

TRANSPORT FOR GREATER MANCHESTER
HIGHWAYS FORECASTING & ANALYTICAL SERVICES

Transport Statistics Wigan 2010

HFAS Report 1664 November 2011

SUMMARY

This report complements HFAS Reports 1654, 'Transport Statistics Greater Manchester 2010' and 1651 - 1653, 'Reported Road Casualty Statistics Greater Manchester 2010'. It focuses on the statistics for Wigan and compares them to those for Greater Manchester where appropriate.

It includes:

- lists and diagrams of traffic flows on major road links
- summaries of traffic profiles at automatic traffic counter sites
- diagrams showing road accident locations by type of accident

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1 INTRODUCTION AND SUMMARY

1.1 This report has been written to complement HFAS Reports 1654, 'Transport Statistics Greater Manchester 2010' and 1651 - 1653, 'Reported Road Casualty Statistics Greater Manchester 2010'. Whereas those reports present statistics for Greater Manchester, this report focuses on Wigan and compares it to Greater Manchester where appropriate.

1.2 The key points from the report are summarised below.

Key Facts

- Wigan has a population of 306,500 and covers an area of 188 square kilometres.
- There are 1,156 km of road consisting of 17 km motorway, 117 km A road, 56 km B road, 68 km other classified road and 898 km unclassified road.
- The average daily flow per kilometre is 93,400 vehicles on motorways, 16,000 on A roads and 11,000 on B roads.
- There were 509 injury accidents in Wigan during 2010 resulting in 678 casualties. There were 62 killed or seriously injured (KSI) casualties.
- Wigan was awarded an allocation of £2.62 million through the LTP process in 2011/12.

Traffic Flows

- The highest estimated 24-hour Annual Average Weekday Traffic (AAWT) flow was 144,800 vehicles on the M6 between Junctions 24 and 25.
- The busiest all-purpose road was the A49 Wallgate in Wigan where the estimated 24-hour AAWT flow reached 49,700 vehicles on the stretch west of Pottery Road
- The site with the highest 12-hour pedal cycle flow was the A577 Darlington Street in Wigan with 239 cycles recorded between 07:00 and 19:00.
- The average 12-hour A and B road pedal cycle flows in Wigan are 65 and 54 respectively, lower than the Greater Manchester average of 107 for A roads and 100 for B roads.

Traffic Growth

- 24-hour weekday flows on motorways in Wigan have increased by 7% since 2009, while there has been a 2% decrease across Greater Manchester as a whole.
- 12-hour weekday flows on A and B roads in Wigan decreased by 4% between 2009 and 2010, while the average for Greater Manchester as a whole decreased by 2%.
- Since 1993, traffic flows on A and B roads have decreased by 1% and 3% in Wigan and in Greater Manchester respectively, and have increased by 2% nationally.

Annual Vehicle Kilometres

- 570 million vehicle kilometres were travelled on motorways, 683million on A roads and 226 million on B roads.
- Motorways, A roads and B roads in Wigan carried 11% of the major road traffic in Greater Manchester on 13% of the major road network.

Traffic Composition

- Motorways: 76% cars, 12% light goods vehicles (LGVs) and 12% other goods vehicles (OGVs).
- A roads: 78% cars, 13% LGVs and 6% OGVs.
- B roads: 84% cars, 12% LGVs and 2% OGVs.
- Minor roads: 75% cars, 16% LGVs and 6% OGVs.
- Traffic composition on Wigan's major road network was broadly similar to Greater Manchester.

Rail Patronage

- The number of boarders travelling inbound to Manchester on the Wigan/Bolton corridor in 2010 was around 3,390 in the peak (07:30-09:30) and around 3,280 in the off-peak (09:30-13:30). These figures represent a decrease of 26% and 2% in the peak and off-peak respectively since 2009, and overall increases of 33% and 170% respectively since 1991.

Key Centre Monitoring

- Since 1997 the number of vehicles crossing the cordon into Wigan town centre has fallen by 12% in the am peak, 24% in the off-peak and 17% in the pm peak.
- LGV numbers increased by 7% and 2% in the morning peak and evening peak respectively. They decreased by 6% in the off-peak.
- OGV numbers continue to show the biggest decreases overall; 57% in the morning peak, 69% in the off-peak and 81% in the evening peak.
- Bus numbers have increased by 1% in the morning and decreased by 22% and 3% in the off-peak and evening peak respectively. All periods have seen an increase in bus numbers between 2010 and 2011.
- Car trips into the Robin Park development have continued to increase since 1997, by 180% in the AM peak, 98% in the off-peak and 73% in the evening peak.

Automatic Traffic Counts at Wigan Key Centre Cordon Sites

- Automatic Traffic Counts were last carried out from March to May 2010.
- Morning weekday peak flows and 24-hour average weekday flows decreased by 13% and 16% respectively between the base year (2007) and 2010.

Road Traffic Casualties

- The total number of reported injury accidents in Wigan was 509 in 2010, 62% lower than the average from the base years (1994-1998) and 18% lower than the 624 in 2009.
- The total number of casualties in Wigan was 678 in 2010, 64% lower than the average from the base years (1994-1998) and 24% lower than the 890 in 2009.
- There were 85 killed or seriously injured (KSI) casualties in 2010 compared with an average of 147 KSI in the base years.
- The 2008-2010 three-year average used for monitoring KSI GMLTP2 targets was 42% below the base years average.
- The 2008-2010 three-year average for child KSI casualties was 59% below the baseline average and 12% below the 2010 GMLTP2 target.
- Slight casualties in 2009 were 65% below the baseline average and 49% below the 2010 GMLTP2 target.

Congestion

- Journey times for Wigan in 2009/10 have increased in the morning peak period and decreased in the off-peak and evening peak period since 2008/09. On average journey times are faster in Wigan compared to Greater Manchester as a whole.
- The most congested routes in the morning peak (08:00-09:00) included the junction between the A5209 School Lane and the A49 High Street in Standish, the B5238 Wigan Road, the A573 School Lane in Scholes, the junction between the A577 Darlington Street and the A573 Warrington Lane, the A573 Warrington Road in Ince-in-Makerfield, the A577 Manchester Road near Higher Ince, Atherton Road in Hindley, the junction between Liverpool Road and the A577 Market Street in Hindley, the A58 Bolton Road in Ashton-in-Makerfield and the junction between the A580 East Lancashire Road and the A572 Newton Road near Golborne.

2 ROAD TRAFFIC

Traffic Flows 2010

2.1 Road traffic figures and traffic growth for Wigan must be treated with caution since the sample size for a single district is smaller than for the county as a whole. Appendix 1 gives 24-hour annual average weekday traffic (AAWT) and the most recent 12-hour (07:00-19:00) pedal cycle flows for all major road links in Wigan.

- The busiest motorway section was on the M6 between Junctions 24 and 25 where the traffic flow reached an estimated 144,800 vehicles.
- The busiest all-purpose road was the A49 Wallgate in Wigan where flows reached an estimated 49,700 vehicles on the stretch west of Pottery Road.
- The second list in Appendix 1 shows that the road with the highest recorded 12-hour pedal cycle flow is the A577 Darlington Street with 239 pedal cycles between 07:00 and 19:00.
- The average 12-hour A road pedal cycle flow in Wigan was 65. The average B road pedal cycle flow was 54. These are considerably lower than the Greater Manchester average of 107 for A roads and 100 for B roads.

Motorway Traffic Growth 2009-2010

2.2 Due to insufficient reliable manual count data, motorway traffic growth has been calculated using a combination of manual counts and 24-hour average weekday ATC data supplied by the Highways Agency. ATC data is unclassified and goods vehicle estimates are based on the most recent manual counts factored to 2009 or 2010. Combined goods vehicle flow differences are thought to be more reliable than LGV and OGV differences.

2.3 Table 1 gives 24-hour average weekday traffic flows on four motorway sections in Wigan surveyed either by automatic traffic counter (ATC) or manually in 2010, together with percentage changes in flow since 2009. Countywide figures based on 58 motorway sections are also given.

- 24-hour weekday flows on motorways in Wigan have increased by 7% and decreased by 2% countywide since 2009.

		LGV	%	OGV	%	All Goods	%	All Motors	%
M6	Bet Jns 24 & 25	18000	(5)	17200	(32)	35200	(17)	144800	(9)
	Bet Jns 25 & 26	12600	(6)	13000	(5)	25600	(6)	113100	(12)
	Bet Jns 26 & 27	11500	(-4)	12300	(-8)	23700	(-6)	103500	(-1)
Wigan Sample		14000	(3)	14200	(9)	28200	(6)	120500	(7)
GM 58 links		13600	(-4)	11300	(4)	24900	(-1)	110400	(-2)

A and B Road Traffic Growth 2009-2010

2.4 Table 2 gives average 12-hour traffic flows on A and B roads in Wigan and Greater Manchester in 2010 together with percentage changes since 2009. The figures for A and B road growth are based on counts on 19 of the 104 A and B road links in Wigan. Combined goods vehicle flow differences are thought to be more reliable than LGV and OGV differences.

- Motor traffic in Wigan decreased by 4% between 2009 and 2010, while the average for Greater Manchester as a whole decreased by 2%.

	No. of Sites	Cars (%)	LGV (%)	OGV (%)	All Goods (%)	All Motors (%)
Wigan	19	17201 (-4)	2866 (-11)	1555 (0)	4420 (-7)	21985 (-4)
Greater Manchester	176	17105 (-2)	2378 (-4)	856 (2)	3234 (-3)	20728 (-2)

Traffic Growth Since 1993

2.5 Table 3 and Figure 1 illustrate local and national traffic growth since 1993. Traffic growth for Wigan and Greater Manchester is based on 12-hour average weekday flows on a sample of A and B road links throughout Wigan and Greater Manchester. National growth is based on average 24-hour daily traffic flow data for major urban A roads published in Table 2.1 Road Statistics 2009: Traffic, Speeds and Congestion DfT.

- Since 1993, traffic flows on A and B roads have decreased by 1% in Wigan compared to a 3% decrease in Greater Manchester and a 2% increase nationally.

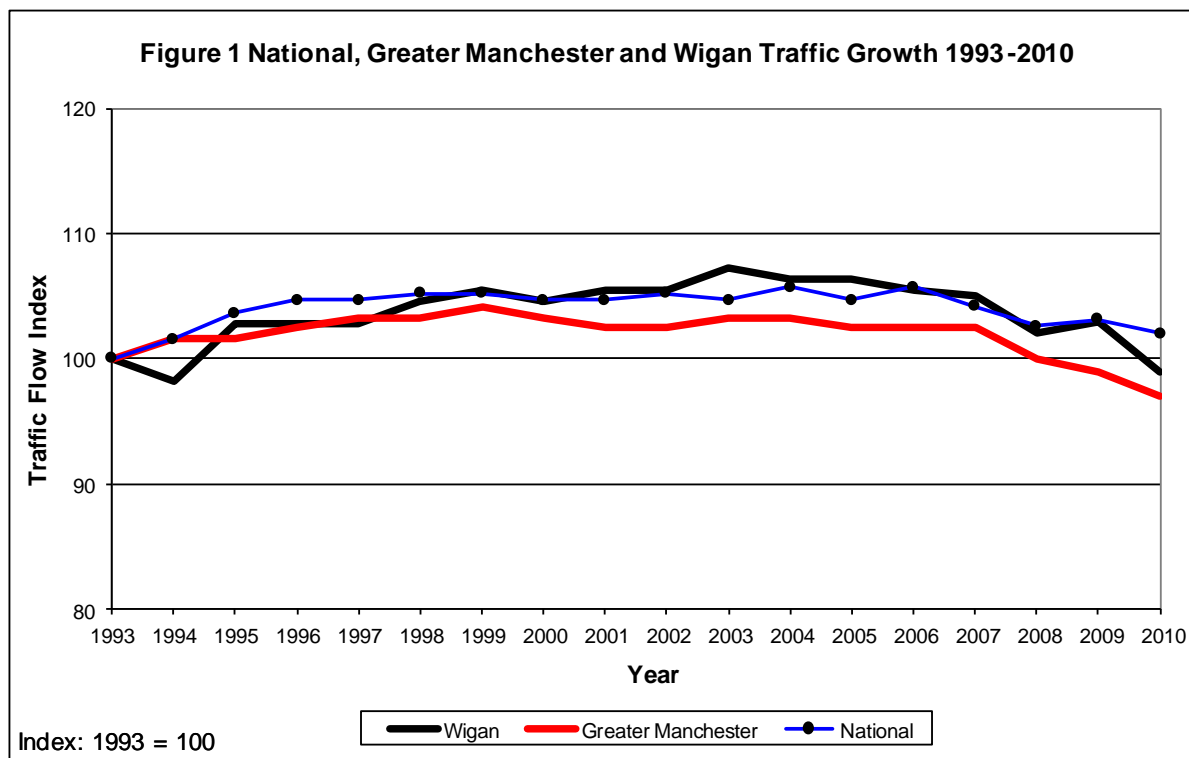


Table 3 National, Greater Manchester and Wigan Traffic Growth 1993- 2010

	Wigan	Greater Manchester	National
1993	100	100	100
1994	98	102	102
1995	103	102	104
1996	103	102	105
1997	103	103	105
1998	105	103	105
1999	105	104	105
2000	105	103	105
2001	105	102	105
2002	105	102	105
2003	107	103	105
2004	106	103	106
2005	106	102	105
2006	105	102	106
2007	105	102	104
2008	102	100	103
2009	103	99	103
2010	99	97	102

Index: 1993 = 100

Notes: Traffic growth for Wigan and Greater Manchester has been based on 12-hour average weekday flows on a sample of A and B road links throughout Wigan and Greater Manchester. 1993 – 2010 National growth is based on average 24-hour daily traffic flow data for major urban A Roads published in Table 2.1 Road Traffic Statistics 2010: Traffic, Speeds and Congestion DfT.

Annual Vehicle Kilometres 2010

2.6 Table 4 shows annual vehicle kilometres on major roads in Wigan and Greater Manchester in 2010.

- Motorways made up 9% of Wigan's major road network and carried 39% of major road traffic. These figures are slightly lower than for the county as a whole where motorways made up 12% of the major road network and carried 45% of major road traffic.
- Motorways carried 52% of all goods traffic on major roads in Wigan. This is much lower than for Greater Manchester as a whole where motorways carried 62% of all major road goods traffic.
- A roads made up 62% of Wigan's network and carried 46% of the traffic. These proportions are very similar to Greater Manchester as a whole where A roads formed 61% of the major road network and carried 44% of the traffic.
- B roads made up 29% of Wigan's network and carried 15% of the traffic. These figures are higher than Greater Manchester where B roads formed 27% of the major road network and carried 11% of the traffic.
- Motorways, A roads and B roads in Wigan carried 11% of the major road traffic in Greater Manchester on 13% of the road network.

Table 4 Vehicle Kilometres in 2010								
	Road Type	Length (km)	Vehicle Kilometres (millions)					Av. Daily Flow per km
			Cars	LGV	OGV	All Goods	All Motors	
Wigan	Motorways	17	432	66	66	132	570	93400
	A Roads	117	575	68	27	95	683	16000
	B Roads	56	197	20	4	25	226	11000
	All Roads	190	1204	154	97	252	1478	21400
Greater Manchester	Motorways	171	4392	727	629	1355	5787	92600
	A Roads	863	4874	520	169	689	5666	18000
	B Roads	375	1260	125	23	149	1438	10500
	All Roads	1409	10526	1372	821	2193	12891	25100

Notes: Figures may not sum due to rounding. Road lengths are based on the link lengths of a model road network and may differ slightly from other sources, eg Greater Manchester Network Information System (GMNIS) and as quoted by DfT form R199b.

Traffic Composition 2010

2.7 Table 5 shows the percentage composition of traffic in Wigan in 2010 compared to Greater Manchester as a whole.

- Traffic composition on Wigan's major road network was broadly similar to Greater Manchester.
- Motorways and A roads in Wigan carried fewer cars and more goods vehicles compared to Greater Manchester as a whole.

Table 5 Percentage Composition of Traffic in Wigan and Greater Manchester 2010 (0700-1900)										
		Cars	LGV	OGV1		OGV2		Buses & Coaches	Motor Cycles	Pedal Cycles
Wigan	Motorways	75.9	11.7	5.3	(44)	6.6	(56)	0.6	0.0	0.0
	A Roads	78.4	12.9	3.8	(59)	2.6	(41)	1.0	0.8	0.4
	B Roads	83.5	11.5	1.4	(74)	0.5	(26)	1.8	0.8	0.6
	Minor Roads	75.2	16.2	3.8	(65)	2.0	(35)	0.9	0.7	1.2
Greater Manchester	Motorways	76.8	12.3	5.3	(51)	5.0	(49)	0.3	0.4	0.0
	A Roads	81.7	11.4	2.9	(68)	1.3	(32)	1.4	0.6	0.6
	B Roads	82.8	11.4	1.4	(75)	0.5	(25)	2.1	0.6	1.1
	Minor Roads	83.7	11.2	1.5	(77)	0.4	(23)	1.7	0.4	1.1

- Notes:**
- LGV = Commercial Vehicles with 2 axles and up to 6 wheels without a side bar.
 - OGV1 = Medium Goods Vehicles with 2 axles and up to 6 wheels with a side bar and Rigid Heavy Goods Vehicles with 3 axles.
 - OGV2 = All Articulated Heavy Goods Vehicles and Rigid Heavy Goods Vehicles with 4 or more axles.

Figures in parentheses are the percentage split between OGV1 and OGV2.

Figures may not sum due to rounding.

3 PUBLIC TRANSPORT

Rail Patronage

3.1 Tables 6 and 7 compare rail patronage in the Wigan/Bolton corridor and in Greater Manchester as a whole in the years 1991 and 1998-2010. Comparisons are based on boarders of trains inbound to Manchester.

- The number of inbound boarders on the Wigan/Bolton corridor decreased in the peak period by 26% and decreased by 2% in the off-peak period between 2009 and 2010. This compares with a decrease of 4% in the peak period and an increase of 3% in the off-peak period for Greater Manchester as a whole.
- The Wigan/Bolton corridor carried 25% of Manchester bound passengers during the morning peak and 33% during the off-peak.

Line/ Corridor	1991	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Wigan/ Bolton	2541	2809	3306	3356	3624	2970	3338	3574	3898	3937	4444	4573	4599	3386
Index	100	111	130	132	143	117	131	141	153	155	175	180	181	133
GM	9808	9877	11177	11171	11290	10222	11454	12399	13286	13422	14400	14635	14173	13544
Index	100	101	114	114	115	104	117	126	135	137	147	149	145	138

Line/ Corridor	1991	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Wigan/ Bolton	1215	1536	2148	1847	2159	1878	2522	2174	2436	3133	3320	3549	3354	3277
Index	100	126	177	152	178	155	208	179	200	258	273	292	276	270
GM	4536	4911	5826	5779	6392	5599	7095	6959	7558	8631	9243	9650	9719	10047
Index	100	108	128	127	141	123	156	153	167	190	204	213	214	221

Notes: Figures for 1991 are based on full counts at every station in each corridor. Wigan/Bolton figures for 1997, 2000, 2003, 2006 and 2009 are also based on counts at every station. All other figures are estimates based on all available counts each year.

Industrial Action: There was sustained industrial action in 2002 by employees of First North Western and Arriva. While the surveys avoided all strike days, the work to rule by First North Western staff in particular may have had an effect on passenger numbers.

- 3.2 Table 8 shows the number of passengers boarding and alighting trains inbound to and outbound from Manchester at all stations in Wigan.
- 3.3 Tables 9 and 10 show the number of passengers boarding and alighting Manchester bound trains in Wigan for 1991 and 1998 to 2010 in the morning peak (07:30-09:30) and off-peak (09:30-13:30) respectively. All stations in Wigan are shown together with passenger numbers where available.

Table 8 Numbers of Passengers Boarding and Alighting Trains in Wigan District (2010)											
Station	Year of Count	AM Peak 07:30-09:30					Off-Peak 09:30-13:30				
		Inbound		Outbound		AM Peak Total	Inbound		Outbound		Off-peak Total
		B	A	B	A		B	A	B	A	
Atherton	2010	332	13	81	10	436	168	40	109	31	348
Bryn	2009	54	14	35	3	106	84	20	39	27	170
Daisy Hill	2010	179	5	45	11	240	39	9	23	21	92
Gathurst	2009	61	23	4	18	106	43	6	8	25	82
Hag Fold	2009	22	11	29	4	66	16	19	35	4	74
Hindley	2009	69	3	162	6	240	110	47	72	26	255
Ince	2009	11	12	18	6	47	13	2	3	5	23
Orrell	2009	16	14	10	5	45	36	3	7	59	105
Pemberton	2009	17	0	6	4	27	24	2	4	11	41
Wigan North Western	2010	149	127	306	330	912	201	165	364	355	1085
Wigan Wallgate	2010	286	69	55	381	791	586	106	100	259	1051

Note: B = Boarders A = Alighters

Table 9 Numbers of Passengers Boarding and Alighting Manchester Bound Trains in Wigan District 1991 & 1998-2010 AM Peak (07:30-09:30)															
Station		1991	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Atherton	B	114	170	218	237	251	225	231	202	230	267	238	255	317	332
	A	-	5	11	6	3	3	18	8	8	12	17	13	13	13
Bryn	B	-	-	-	28	-	-	21	-	-	61	-	-	54	-
	A	-	-	-	5	-	-	7	-	-	14	-	-	14	-
Daisy Hill	B	119	139	120	143	157	-	164	163	176	187	192	222	205	179
	A	-	4	4	1	2	-	1	6	0	2	1	2	2	5
Gathurst	B	22	-	-	40	-	-	36	-	-	48	-	-	61	-
	A	-	-	-	32	-	-	3	-	-	5	-	-	23	-
Hag Fold	B	23	-	-	28	-	-	21	-	-	21	-	-	22	-
	A	-	-	-	2	-	-	1	-	-	3	-	-	11	-
Hindley	B	43	53	-	88	107	-	99	68	-	111	-	-	69	-
	A	-	1	-	0	2	-	3	3	-	4	-	-	3	-
Ince	B	37	-	-	14	-	-	16	-	-	10	-	-	11	-
	A	-	-	-	2	-	-	3	-	-	1	-	-	2	-
Orrell	B	22	-	-	4	-	-	17	-	-	16	-	-	16	-
	A	-	-	-	5	-	-	2	-	-	32	-	-	14	-
Pemberton	B	9	-	-	29	-	-	17	-	-	31	-	-	17	-
	A	-	-	-	2	-	-	2	-	-	2	-	-	0	-
Wigan North Western	B	-	38*	62*	34*	32*	27*	11*	30*	36*	25*	33*	55*	65*	59*
	A	-	0*	21*	13*	18*	12*	7*	13*	20*	15*	25*	15*	92*	78*
Wigan Wallgate	B	376	446	448	495	467	376	484	500	355	372	424	412	503	286
	A	-	74	70	57	72	65	74	67	97	74	97	135	119	69

Notes: B = Boarders A = Alighters

- = No information

*Manchester bound peak trains only—full peak usage figures are 377 boarders, 213 alighters in 2000, 381 boarders, 220 alighters in 2001, 297 boarders, 188 alighters in 2002, 415 boarders, 203 alighters in 2003, 501 boarders, 294 alighters in 2004, 489 boarders, 218 alighters in 2005, 564 boarders, 305 alighters in 2006, 334 boarders, 259 alighters in 2007, 422 boarders, 242 alighters in 2008, 151 boarders, 131 alighters in 2009 and 149 boarders, 127 alighters in 2010.

Table 10 Numbers of Passengers Boarding and Alighting Manchester Bound Trains in Wigan District 1991 & 1998-2010 Off-Peak (09:30-13:30)															
Station		1991	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Atherton	B	34	36	49	74	63	67	107	83	104	132	155	187	125	168
	A	-	19	12	40	22	32	27	24	15	21	16	32	42	40
Bryn	B	-	-	-	22	-	-	31	-	-	40	-	-	84	-
	A	-	-	-	5	-	-	10	-	-	10	-	-	20	-
Daisy Hill	B	17	31	35	24	22	-	37	35	48	58	35	50	54	39
	A	-	2	15	8	3	-	15	5	9	15	6	11	7	9
Gathurst	B	3	-	-	11	-	-	20	-	-	139	-	-	43	-
	A	-	-	-	6	-	-	6	-	-	5	-	-	6	-
Hag Fold	B	9	-	-	16	-	-	12	-	-	9	-	-	16	-
	A	-	-	-	1	-	-	12	-	-	22	-	-	19	-
Hindley	B	18	13	-	26	37	-	34	38	-	58	-	-	110	-
	A	-	7	-	9	11	-	11	13	-	27	-	-	47	-
Ince	B	8	-	-	0	-	-	7	-	-	5	-	-	13	-
	A	-	-	-	2	-	-	1	-	-	1	-	-	2	-
Orrell	B	21	-	-	24	-	-	37	-	-	53	-	-	36	-
	A	-	-	-	4	-	-	7	-	-	7	-	-	3	-
Pemberton	B	16	-	-	12	-	-	24	-	-	41	-	-	24	-
	A	-	-	-	4	-	-	3	-	-	6	-	-	2	-
Wigan North Western	B	-	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*
	A	-	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*
Wigan Wallgate	B	299	376	470	473	547	524	495	498	410	611	569	711	769	586
	A	-	116	126	80	112	114	75	105	108	158	172	157	234	106

Notes: B = Boarders A = Alighters

- = No information

* No Manchester bound off-peak trains – full off-peak usage figures are 265 boarders, 305 alighters in 2000, 419 boarders, 345 alighters in 2001 and 449 boarders, 296 alighters in 2002, 524 boarders, 404 alighters in 2003, 377 boarders, 293 alighters in 2004, 499 boarders and 509 alighters in 2005, 449 boarders and 523 alighters in 2006, 527 boarders and 419 alighters in 2007, 384 boarders and 297 alighters in 2008, 247 boarders and 173 alighters in 2009 and 201 boarders and 165 alighters in 2010.

4 KEY CENTRE MONITORING

- 4.1 Traffic and Metrolink counts were conducted on a cordon around Wigan in 1997. After that, Wigan was surveyed on a three yearly cycle (2000, 2003 and 2006) to monitor progress towards key objectives in the first Greater Manchester Local Transport Plan (GMLTP) and its successor, GMLTP2. Pedestrian surveys were added to the programme in 2003. From 2009 all these surveys have been conducted annually.
- 4.2 Tables providing details of road traffic and modal share trends are presented in this report. Before 2009, CPS (Continuous Passenger Sampling) data had been used to estimate bus trips. However this data was not designed to give an accurate picture of bus passengers at a local level and from 2009, counts of bus passengers crossing the cordon have been conducted.

Road Traffic - Inbound

- 4.3 All vehicles crossing cordons into Wigan key centre and the Robin Park development were counted in the three time periods 07:30-09:30, 10:00-12:00 and 16:00-18:00 on a typical weekday in March 2011.
- 4.4 Tables 11,12 and 13 give traffic counts at individual key centre cordon sites in March 2011 by time period. Tables 14, 15 and 16 give counts at Robin Park sites. Figures 2 and 3 show the locations of the sites and key centre boundary for Wigan and Robin Park respectively.

Site	Site No	Car	LGV	OGV	Bus	Motor Cycle	Pedal Cycle	All Vehicles
U Mesnes St	85001	3	3	3	47	1	5	62
U Standishgate	85002	396	69	19	4	3	2	493
U Water St	85003	350	8	2	0	0	0	360
U Crompton St	85004	48	8	0	33	1	3	93
U Millgate	85005	60	13	5	0	2	1	81
U King St	85006	486	66	13	49	10	8	632
C Wallgate	85007	600	90	11	91	2	4	798
C Dorning St	85008	269	35	0	10	4	3	321
U Station Rd	85019	265	13	0	0	0	0	278
Pavement cyclists							18	18
Total		2477	305	53	234	23	44	3136
% Composition		79.0	9.7	1.7	7.5	0.7	1.4	100.0

Note: Percentages may not sum to 100 due to rounding.

Table 12 Road Traffic Entering Wigan Key Centre in 2011 (1000-1200)								
Site	Site No	Car	LGV	OGV	Bus	Motor Cycle	Pedal Cycle	All Vehicles
U Mesnes St	85001	21	0	0	45	0	5	71
U Standishgate	85002	652	43	7	0	3	1	706
U Water St	85003	135	5	2	0	0	1	143
U Crompton St	85004	150	5	0	39	0	5	199
U Millgate	85005	94	24	6	0	4	1	129
U King St	85006	418	66	5	43	5	9	546
C Wallgate	85007	475	83	9	94	3	2	666
C Dorning St	85008	244	30	7	14	1	2	298
U Station Rd	85019	151	11	0	0	0	3	165
Pavement cyclists							8	8
Total		2340	267	36	235	16	37	2931
% Composition		79.8	9.1	1.2	8.0	0.5	1.3	100.0

Note: Percentages may not sum to 100 due to rounding.

Table 13 Road Traffic Entering Wigan Key Centre in 2011 (1600-1800)								
Site	Site No	Car	LGV	OGV	Bus	Motor Cycle	Pedal Cycle	All Vehicles
U Mesnes St	85001	12	0	0	48	0	4	64
U Standishgate	85002	354	46	3	1	2	7	413
U Water St	85003	35	3	0	0	0	0	38
U Crompton St	85004	48	3	1	42	0	12	106
U Millgate	85005	53	7	1	0	1	0	62
U King St	85006	561	79	2	50	6	6	704
C Wallgate	85007	426	57	5	88	9	10	595
C Dorning St	85008	196	31	1	20	2	4	254
U Station Rd	85019	27	2	0	0	0	0	29
Pavement cyclists							30	30
Total		1712	228	13	249	20	73	2295
% Composition		74.6	9.9	0.6	10.8	0.9	3.2	100.0

Note: Percentages may not sum to 100 due to rounding.

Table 14 Road Traffic Entering Robin Park in 2011 (07:30-09:30)								
Site	Site No	Car	LGV	OGV	Bus	Motor Cycle	Pedal Cycle	All Vehicles
U Gower Street	85009	120	34	1	1	1	0	157
U Loire Drive	85010	280	18	2	0	2	3	305
U Anjou Boulevard	85011	132	7	1	0	0	9	149
U Car Park Entrance	85012	4	3	1	0	0	1	9
U Retail Park Entrance	85013	163	6	1	0	0	1	171
U Stadium Way	85016	211	18	1	2	1	7	240
U Asda Entrance	85018	326	20	0	0	0	4	350
Pavement cyclists							0	0
Total		1236	106	7	3	4	25	1381
% Composition		89.5	7.7	0.5	0.2	0.3	1.8	100.0

Note: Percentages may not sum to 100 due to rounding.

Table 15 Road Traffic Entering Robin Park in 2011 (1000-1200)								
Site	Site No	Car	LGV	OGV	Bus	Motor Cycle	Pedal Cycle	All Vehicles
U Gower Street	85009	226	25	6	0	0	1	258
U Loire Drive	85010	570	26	3	0	2	5	606
U Anjou Boulevard	85011	176	15	2	0	1	6	200
U Car Park Entrance	85012	3	0	3	0	0	0	6
U Retail Park Entrance	85013	347	15	0	0	0	0	362
U Stadium Way	85016	209	19	4	1	2	3	238
U Asda Entrance	85018	532	23	1	0	2	3	561
Pavement cyclists							0	0
Total		2063	123	19	1	7	18	2231
% Composition		92.5	5.5	0.9	0.0	0.3	0.8	100.0

Note: Percentages may not sum to 100 due to rounding.

Table 16 Road Traffic Entering Robin Park in 2011 (1600-1800)								
Site	Site No	Car	LGV	OGV	Bus	Motor Cycle	Pedal Cycle	All Vehicles
U Gower Street	85009	218	18	3	0	1	9	249
U Loire Drive	85010	455	30	0	0	8	9	502
U Anjou Boulevard	85011	282	15	0	1	0	10	308
U Car Park Entrance	85012	6	1	0	0	0	2	9
U Retail Park Entrance	85013	348	19	0	0	4	1	372
U Stadium Way	85016	354	20	1	0	5	20	400
U Asda Entrance	85018	496	26	0	0	4	4	530
Pavement cyclists							0	0
Total		2159	129	4	1	22	55	2370
% Composition		91.1	5.4	0.2	0.0	0.9	2.3	100.0

Note: Percentages may not sum to 100 due to rounding.

4.5 Tables 17 and 18 present, respectively, traffic entering Wigan key centre and Robin Park in 1997, 2000, 2003, 2006, 2009, 2010 and 2011 together with an index of change between 1997 and 2011.

- Since 1997 the number of vehicles crossing the cordon into Wigan town centre has fallen by 12% in the am peak, 24% in the off-peak and 17% in the pm peak.
- Car numbers into Wigan Key Centre have decreased in all time periods since 1997; 13% in the morning peak, 25% in the off-peak and 20% in the evening peak.
- OGV numbers continue to show the biggest decreases overall; 57% in the morning peak, 69% in the off-peak and 81% in the evening peak.
- Bus numbers have risen by 1% in the morning decreased by 22% and 3% respectively in the off-peak and evening peak. All periods have seen an increase in bus numbers between 2010 and 2011.
- Car trips into the Robin Park development have continued to increase since 1997, by 180% in the AM peak, 98% in the off-peak and 73% in the evening peak.

Table 17 Wigan Key Centre Inbound Cordon Counts 1997, 2000, 2003, 2007, 2009, 2010 and 2011								
		Cars	LGV	OGV	Buses	M/C	P/C	All
07:30- 09:30	1997	2844	286	124	231	19	42	3546
	2000	2575	252	56	265	15	34	3197
	2003	2877	314	74	244	15	28	3552
	2006	2448	320	80	184	11	25	3068
	2009	2501	349	62	238	18	44	3212
	2010	2389	276	69	201	13	42	2990
	2011	2477	305	53	234	23	44	3136
	2011/1997	0.87	1.07	0.43	1.01	1.21	1.05	0.88
10:00- 12:00	1997	3111	284	116	300	30	27	3868
	2000	2568	284	63	321	17	19	3272
	2003	2767	308	49	256	19	19	3418
	2006	2467	316	79	216	14	13	3105
	2009	2471	275	63	250	18	33	3110
	2010	2300	234	79	218	12	30	2873
	2011	2340	267	36	235	16	37	2931
	2011/1997	0.75	0.94	0.31	0.78	0.53	1.37	0.76
16:00- 18:00	1997	2141	224	67	256	28	48	2764
	2000	1850	192	20	283	19	52	2416
	2003	2189	232	20	267	21	29	2758
	2006	1835	224	19	217	13	33	2341
	2009	1704	203	26	263	16	44	2256
	2010	1672	192	30	213	11	63	2181
	2011	1712	228	13	249	20	73	2295
	2011/1997	0.80	1.02	0.19	0.97	0.71	1.52	0.83

Table 18 Robin Park Inbound Cordon Counts 1997, 2001, 2004, 2007, 2009, 2010 and 2011								
		Cars	LGV	OGV	Buses	M/C	P/C	All
07:30-09:30	1997	442	64	33	2	4	6	551
	2000	693	58	25	8	5	13	802
	2003	931	78	23	8	7	21	1068
	2006	1011	85	13	4	1	8	1122
	2009	1173	93	11	2	7	12	1298
	2010	1049	91	16	2	1	14	1173
	2011	1236	106	7	3	4	25	1381
	2011/1997	2.80	1.66	0.21	1.50	1.00	4.17	2.51
10:00-12:00	1997	1040	96	45	2	3	4	1190
	2000	1672	105	35	19	9	5	1845
	2003	1853	105	43	10	9	16	2036
	2006	2099	117	40	14	3	3	2276
	2009	2118	138	23	7	10	22	2318
	2010	2123	138	21	8	13	11	2314
	2011	2063	123	19	1	7	18	2231
	2011/1997	1.98	1.28	0.42	0.50	2.33	4.50	1.87
16:00-18:00	1997	1245	67	20	1	4	6	1343
	2000	1659	80	12	9	14	12	1786
	2003	2047	108	18	10	11	21	2215
	2006	2042	127	11	11	11	2	2204
	2009	2236	138	8	4	11	26	2423
	2010	2093	105	6	1	8	45	2258
	2011	2159	129	4	1	22	55	2370
	2011/1997	1.73	1.93	0.20	1.00	5.50	9.17	1.76

Car Occupancy - Inbound

4.6 Car occupancy surveys were conducted at six sites on the Wigan key centre cordon in 2011. Table 19 shows the observed occupancy rates by period and by site.

- The average occupancy rates in 2011 were 1.43 in the morning peak, 1.51 in the off-peak and 1.35 in the evening peak.

Table 19 Wigan Key Centre Car Occupancy Rates 2011		
Site	07:30 - 09:30	
	% Driver Only	Average Occupancy
Standishgate	61.04	1.46
Millgate	79.00	1.21
King Street	55.17	1.58
Wallgate	55.72	1.54
Dorning St	64.03	1.45
Station Rd	85.92	1.16
All Sites	65.33	1.43
Site	10:00 – 12:00	
	% Driver Only	Average Occupancy
Standishgate	45.41	1.66
Millgate	56.12	1.47
King Street	51.48	1.60
Wallgate	51.10	1.60
Dorning St	61.50	1.42
Station Rd	59.01	1.45
All Sites	56.67	1.51
Site	16:00 – 18:00	
	% Driver Only	Average Occupancy
Standishgate	65.63	1.52
Millgate	82.89	1.20
King Street	72.89	1.34
Wallgate	64.68	1.47
Dorning St	70.09	1.41
Station Rd	75.00	1.25
All Sites	73.09	1.35

4.7 Table 20 compares the 2003, 2006, 2009, 2010 and 2011 car occupancy rates.

- The average occupancy rate for the morning peak has increased between 2003 and 2011, but shows a slight decrease between 2010 and 2011. The off-peak and evening peak period rates have decreased between 2003 and 2011 and between 2010 and 2011.

Table 20 Comparison of Wigan Key Centre Car Occupancy Rates 2003, 2006, 2009, 2010 and 2011		
07:30-09:30		
Year	% Driver Only	Ave Occupancy
2003	73	1.32
2006	61	1.48
2009	62	1.45
2010	63	1.44
2011	65	1.43
10:00-12:00		
Year	% Driver Only	Ave Occupancy
2003	53	1.58
2006	56	1.52
2009	52	1.60
2010	52	1.57
2011	57	1.51
16:00-18:00		
Year	% Driver Only	Ave Occupancy
2003	65	1.50
2006	74	1.34
2009	67	1.41
2010	65	1.47
2011	73	1.35

4.8 Table 21 compares the 2003, 2006, 2009, 2010 and 2011 car occupancy rates for Robin Park (as measured at Site No. 85010 Loire Drive).

- There has been an overall decrease in the car occupancy rates between 2003 and 2011 in all periods.

Table 21 Comparison of Robin Park Key Centre Car Occupancy Rates 2003, 2006, 2009, 2010 and 2011		
	07:30-09:30	
Year	% Driver Only	Ave Occupancy
2003	77	1.27
2006	79	1.25
2009	80	1.23
2010	81	1.23
2011	85	1.18
	10:00-12:00	
Year	% Driver Only	Ave Occupancy
2003	51	1.60
2006	56	1.49
2009	54	1.54
2010	56	1.51
2011	75	1.26
	16:00-18:00	
Year	% Driver Only	Ave Occupancy
2003	51	1.69
2006	66	1.44
2009	54	1.55
2010	50	1.68
2011	86	1.16

Rail Patronage - Inbound

4.9 The number of people entering Wigan key centre by rail was surveyed in November 2010. Table 22 presents the results along with those of previous surveys in 1997, 2000, 2003, 2006, 2009 and 2010.

- Since 1997 the number of people entering Wigan key centre has risen by 48% in the am peak, fallen by 1% in the off-peak and risen by 91% in the evening peak.

Year	07:30-09:30			10:00-12:00			16:00-18:00		
	Wallgate	NW	Total	Wallgate	NW	Total	Wallgate	NW	Total
1997	227	469	696	176	474	650	364	311	675
2000	369	404	773	298	363	661	258	343	601
2003	335	284	619	137	230	367	366	416	782
2006	406	152	558	201	201	402	396	215	611
2009	389	322	711	132	230	362	458	486	944
2010	511	382	893	296	276	572	536	588	1124
2011	572	458	1030	327	318	645	726	564	1290
2011/1997	2.52	0.98	1.48	1.86	0.67	0.99	1.99	1.81	1.91

Walk Trips - Inbound

4.10 The number of pedestrians entering Wigan key centre and Robin Park was counted at 21 locations in 2011 (see Figures 2 and 3). Tables 23 and 24 present the number of pedestrians by site and time period for Wigan Key Centre and Robin Park respectively. Tables 25 and 26 present the changes in the number of pedestrians entering Wigan Key Centre and Robin Park between 2003 and 2011.

- The number of pedestrians entering Wigan Key Centre increased by 33% and 37% between 2003 and 2011 in the morning peak and off-peak periods respectively and decreased by 1% in the evening peak.
- The number of pedestrians entering Robin Park has decreased by 25% in the morning peak, increased by 41% in the off-peak and decreased by 1% in the evening peak.

Table 23 Pedestrians Entering Wigan Key Centre 2011				
Site	Description	07:30-09:30	10:00-12:00	16:00-18:00
85001	U Mesnes Rd	90	152	205
85002	U Standishgate	431	589	258
85003	U Water St	47	106	19
85004	U Crompton St	408	395	80
85005	U Millgate	98	113	35
85006	U King St	242	337	117
85007	C Wallgate	310	349	275
85008	U Dorning St	141	96	78
85020	U New Market St	264	768	451
85021	B5375 New Market St	164	503	140
85022	U Frog Lane	46	47	41
85023	Bus Station	142	246	361
85027	U Library St	73	32	17
85028	U Mesnes Terrace	56	123	58
	Wigan Key Centre	2512	3856	2135

Table 24 Pedestrians Entering Robin Park 2011				
Site	Description	07:30-09:30	10:00-12:00	16:00-18:00
85010	U Loire Drive	28	41	38
85009	U Gower St	33	63	49
85011	U Anjou Boulevard	66	67	42
85012	U Car Park Entrance	8	11	10
85013	U Retail Park Entrance	38	66	55
85016	U Stadium Way	3	8	20
85018	U ASDA Entrance	53	135	81
	Robin Park	229	391	295

Table 25 Pedestrians Entering Wigan Key Centre 2003, 2006, 2009, 2010 and 2011			
Year	07:30-09:30	10:00-12:00	16:00-18:00
2003	1889	2811	2148
2006	2722	3830	1849
2009	2713	4044	2143
2010	2719	4059	2309
2011	2512	3856	2135
2003/2011	1.33	1.37	0.99

Table 26 Pedestrians Entering Robin Park 2003, 2006, 2009, 2010 and 2011			
Year	07:30-09:30	10:00-12:00	16:00-18:00
2003	305	277	297
2006	208	307	306
2009	205	458	436
2010	190	325	323
2011	229	391	295
2003/2011	0.75	1.41	0.99

Summary of Trends in Modal Share - Inbound

4.11 Table 27 gives the modal split of car and non-car trips crossing the cordon into Wigan key centre in 2003, 2006, 2009, 2010 and 2011 along with a ratio of change between 2003 and 2011.

- The proportion of trips into Wigan key centre made by car has decreased in all time periods since 2003.
- Bus trips increased in all time periods since 2003.
- Walk trips have also increased in the morning and off-peak periods but have decreased slightly in the evening peak period.

Table 27 Car and Non-Car Trips into Wigan Key Centre									
Time Period	Year	Car	Bus	Rail	Cycle	Walk	Total	% Car	% Non-Car
07:30-09:30	2003	3798	1364	619	28	1889	7698	49	51
	2006	3623	1787	558	25	2722	8715	42	58
	2009	3626	1936	711	44	2713	9030	40	60
	2010	3440	1889	893	42	2719	8984	38	62
	2011	3542	2353	1030	44	2512	9481	37	63
	2011/2003	0.93	1.72	1.66	1.57	1.33	1.23		
10:00-12:00	2003	4372	1109	367	19	2811	8678	50	50
	2006	3750	1545	402	13	3830	9540	39	61
	2009	3954	2551	362	33	4044	10943	36	64
	2010	3611	2201	572	30	4059	10473	34	66
	2011	3533	2377	645	37	3856	10449	34	66
	2011/2003	0.81	2.14	1.76	1.95	1.37	1.20		
16:00-18:00	2003	3284	385	782	29	2148	6628	50	50
	2006	2459	576	611	33	1849	5528	44	56
	2009	2403	999	944	44	2143	6533	37	63
	2010	2458	1106	1124	63	2309	7059	35	65
	2011	2311	1047	1290	73	2135	6856	34	66
	2011/2003	0.70	2.72	1.65	2.52	0.99	1.03		

24-Hour Traffic Profiles into Wigan Key Centre

4.12 Key Centre ATC surveys were last conducted from March to May 2010. Data for March/April 2007 to March/May 2010 is presented below.

4.13 For GMLTP2, the DfT required automatic traffic counts on busy roads (more than 2,000 vehicles per day) approaching key centres in Greater Manchester. Ideally the counts should be just outside the areas where key centre parking occurs. However, it was agreed with the DfT, that in Greater Manchester, these counts would be undertaken on the existing key centre cordons for consistency with, and to complement and add value to the other key centre monitoring. The counts were continuous over a two-week period annually. The indicator for the DfT (LTP6) covered the morning peak period (07:00-10:00). Table 28 provides a comparison of the results of the surveys conducted in 2007, 2008, 2009 and 2010 for this time period and for a 24-hour average weekday. Surveys were not undertaken in 2011. A list of the sites that met the DfT counting requirement, a summary of all sites and individual profiles for each site are provided in Appendix 3 of this report.

- Morning weekday peak flows and 24-hour average weekday flows fell by 13% and 16% respectively between 2006/2007 and 2009/2010.
- The large decreases on Station Road are likely to be a consequence of development in the area, which has also caused flows to be inflated in recent times as traffic has been re-routed through Station Road.

Site	0700-1000 Ave Weekday					24-Hour Ave Weekday				
	Base 2007	2008	2009	2010	% Diff 10/ Base	Base 2007	2008	2009	2010	% Diff 10/ Base
Standishgate	947	796	729	756	-5	4573	3643	3838	3590	-21
King Street	942	887	787	773	-13	4492	4355	4031	3907	-13
Station Road	274	443	447	281	-37	1309	1652	1568	710	-46
Wallgate	1324	1273	1253	1104	-13	6279	6301	6168	5685	-9
Dorning Street	494	460	430	444	-3	2232	2016	1907	1968	-12
TOTAL	3981	3859	3646	3358	-13	18885	17967	17512	15860	-16

5 ROAD ACCIDENTS AND CASUALTIES

- 5.1 There were 509 accidents in Wigan during 2010, 62% lower than the base years (1994-1998) and 18% lower than in 2009. The total number of casualties in Wigan was 678 in 2010, 64% lower than the average of the base years (1994-1998) and 24% lower than in 2009. There were 85 killed or seriously injured (KSI) casualties in 2010 compared with an average of 147 KSI casualties in the base years.
- 5.2 Local targets for 2010 have been set as part of the second Local Transport Plan (GMLTP2). These are a 50% reduction for KSI casualties, a 55% reduction for child KSI casualties and a 30% reduction in slight casualties relative to base years average. Unlike the first Local Transport Plan (GMLTP), the annual figures for the KSI casualties and Child KSI casualties are represented by a three-year average. Thus the average of 2006, 2007 and 2008 represents 2007. The targets are all more rigorous than the national targets which are for a 40% reduction in KSI casualties, a 50% reduction in child KSI casualties and a 10% reduction in slight casualties per vehicle kilometre.
- 5.3 Table 29 shows the base, the annual average trend and GMLTP2 targets for KSI and child KSI casualty groups. Table 31 shows the base, the annual trend and target for slight casualties.
- The three-year average number of KSI casualties for 2009 was 42% below the base.
 - The three-year average for 2009 for child KSI casualties was 59% below the baseline average and 12% below the 2010 GMLTP2 target.
 - Slight casualties in 2009 were 65% below the baseline average and 49% below the 2010 GMLTP2 target.

	<u>Base</u> ave 1994 to 1998	<u>2000</u> ave 1999 to 2001	<u>2001</u> ave 2000 to 2002	<u>2002</u> ave 2001 to 2003	<u>2003</u> ave 2002 to 2004	<u>2004</u> ave 2003 to 2005	<u>2005</u> ave 2004 to 2006	<u>2006</u> ave 2005 to 2007	<u>2007</u> ave 2006 to 2008	<u>2008</u> ave 2007 to 2009	<u>2009</u> ave 2008 to 2010	<u>Target</u> ave 2009 to 2011
KSI	147	133	135	126	124	123	115	108	97	97	85	73
Child KSI	37	30	31	30	27	27	23	20	16	16	15	17

Table 30 Base, Yearly Trend and Target for Slight GMLTP2 Casualty Target Groups												
	Base ave 1994 to 1998	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	Target 2010
Slight	1735	1690	1595	1409	1240	1133	1185	921	845	793	616	1214

5.4 Tables 31 to 33 show the breakdown of casualties by type and age. Tables 34 and 35 show how accidents vary by day of week and month, and by driving conditions.

5.5 Figures 4 to 6 show graphically the number of casualties in each of the three target groups from 1985 onwards. Figure 7 shows how the trend in all casualties in Wigan compares to the Greater Manchester average.

5.6 Finally, Figures 8 and 9 show the trends over the last five years by casualty type for all casualties and child casualties respectively.

5.7 Computer plots of accident locations in Wigan are given in Appendix 4 for the following categories of accident:

- all by severity
- KSI sub-divided into child and adult
- pedestrian sub-divided into child and adult
- pedal cycle sub-divided into child and adult

Table 31 Wigan Casualty Data 1994-2010													
	Ave 94-98	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
All Casualties													
Fatal	12	10	20	13	9	12	6	13	11	9	6	10	5
Serious	134	114	129	112	123	108	114	117	85	90	89	87	57
Slight	1735	1716	1651	1690	1595	1409	1240	1133	1185	921	845	793	616
All	1881	1840	1800	1815	1727	1529	1360	1263	1281	1020	940	890	678
KSI	147	124	149	125	132	120	120	130	96	99	95	97	62
Population 000's	310.0	311.4	312.0	301.4	301.6	303.8	303.8	305.4	306.7	305.5	305.6	305.4	306.5
KSI Rate per 100000 Pop'n	47	40	48	41	44	39	39	43	31	32	31	32	20
Child Casualties													
Child KSI	37	28	28	33	31	26	25	30	14	17	16	15	14
Child (All)	341	328	294	304	315	231	215	173	168	136	139	130	104
Child Pop'n 000's	63.8	63.2	62.7	61.4	60.8	60.4	60.4	60.0	59.6	59.0	58.3	58.1	58.0
KSI Rate per 100000 Pop'n	58	44	45	54	51	43	41	50	23	29	27	26	24
Casualty Type													
TWPV	82	72	111	108	115	110	109	122	92	82	78	69	60
Car Occupant	1208	1233	118	1193	1083	983	858	810	798	607	551	542	408
Pedestrian	323	303	275	260	292	250	232	190	210	165	167	141	108
Pedal Cycle	133	119	112	108	108	82	90	76	78	80	59	66	64
Other	135	113	184	146	129	104	71	65	103	86	85	72	38
All	1881	1840	1800	1815	1727	1529	1360	1263	1281	1020	940	890	678

Note: The table uses figures provided by the Office for National Statistics for mid-year estimates of populations.

Table 32 Wigan Casualty Data 1989-2010										
	Average 1989-93	Average 1994-98	Average 1999-03	2004	2005	2006	2007	2008	2009	2010
All Casualties										
Wigan Casualties	1874	1881	1742	1360	1263	1281	1020	940	890	678
Wigan KSI Casualties	210	147	130	120	130	96	99	95	97	62
Greater Manchester Casualties	16479	16708	15671	13543	12805	11795	10702	9881	9303	7587
Casualty Type										
TWPV Rider	151	76	97	99	116	84	80	73	65	58
TWPV Pillion	17	6	7	10	6	8	2	5	4	2
Car Driver	644	761	717	556	511	517	376	367	342	285
Car Passenger	429	447	405	302	299	281	231	184	200	123
Pedestrian	373	323	276	232	190	210	165	167	141	108
Cyclist (Rider Only)	132	132	104	89	75	78	79	59	65	64
PCV Passenger	49	56	66	24	25	48	34	51	32	12
Total Other Driver	55	55	53	37	31	41	37	28	30	15
Total Other Passenger	22	26	18	11	10	14	16	6	11	11
Child Casualties by Type										
Driver/Rider	64	68	54	38	35	37	28	25	22	23
Passenger	93	107	101	77	54	53	47	54	57	24
Pedestrian	170	166	139	100	84	78	61	60	51	57
All Classes	328	341	294	215	173	168	136	139	130	104
Child Casualties by Age										
0 – 4	59	47	34	20	18	19	19	17	15	18
5 – 9	pupil to/from school	13	13	9	5	3	2	1	0	0
	pupil not to/from school	100	102	83	51	48	42	30	31	27
10 – 15	pupil to/from school	35	43	38	28	29	17	8	9	7
	pupil not to/from school	122	136	130	111	75	88	78	82	81
Drink Drive Casualties by Severity										
Fatal	1	1	0	0	1	1	2	1	0	0
Serious	8	5	7	5	8	8	5	4	5	4
Slight	58	46	66	43	63	58	46	38	45	23
Total	67	52	73	48	72	67	53	43	50	27

Table 33 Wigan Casualty Data by Age Group 1989-2010											
		Average 1989-93	Average 1994-98	Average 1999-03	2004	2005	2006	2007	2008	2009	2010
Pedestrian Casualties											
Under 16 years	Male	104	100	89	69	44	44	41	36	32	36
	Female	66	66	51	31	40	34	20	24	19	21
16 – 59	Male	88	71	61	67	42	73	48	47	45	22
	Female	53	43	42	37	43	28	35	39	27	15
Over 59 years	Male	24	18	16	11	10	11	6	13	5	5
	Female	38	26	18	17	11	20	15	8	13	9
	Total	373	323	276	232	190	210	165	167	141	108
Cyclists (Rider Only)											
Under 16 years	Male	53	54	42	27	24	30	21	24	21	20
	Female	9	11	7	8	5	5	5	1	0	2
16 – 59	Male	56	58	43	46	36	33	40	25	36	35
	Female	11	6	6	5	6	8	6	2	4	1
Over 59 years	Male	4	2	5	2	2	2	6	6	2	5
	Female	0	0	0	1	2	0	1	1	2	1
	Total	132	132	104	89	75	78	79	59	65	64
TWPV Riders											
Under 20 years	Male	42	14	29	29	42	26	29	21	14	17
	Female	4	1	2	2	0	2	0	1	2	0
20 – 29	Male	60	23	17	23	14	16	18	14	17	14
	Female	5	2	2	1	3	1	3	1	0	0
Over 29 years	Male	34	33	43	42	54	36	28	35	31	25
	Female	6	3	4	2	3	3	2	1	1	2
	Total	151	76	97	99	116	84	80	73	65	58
Car Drivers											
Under 20 years	Male	63	54	45	28	32	29	21	24	24	16
	Female	32	28	25	23	19	17	12	9	23	8
20 – 29	Male	137	140	113	73	74	74	47	49	52	39
	Female	107	122	93	60	70	78	57	51	39	45
Over 29 years	Male	182	231	245	193	186	168	120	126	106	95
	Female	124	185	197	179	130	151	119	108	98	82
	Total	644	761	717	556	511	517	376	367	342	285

Notes: Average 1989-93, average 1994-98 and average 1999-2003 totals may not sum due to rounding.

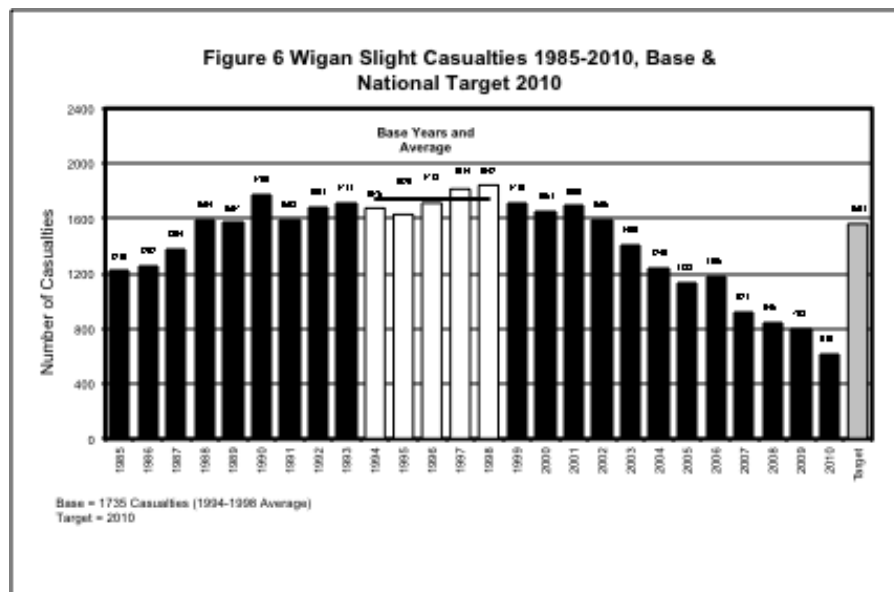
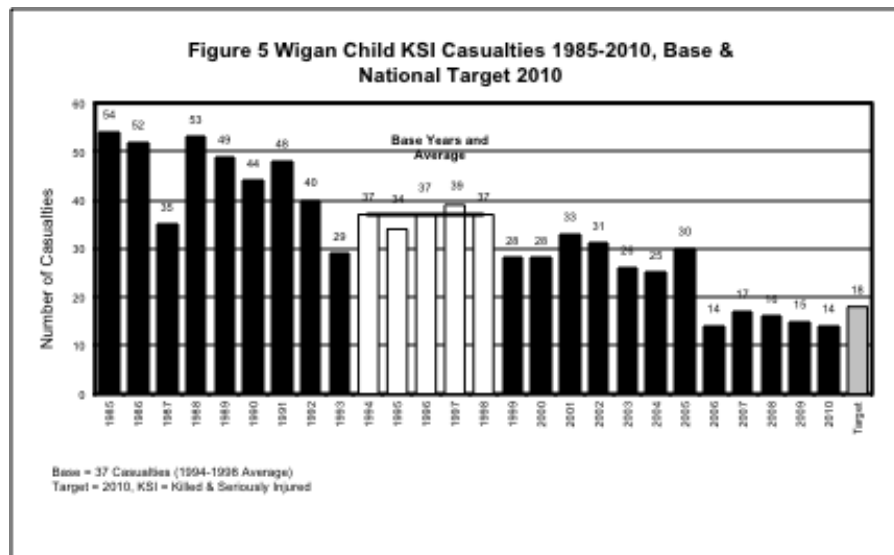
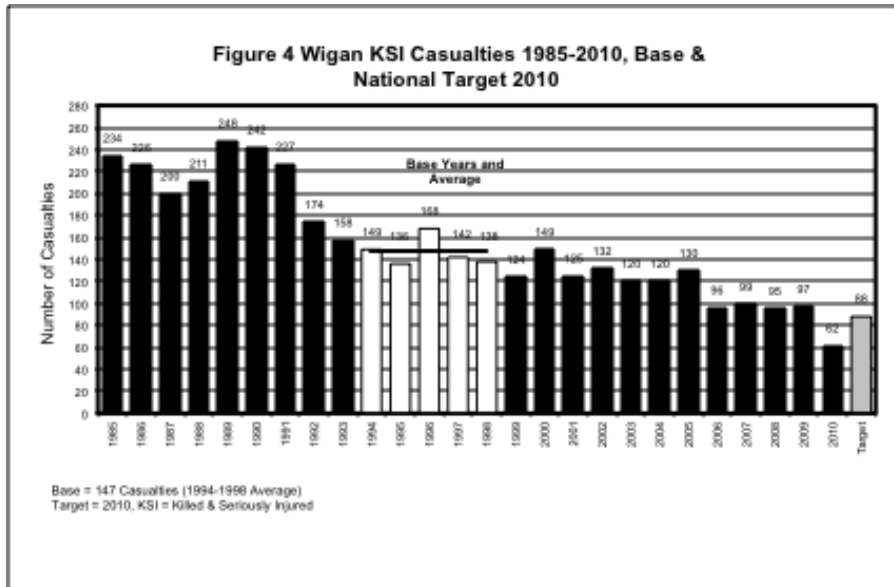
Car – From 1/4/99 this definition was revised to exclude invalid tricycles and motor caravans.

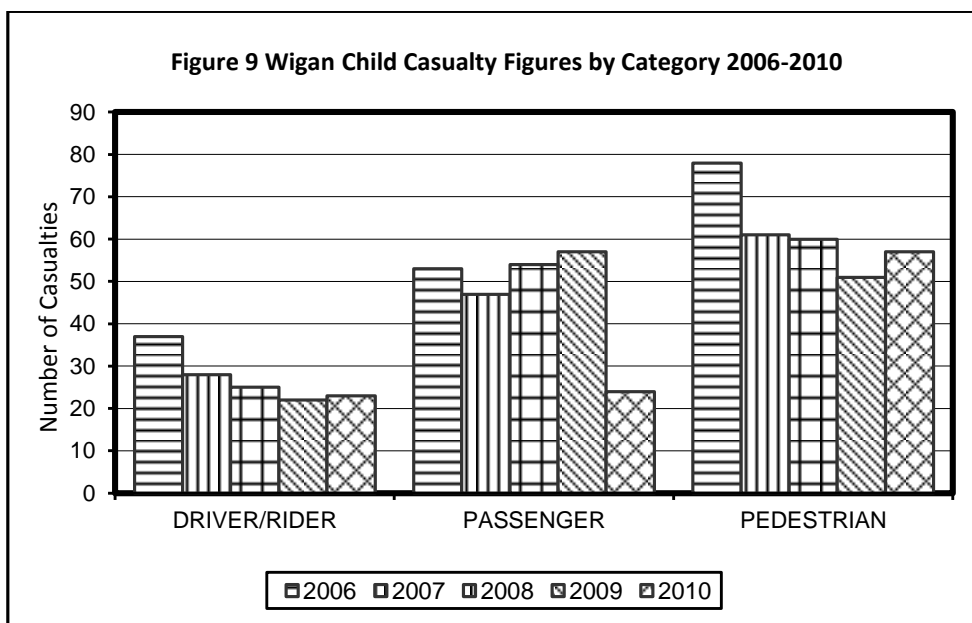
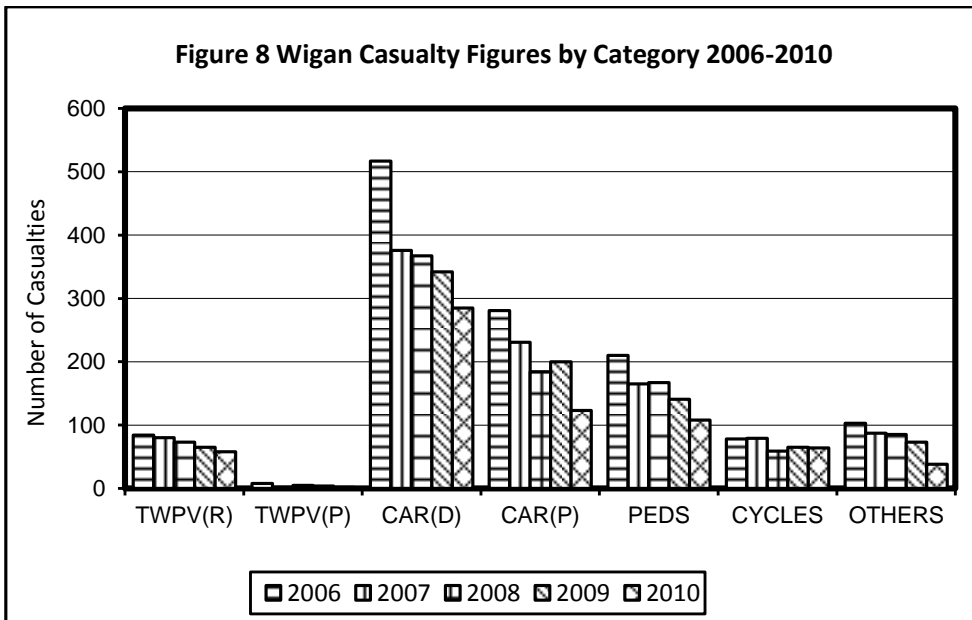
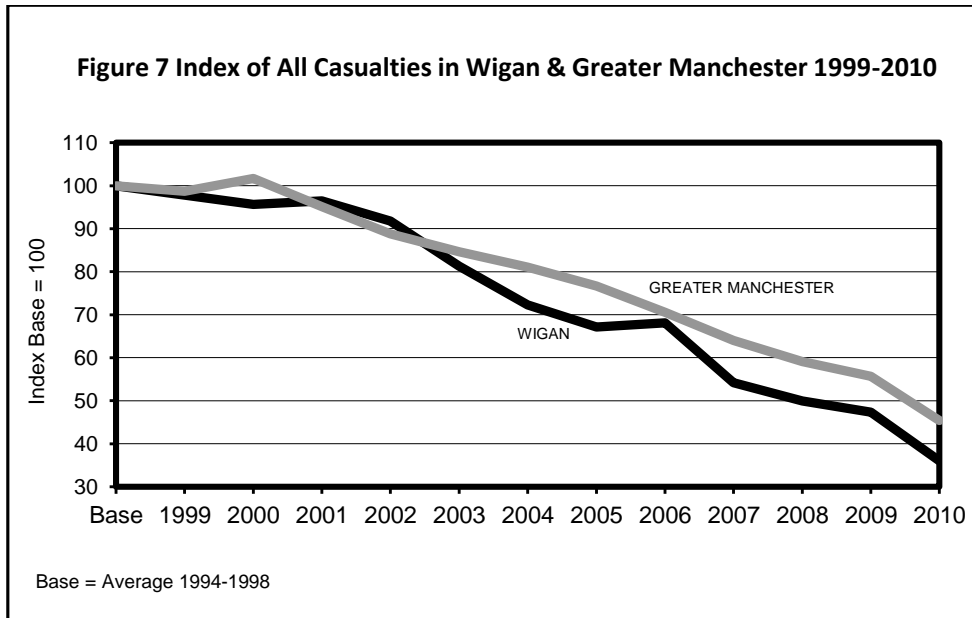
Table 34 Wigan Injury Accident Data 1989-2010										
	Average 1989-93	Average 1994-98	Average 1999-03	2004	2005	2006	2007	2008	2009	2010
Total Accidents	1394	1353	1230	995	917	909	761	694	624	509
Total KSI Accidents	188	134	115	109	111	91	97	91	86	61
Accidents by Month										
January	120	119	102	89	76	76	69	61	52	19
February	98	107	88	84	76	69	47	59	39	33
March	114	111	103	80	75	59	63	53	69	46
April	113	102	99	89	71	71	78	56	65	37
May	108	101	107	103	77	89	77	58	56	41
June	119	117	94	74	87	78	69	60	60	59
July	114	103	97	90	73	61	46	52	61	44
August	123	101	96	68	70	88	57	59	46	41
September	112	115	106	64	67	80	66	68	35	40
October	124	129	112	80	74	92	58	56	60	51
November	132	132	114	80	88	85	71	59	49	57
December	115	117	113	94	83	61	60	53	32	41
Accidents by Day of Week										
Sunday	145	154	146	108	106	95	76	76	78	57
Monday	185	180	171	157	113	119	106	103	82	74
Tuesday	190	189	171	140	138	140	117	106	97	85
Wednesday	200	195	174	140	148	127	122	100	86	77
Thursday	213	203	190	156	137	154	121	108	94	74
Friday	240	229	201	161	149	142	115	116	100	81
Saturday	221	203	177	133	126	132	104	85	87	61

Table 35 Wigan Injury Accident Data by Conditions 1989-2010											
	Average 1989-93	Average 1994-98	Average 1999-03	2004	2005	2006	2007	2008	2009	2010	
Accidents by Road Surface											
Dry	819	806	733	630	601	597	515	424	420	343	
Wet/Damp	543	523	471	351	306	302	230	249	195	129	
Snow	2	7	3	2	1	3	0	3	3	6	
Frost/Ice	28	17	15	3	8	5	16	17	6	31	
Flood	2	0	2	4	0	2	0	1	0	0	
Oil or Diesel	0	0	5	5	0	0	0	0	0	0	
Mud	0	0	1	0	1	0	0	0	0	0	
Wet/Damp Accidents by Road Class											
Motorway	22	21	16	13	17	16	8	12	3	9	
A (M)	0	0	0	0	0	0	0	0	0	0	
A	266	256	238	183	154	137	115	134	112	62	
B	91	91	77	52	46	41	26	23	25	21	
C	66	59	55	50	47	46	55	45	27	18	
U	98	96	84	53	42	62	26	35	28	19	
Total	543	523	471	351	306	302	230	249	195	129	
Accidents by Light/Dark											
Motorway	Dark	13	11	12	13	11	14	7	7	4	4
A (M)		0	0	0	0	0	0	0	0	0	0
A		191	187	176	151	134	121	104	103	102	60
B		66	64	53	40	36	40	29	20	9	21
C		129	40	47	38	38	40	40	30	30	13
U		83	78	71	53	53	61	26	37	29	13
Total	401	381	360	295	272	276	206	197	174	111	
Motorway	Light	38	35	34	23	34	37	26	24	13	20
A (M)		0	0	0	0	0	0	0	0	0	0
A		451	436	385	319	292	280	249	227	225	187
B		153	142	131	103	99	77	80	74	62	49
C		106	110	106	84	71	84	92	77	74	58
U		244	237	214	171	149	155	108	95	76	84
Total	993	972	870	700	645	633	555	4497	450	398	
No. of Vehicles Per Accident											
1	495	405	344	287	234	261	213	197	179	131	
2	766	819	759	593	584	551	469	441	385	316	
3 or more	133	129	127	115	99	97	79	56	60	62	
No. of Casualties Per Accident											
1	1089	1010	902	743	689	665	581	527	463	393	
2	200	232	224	184	158	165	128	121	102	80	
3 or more	105	112	103	68	70	79	52	46	59	36	

Notes: Average 1989-93, average 1994-98 and average 1999-2003 totals may not sum due to rounding. Oil/ Diesel or Mud were removed from 'Road Surface Condition' and

re-introduced in 'Special Conditions at Site' on 1/4/2006



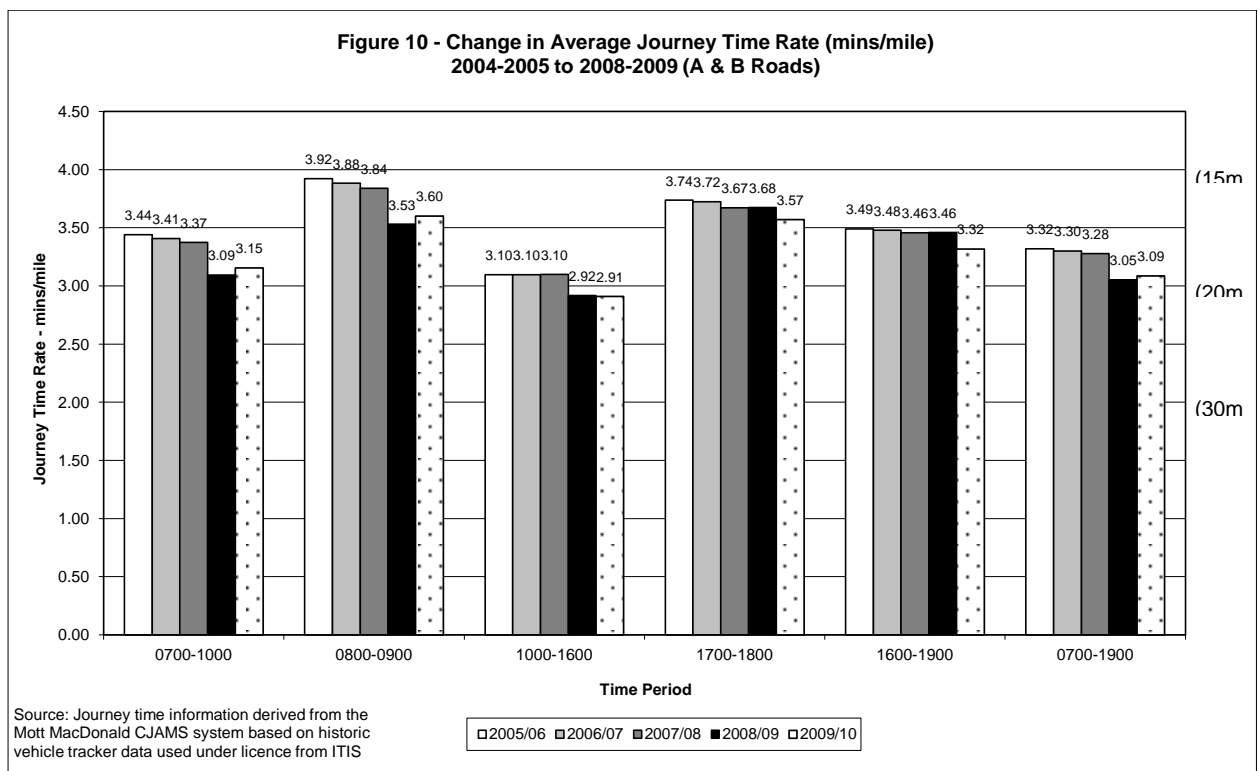


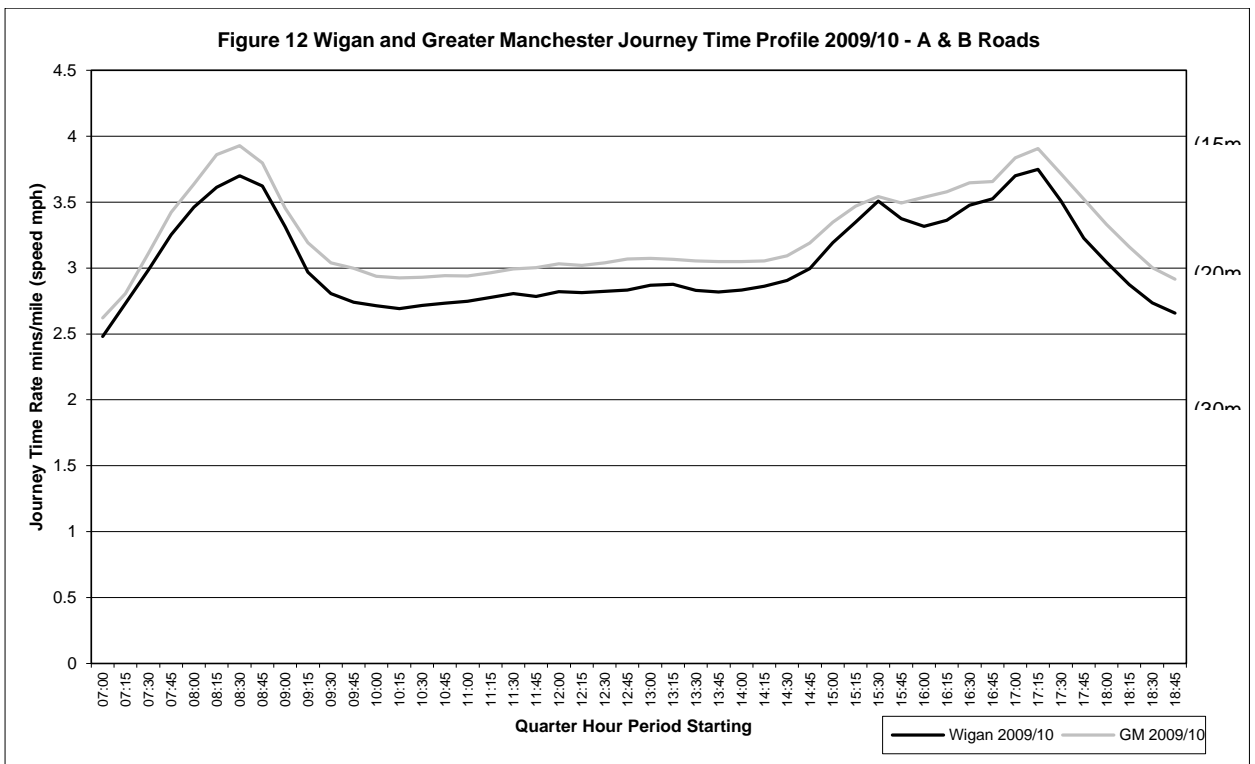
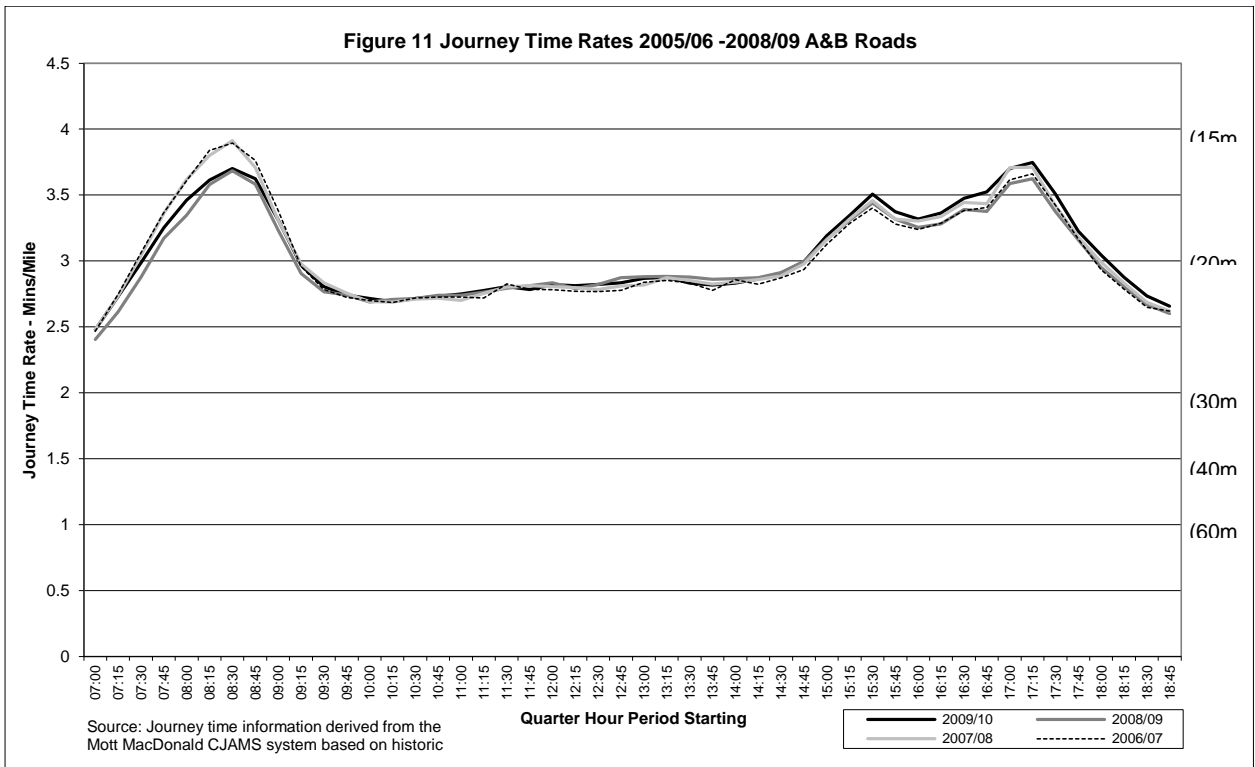
6 CONGESTION

- 6.1 The journey time data presented below has been calculated using data collected from in-vehicle GPS tracking devices from which average vehicle speeds and journey times can be derived. This report presents journey time rates in minutes per mile and speeds in miles per hour.
- 6.2 The journey time rates are the sum of the average link times divided by the sum of the link lengths for the set of links and time period under consideration. The link times are the average of observations for the 12-month period running from September to August. All journey time rates are for an average weekday excluding school holidays and bank holidays.
- 6.3 Tables 36 and 37 show respectively average journey time rates and speeds for A and B roads, for 2004/05, 2005/06, 2006/07, 2007/08, 2008/09 and 2009/10. For comparison, the 2009/10 journey time rates and speeds for Greater Manchester are also shown.
- 6.4 Figure 10 illustrates the change in average journey time rates in Wigan over the last five years for various time periods. Figure 11 illustrates average journey time rates by quarter-hour time period for the last three years in Wigan and Figure 12 illustrates average journey times by quarter hour time period during 2009/10 for Wigan and Greater Manchester. Congestion maps showing average speeds can be found in Appendix 4.
- Between 2008/09 and 2009/10, journey time rates have increased in the morning peak period and generally decreased in the off-peak and evening peak.

Table 36 Wigan and Greater Manchester Average Journey Time Rates (Mins/ Mile)						
Wigan						
Year	0700 - 1000	0800 - 0900	1000 - 1600	1700 - 1800	1600 - 1900	0700 - 1900
2005/06	3.32	3.87	2.91	3.58	3.25	3.15
2006/07	3.24	3.77	2.88	3.48	3.20	3.07
2007/08	3.23	3.23	3.76	2.90	3.51	3.25
2008/09	3.09	3.53	2.92	3.68	3.46	3.05
2009/10	3.15	3.60	2.91	3.57	3.32	3.09
Greater Manchester						
2009/10	3.37	3.30	3.81	3.11	3.53	3.75

Table 37 Wigan and Greater Manchester Average Speeds (MPH)						
Wigan						
Year	0700 - 1000	0800 - 0900	1000 - 1600	1700 - 1800	1600 - 1900	0700 - 1900
2005/06	18	16	21	17	18	19
2006/07	19	16	21	17	19	20
2007/08	19	16	21	17	18	19
2008/09	19	17	21	16	17	20
2009/10	19	17	21	17	18	19
Greater Manchester						
2009/10	18	18	16	19	17	16





APPENDIX 1

LISTS OF TRAFFIC FLOWS ON MAJOR ROADS IN 2010

LISTS OF TRAFFIC FLOWS ON MAJOR ROADS 2010

This Appendix includes the following information:

- A list of traffic flows on major road links in Wigan in 2010 sorted by road class and all motor flows.
- A list of traffic flows on major roads links in Wigan in 2010 sorted by 12-hour pedal cycle flow.

The motor vehicle flows are estimates of the 24-hour, annual average weekday flows. They are based mainly on 12-hour manual classified traffic count and ATC data collected as part of the Unit's countywide monitoring programme. They represent the flow at a specific point on each link. Flows on links not counted in 2010 have been estimated by applying average countywide growth factors to earlier counts. Therefore the flows given here, whilst being our best estimates for 2010 cannot be used to indicate growth since 2009 on individual links.

Two sets of pedal cycle flows are presented: the counted 12-hour flows and an estimate of 24-hour annual average weekday pedal cycle flows for 2010 using factors derived from a set of automatic cycle count data.

Maps showing motor vehicle flows, pedal cycle flows and DfT link numbers are included in Appendix 4.

APPENDIX 2
AUTOMATIC TRAFFIC AND CYCLE COUNTS

AUTOMATIC TRAFFIC AND CYCLE COUNTS

Summary data for the following continuous ATC and ACC sites relevant to Wigan is shown in this Appendix.

ATC

Data is available in 2010 for:

- Site 1074 A49 Central Park Way, Wigan
- Site 1075 A49 Wallgate, Wigan

Data is unavailable in 2010 for:

- Site 1123 A579 Atherleigh Way, Leigh
- Site 1124 A577 Atherton Road, Hindley
- Site 1128 B5207 Bryn Road, Ashton-in-Makerfield
- Site 1277 B5238 Whelley, Wigan

ACC

Data is available in 2010 for:

- Site 2226 A49 Wallgate, Wigan (Cycle Lane)
- Site 2228 Whelley Loop, Haigh Hall
- Site 2229 Whelley Loop (School Entrance), Wigan
- Site 2230 Whelley Loop, Swinside
- Site 2231 Whelley Loop, Rathen Avenue
- Site 2232 Whelley Loop, Makerfield Way
- Site 2233 Whelley Loop, Wigan Road

For each site the following graphs and tables are given:

- A graph showing 24-hour average daily traffic flows in 2010.
- A graph showing average weekday flows in 2010 by month.
- A graph showing annual average 24-hour weekday flows by year.
- Tables showing daily average flows for each direction in 2010.
- Tables showing monthly average flows for each direction in 2010.
- Graphs showing average hourly weekday, Saturday and Sunday flows in 2010 for each direction.

APPENDIX 3 ATC
DATA FROM SITES ON KEY CENTRE CORDONS

ATC DATA FROM SITES ON KEY CENTRE CORDON

ATC surveys for sites on Key Centre cordons were last conducted from March to May 2010.

This section presents profiles of traffic entering the key centre, derived from automatic traffic counts over two consecutive weeks March 2010 on roads with at least 2000 vehicles per day.

The first sheet presents total traffic flows. The five day average flow for time period 0700-1000, combined with those from the other key centres in Greater Manchester (excluding Manchester), provides the 2009/10 data for the mandatory indicator LTP6b: Peak traffic flows to other Greater Manchester key centres.

The second and subsequent sheets present data for each site as follows:

Site	Description	Direction
01010611	Standishgate	Southwest bound
01010621	Station Road	Northbound
01010630	King Street	Northbound
01010641	Wallgate	Northeast bound
01010650	Dorning Street	Southbound

APPENDIX 4

TRAFFIC FLOW, ROAD ACCIDENT AND CONGESTION PLOTS

TRAFFIC FLOW PLOTS

- A4.1 The major road network showing estimates of 24-hour annual average weekday all-motor flow (AAWT) in 2010
- A4.2 The major road network showing estimates of 12-hour pedal cycle flows in 2010
- A4.3 The major road network showing DfT link numbers as included in the flow lists (Appendix 1)

ROAD ACCIDENT PLOTS

- A4.4 Road injury accidents 2008-2010 by severity
- A4.5 Child and adult killed and seriously injured road accidents 2008-2010
- A4.6 Child and adult pedestrian road injury accidents 2008-2010
- A4.7 Child and adult pedal cycle road injury accidents 2008-2010

CONGESTION PLOTS

- A4.8 Average AM peak hour (08:00-09:00) speeds on road links with at least 10 observations (based on 2009/10 Trafficmaster data)
- A4.9 Average Off-Peak (10:00-16:00) speeds on road links with at least 10 observations (based on 2009/10 Trafficmaster data)
- A4.10 Average PM peak hour (17:00-18:00) speeds on road links with at least 10 observations (based on 2009/10 Trafficmaster data)