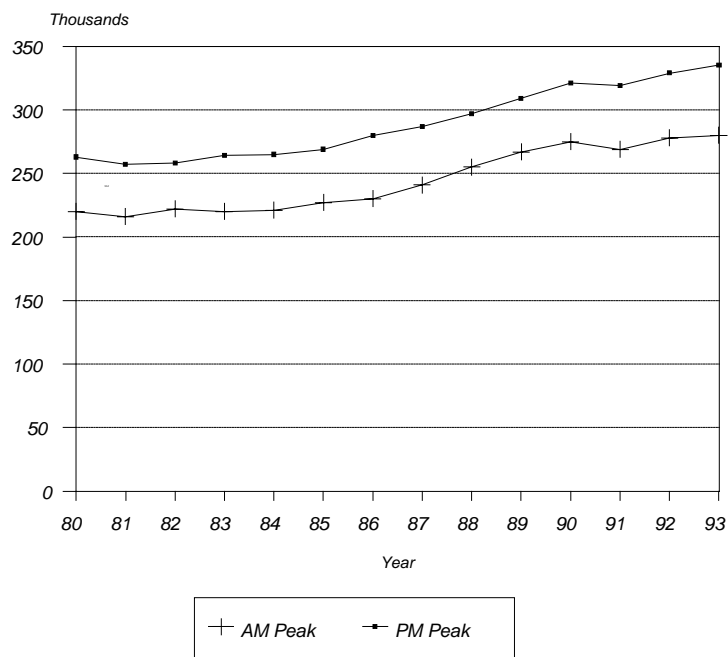


Figure 2 shows that the am peak travel and the pm peak travel for an average weekday have been following the same general pattern. The figures for each road type are presented in Figure 3 on page 7 and Figure 4 on page 8.

The actual figures for the morning and evening peak travel separated by road type can be seen in Table 6 on page 7 for the morning peak data and Table 7 on page 8 for the evening peak data. Both morning and evening peak hour traffic increased during 1993, by 1.0% and 2.0% respectively.

After an overall decrease in peak hour traffic in 1991, levels have now shown an upturn compared with 1990, continuing the upward trend shown in previous years.

Table 6. Total Travel in 000's Vehicle-kilometres 1980-1993, 7am to 9am Monday to Friday Average Day

	<i>Motorway</i>	<i>Trunk and Principal</i>	<i>Class. Non-Principal</i>	<i>Un-Classified</i>	<i>Total Excluding Motorway</i>
1980	39,217	90,336	48,788	80,953	220,077
1981	37,835	90,051	47,321	78,726	216,096
1982	41,622	92,387	49,199	80,113	221,699
1983	43,303	92,274	50,052	78,028	220,354
1984	45,471	92,928	51,396	76,713	221,037
1985	45,737	96,050	50,874	79,596	226,520
1986	48,857	92,475	52,585	84,889	229,949
1987	N/A	99,792	54,473	86,831	241,096
1988	N/A	103,293	59,269	92,624	255,186
1989	N/A	107,683	62,374	97,310	267,368
1990	N/A	108,320	63,808	103,122	275,251
1991	N/A	105,412	61,706	101,629	268,749
1992	N/A	107,866	59,902	109,744	277,513
1993	N/A	107,577	61,651	110,999	280,226

These figures are represented graphically below and indicate that the unclassified roads show the largest growth in total travel in this time period.

Figure 3 Total Travel in 000's Vehicle-kilometres, 7-9am Monday to Friday Average Day

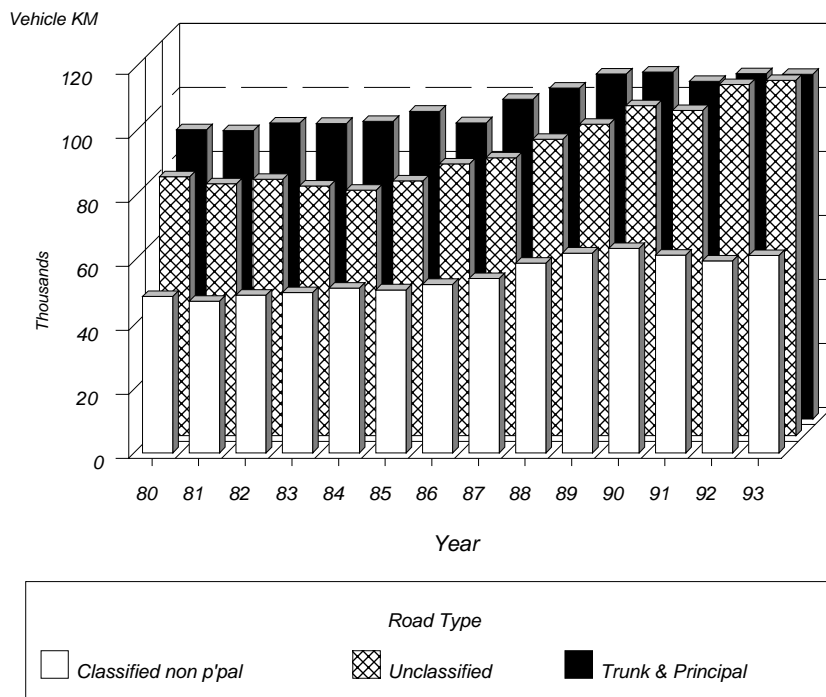
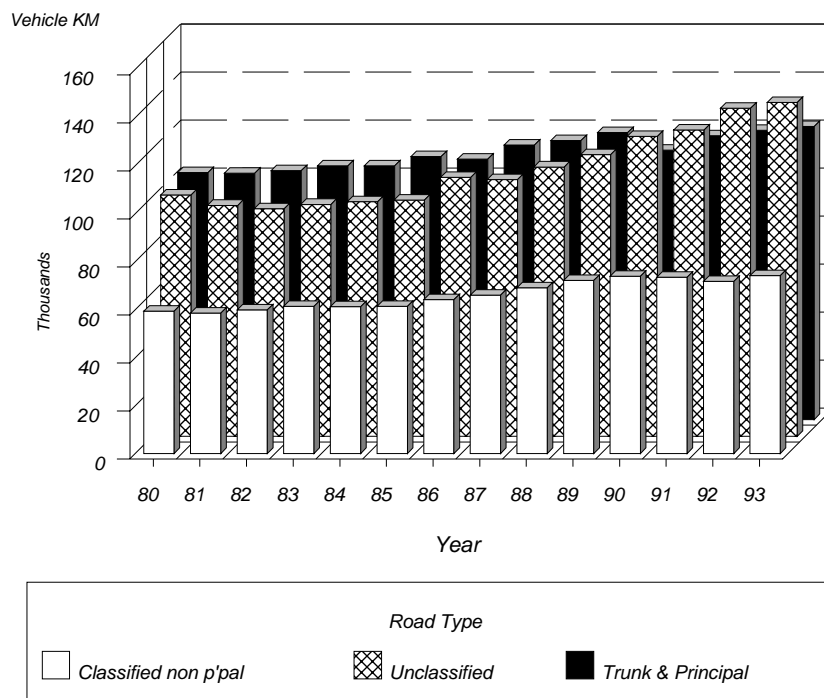


Table 7. Total Travel in 000's Vehicle-kilometres 1980-1993, 4pm to 6pm Monday to Friday Average Day

	<i>Motorway</i>	<i>Trunk and Principal</i>	<i>Class. Non-Principal</i>	<i>Un-Classified</i>	<i>Total Excluding Motorway</i>
1980	44,103	102,818	59,254	100,573	262,645
1981	42,473	102,527	58,423	96,227	257,177
1982	46,886	103,585	59,840	94,800	258,225
1983	47,398	105,692	61,242	96,607	263,541
1984	50,570	105,618	61,119	97,808	264,545
1985	50,102	109,483	61,198	98,445	269,126
1986	54,447	108,444	64,001	107,924	280,369
1987	N/A	114,274	65,921	106,997	287,192
1988	N/A	116,171	68,979	112,241	297,391
1989	N/A	119,497	72,073	117,332	308,856
1990	N/A	122,140	73,847	124,910	320,898
1991	N/A	118,207	73,315	127,591	319,113
1992	N/A	120,380	71,649	136,695	328,725
1993	N/A	122,072	74,028	139,116	335,216

These figures are represented graphically below and indicate that, as in the morning peak data, unclassified roads have shown the largest long term growth of the three road types in this period. This road type now shows the largest figure of the three road types for total travel.

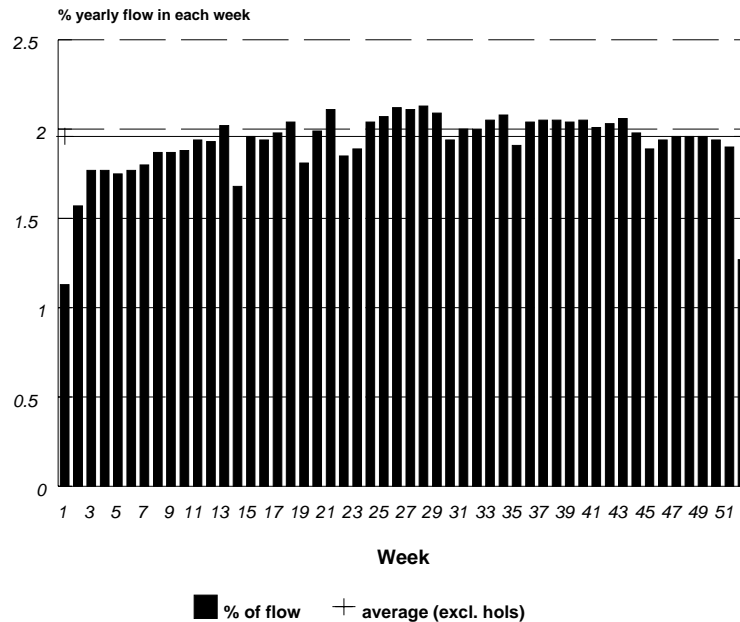
Figure 4 Total Travel in 000's Vehicle-kilometres, 4-6pm Monday to Friday Average Day



5.2 Seasonal Variations

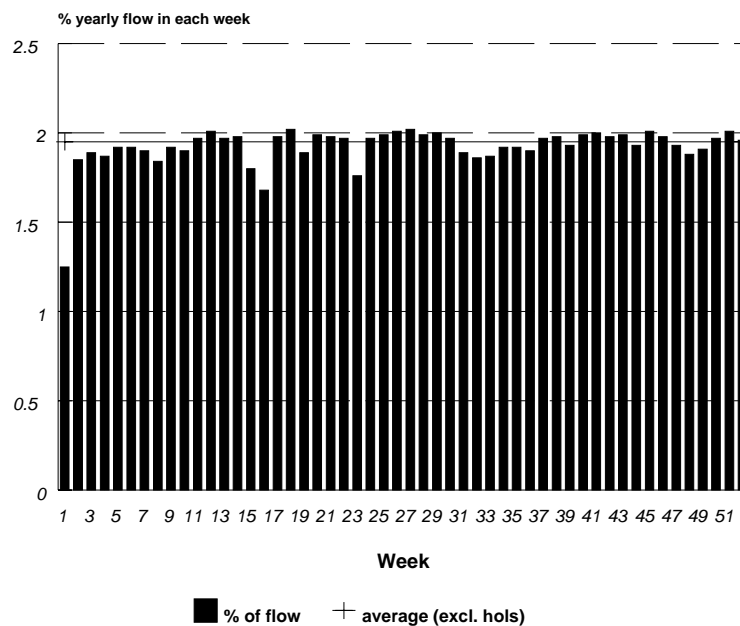
Figure 5 illustrates the percentage of yearly traffic in each week to show seasonal variations in traffic on the motorways in 1986. The same figures for 'all roads except motorways' are given in Figure 6 for 1993. Percentage yearly flows in each week for each road type are available from the JDT on request.

Figure 5. Seasonal Variations 1986. Motorways - 24 hour average day (Monday-Friday)



The average figure (excluding holiday weeks) is 1.96. If holiday weeks are included this figure drops to 1.92.

Figure 6. Seasonal Variations 1993. All Roads Except Motorways - 24 hour average day (Monday-Friday)



For the 'all roads' figures, the average % flow in each week (excluding holiday weeks) is 1.95. If holiday weeks are included this figure drops to 1.92.

5.3 Weekly Variations

Table 8 provides factors by which flows on a particular day should be divided to give the flow on an average weekday. For example, if a count was undertaken on a Monday on a trunk road then to convert that flow to an average weekday flow, divide by 0.969.

Similarly, flows on an average day can be multiplied by these factors to give flows on a particular day.

Table 8. Weekday Conversion Factors Calculated From 1993 Hundred Point Analysis

(five day average)

	<i>Motorway*</i>	<i>Trunk and Principal</i>	<i>Classified Non-Principal</i>	<i>Un- Classified</i>
Monday	0.959	0.969	0.961	0.967
Tuesday	0.959	0.991	0.982	0.976
Wednesday	0.989	0.990	0.993	0.987
Thursday	1.002	1.006	1.014	1.009
Friday	1.074	1.044	1.051	1.061

* Figures for motorway are 1986.

The figures in Table 9 are for conversion to an average day in a seven day week. Using this table, flows taken on a Saturday on an unclassified road, for example, could be divided by 0.94 to provide an average daily flow for that week.

Table 9 Daily Conversion Factors Calculated From 1993 Hundred Point Analysis

(seven day average)

	<i>Trunk and Principal</i>	<i>Classified Non- Principal</i>	<i>Un- Classified</i>
Monday	1.039	1.032	1.031
Tuesday	1.062	1.055	1.041
Wednesday	1.062	1.067	1.052
Thursday	1.079	1.089	1.075
Friday	1.119	1.130	1.130
Saturday	0.920	0.923	0.940
Sunday	0.719	0.703	0.731

5.4 Daily Variations.

Figures shown in Table 10 are the percentage of 24 hour flows which occurs at selected times of an average weekday on the four types of road. For example, on motorways the 12 hour (7-19) flow is 82.1% of the 24 hour total flow. The percentages in Table 10 can also serve as factors to convert short term counts into flows covering a longer time period. For instance to convert a 12 hour flow on a principal road into a 24 hour flow, divide the 12 hour count by 0.779. Alternatively, to convert an a.m. peak (8-9) flow on a non-principal to a 24 hour flow divide the peak flow by 0.088 to produce a 24 hour flow and then multiply this figure by 0.797 to convert back to a 12 hour flow.

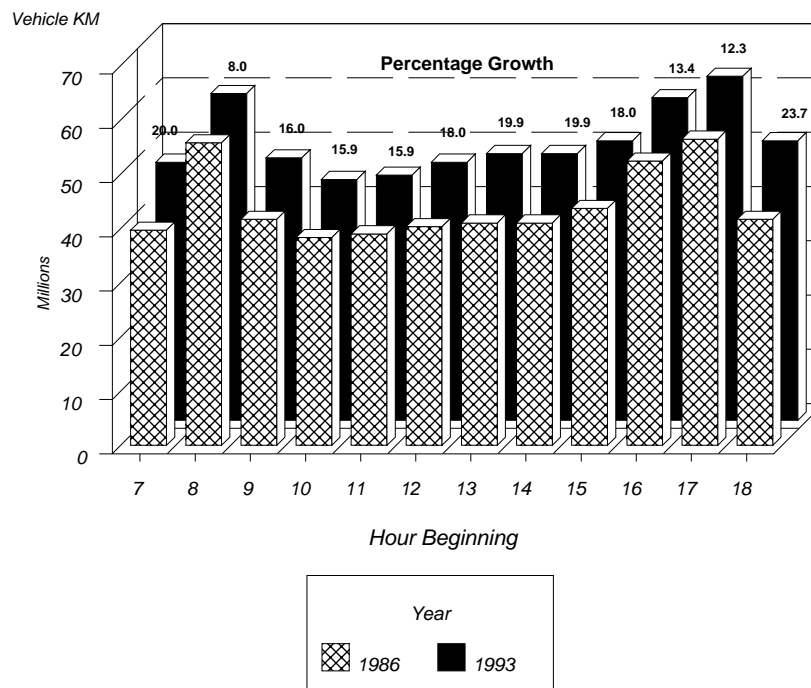
Table 10. Percentage of 24 Hour 1993 Traffic Flows in Selected Periods of an Average Weekday

	<i>Motorway*</i>	<i>Trunk and Principal</i>	<i>Classified Non-Principal</i>	<i>Un- Classified</i>
8 - 9 am	8.4	7.6	8.8	8.4
5 - 6 pm	8.3	8.0	9.1	8.8
7 - 19 (12 hr)	82.1	77.9	79.7	78.0
6 - 22 (16 hr)	93.6	92.7	94.0	93.7
6 - 24 (18 hr)	96.3	97.1	98.2	98.2

* Figures for motorway are 1986.

Figure 7 gives an indication of the growth that has occurred in each hour of the main twelve hour day. This graph compares 1984 with 1993 to give a picture of the long term growth. It shows that, between these two years, the main growth has occurred in the hours at either end of the main twelve hour day. The hour beginning 7am showed 20% growth and the hour beginning 6pm showed 23.7% growth. The main part of the day also showed large percentage growth, but the lowest growth occurred in the hours 8-9am (8% growth) and 5-6pm (12.3% growth)

Figure 7 Total Hourly Travel, 7am-7pm (trunk & principal roads)



5.5 Proportions of Non-Motorway Travel 1993

In view of the absence of flow data for motorways in 1992, the calculation of proportions of total travel has had to be restricted to non-motorway roads. The figures presented in Table 11 show how large a proportion of travel (61.2% on classified roads) continues to be carried on a small proportion of the road network (20.5% is classified).

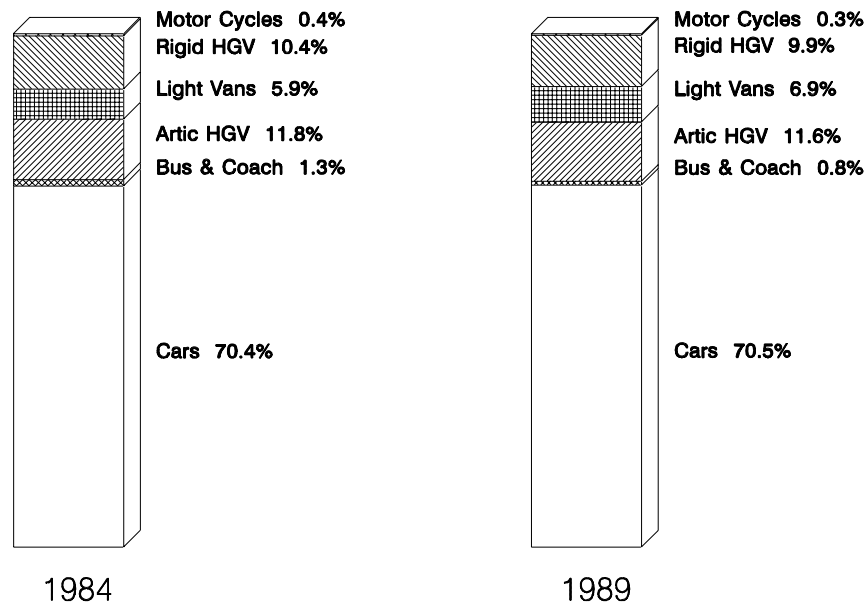
Table 11. Proportions of Non-motorway Travel 1993

	<i>Trunk and Principal</i>	<i>Classified Non - Principal</i>	<i>Un-Classified</i>
% of travel	39.3	21.9	38.7
% of non-motorway road length	9.5	11.1	79.3

5.6 Traffic Compositions

Traffic compositions are obtained from manual counts, the most recent of which were carried out in 1992. Figure 8 shows traffic compositions on the M6 motorway between junctions 2 and 3 for 1984 and 1989 (the Department of Transport have discontinued this survey site). Figure 9 overleaf shows average traffic compositions excluding motorways for 1984 and 1992 throughout the county.

Figure 8. Traffic Compositions M6 Junctions 2-3, 1984-89 (based on 24hr flows)



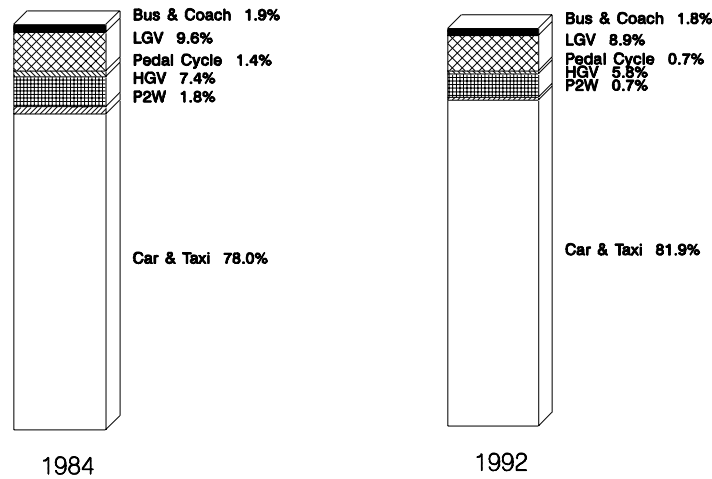
Source: Transport Statistics 1984, 1989

During the eight years between 1984 and 1992, cars and taxis have increased their share of traffic composition by 4%. Proportions of pedal cycles and powered two-wheelers have halved, and the heavy goods share of traffic has decreased by 1.6%, perhaps due in part to the recession in recent years.

Figure 10 overleaf shows the changes in proportions of heavy vehicle traffic from 1984 to 1992. There has been quite a large increase (8%) in the proportion of 1.5T-3T lorries on the road, almost

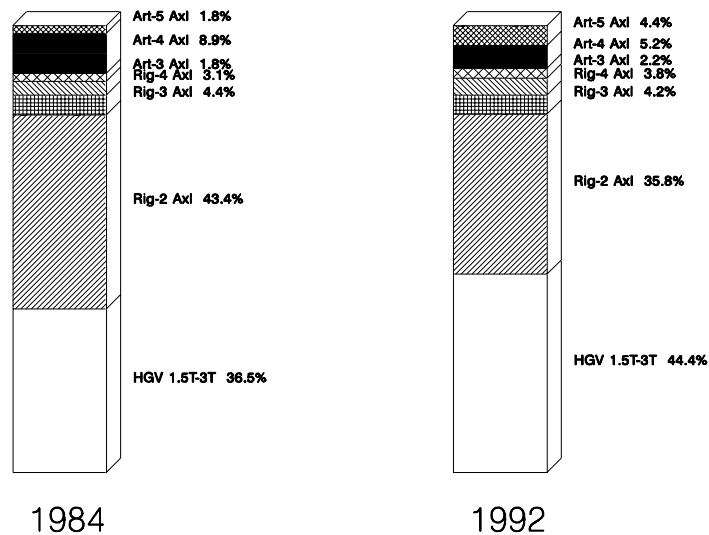
entirely it seems at the expense of rigid 2-axle vehicles. There has also been a 2.5% shift from articulated 4-axle HGVs to the larger 5-axle vehicles.

Figure 9. Traffic Compositions on Roads excluding Motorways, 1984-92 (based on 12hr flows)



These figures can be used to estimate the growth in travel for a particular vehicle type. For example, the estimated 12hr total travel on all roads in 1984 was 1,287,649,301, giving an estimate of the number of cycles as 0.014 multiplied by the figure, ie 18,027,090. The 1993 figures for 12 hourly travel are 1,588,754,359. This gives an estimate for the number of cycles in this period as 0.007 x 1,588,754,359, ie 11,121,281. Therefore, an estimate of the 'growth' in cycle travel between these two years is -38.3%. The total travel for cycles has shown a large decrease over the two years considered.

Figure 10. Heavy Goods Vehicles Composition excluding Motorways, 1984-92 (based on 12hr flows)



The next set of manual counts is due to be carried out by the Districts during 1994.

5.7 Other Information

Flow reduction factors for holiday weeks, average weekly/daily/peak hour/Sunday flows for each site, and grossing factors for converting weekly flows to yearly flows for each four week period are also available from the J.D.T. upon request (tel. 021-704-6597).

Appendix 1:

Position of Hundred Point Sites

HP	Road Number & Name	Location of count	Road Type	Site Type	District
*HP03	M5 Motorway				
*HP66	M6 Motorway				
HP02	B4217 Salisbury Road	Between Park Hill & Salisbury Close	Classified Non-Principal	Permanent	Birm.
HP04	B4146 Wharfdale Road	Between Rushy Lane & Blythwood Road	Classified Non-Principal	Permanent	Birm.
HP07	B4151 Slade Road	Between Weeford Road & Aulton Road	Classified Non-Principal	Several (4 times per year)	Birm.
HP15	B4148 Walmley Road	Between Sringfield Road & Walsh Drive	Classified Non-Principal	Several (4 times per year)	Birm.
HP16	B4149 Kings Road	Between Shady Lane & Kingstanding Road	Classified Non-Principal	Several (4 times per year)	Birm.
HP18	B4129 Metchley Lane	Between Somerset Road & Malt Close	Classified Non-Principal	Several (4 times per year)	Birm.
HP34	Gressel Lane	Between Kyngsford Road & Hawksford Road	Classified Non-Principal	Several (4 times per year)	Birm.
HP20	A34 Stratford Road	Between Fernley Road & Evelyn Road	Classified Principal	Permanent	Birm.
HP09	A47 Nechells Parkway	Between Great Lister Street & Lawley Street	Classified Principal	Several (4 times per year)	Birm.
HP14	B4151 Streetly Lane	Between Park View Road & Bennett Road	Classified Principal	Several (4 times per year)	Birm.
HP24	A4040 Watford Road	Between Woodfall Avenue & Northfield Road	Classified Principal	Permanent	Birm.
HP32	A456 Quinton Expressway	Between Hagley Road & Junction 3, M5	Classified Principal	Several (4 times per year)	Birm.
HP35	A441 Pershore Road	Between Belgrave Road & Bellevue	Classified Principal	Several (4 times per year)	Birm.
HP37	A38 Bristol Road	South of Pebble Mill Road	Classified Principal	Several (4 times per year)	Birm.
HP38	A41 Soho Road	Between Baker Street & Linwood Road	Classified Principal	Several (4 times per year)	Birm.
HP43	Brandwood Park Road	Between Reaside Crescent & Lifford Close	Unclassified	Several (4 times per year)	Birm.
HP44	Bulls Lane	East of Bulls Lane Farm	Unclassified	¼ Permanent (one week in four)	Birm.
HP52	Sherwood Road	Between Painswick Road & Highfield Road	Unclassified	Permanent	Birm.
HP54	Windermere Road	Between Wakegreen Road & Ashleigh Gardens	Unclassified	¼ Permanent (one week in four)	Birm.
HP56	Jerry's Lane	Between Sheddington Road & Radford Road	Unclassified	Permanent	Birm.
HP57	Mary Street	Between Balsall Heath Road & Knutsford Street	Unclassified	Several (4 times per year)	Birm.
HP59	Regan Crescent	Between Farm Road & Stanwell Gardens	Unclassified	Several (4 times per year)	Birm.
HP60	Clay Lane	Between Bosworth Road & The Vineries	Unclassified	Several (4 times per year)	Birm.
HP63	Sedgemore Road	Between Partridge Road & Averill Road	Unclassified	Several (4 times per year)	Birm.
HP65	Wellhead Lane	Between Oscott Road & Aldridge Road	Unclassified	Several (4 times per year)	Birm.
HP69	Browfield Road	Between Croft Lane & Timberley Lane	Unclassified	Several (4 times per year)	Birm.
HP71	Camp Lane	Between Oxhill Road & Copthall Road	Unclassified	Several (4 times per year)	Birm.
HP72	Birkenshaw Road	Between Brentwood Gardens & Old Oscott Lane	Unclassified	Several (4 times per year)	Birm.

HP75	Woodacre Road	Between Westmead Crescent & Holly Lane	Unclassified	Several (4 times per year)	Birm.
HP77	Hazelwell Road	Between Plymouth Road & Warren Road	Unclassified	Several (4 times per year)	Birm.
HP84	Gorleston Road	Between Gorleston Gardens & Prince of Wales Lane	Unclassified	Several (4 times per year)	Birm.
HP92	Shady Lane	East of Amblecote Avenue	Unclassified	Several (4 times per year)	Birm.
HP19	B4098 Tamworth Road	North of Hollyfast Lane	Classified Non-Principal	Several (4 times per year)	Coventry
HP31	B4107 Earlsdon Avenue North	Between Westwood Road & Newcombe Road	Classified Non-Principal	Several (4 times per year)	Coventry
HP10	A429 Kenilworth Road	Between Cannon Hill Road & Kenpas Highway	Classified Principal	Permanent	Coventry
HP21	A4082 Henley Road	Between Purcell Road & Henley Mill Lane	Classified Principal	Several (4 per year)	Coventry
HP25	A4023 Tile Hill Lane	Between Templar Avenue & Malam Close	Classified Principal	Several (4 times per year)	Coventry
HP47	Arundel Road	Between Foresters Road & Bettman Close	Unclassified	Permanent	Coventry
HP48	Torrington Avenue	Between Wolfe Road & Templar Avenue	Unclassified	Permanent	Coventry
HP67	Long Lane	Between Tamworth Road & Brownhill Green Road	Unclassified	Several (4 times per year)	Coventry
HP74	Beechwood Avenue	Between Styvechale Avenue & Bates Road	Unclassified	Several (4 times per year)	Coventry
HP86	Middlemarch Road	Between Capmartin Road & Villa Road	Unclassified	Several (4 times per year)	Coventry
HP89	Stamford Avenue	Between Dillotford Avenue & Knoll Drive	Unclassified	Several (4 times per year)	Coventry
HP91	Lincroft Crescent	Between the Headlands	Unclassified	Several (4 times per year)	Coventry
HP29	B4551 Grange Road	Between Halesowen By Pass & Illey Lane	Classified Non-Principal	Permanent	Dudley
HP42	B4180 Brierley Hill Road	Between Coopers avenue & Bevan Road	Classified Non-Principal	Several (4 times per year)	Dudley
HP39	A4036 Merry Hill	North Of Coppice Lane	Classified Principal	Several (4 times per year)	Dudley
HP41	A459 Dudley Road	Between Valley Road & Moden Hill	Classified Principal	Several (4 times per year)	Dudley
HP45	Uffmoor Lane	Between Hagley Road & Blakedown Road	Unclassified	Permanent	Dudley
HP46	Newland Grove	Between Hallchurch Road & Woodside Road	Unclassified	Permanent	Dudley
HP53	New John Street	Between Halesowen Street & Upper Ashley Street	Unclassified	Several (4 times per year)	Dudley
HP55	Shenstone Avenue	Between Lavender Lane & Rosemary Lane	Unclassified	Several (4 times per year)	Dudley
HP62	Kingsway	West of Cheshire Close	Unclassified	Several (4 times per year)	Dudley
HP93	St Peters Road	Between Abbey Road & Lynbrook Close	Unclassified	Several (4 times per year)	Dudley
HP94	Oldnall Road	West of Foxcote Lane	Unclassified	Several (4 times per year)	Dudley
HP00	Bowden Road	North of Devonshire Road.	Unclassified	Several (4 times per year)	Sandwell
HP36	B4149 Church Lane	Between Byron Street & Small Street	Classified Non-Principal	Several (4 times per year)	Sandwell
HP40	B4171 Dudley Road	Between Doulton Road & St. James Avenue	Classified Non-Principal	Several (4 times per year)	Sandwell

HP23	A461 Dudley Port	Between Tividale Street & Fisher Street	Classified Principal	Permanent	Sandwell
HP26	A459 Halesowen Road	Between Cox's Lane & Highland Road	Classified Principal	Several (4 times per year)	Sandwell
HP51	Groveland Road	Between Monk Close & Cleton Street	Unclassified	Several (4 times per year)	Sandwell
HP64	Shakespeare Road	Between Swann Walk & Kennedy Walk	Unclassified	¼ Permanent (one week in four)	Sandwell
HP82	Pembroke Road	North of Windsor Road	Unclassified	Several (4 times per year)	Sandwell
HP97	Bristnall Hall Road	Between Knottshalk Lane & Beeches Road	Unclassified	Several (4 times per year)	Sandwell
HP98	Stuart Road	Between Windsor Road & Throne Crescent	Unclassified	Several (4 times per year)	Sandwell
HP99	Barclay Road	South of Upper St. Mary's Road	Unclassified	Several (4 times per year)	Sandwell
HP08	B4102 Tanworth Lane	North of Lady Lane	Classified Non-Principal	¼ Permanent (one week in four)	Solihull
HP13	B4102 Hight St (Hampton)	South of Shadowbrook Lane	Classified Non-Principal	Several (4 times per year)	Solihull
HP28	B4025 Streetsbrook Road	Between Broad Oak Road & Dorchester Road	Classified Non-Principal	Several (4 times per year)	Solihull
HP01	A41 Warwick Road	Between Jacobean Lane & Lady Byron Road.	Classified Principal	Several (4 times per year)	Solihull
HP22	A45 Coventry Road	East of Damson Lane	Classified Principal	Several (4 times per year)	Solihull
HP68	Creynolds Lane	Between Stratford Road & Cheswick Way	Unclassified	Permanent	Solihull
HP70	Lugtrout Lane	Between Field Lane & Sambourn Close	Unclassified	Several (4 times per year)	Solihull
HP79	School Lane	Between Broomfields Farm Road & Hampton Lane	Unclassified	Several (4 times per year)	Solihull
HP95	Tomlinson Road	Between Neville Road & Green Lane	Unclassified	Several (4 times per year)	Solihull
HP96	Brookvale Road	Between Brookvale Grove	Unclassified	Several (4 times per year)	Solihull
HP27	B4151 Foley Road East	Between Streetly Wood & Featherston Road	Classified Non-Principal	Permanent	Walsall
HP33	B4152 Barr Common Road	East of Barr Common Close	Classified Non-Principal	Several (4 times per year)	Walsall
HP12	A4148 Broadway	Between Birm. Road & Delves Green Road	Classified Principal	Several (4 times per year)	Walsall
HP17	A461 Lichfield Road	Between Coppice Road & Brook Lane	Classified Principal	Several (4 times per year)	Walsall
HP58	Dangerfield Lane	Between Stanley Road & Broadwaters Road	Unclassified	Permanent	Walsall
HP61	St Annes Road	Between Temple Road & Stringes Lane	Unclassified	Permanent	Walsall
HP76	Field Street	Between Harrison Street & Victoria Avenue	Unclassified	Several (4 times per year)	Walsall
HP80	Norfolk Crescent	Between Broadmeadow & Lancaster Avenue	Unclassified	Several (4 times per year)	Walsall
HP87	Hazelwood Road	Between Limetree Road & Cedar Drive	Unclassified	Several (4 times per year)	Walsall
HP88	Wood Lane	Between Leamore Lane & Lilac Grove	Unclassified	Several (4 times per year)	Walsall
HP90	Butts Road	Between Eastbourne Street & Westbourne Street	Unclassified	Several (4 times per year)	Walsall
HP30	Aldersley Road	Between Sandy Lane & Burland Avenue	Classified Non-Principal	Several (4 times per year)	Wolv.

HP05	A4124 Lichfield Road	Between Stubby Lane & Peacock Avenue	Classified Principal	Permanent	Wolv.
HP11	A4123 Thompson Avenue	Between Silver Birch Road & Dixon Street	Classified Principal	Several (4 times per year)	Wolv.
HP49	Northwood Park Road	Between Ireton Road & Northwood Park Close	Unclassified	Permanent	Wolv.
HP50	Mount Road	Between Wakeley Hill & Dewsbury Drive	Unclassified	Permanent	Wolv.
HP73	Coppice Road	Between Meadow Road & Cranford Road	Unclassified	Permanent	Wolv.
HP78	Cadman Crescent	Between Kingsway Road & Copes Crescent	Unclassified	Several (4 times per year)	Wolv.
HP81	Wentworth Road	Between Hamilton Gardens & Legs Lane	Unclassified	Several (4 times per year)	Wolv.
HP83	Griffiths Drive	Between Clarke Avenue & Phillips Avenue	Unclassified	Several (4 times per year)	Wolv.
HP85	St Annes Road	Between Arundel Road & Ingestre Road	Unclassified	Several (4 times per year)	Wolv.

* Motorway Counts not available