

## CHAPTER 5 SAFER ROADS

### Introduction

5.1 The following 7 indicators have been chosen to monitor our progress towards the “Safer Roads” strategy in LTP2. Progress towards LTP2 targets will be measured using 3 mandatory and 1 local key indicator. The remaining 3 indicators are background trend indicators which will help assess overall progress for this key strategy area.

### Mandatory Indicator S1 : All Road User Casualty Trends

5.2 The number of people injured in road traffic accidents has been monitored for many years. Data is collected continuously on the numbers of fatal, serious and slight casualties throughout West Yorkshire via the West Yorkshire Police Stats 19 process. In 2004, 12,031 casualties were recorded on West Yorkshire’s roads, a further decrease on the total recorded in 2003 and a marked reduction on the average over the years 1994 - 1998, which has been set by National Government as the base for all their casualty reduction targets. The road casualty trends for West Yorkshire are shown in Table 5.1 and Figure 5.1

Year	KSI *	Fatal	Serious	Slight	Total
1994 - 1998 average	1,484	115	1,369	11,391	12,876
2000	1,299	120	1,179	12,426	13,725
2001	1,331	144	1,187	11,807	13,138
2002	1,319	115	1,204	11,648	12,967
2003	1,238	102	1,136	11,566	12,804
2004	1,215	116	1,099	10,816	12,031
% Change 2004 cf. 1994 -1998 average	-18%	+0.9%	-20%	-5.0%	-6.6%
% Change 2004 cf. 2003	-1.9%	+14%	-3.3%	-6.5%	-6.0%

\* Killed or Seriously Injured

Table 5.1 West Yorkshire Road Casualty Trends

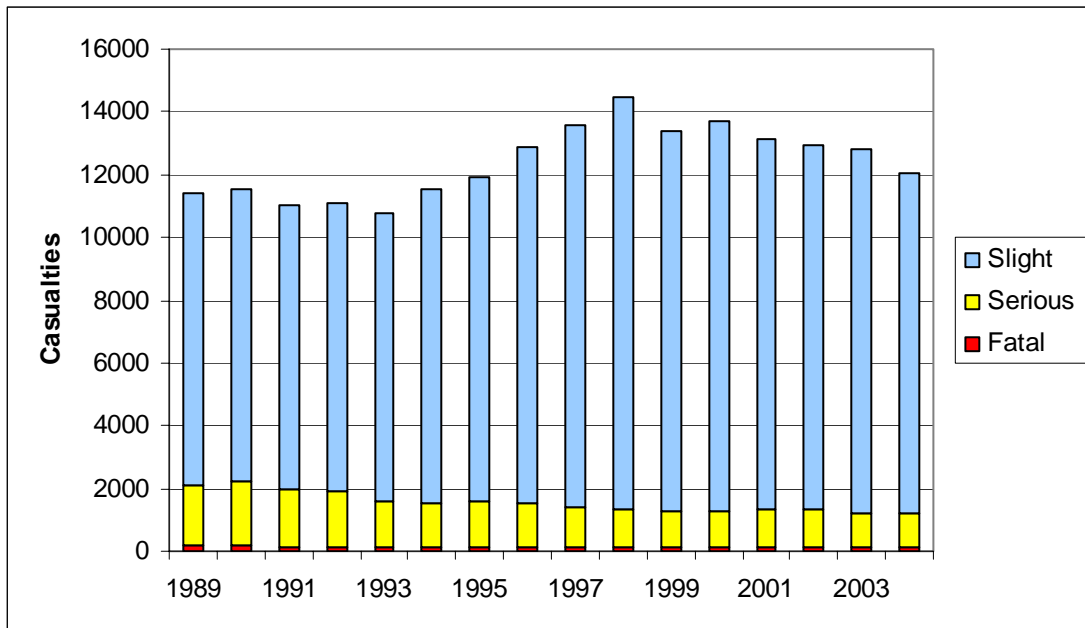


Figure 5.1 West Yorkshire Road Casualty Trends Since 1989

5.3 The West Yorkshire authorities will continue to monitor data on road casualties and report progress towards the LTP2 and National Targets in future monitoring reports.

#### Mandatory Indicator S2 : Casualty Trends for Children

5.4 The number of children injured in road traffic accidents has been monitored for a number of years. The trends are shown in Table 5.2 and Figure 5.2

Year	KSI *	Fatal	Serious	Slight	Total
1994 - 1998 average	273	13	260	1,732	2,004
2000	230	8	222	1,700	1,930
2001	227	13	214	1,550	1,777
2002	161	7	154	1,448	1,600
2003	203	4	199	1,380	1,583
2004	148	8	140	1,234	1,382
% Change 2004cf. 1994 -1998 average	-46%	-39%	-46%	-29%	-31%
% Change 2004 cf. 2003	-27%	+100%	-30%	-11%	-13%

\* Killed or Seriously Injured

Table 5.2 West Yorkshire Road Casualty Trends for Children

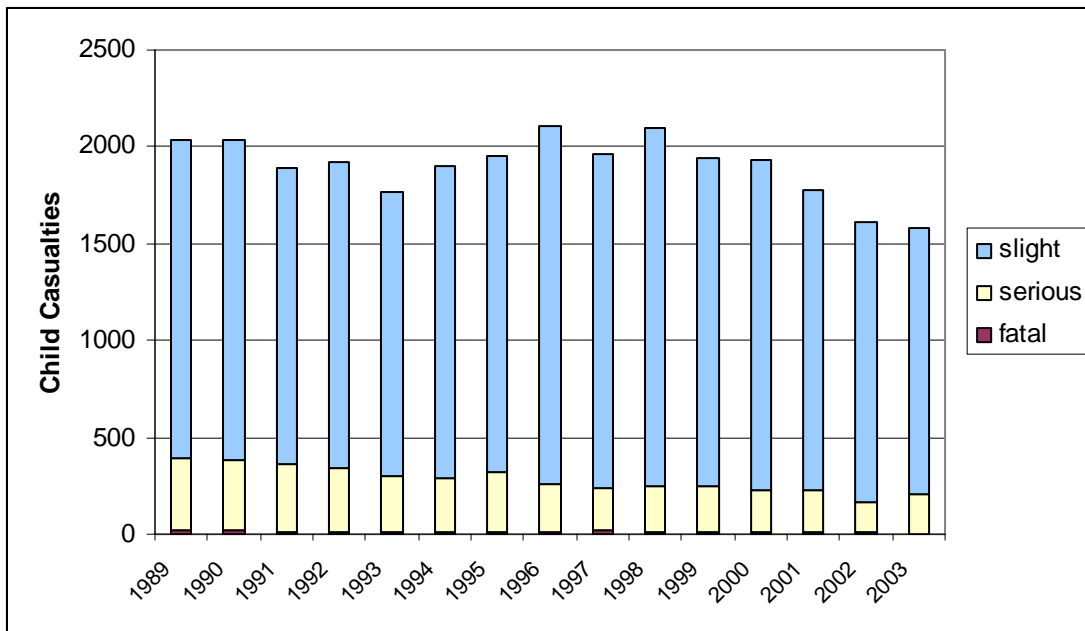


Figure 5.2 West Yorkshire Road Casualty Trends for Children since 1989

5.5 The situation for child casualties continues to show a reduction in the total number of injuries, as does the number of children seriously injured. However the number of children killed doubled during 2004 compared with 2003 showing the volatility of the numbers. Overall the figures show that there has been a reduction of over 30% compared with the 1994-98 average and the trend is still downwards. The total number of child injuries was again the lowest level since 1993. The number of children killed each year, whilst at a low level, shows wild fluctuations from year to year.

5.6 The West Yorkshire authorities will continue to monitor data on accidents involving children and report progress towards both LTP2 and National Targets. Due to the volatility of the statistics, trends will be reported using 3-year averages.

### Mandatory Indicator S3 : Slight Casualty Numbers

5.7 Table 5.3 below shows the trend in slight casualties in West Yorkshire since 1999, together with the average for 1994 to 1998 which is the baseline for national and LTP2 targets.

Year	Number of slight Casualties
1994 to 1998 Ave	11,391
1999	12,340
2000	12,426
2001	11,807
2002	11,648
2003	11,566
2004	10,818

*Table 5.3 West Yorkshire : Number of Slight Casualties, 1994/98 to 2004*

5.8 The West Yorkshire authorities will continue to monitor data on the number of slight casualties on West Yorkshire roads and report progress towards both LTP2 and National Targets.

#### **Local Key Indicator S4 : Casualty Trends for Different Road User Groups**

5.9 The number of casualties in the different priority groups has been monitored for a number of years and will continue to be monitored and changes reported annually. The West Yorkshire trends for different groups of road user are shown in Table 5.4 for KSI and in Figure 5.3 for all casualties.

Year	Pedestrians	Pedal Cyclists	M/cycle Rider	M/cycle Pillion	Car Driver	Car Passenger
1994 - 1998 average	525	106	145	13	378	232
2000	450	80	199	8	360	149
2001	378	91	206	20	379	202
2002	376	62	233	25	385	196
2003	340	101	216	19	323	182
2004	360	78	204	24	300	194
% Change 2004 cf. 1994 - 1998 ave.	-31%	-26%	+41%	+85%	-21%	-16%
% Change 2004 cf. 2003	+5.9%	-23%	-5.6%	+21%	-7.1%	+4.4%

*Table 5.4 West Yorkshire Killed and Seriously Injured (KSI) Trends for Different Road Users*

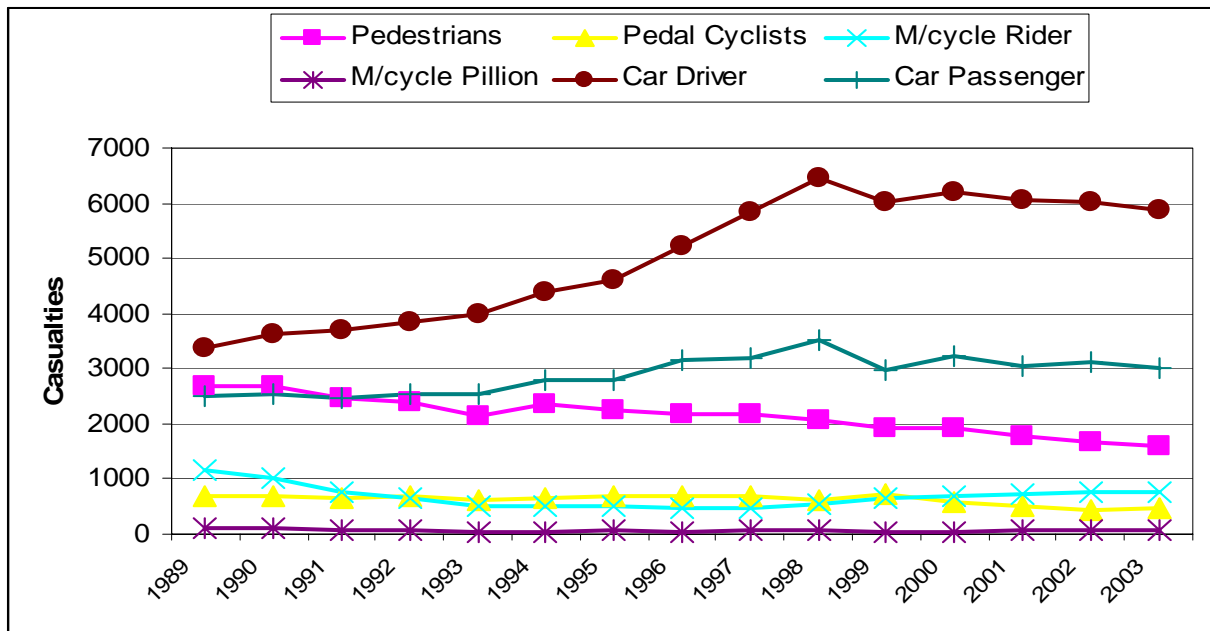


Figure 5.3 West Yorkshire Casualty Trends for Different Road Users Since 1989

5.10 The West Yorkshire authorities will continue to monitor data on all road casualties. In particular progress towards the local target of reducing pedestrian casualties will be reported in future monitoring reports.

**Background Indicator S5 : Town Centre Car Park Spaces with CCTV Cameras**

5.11 An important element of the overall safe car journey is having a secure and safe place to leave the vehicle. Table 5.5 shows the number of off street car park spaces with CCTV coverage in the major town and city centres in West Yorkshire. The data refers to council owned car park spaces only.

	Year	Bradford	Halifax	Huddersfield	Leeds	Wakefield
No. of Spaces with CCTV	2000	2,021	441	1,902	2,708	1,743
	2001	856	441	2,187	2,708	1,705
	2002	1,576	441	2,667	2,708	1,266
	2003	1,576	441	2,764	2,931	1,266
	2004	1,551	441	3,087	2,137	1,215
No. of Spaces without CCTV	2000	1,159	964	925	153	0
	2001	889	964	890	153	0
	2002	124	964	1,048	153	439
	2003	124	964	1,018	140	439
	2004	93	964	668	831	538
% of Spaces with CCTV	2000	63%	34%	67%	95%	100%
	2001	49%	34%	71%	95%	100%
	2002	93%	31%	72%	95%	74%
	2003	93%	31%	73%	96%	74%
	2004	94%	31%	82%	72%	69%

Table 5.5 Local Authority Off-Street Car Parks with CCTV Surveillance

5.12 It is envisaged that the number and percentage of car parking spaces with CCTV cameras will increase in the future, not just in the main centres but also in other town centres in West Yorkshire.

### Background Indicator S6 : Rail/Bus Stations with CCTV Cameras

5.13 As with road users, the added security of CCTV coverage at railway stations is an important factor in safer travel. Table 5.6 shows the number of railway station car parks so covered. Changes to this coverage will be reported in future monitoring reports.

	Rail station car parks with CCTV	Of which staffed rail stations	Of which unstaffed rail stations
<b>1999/00</b>	22 (43%)	10 (63%)	12 (34%)
<b>2004/05</b>	25 (45%)	12 (67%)	13 (35%)

*Table 5.6 Rail Station Car Parks with CCTV Surveillance*

### Background Indicator S7 : Town and City Centre Streets with CCTV Cameras

5.14 Table 5.7 shows the changes in CCTV coverage in the major town and city centres since 1998 through the percentage of streets covered by cameras.

	Bradford	Halifax	Huddersfield	Leeds	Wakefield
1998	40%	0	90%	60%	93%
1999	40%	5%	90%	60%	93%
2000	40%	15%	90%	70%	93%
2001	40%	30%	94%	70%	93%
2002	55%	40%	94%	73%	93%
2003	60%	40%	95%	80%	93%
2004	65%	40%	96%	87%	93%

*Table 5.7 Percentage of City Centre Streets Covered by CCTV*

5.15 It is envisaged that the percentage of streets covered by CCTV in Bradford, Halifax and Leeds will continue to increase, but Huddersfield and Wakefield are probably close to their realistic maximum. It is also expected that more of the smaller towns will be covered by CCTV in the future.

5.16 Changes to CCTV coverage will be reported in future monitoring reports.

## CHAPTER 6 BETTER AIR QUALITY

### Introduction

6.1 The following 6 indicators are being used to monitor our progress towards the “Better Air Quality” strategy in LTP2. Progress towards targets in this area will be measured using 2 mandatory and 1 local key indicators. The remaining 3 indicators are background trend indicators which will help assess overall progress for this key strategy area.

6.2 Road transport emissions remain the most significant source of urban air pollution within West Yorkshire. High levels of exhaust emissions can result from the effects of traffic congestion, which is most common during peak periods.

6.3 Road transport emissions of nitrogen dioxide (NO<sub>2</sub>) and particulates (PM<sub>10</sub>) contribute in the region of 75% and 50% respectively, towards total urban emissions. NO<sub>2</sub> and PM<sub>10</sub> are the two major transport pollutants of concern.

### **Mandatory Indicator AQ1 : NO<sub>2</sub> Levels in Air Quality Management Areas**

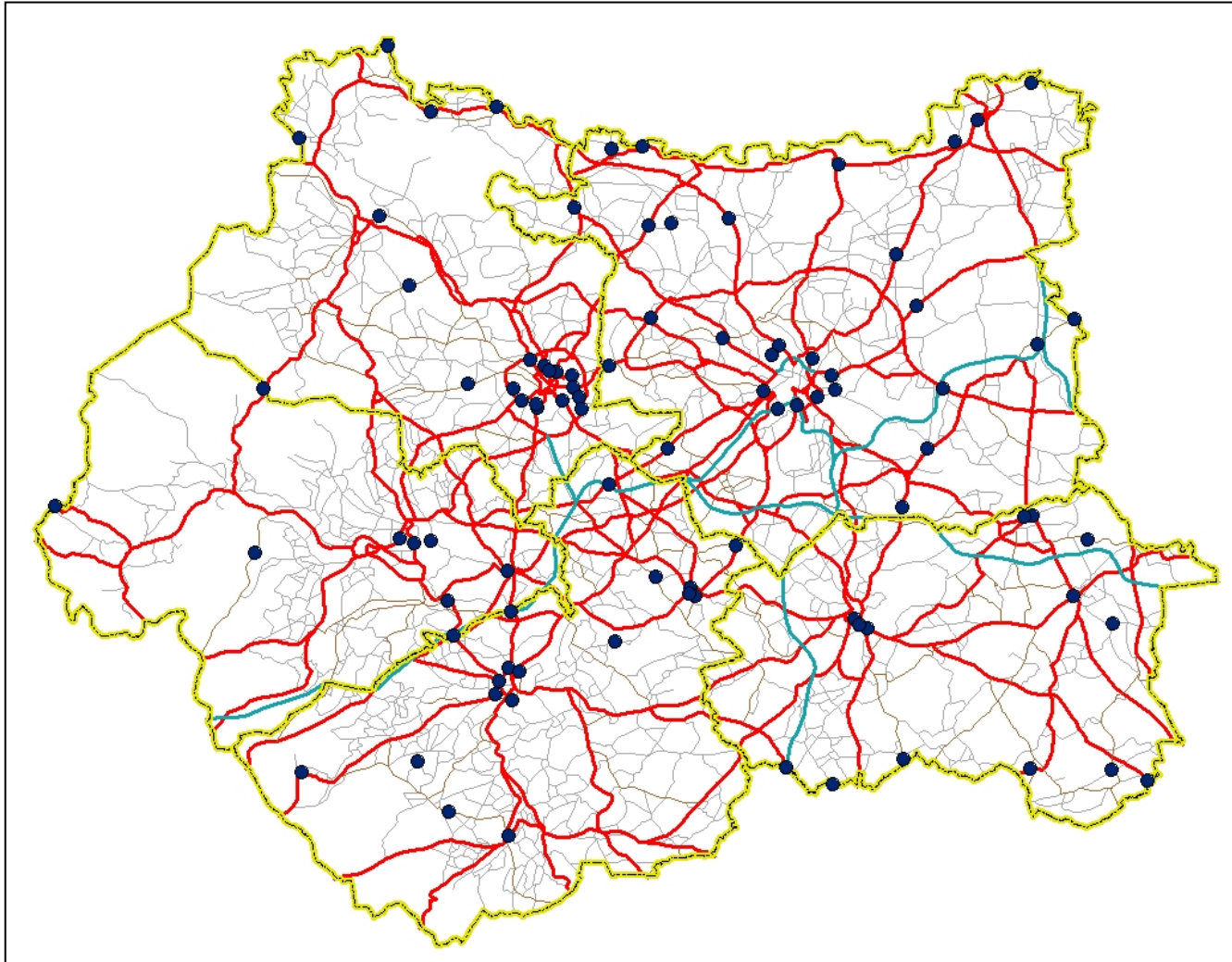
6.4 Air quality is currently measured at Haslewood Close in the Ebor Gardens AQMA in Leeds. The real time monitoring station is close to York Road, the major road traffic source of NO<sub>2</sub>

6.5 The baseline for LTP2 monitoring is an annual average NO<sub>2</sub> concentration of 45.8 µg/m<sup>3</sup> in 2004.

6.6 Annual changes will be recorded against this baseline, and further AQMAs will be included during the course of LTP2.

### **Mandatory Indicator AQ2 : Area Wide Traffic Flows**

6.7 The West Yorkshire Long Term Monitoring Programme (LTMP) of automatic traffic counts was established in 1979 to monitor traffic flows at about 400 locations across West Yorkshire. In 1980, a sub-set of this programme, stratified to give a representative coverage of A, B and C/Unclassified roads was created to provide a statistically robust method for calculating changes in daily traffic flows across West Yorkshire. The methodology was modified in 2003 in that the flows obtained were weighted by road lengths in order to give a better estimate of changes in traffic volumes rather than vehicle flows. The location of the counting sites is shown in Figure 6. 1



*Figure 6.1 Location of Annual Traffic Growth Count Sites*

6.8 Table 6.1 below shows the change in the index of traffic volumes since 2000 relative to the LTP2 base year of 2004.

Year	Index of Traffic Volumes
2000	97.5
2001	98.3
2002	97.4
2003	100.2
2004	100
Change 2000 to 2004	+ 2.5

*Table 6.1 Changes in Traffic Volumes from Long Term Monitoring Programme, 2000 to 2004*

6.9 Changes to the index will be reported annually and will incorporate the latest road length statistics.

6.10 An alternative source of data for this indicator is data supplied by DfT on annual vehicle kilometres obtained from the National Traffic Census (NTC). Table 6.2 shows traffic volume changes since 2000 using this source.

Year	Index of Traffic Volumes
2000	92.0
2001	93.0
2002	96.0
2003	99.3
2004	100
Change 2000 to 2004	+ 8.0

*Table 6.2 Changes in Traffic Volumes from National Traffic Census, 2000 to 2004*

6.11 The changes in flow calculated by NTC data are in the order of 3 times greater than that indicated from our LTMP monitoring. We have adopted the first methodology to derive our LTP2 target for the following reasons :

- Consistency with LTP1 and District strategy monitoring and targets
- A detailed analysis of the NTC statistics suggests that the majority of growth is on unclassified roads. The methodology used by DfT to establish vehicle kilometres from counts on minor roads is currently subject to revision following the Quality Review of Road Traffic Statistics.

6.12 We will continue to report both sets of statistics for this indicator but will track our progress towards the LTP2 target using figures derived from the LTMP.

### Local Key Indicator AQ3 : Area Wide Road Transport Emissions : NO<sub>x</sub> , CO<sub>2</sub>

6.13 Road transport emissions of oxides of nitrogen (NO<sub>x</sub>) which contains a mixture of nitric oxide (NO) and nitrogen dioxide (NO<sub>2</sub>), and carbon dioxide (CO<sub>2</sub>), the primary “greenhouse gas”, have been predicted for the West Yorkshire trunk / principal road network. Annual emission rates were predicted for NO<sub>x</sub> using the latest DfT / DEFRA approved vehicle emission factors (published in 2002 by Casella Stanger and AEA Technology). The DMRB vehicle emission factors published in 1999, were used to predict emissions of CO<sub>2</sub>.

6.14 All calculated emission rates took account of the observed annual traffic growth for all road types in each District and actual traffic count data on the Motorway network. Some coarse assumptions have been used to approximate traffic speeds and the percentage of Heavy Duty Vehicles within the modelled network based on previously used data. It should be noted that annual emission rates are sensitive to the input of speed data and may underestimate the exacerbating effects of local congestion during peak periods.

6.15 Table 6.3 provides a summary of predicted road transport emissions for the West Yorkshire trunk / principal road network. Approximately 17,956 tonnes and 2.82 million tonnes / year of NO<sub>x</sub>, and CO<sub>2</sub> emissions respectively, have been predicted for the year 2004. The annual emission rates for NO<sub>x</sub> and PM<sub>10</sub> continues to fall across the region, whilst there is a small increase for CO<sub>2</sub> emissions. Future changes will be recorded against this baseline.

<u>Year</u>	<b>2000 (Base Year)</b>	<b>2002</b>		<b>2003</b>		<b>2004</b>	
<b>Pollutant</b>	<b>Tonnes / yr</b>	<b>Tonnes / yr</b>	<b>% Change from base year</b>	<b>Tonnes / yr</b>	<b>% Change from base year</b>	<b>Tonnes / yr</b>	<b>% Change from base year</b>
<b>NO<sub>x</sub></b>	24,459	20,802	- 15.0%	19,240	- 21.5%	17,956	-26.6%
<b>CO<sub>2</sub></b>	2.787*10 <sup>-6</sup>	2.787*10 <sup>-6</sup>	0.0%	2.817*10 <sup>-6</sup>	+ 1.1%	2.817*10 <sup>-6</sup>	+1.1%

Table 6.3 Summary of Road Transport Emissions : NO<sub>x</sub> and CO<sub>2</sub>

### Background Indicator AQ4 : Air Quality Monitoring in Town and City Centres

6.16 Road transport emissions remain the most significant source of urban air pollution within West Yorkshire. High levels of exhaust emissions can

result from the effects of traffic congestion, which is most common during peak periods.

6.17 Road transport emissions of nitrogen dioxide (NO<sub>2</sub>) and particulates (PM<sub>10</sub> reported separately as AQ5) contribute in the region of 75% and 50% respectively, towards total urban emissions. NO<sub>2</sub> and PM<sub>10</sub> represent the two major transport pollutants of concern.

6.18 Figure 6.2 illustrates the results of the annual average NO<sub>2</sub> monitoring within urban centres of each District. During the year 2004, all Districts except Wakefield complied with the annual average standard of 40 µg/m<sup>3</sup>. Over the 7 year period, there is a general trend of improving air quality, with respect to background levels of NO<sub>2</sub>. This trend provides an indication that road transport emissions of NO<sub>2</sub> are slowly declining.

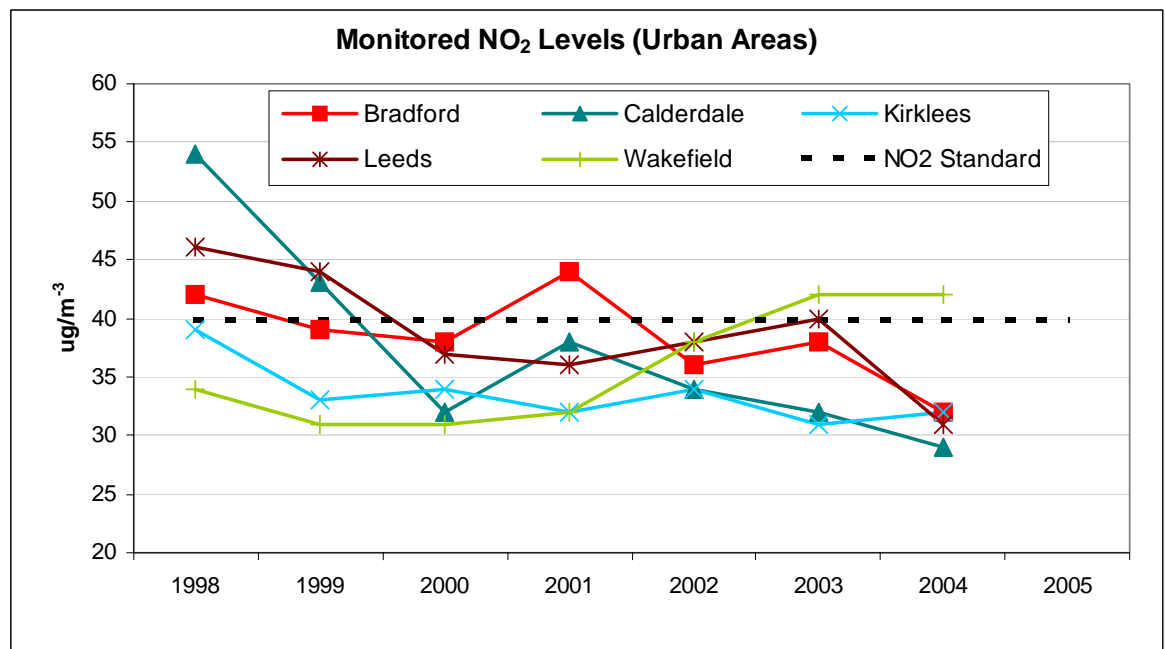


Figure 6.2 West Yorkshire Annual Average NO<sub>2</sub> Monitoring – Summary Data

### Background Indicator AQ5 : Area Wide Road Transport Emissions : PM<sub>10</sub>

6.19 Figure 6.3 indicates that all Districts comply with the annual average PM<sub>10</sub> standard of 40 µg/m<sup>3</sup>. Since monitoring began in 1998 there has been little change in general background PM<sub>10</sub> air quality within urban centres. All Districts reported a reduction in Annual Average PM<sub>10</sub> levels in 2004 except Bradford, which recorded the same level as for 2003.

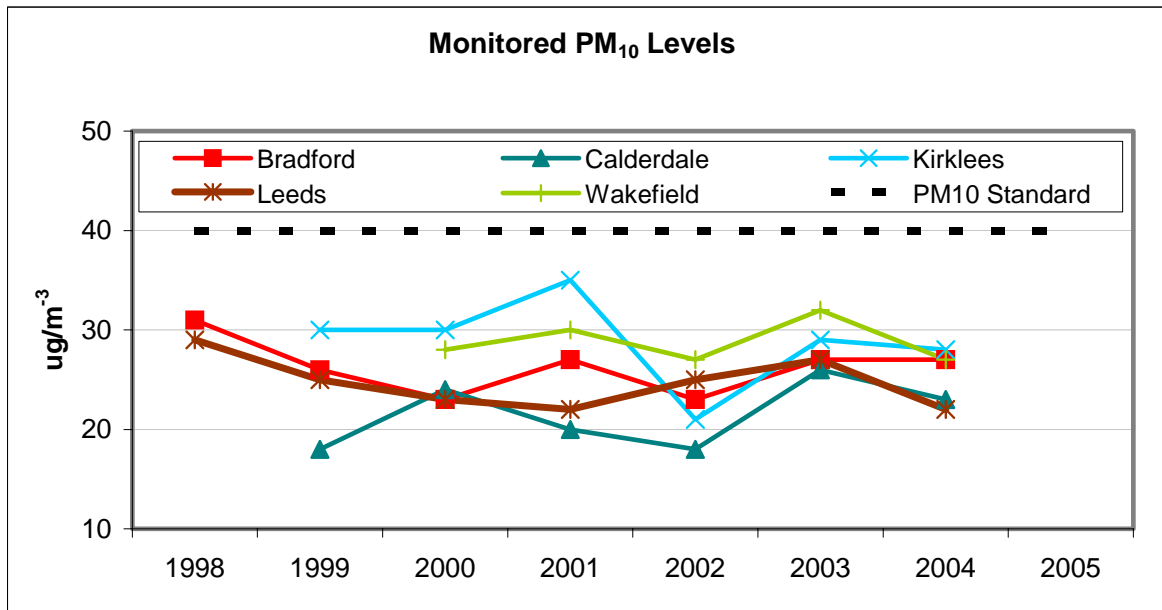


Figure 6.3 West Yorkshire Annual Average PM<sub>10</sub> Monitoring

### Background indicator AQ6 : Low Noise Road Surfacing

6.20 Figure 6.4 shows the approximate lengths roads that have been re-surfaced with 'low noise' asphalt over the previous four years. In total, there has been approximately 363km of 'low noise' asphalt have been laid in West Yorkshire between the years 2000 – 2005. This figure includes 48km laid by the Highways Agency on motorways and trunk roads. Approximately 74km. of low noise surfacing was laid in 2004/05

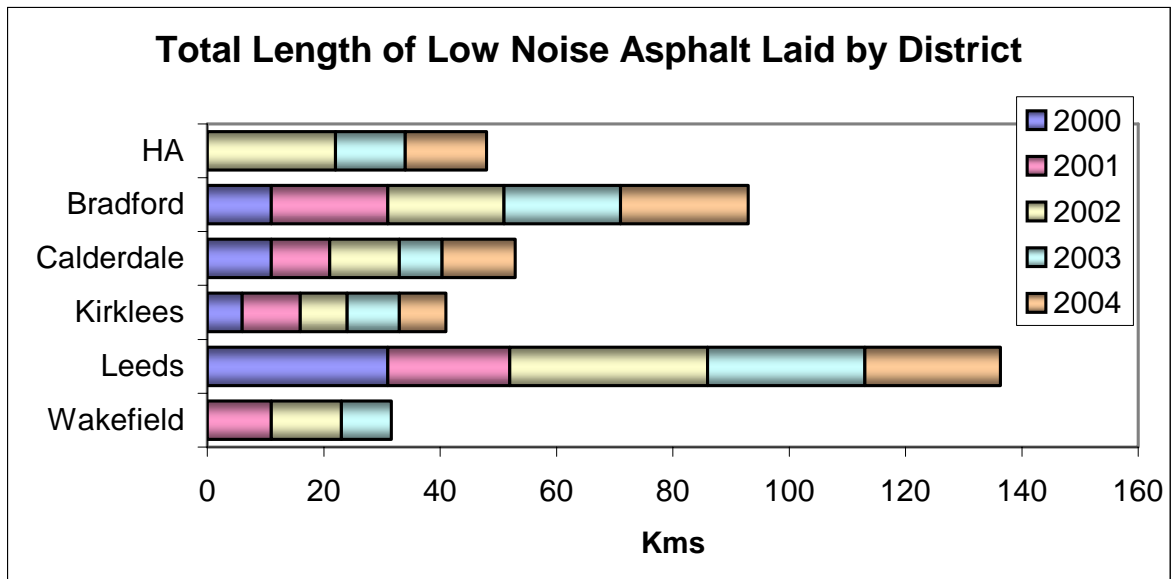


Figure 6.4 Total Length of Low Noise Asphalt Laid by District , 2000 to 2004

6.21 Figure 6.5 compares the actual lengths of ‘low noise’ asphalt laid within West Yorkshire to an approximate percentage coverage of the trunk / principal road network within each district. Taken as a whole approximately 25% of the trunk / principal road network within West Yorkshire is surfaced with low noise asphalt.

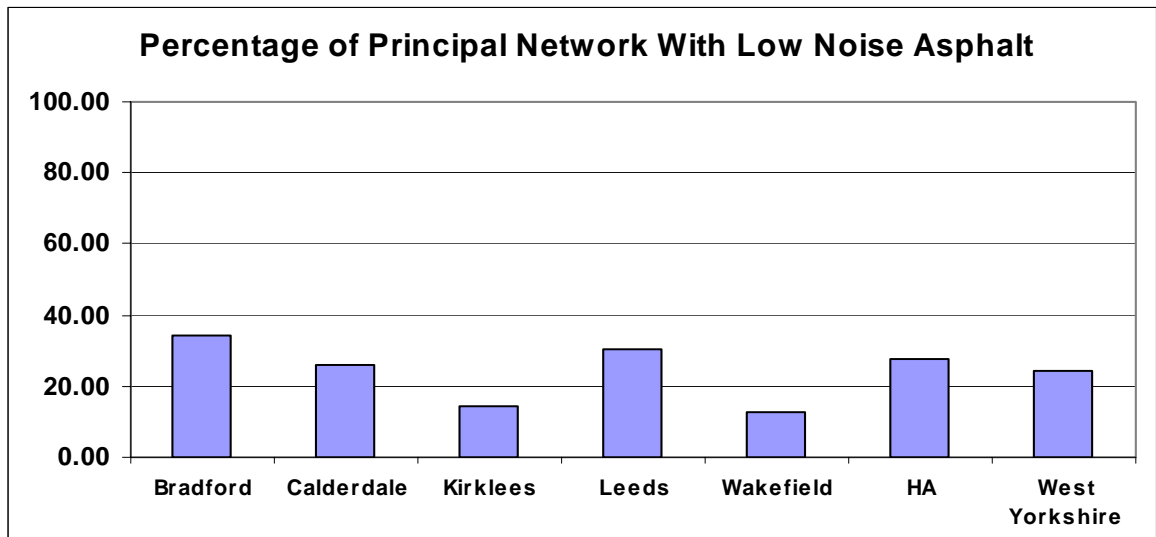


Figure 6.5 Percentage of Principal Road Network with Low Noise Asphalt

6.22 The use of low noise asphalt will continue to be monitored and reported annually.



## CHAPTER 7 ASSET MANAGEMENT

### Introduction

7.1 The following 4 indicators have been selected to monitor our management of the transport assets of West Yorkshire. Progress towards LTP2 targets will be measured using 2 mandatory indicators and 2 local key indicators.

7.2 West Yorkshire averages for all road and footway condition performance indicators are calculated from weighted lengths, not an average of the five District values.

### Mandatory Indicator AM1 : Principal, Non-principal and Unclassified Road Condition

7.3 The BVPI's for road condition surveys are being revised and renumbered and new data will be presented for BVPI 97a (reclassified as BVPI 224a) in the first LTP2 Progress Report. This will be based on data collected by scanner methodology.

7.4 Currently, BVPI 96 (now BVPI 223) measures the percentage of Principal Roads which have reached the point at which repairs to prolong their future life should be considered. For 2004-05 this has been measured using a TRACS type survey (TTS). The results are as follows:-

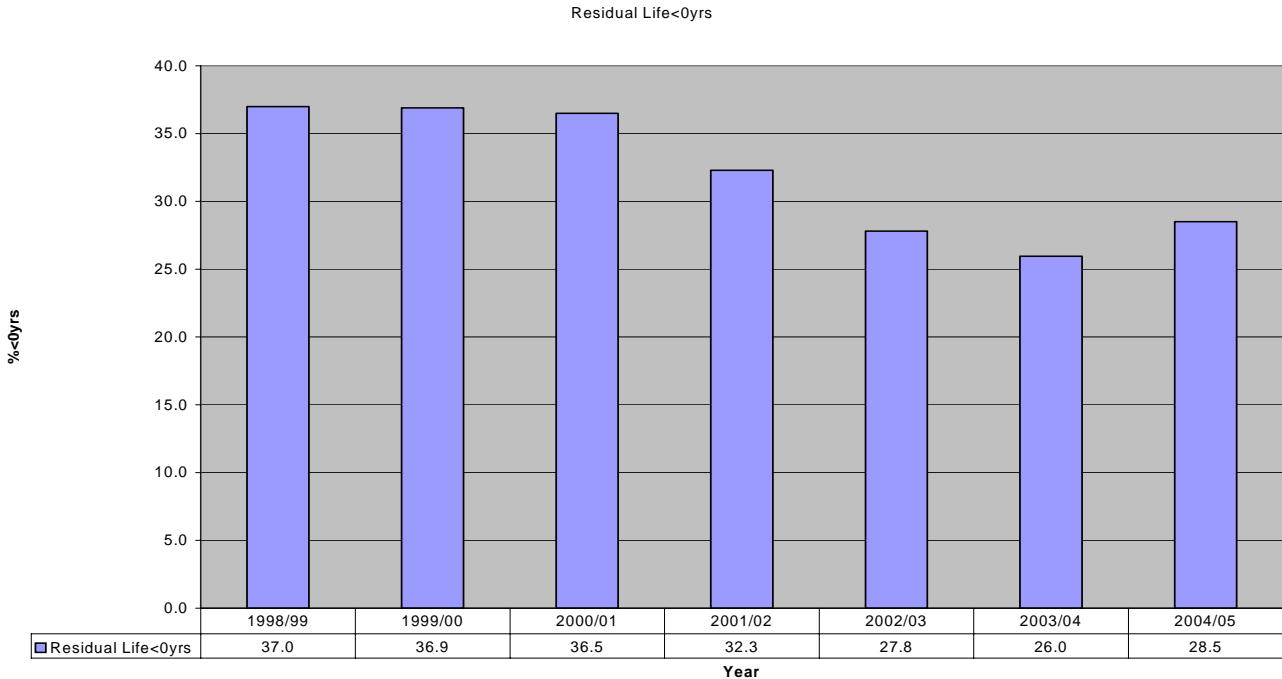
District	Result
Calderdale	39%
Kirklees	45%
Leeds	26%
Wakefield	29%
Weighted Ave.	36%

7.5 Bradford commissioned their surveys but accreditation of the provider's machine was delayed and they consequently have no result. The available results follow the same pattern as previous surveys in terms of worst and best performance. However they are some 20% to 66% higher than data from deflectograph surveys. Similar increases across the country show that the survey methods do not give comparable results and this data cannot be used to map trends from previous BVPI 96 results.

7.6 Leeds and Bradford undertook some TTS in 2003-04 and calculated values of 47% and 45% respectively on their sample data. However the machines were not accredited and meaningful comparisons cannot be made.

7.7 However all West Yorkshire authorities continue to undertake deflectograph surveys of their Principal Roads with results as shown below. The weighted averages for 2004/05 suggest a slight decline in condition but the general trend is still positive. Authorities now need to sustain the recent

levels of investment in the maintenance of principal roads in order to show continuous improvement in condition.



*Figure 7.1 Percentage of the Roads Network with Negative Residual Life, Derived from Deflectograph Surveys.*

7.8 In addition to carrying out deflectograph surveys, three of the five West Yorkshire Authorities also carry out UKPMS CVI surveys on their principal road network. The results are all below 10% which show that the visual condition of the road surface is much better than the structural condition.

7.9 BVPI 97 measures the percentage of Non-Principal Roads needing structural maintenance work. The indicator was introduced in 2000 for classified non-principal roads (97a, to be BVPI 224a) and in 2001 for unclassified roads (97b, to be 224b). It is currently calculated using UKPMS accredited visual surveys.

7.10 The weighted average value for BVPI 97a is 12.8% which is just outside the upper quartile for both the metropolitan authorities and England. This is the third year where the result has been around 13% and indicates that deterioration has been arrested.

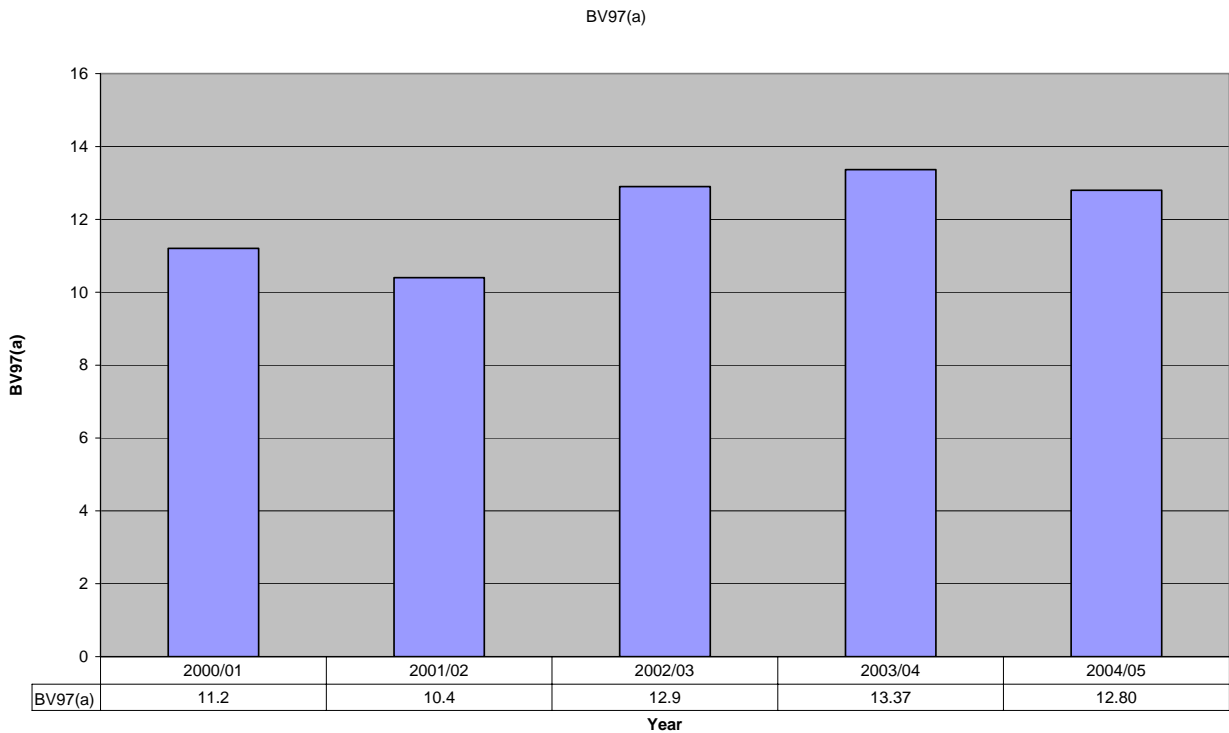


Figure 7.2 *BVPI 97(a) Percentage of Non-principal Classified Roads with Significant Defects (Visual Inspection).*

7.11 2004-05 was the fourth year for the calculation of BV97(b). The result each year is based on data collected in the preceding 12 months for 25% of the unclassified roads. The results have fluctuated over the four year as shown below. It is not possible to determine whether this fluctuation is a consequence of variation in condition between the 25% samples, variations in the rules and parameters use for the analysis, actual changes in condition or a combination of factors.

BV97(b)

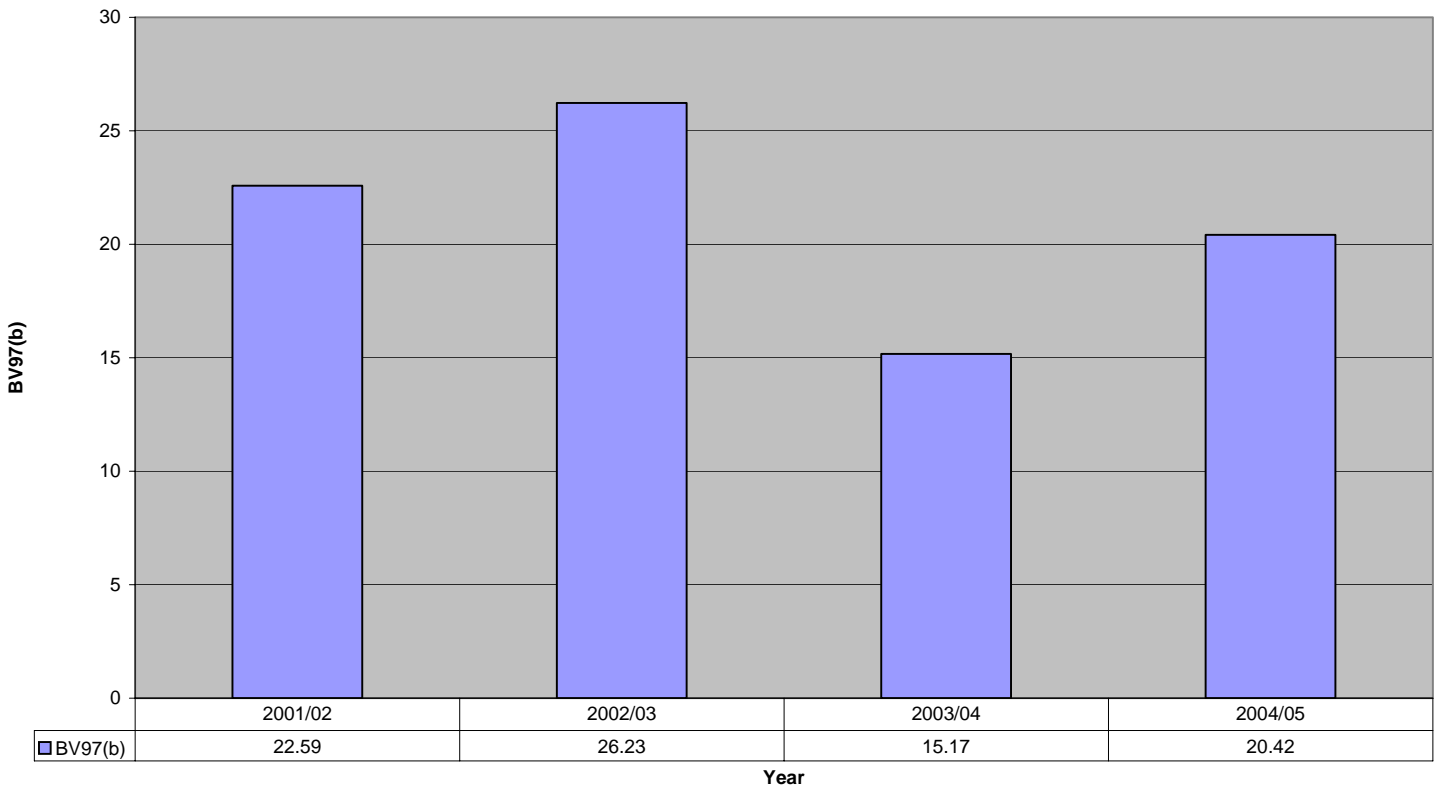


Figure 7.3 BVPI 97(b) Percentage of Non-principal Unclassified Roads with Significant Defects (Visual Inspection).

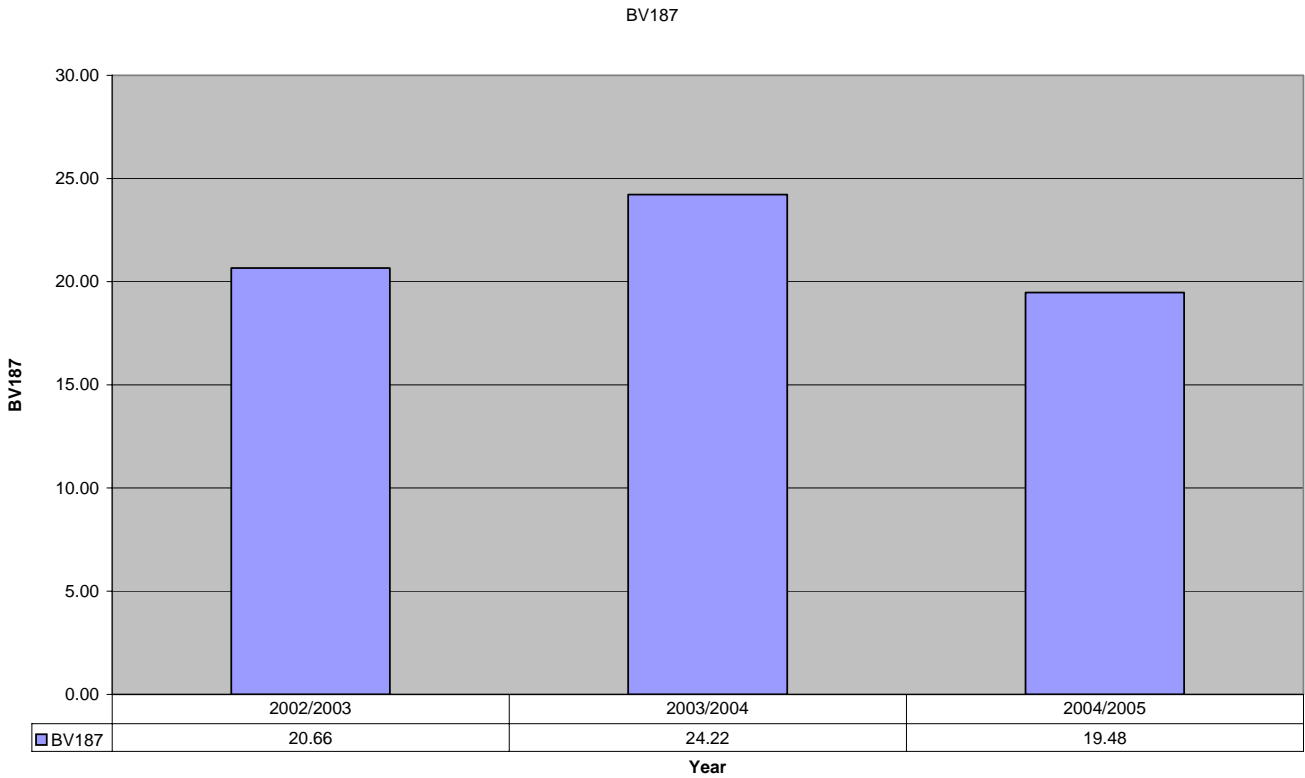
7.12 The weighted average for 2003/04 is 15%. The average result for the four years is 21.1%. Both figures are in the bottom quartile to median range. These results suggest that there has been no significant improvement in the network. The condition of unclassified roads is not as good as the classified roads and this difference reflects their relative priority of the networks hierarchy.

**Mandatory Indicator AM2 : Footway Condition**

7.13 BVPI 187 measures the condition of prestige, primary and secondary walking routes. Fifty percent of these footways are surveyed each year using UKPMS DVI surveys and three years of data have now been collected. The improvement in 2004-05 initially appears to be significant. However the West Yorkshire authorities believe that trends can be better assessed by taking a 100% sample over a two year period. This gives a small improvement from 22.5% to 21.85% which is in the upper to median quartile of results nationally.

7.14 Future works programmes will further improve this part of the footway network. However these footways represent a relatively small percentage of

the total footway network and eradicating the backlog of maintenance to all footways by 2010/11 will not be achieved without a considerable increase in funding.



*Figure 7.4 BVPI 187 Percentage of Prestige, Primary and Secondary Walking Routes with Significant Defects (Visual Inspection).*

**Local Key Indicator AM3 : Structures With Weight/Width Restrictions**

7.15 The function of a bridge is to support the road, which in turn provides a transport facility for the user. If any part of the structure is closed or restricted for any reason, traffic will be disrupted and there will be resulting cost and inconvenience to the user. The overall functional requirement for bridge management, therefore, is to keep road user disruption to the minimum.

7.16 The percentage of structures with temporary weight or width restrictions is used to monitor performance in this area. The position at March 2004, the baseline for LTP2, is reported in Table 7.1 , together with data from 2005. Future changes will be reported against the 2004 baseline.

West Yorkshire: Weight And Width Restricted Structures												
District	TO MARCH 2004						TO MARCH 2005					
	Structures with temporary weight or width restriction. (Council Owned)			Structures with temporary weight or width restriction. (Privately Owned)			Structures with temporary weight or width restriction. (Council Owned)			Structures with temporary weight or width restriction. (Privately Owned)		
	Total No In Prog	No Rest.	%	Total No In Prog	No Rest.	%	Total No In Prog	No Rest.	%	Total No In Prog	No Rest.	%
Bradford	237	3	1.7	74	11	14.8	237	3	1.7	74	11	14.8
Calderdale	263	0	0	66	1	1.5	263	0	0	66	1	1.5
Kirklees	290	17	5.9	87	15	17.2	296	16	5.4	86	13	15.1
Leeds	229	5	2.2	112	1	0.9	229	6	2.6	113	3	2.7
Wakefield	85	0	0	60	6	10.0	85	0	0	60	5	8.3
TOTAL	1104	25	2.3	399	34	8.5	1110	25	2.3	399	33	8.3

*Table 7.1 Percentage of Structures with Temporary Weight or Width Restrictions*

7.17 Completion of the strengthening programme will allow all restrictions to be removed, except where permanent weight restrictions are acceptable. Hence, for Council owned structures, the target date is the end of the second 5 year LTP in March 2011, with the exception of sub-standard bridges under monitoring regimes where restrictions are not significant. These represent about 1.5% of structures in West Yorkshire. In addition, continued pressure on private bridge owners is required to ensure that their weak structures are strengthened within a reasonable timescale.

#### **Local Key Indicator AM4 : Bus Shelters Meeting Modern Standards**

7.18 Market research has indicated that peoples perception of public transport is influenced greatly by their wait for a service. West Yorkshire's bus stops rate poorly for weather protection and information provision. In order to remedy this situation indicator AM4 will monitor the replacement of shelters with those meeting modern standards – defined for this purpose as having full glazing, have a light or seat and meet DDA requirements.

7.19 Currently (2003/04) 31% of shelters meet this standard. Progress towards the LTP2 target of 95% will be reported in future Monitoring Reports.

# APPENDICES



## **APPENDIX 1    LTP2 TARGET DEVELOPMENT**

As part of the LTP2 process a workshop was held in January 2006 to finalise the development of some mandatory and local targets.

The following proformas summarise the output from the workshop and give details of the rationale behind the setting of targets in LTP2.

<b>TARGET</b>	<b>M2:</b> Increase in bus punctuality for all registered services
<b>STATUS</b>	Mandatory
<b>INDICATOR</b>	Bus punctuality
<b>TREND DATA</b>	2000/01 88.65 2001/02 88.53 2002/03 90.03 <b>2003/04 87.1</b> 2004/05 86.8
<b>EVIDENCE &amp; ISSUES</b>	Challenging target dependent on introduction of: <ul style="list-style-type: none"> <li>• Simplified ticketing, fares and routes</li> <li>• Additional fleet investment</li> </ul> Fleet investment and Metro infrastructure investment will result in more level boarding thus speeding up boarding time.
<b>WYLTP Target</b>	Increase punctuality to 95% by 2010/11 for all registered services (measured at start of route and intermediate timing points) A year on year reduction in excess waiting time for services registered as Frequent (measured at start of route and intermediate timing points)
<b>STM Results</b>	Decrease in average bus travel time ranges from 1.75 to 5% depending on centre. This will assist in target achievement.
<b>DfT Satisfactory level</b>	N/A
<b>Does WYLTP meet this</b>	N/A
<b>RISKS TO ACHIEVING TARGET</b>	<ul style="list-style-type: none"> <li>• Rate of delivery of bus priority schemes</li> <li>• Proactive use of the RTPI system by operators</li> <li>• Commitment of operators to improve performance</li> <li>• Commitment of operators to modernise bus fleets</li> <li>• Implementation of simplified ticketing</li> </ul>
<b>LINKS TO OTHER WYLTP TARGETS</b>	M3 Bus satisfaction M8 Bus patronage
<b>RECOMMENDATIONS</b>	Challenging but positive improvements to efficiency in operation are evident

<b>TARGET</b>	<b>M3</b> Satisfaction with local bus services
<b>STATUS</b>	Mandatory
<b>INDICATOR</b>	BVPI 104
<b>TREND DATA</b>	2000/01 – 54% 2003/04 – Awaiting figure from government
<b>EVIDENCE &amp; ISSUES</b>	Implementation of quality bus partnerships in 2009 to improve all aspects of bus travel and therefore satisfaction. This includes: <ul style="list-style-type: none"> <li>• Simplify and flatten fares</li> <li>• No more above inflation fare increase</li> <li>• Newer vehicles</li> <li>• Less service changes</li> <li>• Marketing effort &amp; common branding</li> </ul>
<b>WYLTP Target</b>	59%
<b>STM Results</b>	N/A
<b>DfT Satisfactory level</b>	Maintain bus satisfaction levels to 2009/10 (if level in 2003/04 is greater than 50% or improve them by at least 6% over 2003/04 level by 2009/10 (if not)
<b>Does WYLTP meet this</b>	Yes
<b>RISKS TO ACHIEVING TARGET</b>	<ul style="list-style-type: none"> <li>• Delay / problems implementing quality bus partnership</li> <li>• Over estimated effects of measures implemented.</li> </ul>
<b>LINKS TO OTHER WYLTP TARGETS</b>	M2 Bus punctuality – the target is to improve bus punctuality which will improve bus satisfaction L1 Satisfaction with LTP funded facilities
<b>RECOMMENDATIONS</b>	Agree 59% target

<b>TARGET</b>	<b>M4</b> : Annualised Index of Cycle flows
<b>STATUS</b>	Mandatory
<b>INDICATOR</b>	12 hour weekday flow at a sample of sites, averaged over 3 years
<b>TREND DATA</b>	43.3, 42.1, 40.2, 39.6, <b>38.9</b>
<b>EVIDENCE &amp; ISSUES</b>	Revised monitoring programme for LTP2 - less sites but more representative, includes some off road automatic count data.
<b>WYLTP Target</b>	+10% (42.8)
<b>STM Results</b>	n/a
<b>DfT Satisfactory level</b>	No change on 2004 figure
<b>Does WYLTP meet this</b>	Yes
<b>RISKS TO ACHIEVING TARGET</b>	<ul style="list-style-type: none"> <li>• Weather!</li> <li>• Monitoring methodology not ideal, but cost effective.</li> <li>• Investment in cycling measures might be ineffective.</li> <li>• Recent trends do not show level of growth targeted.</li> </ul>
<b>LINKS TO OTHER WYLTP TARGETS</b>	Numbers too small to have significant impact on other targets.
<b>RECOMMENDATIONS</b>	Target realistic and (possibly) achievable

<b>TARGET</b>	<b>M6 (i)</b> Change in peak period traffic flow to urban centres (0700-1000) - <b>Bradford</b>
<b>STATUS</b>	Mandatory
<b>INDICATOR</b>	ATC traffic flows
<b>TREND DATA</b>	Year Volume 1999 45,600 2001 46,800 <b>2003 45,500 Base year</b>
<b>EVIDENCE &amp; ISSUES</b>	<ul style="list-style-type: none"> <li>• The forecast impact of future increases in employment in Bradford District is to increase AM peak period traffic levels across the cordon by 6% or just fewer than 3000 vehicles. The forecast increase in employment between 2006-11 (12,400 jobs) is similar to that for Leeds (13,200) and is significantly higher than that which occurred between 1991-2001 (6,600);</li> <li>• Forecast increases in City Centre living in Bradford are for some 5000 people (up from less than 500 now) within 2-3 years. Potentially this could reduce car trips across the Cordon by 1600 cars (3.5%), however, currently only 40% of residents work in the City Centre. This would reduce the flow by around 600 (1.4%);</li> <li>• The impact of meeting the bus patronage target is likely to be minimal in Bradford. Evidence from Manchester Rd suggests that at best bus patronage in the AM peak could remain at current levels; evidence from the modal split surveys shows a sustained downward trend of -11% since 1998;</li> <li>• There is no rail target for Bradford, however, additional rolling stock on routes into Leeds would provide extra capacity for travel to Bradford. The modal split survey shows a 17% rise since 1998 although this has all occurred in the last year so may not be fully representative. The impact on the cordon however of future increases would be marginal. A 20% rise would represent just 400 cars or less than 1%;</li> <li>• Cycle flows across Bradford cordon are very low – just 112 (0730-0930) in 2005;</li> <li>• The impacts of implementing Liftshare</li> </ul>

	<p>have been estimated at reducing flows across the cordon by around 550 cars per day, or 0.6%;</p> <ul style="list-style-type: none"> <li>• Demand management does not have a high priority in Bradford. The Council has control of 6600 long stay City Centre spaces but only 4000 are occupied, (equivalent to 9% of the cordon flow). Unrealistic to assume any impact.</li> </ul>
<b>WYLTP Target</b>	Provisional LTP target = limit increase to 3%
<b>STM Results</b>	Typical Am Peak <b>hour</b> shows increase of 1.6% in 2011 preferred strategy
<b>DfT Satisfactory level</b>	No change
<b>Does WYLTP meet this</b>	No.
<b>RISKS TO ACHIEVING TARGET</b>	<ul style="list-style-type: none"> <li>• Reliability of the forecast employment changes and impacts;</li> <li>• Economic growth exceeds the forecasts;</li> <li>• Employment growth in the city centre rises faster than the District as a whole;</li> <li>• The growth in city centre living is less than anticipated;</li> <li>• The growth in city centre living is by people with jobs outside Bradford city centre;</li> <li>• Rail patronage and Liftshare have less impact than forecast;</li> <li>• The monitoring accuracy of the ATC cordon is +/- 2.5%. The target could be met in reality, but monitoring may show an increase.</li> </ul>
<b>LINKS TO OTHER WYLTP TARGETS</b>	<p>M8 Bus patronage  L2 AM Peak cycling  L3 Mode share  L4 AM Peak rail patronage to Leeds</p>
<b>RECOMMENDATIONS</b>	<p>The growth in employment and its impact on the cordon is subject to a great deal of uncertainty. Given past trends this effect is likely to be over-estimated. The provisional LTP target is consequently reasonable assuming that the growth in City Centre living is achieved and that there is some impact from increased rail patronage and Liftshare.</p>

<b>TARGET</b>	<b>M6 (ii)</b> Change in peak period traffic flow to urban centres (0700-1000) - <b>Huddersfield</b>
<b>STATUS</b>	Mandatory
<b>INDICATOR</b>	ATC traffic flows
<b>TREND DATA</b>	1999 – 31490 2001 – 31220 <b>2003 – 31110 - new baseline</b>
<b>EVIDENCE &amp; ISSUES</b>	<p><b>Employment</b> – Using Yorkshire futures predictions an extra 5276 jobs created leading to an extra 960 cars across cordon.</p> <p><b>City Centre Living</b> – 840 units predicted to 2013. Only small impact envisaged on flows across Huddersfield cordon given potential for commute to Leeds and the fact that other job creation areas outside cordon (A62 – 4500 jobs) also have impact.</p> <p><b>Bus</b> – Uncertain factor - Mode split surveys show some peak growth in bus mode share on key corridors into the centre and increase by 1.5% in bus mode share since 2000. This may be a product of data collection rather than actual shift.</p> <p><b>Rail</b> – Rail numbers low – potential for impact on car trips small.</p> <p><b>Cycling</b> – Numbers at around 100 in morning peak – No significant influence envisaged.</p> <p><b>Demand Management</b> – as yet no formal commitment to more severe parking charges and control.</p>
<b>WYLTP Target</b>	Growth of around 3% to 2011
<b>STM Results</b>	Typical peak <b>hour</b> growth for Huddersfield is 4% as a result of preferred strategy in 2011
<b>DfT Satisfactory level</b>	No change
<b>Does WYLTP meet this</b>	<p>No – the possibility of economic growth (job creation) is high for both Huddersfield and commuter destinations such as Leeds. The prospect of this abating is small given thrust of Regional Guidance.</p> <p>This target needs to be matched by better</p>

	management between the modes to ensure traffic growth is not excessive. This may be limited in Huddersfield and relies heavily on increases in bus patronage. Modelling work by Metro does not foresee this time period as a growth area.
<b>RISKS TO ACHIEVING TARGET</b>	<ul style="list-style-type: none"> <li>• Higher than anticipated job creation within or close to central cordon.</li> <li>• No increase in car parking tariffs or increase in cheap long stay car parking.</li> <li>• No impact of bus strategy measures into the core area.</li> <li>• Cheaper motoring costs.</li> <li>• Reduction in rail services.</li> </ul>
<b>LINKS TO OTHER WYLTP TARGETS</b>	<p>L8 Bus patronage  L2 AM Peak cycling  L3 Mode Share  L4 AM Peak rail patronage to Leeds</p>
<b>RECOMMENDATIONS</b>	It is recommended that the target for Huddersfield is set at 3% to take account of potential increases in job creation in Kirklees.

<b>TARGET</b>	<b>M6 (iii)</b> Change in peak period traffic flow to urban centres (0700-1000) - <b>Leeds</b>
<b>STATUS</b>	Mandatory
<b>INDICATOR</b>	ATC traffic flows on LTMP central cordons
<b>TREND DATA</b>	Trend data since 2000 shows: 2000 93,500 2002 97,000 2004 98,200 (+5%)
<b>EVIDENCE &amp; ISSUES</b>	<ul style="list-style-type: none"> <li>• The forecast impact of future increases in employment in Leeds District is to increase AM peak period traffic levels across the cordon by 3% or just fewer than 3000 vehicles. The forecast increase in employment between 2006-11 Leeds (13,200) is similar to that for Bradford (12,400 jobs) and is significantly lower than that which occurred between 1991-2001 (51,000);</li> <li>• Forecast increases in City Centre living in Leeds are significant with some 2,900 additional units under construction and a further 4,500 with planning permission. Potentially this could reduce car trips across the Cordon by 1000-2000 cars (1-2%);</li> <li>• The impact of meeting the bus patronage target is likely to be minimal in Leeds. Evidence from East Leeds suggests that at best bus patronage in the AM peak could remain at current levels;</li> <li>• The AM peak rail target is for an increase in 2000 passengers between 0730-0930. Allowing for a greater rise between 0700-1000, this could reduce traffic by 2%;</li> <li>• Cycle flows across Leeds cordon are greater than the other centres, however, even with the target increase of 20% this would represent about 0.1% of the cordon flow;</li> </ul>

	<ul style="list-style-type: none"> <li>• <b>Commuter Parking :-</b> <ul style="list-style-type: none"> <li>➤ predicted net loss of 28% of publicly available long stay parking spaces by 2011.</li> <li>➤ Parking charges continue to increase at above the rate of inflation)</li> </ul> </li> <li>• Current parking demand management in Leeds is high (Decrim. Powers etc), however, there are only 2050 long stay spaces under Council control.</li> </ul>
<b>WYLTP Target</b>	+3%
<b>STM Results</b>	Typical Am Peak <b>hour</b> shows decrease of 2.1% in 2011 preferred strategy
<b>DfT Satisfactory level</b>	No change
<b>Does WYLTP meet this</b>	No
<b>RISKS TO ACHIEVING TARGET</b>	<ul style="list-style-type: none"> <li>• Economic growth exceeds the forecasts</li> <li>• Employment growth in the city centre rises faster than the District as a whole</li> <li>• The growth in city centre living is less than anticipated</li> <li>• Rail patronage increases are not achieved</li> <li>• The monitoring accuracy of the ATC cordon is +/- 2.5%. Zero growth could be met in reality, but monitoring may show an increase.</li> </ul>
<b>LINKS TO OTHER WYLTP TARGETS</b>	
<b>RECOMMENDATIONS</b>	Significant risks associated with a 0% growth target, therefore 3% increase should be adopted subject to revision in future APR's if trend data allows.

<b>TARGET</b>	<b>M6 (iv)</b> Change in peak period traffic flow to urban centres (0700-1000) - <b>Wakefield</b>
<b>STATUS</b>	Mandatory
<b>INDICATOR</b>	ATC traffic flows
<b>TREND DATA</b>	Trend data since 1999 shows:  Year Volume 2000 26,344 2002 29,577 <b>2004 28,228</b>
<b>EVIDENCE &amp; ISSUES</b>	<ul style="list-style-type: none"> <li>• A very large increase was experienced between 2000 and 2002. This may in part have been related to a large retail site opening close to the cordon. However, this growth was experienced across several sites, suggesting that traffic growth may have been related to a general increase in economic activity across the region.</li> <li>• The forecast impact of future increases in employment in the Wakefield District is to increase the inbound period traffic levels across the cordon by 3% (850 cars). The forecast employment increase in Wakefield between 2006-11 (4,300) is lower than that which occurred between 1991-2001 (6,500).</li> <li>• Forecast increases in City Centre living in Wakefield are for some 1600 residents within the next five years. Depending on their chosen employment destination this has the potential to slightly reduce the flow of commuter car trips across the cordon by around 230 cars (0.5%).</li> <li>• Bus travel in the am peak has fluctuated around a flat trend into Wakefield city centre since 1998. Recent and planned bus priority measures have the potential to increase the share of this mode. Allowing for an assumed one per cent growth in AM peak bus patronage by the end of the period the modal share here is forecast to remain roughly constant throughout the term of the plan, falling slightly towards the end.</li> </ul>

	<ul style="list-style-type: none"> <li>• Rail travel into the city centre in the am peak has doubled between 1998 and 2004 and this strong trend is expected to continue in line with economic growth. New services, stopping at Kirkgate from Sheffield and frequent GNER services stopping at Westgate from Leeds, allow sufficient capacity to accommodate further rail patronage growth in excess of 10%.</li> <li>• Cycle flows across Wakefield cordon are in low numbers at 72 in 2004/5. This is thought to be an underestimate as there are other cycle routes through the cordon that are not being surveyed. Additional survey points have been created to increase the rigour of the survey;</li> <li>• A recent study has estimated that demand management through control of parking prices in Wakefield city centre has a weak potential to impact on this indicator. The amount of local authority controlled long stay parking in the core of the city is small.</li> </ul>
<b>WYLTP Target</b>	Limit growth to 3%
<b>STM Results</b>	Typical Am Peak <b>hour</b> shows decrease of 2.9 % in 2011 preferred strategy
<b>DfT Satisfactory level</b>	No change
<b>Does WYLTP meet this</b>	No
<b>RISKS TO ACHIEVING TARGET</b>	<ul style="list-style-type: none"> <li>• Economic growth and concomitant growth in travel demand may turn out to be greater than estimated.</li> <li>• Bus patronage may not grow by the required amount, particularly if bus priorities don't achieve forecast journey time savings. Insufficient car users attracted to use buses.</li> <li>• Necessary increases in cycle and walking don't happen, because facilities fail to attract existing car users.</li> <li>• Demand management measures, may not be strong enough to discourage private car use (HOV lanes and long stay car park charge increases).</li> </ul>
<b>LINKS TO OTHER WYLTP TARGETS</b>	L8 Bus patronage L2 AM Peak cycling L3 Mode Share

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	L4 AM Peak rail patronage to Leeds
<b>RECOMMENDATIONS</b>	<p>The Provisional target of 5% may be too high an estimate for Wakefield. A number of factors will increase the demand for travel into the city centre (economic growth, planned key developments). Other factors will reduce the demand for travel (more city centre living, improvements that reduce the relative generalised cost of non-car modes, and active encouragement of modal shift). A target of 3% is estimated to be achievable.</p>

<b>TARGET</b>	<b>M7</b> : Reduce the proportion of children travelling to a) primary and b) secondary schools by car
<b>STATUS</b>	Mandatory from 2006/07
<b>INDICATOR</b>	Mode share for journeys to school as supplied by DfES (PLASC data). <i>May only be compulsory for those schools with a travel plan.</i>
<b>TREND DATA</b>	Base year will be 2006/07
<b>EVIDENCE &amp; ISSUES</b>	Delivery of PLASC data delayed, DfT advise against use of “hands up “ survey
<b>WYLTP Target</b>	Not set - nb : 2003/04 “hands up” shows 36% by car overall
<b>STM Results</b>	N/A
<b>DfT Satisfactory level</b>	No change in car mode share.
<b>Does WYLTP meet this</b>	n/a
<b>RISKS TO ACHIEVING TARGET</b>	Decline in commitment to school travel plans Halt to “Yellow Bus “ project Growth in parental choice increases number of car based trips
<b>LINKS TO OTHER WYLTP TARGETS</b>	M5 Congestion M6 Peak Period Traffic flows L3 Peak period mode share (although impact on all may be minimal given nature and timing)
<b>RECOMMENDATIONS</b>	Continue with “hands up” survey data as a background indicator with monitoring group becoming involved in planning & conduct of survey to ensure statistical rigour by 2006/07 in case PLASC does not materialise.

<b>TARGET</b>	<b>M8</b> : Public transport patronage (BVPI 102).	
<b>STATUS</b>	Mandatory	
<b>INDICATOR</b>	Bus Patronage – BVPI 102 on West Yorkshire basis.	
<b>TREND DATA</b>	2000/01	201.6
	2001/02	202.0
	2002/03	203.5
	<b>2003/04 (baseline figure)</b>	<b>199.1</b>
	2004/05	195.7
<b>EVIDENCE &amp; ISSUES</b>	<ul style="list-style-type: none"> <li>• Bus model predicts 3.4% increase by 2011/12</li> <li>• Additional 0.7% increase generated by new park &amp; ride sites.</li> <li>• Additional 0.7% increase through demand management measures e.g. parking charges, travel plans etc</li> <li>• Free elderly travel April 2006 after 9:30am (Model predicts 8.5% increase in total patronage down to this alone)</li> <li>• Quality bus partnerships to start in 2009 including: <ul style="list-style-type: none"> <li>• Simplify and flatten fares</li> <li>• No more above inflation fare increases</li> <li>• Newer vehicles</li> <li>• Less service changes</li> <li>• Marketing effort &amp; common branding</li> </ul> </li> <li>• Social factors e.g. increased car ownership causes downward pressure on bus patronage</li> <li>• Predicted increase in jobs in region causes upwards pressure on bus patronage</li> </ul>	
<b>WYLTP Target</b>	5% increase in bus patronage by 2010/11	
<b>STM Results</b>	STM shows that the number of additional bus trips being made in a typical AM peak and inter peak period will increase as a result of the preferred strategy in 2011. <b>IT SHOULD BE NOTED THAT</b>	

	<b>STM ALLOCATES A GREATER PROPORTION OF TRIPS TO BUS THAN IS REALISTIC.</b>
<b>DfT Satisfactory level</b>	-
<b>Does WYLTP meet this</b>	-
<b>RISKS TO ACHIEVING TARGET</b>	<ul style="list-style-type: none"> <li>• Delay / problems implementing quality bus partnerships and contracts.</li> <li>• Over estimated effects of measures implemented.</li> <li>• Delay / problems operating park &amp; ride sites.</li> <li>• Lack of demand management measures.</li> <li>• Other economic factors which favour car use.</li> </ul>
<b>LINKS TO OTHER WYLTP TARGETS</b>	<p>This target is <b>all day</b> bus patronage. The patronage increase is due mainly to free elderly travel (after 9:30am), <b>so no link to morning peak mode share target from this increase.</b></p> <p>M6, L3 However the implementation of quality bus partnerships from 2009 and other continuing improvement measures such as real time &amp; Yorkshire Bus Initiative will have a positive effect on the morning peak mode share target and individual traffic flow targets for urban centres.</p> <p>M2 Bus punctuality – the target is to improve bus punctuality which will improve bus patronage</p> <p>M3 Satisfaction with LTP funded facilities</p>
<b>RECOMMENDATIONS</b>	<p>If a 5% target is to be agreed some certainty surrounding the implementation of park and ride and the effect of demand management in the individual districts should be assured. <u>Without some certainty in these areas a 3.6% increase is considered challenging.</u></p>

<b>TARGET</b>	<b>M13 : Area wide traffic flows</b>
<b>STATUS</b>	Mandatory
<b>INDICATOR</b>	Index of 16 hour weekday traffic weighted by road length
<b>TREND DATA</b>	<p>Trend data since 2000 (using 2003 road lengths) shows:</p> <p>Year Index (2000=100)</p> <p>2000 100.0</p> <p>2001 100.9</p> <p>2002 99.9</p> <p>2003 102.8</p> <p><b>2004 102.6 Base year</b></p> <p>2011 107.6 extrapolated trend</p>
<b>EVIDENCE &amp; ISSUES</b>	<p>Growth in WY employment 1991-2001 was 77,000 of which 51,000 occurred in Leeds. Forecast increases 2006-11 (36,000) although occurring at the much the same rate are more widely spread, with only 13,000 forecast for Leeds.</p> <p>The extrapolated trend in all day traffic to 2011 shows a 4.9% increase from 2004 (based on the period 2000-2004) and a 4% increase based on the longer period 1994-2004;</p> <p>It is estimated that current bus use represents around 7% of total person-kms travelled in West Yorkshire by road. An increase in bus patronage of 5% would at most therefore reduce car traffic levels by 0.35% assuming a full modal shift;</p> <p>Current rail trips represent around 10% of public transport patronage. The effect of growth here on all day traffic would therefore be minimal.</p> <p>Growth in cycling levels will have even less impact.</p>
<b>WYLTP Target</b>	Not more than 5% growth between 2004 and 2011
<b>STM Results</b>	2.5% to 3.5% growth in AM peak car trips; 3-4%

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	growth in Inter peak car trips by 2011
<b>DfT Satisfactory level</b>	None
<b>Does WYLTP meet this</b>	N/A
<b>RISKS TO ACHIEVING TARGET</b>	Future economic growth exceeds the recent trends
<b>LINKS TO OTHER WYLTP TARGETS</b>	M7 Public transport patronage M8 Cycle flows
<b>RECOMMENDATIONS</b>	The Provisional LTP target of not more than 5% growth represents a realistic assessment of the likely outcome.

<b>TARGET</b>	<b>L1</b> : Increase satisfaction with LTP funded public transport facilities
<b>STATUS</b>	Local
<b>INDICATOR</b>	Satisfaction with local bus journeys
<b>TREND DATA</b>	Baseline figure for LTP2 purposes is 87% satisfaction (2004/5)
<b>EVIDENCE &amp; ISSUES</b>	<ul style="list-style-type: none"> <li>• Historic monitoring data of satisfaction levels for 7 schemes implemented in 2004/5</li> </ul>
<b>WYLTP Target</b>	90% satisfaction by 2011
<b>STM Results</b>	N/A
<b>DfT Satisfactory level</b>	
<b>Does WYLTP meet this</b>	Yes, with ongoing programme of improvements to facilities planned
<b>RISKS TO ACHIEVING TARGET</b>	<ul style="list-style-type: none"> <li>• Local problems with bus and rail operations may affect perception of facilities</li> <li>• Delay in delivery of schemes</li> <li>• Unforeseen disruption in implementing schemes may affect perception of facilities</li> </ul>
<b>LINKS TO OTHER WYLTP TARGETS</b>	Bus patronage AM peak rail patronage into Leeds
<b>RECOMMENDATIONS</b>	Target aims high, but overall increase is modest. Recommend acceptance.

<b>TARGET</b>	<b>L2 : AM peak cycle trips to urban centres - Halifax</b>
<b>STATUS</b>	Local
<b>INDICATOR</b>	Inbound Cordon flows (0730-0930) - 3 counts per site
<b>TREND DATA</b>	2000 – 52 cyclists 2002 – 51 cyclists 2004 – 54 cyclists 2005 - 53 cyclists
<b>EVIDENCE &amp; ISSUES</b>	
<b>WYLTP Target</b>	20% increase
<b>STM Results</b>	N/A
<b>DfT Satisfactory level</b>	None set specifically for urban centres
<b>Does WYLTP meet this</b>	Yes
<b>RISKS TO ACHIEVING TARGET</b>	<ul style="list-style-type: none"> <li>• Weather!</li> <li>• Monitoring methodology not ideal, but cost effective.</li> <li>• Investment in cycling measures might be ineffective.</li> <li>• Recent trends do not show level of growth targeted.</li> </ul>
<b>LINKS TO OTHER WYLTP TARGETS</b>	Numbers too small to have significant impact on other targets with possible exception of local accessibility targets under development.
<b>RECOMMENDATIONS</b>	Whilst recent trends do not show levels of growth predicted discussions with cycling task group and authorities involved reveal that target can be achieved particularly as numbers are very small. Accept on the basis that Calderdale have overall responsibility.

<b>TARGET</b>	<b>L2 : AM peak cycle trips to urban centres - Leeds</b>
<b>STATUS</b>	Local
<b>INDICATOR</b>	Inbound Cordon flows (0730-0930) - 3 counts per site
<b>TREND DATA</b>	2000 = 441 2002 = 430 <b>2004 = 571 Baseline</b> 2005 = 628
<b>EVIDENCE &amp; ISSUES</b>	
<b>WYLTP Target</b>	685 (+20%)
<b>STM Results</b>	N/A
<b>DfT Satisfactory level</b>	None set for urban centres
<b>Does WYLTP meet this</b>	Yes
<b>RISKS TO ACHIEVING TARGET</b>	<ul style="list-style-type: none"> <li>• Weather!</li> <li>• Monitoring methodology not ideal, but cost effective. Some noise in data</li> <li>• Investment in cycling measures might be ineffective.</li> <li>• Recent trends do not show level of growth targeted.</li> <li>• “noise” in data - 2005 survey shows 628 cycles !</li> <li>• Limited take up of Workplace Travel planning</li> </ul>
<b>LINKS TO OTHER WYLTP TARGETS</b>	Numbers too small to have significant impact on other targets.
<b>RECOMMENDATIONS</b>	Whilst recent trends do not show levels of growth predicted discussions with cycling task group and authorities involved reveal that target can be achieved particularly as numbers are very small. Accept on the basis that Leeds have overall responsibility.

<b>TARGET</b>	<b>L2 : AM peak cycle trips to urban centres – Wakefield</b>
<b>STATUS</b>	Local
<b>INDICATOR</b>	Inbound Cordon flows (0730-1030) - counts undertaken on three separate days per site (2004/05 onwards)
<b>TREND DATA</b>	Trend line data since 1999 shows: 2000 155 cyclists 2002 141 cyclists 2003 132 cyclists <b>2004 72 cyclists</b> 2005 105 cyclists
<b>EVIDENCE &amp; ISSUES</b>	<ul style="list-style-type: none"> <li>• Cycle use has declined in recent years for many reasons. Increases in the volume of motorised vehicles have discouraged cycling. New/more complicated junctions are perceived to be more dangerous (e.g roundabouts and signalised junctions). Much new employment has been located away from Wakefield City centre, in less accessible locations near to Motorway junctions.</li> <li>• Up until the last two years there had been little investment in cycle infrastructure in the Wakefield City area. Facilities have been provided as part of the safe routes to schools initiative, away from the City centre.</li> <li>• Recent investment in a radial cycle route, will be replicated on other radials in the LTP2 period, coordinated with major developments in the City centre. The development of the emerald ring concept on the inner ring road, to improve penetration for both cyclists and pedestrians across the road into the centre is expected to encourage more cycling and walking to the City centre.</li> </ul>
<b>WYLTP Target</b>	+ 20% from 2004 base
<b>STM Results</b>	Unlikely be of use.
<b>DfT Satisfactory level</b>	N/A
<b>Does WYLTP meet this</b>	N/A

<b>RISKS TO ACHIEVING TARGET</b>	<ul style="list-style-type: none"> <li>• If the proposed new cycle facilities are not delivered, it will be difficult to attract car users to cycling.</li> <li>• A comprehensive network of radial routes is required, and where third parties are involved (such as Network Rail or other land owners), negotiations may be protracted and delay implementation.</li> <li>• Improvements within the City centre are dependant on key development sites being progressed quickly. Major changes to the highway network and the emerald ring concept, are heavily reliant on these developments. If the developments are delayed, these highway changes will also be delayed.</li> <li>• If comprehensive demand management measures are not implemented, there will be no disincentive to car use, so alternative modes (such as cycling) won't be considered by car users.</li> </ul>
<b>LINKS TO OTHER WYLTP TARGETS</b>	Numbers too small to have significant impact on other targets.
<b>RECOMMENDATIONS</b>	Improved monitoring techniques will reflect changes related to off road routes more accurately. Given the low base of cycling measured in 2004, a 20% increase equates to a very small absolute increase of just 14 cyclists. Given the scale of investment planned for radial routes into Wakefield City centre in LTP2, and associated promotion planned, this growth should easily be achieved. Recent experience with the Spen Valley greenway and other Sustrans schemes in Yorkshire and Humber region suggest that considerably higher levels of growth have been experienced on isolated routes.

<b>TARGET</b>	<b>L3 : AM peak period modal split to urban centres - Bradford</b>
<b>STATUS</b>	Local
<b>INDICATOR</b>	Inbound Cordon flows (0730-0930) - 3 counts per site
<b>TREND DATA</b>	<p>Trend data since 1998 (0730-0930) shows:</p> <p style="text-align: center;">Car mode share %</p> <p>1998 72.6  2000 73.7  2002 74.0  2004 73.6  <b>2005 73.6 Base year</b></p>
<b>EVIDENCE &amp; ISSUES</b>	<ul style="list-style-type: none"> <li>• The trend from 1998 up to 2011 is for 75.1% car mode share, from 2000 the trend is flat – 73.3%;</li> <li>• The forecast impacts of increased employment assumes existing modal share across the cordon;</li> <li>• The impacts of City Centre living are likely to be marginal in terms of modal share.</li> <li>• The impact of meeting the bus patronage target is likely to be minimal in Bradford. Evidence from Manchester Rd suggests that at best bus patronage in the AM peak could remain at current levels; evidence from the modal split surveys shows a sustained downward trend of -11% since 1998. Currently bus represents 16.2% of mode share;</li> <li>• The 2005 modal split survey shows a 17% rise in rail patronage since 1998 although this has all occurred in the last year so may not be fully representative. The impact on the cordon however of future increases would be marginal. Currently rail represents 5.5% of mode share;</li> <li>• Cycle flows across Bradford cordon are very low – just 112 (0730-0930) in 2005 – with a sustained downward trend;</li> </ul>

	<ul style="list-style-type: none"> <li>• The trend in walking levels has been slightly upward since 1998 with a trend of +6% over this period, although the 2005 survey was well down on the 2004 figure. Currently walking represents just 4% of mode share;</li> <li>• The impacts of implementing Liftshare have been estimated at reducing traffic flows across the cordon by around 550 cars per day (0700-1000). This would have no impact on car mode share, however, Leeds data indicates that around 20% of users switch from non-car modes. The numbers affected here would nevertheless be very small – around 0.3% of mode share.</li> </ul>
<b>WYLTP Target</b>	No change in car mode share
<b>STM Results</b>	Typical Am Peak hour shows mode share for car reducing by 5%, mostly as a result of a transfer to rail and bus.
<b>DfT Satisfactory level</b>	If there is an increase in peak traffic flows car mode share should show a ‘significant’ reduction
<b>Does WYLTP meet this</b>	No.
<b>RISKS TO ACHIEVING TARGET</b>	<ul style="list-style-type: none"> <li>• Continuation of the decline in bus patronage not compensated for by growth in other non-car modes;</li> <li>• Mode share of new employment is more car based than existing situation;</li> <li>• The recent trend in rail patronage is not sustained in future years.</li> </ul>
<b>LINKS TO OTHER WYLTP TARGETS</b>	M6 AM peak period traffic flows to urban centres M7 Bus patronage L5 AM peak period (0730-0930) rail patronage into Leeds
<b>RECOMMENDATIONS</b>	Given the trend since 2000 a ‘no change’ target would be feasible

<b>TARGET</b>	<b>L3 : AM peak period modal split to urban centres - Halifax</b>			
<b>STATUS</b>	Local			
<b>INDICATOR</b>	Inbound Cordon flows (0730-0930) - 3 counts per site			
<b>TREND DATA</b>	2000	2002	<b>2004</b>	2005
Total traffic - vehicles	17365	17271	<b>17973</b>	18064
Total persons	25067	24576	<b>24425</b>	25795
%age by mode - pedestrians	4.3	3.6	<b>4.5</b>	4.6
%age by mode - cycles	0.2	0.1	<b>0.2</b>	0.2
%age by mode – m/cycles	0.3	0.3	<b>0.5</b>	0.4
%age by mode - car	75.8	75.2	<b>75.9</b>	77.2
%age by mode - bus	19.3	20.7	<b>18.9</b>	17.5
%age of cars with one occupant	76.9	77.6	<b>79.6</b>	77.0
			<b>Base year</b>	
<b>EVIDENCE &amp; ISSUES</b>	<ul style="list-style-type: none"> <li>• <b>Car</b> - surveys in 2005 indicate an increase on vehicle numbers and people crossing the cordon in the base year. However, the average car occupancy increased from 1.24% in the base year to 1.29% and the % of cars with a single occupant fell by 2.6%</li> <li>• <b>Employment</b> – Yorkshire Futures prediction is an additional 1300 jobs created in the period 2006 – 11 which may increase the number of cars crossing the cordon in the AM peak</li> <li>• <b>Town Centre Living</b> – 208 change of use and conversion to dwelling applications still to be completed inside the cordon and 163 new build houses (as at 30 Sept 2005) 90% are flats with 2/3 bedrooms which may appeal to professional people who normally commute into Halifax by car.</li> <li>• <b>Bus</b> – 2005 modal split survey information indicates a decline in the annual bus mode share of 6.5% overall since year 2000 and almost 2.0% since 2004 base year, on the key corridors into the centre during the 0730 – 0930 AM peak</li> <li>• <b>Rail</b> – rail patronage into Halifax is 4% of the modal share, just over 1000 people on eight trains in the 0730 – 0930 AM peak. (consider this to be high through observational</li> </ul>			

	<p>evidence). Eastbound trains carry high number of commuters travelling to Bradford and Leeds</p> <ul style="list-style-type: none"> <li>• <b>Cycling</b> – although only 50 cyclists were recorded in the 7:30 – 9:30 AM peak on the designated routes for modal share data collection as monitored in 2004 base year, that is 2% of the mode split, workplace travel plans will increase numbers though it is not considered it would significantly affect car and rail commuters</li> <li>• <b>Demand Management</b> – the extension of the existing Pay &amp; Display zone to cover a large part of the area inside the Halifax town centre cordon and decriminalised parking enforcement may change the attitude of the people who make the journey to work in Halifax town centre by car in the AM peak</li> </ul>
<b>WYLTP Target</b>	No increase in the car modal share of total number of people crossing the Halifax cordon
<b>STM Results</b>	Typical AM peak hour shows mode share for car reducing by 6%, mostly as a result of a transfer to bus and rail
<b>DfT Satisfactory level</b>	“Significant” reduction
<b>Does WYLTP meet this</b>	No
<b>RISKS TO ACHIEVING TARGET</b>	<ul style="list-style-type: none"> <li>• economic growth which exceeds the forecast</li> <li>• increased number of jobs in the town centre</li> <li>• minimal impact of bus strategy measures, and</li> <li>• a growth in car commuting levels skirting the town centre core area en-route to other centres in West Yorkshire and neighbouring authorities not affected by parking management</li> <li>•</li> </ul>
<b>LINKS TO OTHER WYLTP TARGETS</b>	<p>M6 AM peak period traffic flows to urban centres  M7 Bus patronage  L3 Am peak period (0730-0930) cycle flows to urban centres</p>
<b>RECOMMENDATIONS</b>	The AM peak period modal split show slight changes, both up and down, over the 5 years we have been doing the surveys. %age of cars with

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	<p>one occupant and the average car occupancy is now virtually the same as in 2000, although people and traffic have increased. The only evidence of modal shift is from bus to car, unfortunately, but even that is a very small movement and could easily go the other way next year. Need to be wary of creating a target from what is an inconclusive trend.</p>
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<b>TARGET</b>	<b>L3 : AM peak period modal split to urban centres - Huddersfield</b>
<b>STATUS</b>	Local
<b>INDICATOR</b>	Inbound Cordon flows (0730-0930) - 3 counts per site
<b>TREND DATA</b>	<p>Trend data since 1998 (0730-0930) shows:</p> <p style="padding-left: 40px;">Car mode share %</p> <p>1998 69</p> <p>2000 67</p> <p>2002 68</p> <p>2004 66</p> <p><b>2005 64 Base year</b></p>
<b>EVIDENCE &amp; ISSUES</b>	<ul style="list-style-type: none"> <li>• The trend from 1998 up to 2011 is for 57.9% car mode share, from 2000 the trend is also down at 58%;</li> <li>• The forecast impacts of increased employment assumes existing modal share across the cordon;</li> <li>• The impacts of City Centre living are likely to be marginal in terms of modal share.</li> <li>• The impact of meeting the bus patronage target is likely to be minimal in Huddersfield. There is little hard evidence that bus patronage in the am peak has increased although analysis of mode split counts reveals that there has been some upward movement. However, data collected in the early years is much less statistically robust than recent three day counts. As such this not a strong base on which to make predictions. Evidence from other sources such as Manchester Rd. in Bradford suggests that at best bus patronage in the AM peak could remain at current levels;</li> <li>• It is important to note that even a small</li> </ul>

	<p>shift in mode share from car to bus would in actuality mean a large and unrealistic increase in peak period bus patronage.</p> <ul style="list-style-type: none"> <li>• The modal split surveys show a 20% rise in rail patronage since 1998. The impact on the cordon however of future increases would be marginal. Currently rail represents 6% of mode share;</li> <li>• Cycle flows across the Huddersfield cordon are very low – just 109 (0730-0930) in 2005 – with a variable trend since 1998;</li> <li>• The trend in walking levels has been slightly upward since 1998 with a trend of 41% over this period. Currently walking represents just 7% of mode share.</li> </ul>
<b>WYLTP Target</b>	No change in car mode share
<b>STM Results</b>	Typical Am Peak hour shows mode share for car reducing by 5%, mostly as a result of a transfer to rail and bus.
<b>DfT Satisfactory level</b>	If there is an increase in peak traffic flows car mode share should show a ‘significant’ reduction
<b>Does WYLTP meet this</b>	No.
<b>RISKS TO ACHIEVING TARGET</b>	<ul style="list-style-type: none"> <li>• Continuation of the decline in bus patronage not compensated for by growth in other non-car modes;</li> <li>• Mode share of new employment is more car based than existing situation;</li> <li>• The recent trend in rail patronage is not sustained in future years.</li> </ul>
<b>LINKS TO OTHER WYLTP TARGETS</b>	<p>M6 AM peak period traffic flows to urban centres</p> <p>M7 Bus patronage</p> <p>L5 AM peak period (0730-0930) rail patronage into Leeds</p>
<b>RECOMMENDATIONS</b>	Given that it is unlikely that peak hour bus patronage could grow significantly in five years a ‘no change’ target would still be challenging.

<b>TARGET</b>	<b>L3 : AM peak period modal split to urban centres - Leeds</b>
<b>STATUS</b>	Local
<b>INDICATOR</b>	Inbound Cordon flows (0730-0930) - 3 counts per site
<b>TREND DATA</b>	<p style="text-align: center;">Car Mode Share %</p> <p>1998 64.0  2000 61.2  2002 60.9  <b>2004 57.7</b>  2005 57.3</p>
<b>EVIDENCE &amp; ISSUES</b>	<ul style="list-style-type: none"> <li>• Trend data from 1998 to 2011 shows continuing slight fall</li> <li>• Forecasts of increased city centre employment assumes existing modal share</li> <li>• Impacts of city centre living may reduce peak period car demand – see Proforma for peak period traffic growth</li> <li>• Planned increase in rail patronage of 20%</li> <li>• Bus patronage increase :- <ul style="list-style-type: none"> <li>- 0.4% increase above trends due to P&amp;R and associated demand management measures.</li> </ul> </li> <li>• Commuter Parking :- <ul style="list-style-type: none"> <li>- predicted net loss of 28% of publicly available long stay parking spaces by 2011.</li> <li>- Parking charges continue to increase at above the rate of inflation)</li> </ul> </li> <li>• +20% cycling target (L2) will have no significant impact (600 trips out of 121,000)</li> </ul>
<b>WYLTP Target</b>	54% car mode share (55% corporate target by 2008)
<b>STM Results</b>	Typical AM Peak hour shows mode share for car reducing by 4%, mostly as a result of a transfer to bus

<b>DfT Satisfactory level</b>	If there is an increase in peak traffic flows car mode share should show a 'significant' reduction.
<b>Does WYLTP meet this</b>	Yes – for Leeds
<b>RISKS TO ACHIEVING TARGET</b>	Increase PNR parking as a result of development over and above that predicted P&R site is not completed Increases in rail capacity don't occur Peak period bus patronage trends in Leeds reverse
<b>LINKS TO OTHER WYLTP TARGETS</b>	M6 AM peak period traffic flows to urban centres M8 Bus patronage L4 AM peak period (0730-0930) rail patronage into Leeds
<b>RECOMMENDATIONS</b>	Given trends and assumptions linked to other targets a 54% car mode target is ambitious but achievable.

<b>TARGET</b>	<b>L3 : AM peak period modal split to urban centres - Wakefield</b>
<b>STATUS</b>	Local
<b>INDICATOR</b>	Inbound Cordon flows (0730-0930) - 3 counts per site
<b>TREND DATA</b>	<p>Trend data since 1998 (0730-0930) shows:</p> <p>1998 79.6  2000 71.8  2002 75.7  2004 73.0  <b>2005 76.0* Base year</b></p> <ul style="list-style-type: none"> <li>• (07:30-10:30)</li> </ul> <p>2011 77.0 (straight line forecast)</p>
<b>EVIDENCE &amp; ISSUES</b>	<ul style="list-style-type: none"> <li>• Trend data shows a large amount of variability over the plan period. This makes the trend forecast for 2011 unreliable. Sampling frequency improvements started in 2005 have improved the reliability of the surveys.</li> <li>• Economic growth is expected for the city centre during the LTP2 plan period. Three large city centre developments are scheduled to complete, attracting trips.</li> <li>• The forecast impact of future increases in employment in the Wakefield District is to increase the inbound period traffic levels across the cordon by 3% (850 cars). The forecast employment increase in Wakefield between 2006-11 (4,300) is lower than that which occurred between 1991-2001 (6,500).</li> <li>• Bus travel in the am peak has fluctuated around a flat trend into Wakefield city centre since 1998. Recent and planned bus priority measures have the potential to increase the share of this mode. Allowing for an assumed one per cent growth in AM peak bus patronage by the end of the period the modal share here is forecast to remain roughly constant throughout the term of the plan, falling slightly towards the end.</li> <li>• Rail travel into the city centre in the am peak has doubled between 1998 and 2004 and this strong trend is expected to continue in line with</li> </ul>

	<p>economic growth. New services, stopping at Kirkgate from Sheffield and frequent GNER services stopping at Westgate from Leeds, allow sufficient capacity to accommodate further rail patronage growth in excess of 10%.</p> <ul style="list-style-type: none"> <li>• Cycle flows across Wakefield cordon are in low numbers at 72 in 2004/5. This is thought to be an underestimate as there are other cycle routes through the cordon that are not being surveyed. Additional survey points have been created to increase the rigour of the survey;</li> <li>• There has been a strong growth in the numbers walking into the city centre in the peak period but numbers are still relatively small in comparison to car modal share (walking share was 4% in 2005).</li> <li>• Cycle flows across the cordon are very low. Evidence suggests some trips may be escaping measurement. Additional survey points are being created to include these trips in counts and make the survey more rigorous.</li> <li>• A recent study has estimated that demand management through control of parking prices would have a weak potential to impact on this indicator, due to the relatively small amount of local authority controlled parking in the core of the city.</li> </ul>
<b>WYLTP Target</b>	No change in car mode share.
<b>STM Results</b>	Typical AM Peak hour shows mode share for car reducing by 4%, mostly as a result of a transfer to bus.
<b>DfT Satisfactory level</b>	If there is an increase in peak traffic flows car mode share should show a 'significant' reduction.
<b>Does WYLTP meet this</b>	No. For Wakefield car mode share is estimated to remain at least at the same proportion. Given the risks involved here it may even increase by as much as one per cent over the plan period. The non-car modes represent much smaller magnitudes relative to that of the car. Given some anticipated growth in car trips (see indicator M6) larger increases in levels of non-car mode trips are necessary just for the car mode share to remain the same over time.
<b>RISKS TO ACHIEVING</b>	<ul style="list-style-type: none"> <li>• Economic growth and concomitant growth in</li> </ul>

<b>TARGET</b>	<p>travel demand may turn out to be greater than anticipated.</p> <ul style="list-style-type: none"> <li>• Bus operators outside of the control of the authority. Any bus priority improvements may not be complemented by a high standard of bus services from operators.</li> <li>• The degree of success in realising modal shift after improvements are made may be less than anticipated, if the preference for non-car modes remains unchanged among the general population.</li> </ul>
<b>LINKS TO OTHER WYLTP TARGETS</b>	<p>M6 AM peak period traffic flows to urban centres. For Wakefield this is estimated to grow by 2.5%.  M7 Bus patronage  L5 AM peak period (0730-0930) rail patronage into Leeds  L2 Am peak period (0730-0930) cycle flows to urban centres</p>
<b>RECOMMENDATIONS</b>	<p>The WYLTP target of no change in car mode share is an ambitious yet realistic target for Wakefield. Levels of non-car travel to the city centre in the AM peak will have to increase but as a proportion of all travel they are expected to remain constant. This is due to an expected growth in the level of car traffic to the city centre.</p>

<b>TARGET</b>	<b>L4 ; AM peak period (0730-0930) rail patronage into Leeds</b>														
<b>STATUS</b>	Local														
<b>INDICATOR</b>	Public transport patronage														
<b>TREND DATA</b>	<table> <tr> <td>1999</td> <td>10693</td> </tr> <tr> <td>2000</td> <td>*</td> </tr> <tr> <td>2001</td> <td>*</td> </tr> <tr> <td>2002</td> <td>10147</td> </tr> <tr> <td>2003</td> <td>9585</td> </tr> <tr> <td><b>2004</b></td> <td><b>10209</b></td> </tr> <tr> <td>2005</td> <td>11863</td> </tr> </table> <p>(* Figures for 2000 and 2001 unrealistic because of the number of bus substitutions and service suspensions associated with the Leeds 1<sup>st</sup> Project and other problems associated with the Hatfield accident, strikes and staff shortages)</p>	1999	10693	2000	*	2001	*	2002	10147	2003	9585	<b>2004</b>	<b>10209</b>	2005	11863
1999	10693														
2000	*														
2001	*														
2002	10147														
2003	9585														
<b>2004</b>	<b>10209</b>														
2005	11863														
<b>EVIDENCE &amp; ISSUES</b>	<ul style="list-style-type: none"> <li>• Additional jobs forecast in Leeds with trends suggesting 9,000 by 2008</li> <li>• Demand management such as ‘early bird’ fares to use spare capacity on early trains</li> <li>• Bid for additional rolling stock to allow for expansion on peak journeys</li> </ul>														
<b>WYLTP Target</b>	An increase in peak arrivals of 20% by 2010/11 The target relates to local trains operated as part of the Northern franchise on behalf of Metro														
<b>STM Results</b>	Increase in mode share of 1% in 2011 preferred strategy. This equates to about 9.1% increase in rail patronage. <b>IT SHOULD BE NOTED THAT STM HAS CONSISTENTLY UNDERESTIMATED RAIL TRIPS.</b>														
<b>DfT Satisfactory level</b>	n/a														
<b>Does WYLTP meet this</b>	n/a														
<b>RISKS TO ACHIEVING TARGET</b>	<ul style="list-style-type: none"> <li>• Downturn in the economy</li> <li>• Extra rolling stock bid fails</li> </ul>														
<b>LINKS TO OTHER WYLTP</b>	M6 AM peak period traffic flows to urban centres														

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<b>TARGETS</b>	M8 Bus patronage L3 AM peak period modal split to urban centres
<b>RECOMMENDATIONS</b>	Trend shows fast growth so target should be achievable

<b>TARGET</b>	<b>L5 : Quality Bus Corridor Patronage</b>		
<b>STATUS</b>	Local		
<b>INDICATOR</b>	Public transport patronage		
<b>TREND DATA</b>	<b>Year</b>	<b>QBC trend</b>	<b>W Yorks trend</b>
	2000/1	+3%	+1.1%
	2001/2	+4%	+0.2%
	2002/3	+3%	+0.74%
	2003/4	+3%	-2.16%
	2004/5	+2%	-1.71%
<b>EVIDENCE &amp; ISSUES</b>	Evidence from the main schemes in West Yorkshire show consistent increases over the West Yorkshire baseline		
<b>WYLTP Target</b>	Increase in bus patronage above West Yorkshire baseline on QBC routes		
<b>STM Results</b>	N/A		
<b>DfT Satisfactory level</b>	N/A		
<b>Does WYLTP meet this</b>	N/A		
<b>RISKS TO ACHIEVING TARGET</b>	<ul style="list-style-type: none"> <li>• Commitment of bus operators to improve performance</li> <li>• Maintenance of fleet and infrastructure standards on QBCs</li> </ul>		
<b>LINKS TO OTHER WYLTP TARGETS</b>	M5 Journey time per person mile M8 Bus patronage M3 Bus satisfaction		
<b>RECOMMENDATIONS</b>	Accept target of “increase in QBC patronage above WYorks increase”		

<b>TARGET</b>	<b>L10 : Bus shelters meeting modern standards</b>
<b>STATUS</b>	Local
<b>INDICATOR</b>	Satisfaction with local bus services
<b>TREND DATA</b>	Baseline data: 2003/04 - 31% of shelters meeting modern standards 2004/05 – 40% of shelters meeting modern standards
<b>EVIDENCE &amp; ISSUES</b>	<b>Installation programme</b> Programme of installation has now accelerated with the establishment of a supplier with local base.
<b>WYLTP Target</b>	95% of bus shelters to meet modern standards by 2010/11 Bus shelters meeting modern standards are <ul style="list-style-type: none"> <li>• Fully glazed</li> <li>• Have a light and/or seat</li> <li>• Are wheelchair accessible</li> </ul>
<b>STM Results</b>	N/A
<b>DfT Satisfactory level</b>	N/A
<b>Does WYLTP meet this</b>	N/A
<b>RISKS TO ACHIEVING TARGET</b>	Lack of capital and human resources
<b>LINKS TO OTHER WYLTP TARGETS</b>	M8 Bus patronage M3 Bus satisfaction L1 Satisfaction with LTP funded PT facilities
<b>RECOMMENDATIONS</b>	Challenging but realistic.

## **APPENDIX 2 WEST YORKSHIRE LTP , 2006 – 2011 TARGETS**

The following table shows the targets contained within the second West Yorkshire LTP for DfT Mandatory and Local Key Indicators. Progress against these targets will be reported annually using the pro-forma in Appendix 3



Key Outcome Indicators		Local Targets to 2010/11	Relevant Shared Priority
Mandatory M1	Local accessibility target	Ensure that 89.5% of households without access to a car are within 30 minutes of a hospital by public transport.	Delivering Accessibility
Mandatory M2	Bus punctuality	Increase bus punctuality to 95% by 2010/11 for all registered services. A year on year reduction in Excess Waiting Time for Frequent services	Delivering Accessibility; Tackling Congestion
Mandatory M3	Satisfaction with local bus services (BVPI 104)	Increase bus satisfaction to 59% by 2009/10	Delivering Accessibility; Tackling Congestion;
Mandatory M4	Annualised index of cycling trips	A 10% increase in overall cycling levels by 2010/11	Delivering Accessibility
Mandatory M5	Average journey time per person mile on key routes	Process of target setting still ongoing – awaiting DfT data and guidance - to be finalised by July 2006.	Tackling Congestion
Mandatory M6	Change in peak period traffic flows to urban centres	Traffic growth in urban centres in the morning peak period (0700-1000) from 2003/04 to 2010/11 to be restricted to : Bradford 3% Halifax 3% Huddersfield 3% Leeds 3% and Wakefield 3%	Tackling Congestion; Better Air Quality
Mandatory M7	Mode share of journeys to school	Setting of target on hold until DfES data available in 2007.	Tackling Congestion
Mandatory M8	Public transport patronage (BVPI 102)	A 5% increase in bus patronage by 2010/11.	Tackling Congestion
Mandatory M9	Total KSI casualties (BVPI 99)	A 40% reduction in the number of people KSI from the 1994/98 average by 2010 (National Target), stretched to a 30% reduction from the 2002-2004 average by 2010.	Safer Roads
Mandatory M10	Child KSI casualties (BVPI 99)	A 50% reduction in the number of children KSI from the 1994/98 average to 2010 (National Target), stretched to a 40% reduction from 2002-2004 by 2010 (related to PSA).	Safer Roads
Mandatory M11	Total slight casualties (BVPI 99)	A 15% reduction in the number of people slightly injured from the 2002-2004 average by 2010.	Safer Roads
Mandatory M12	NO <sub>2</sub> annual average concentration in designated Air Quality Management Areas (AQMA's)	A 10% reduction NO <sub>2</sub> in the Leeds AQMA's. Targets will be set for other AQMA's as they are declared during LTP2	Better Air Quality

Key Outcome Indicators		Local Targets to 2010/11	Relevant Shared Priority
Mandatory M13	Change in area wide road traffic	No more than a 5% increase in 16-hour weekday traffic flows, weighted by road length, at a representative sample of sites from 2003/04 levels by 2010/11	Better Air Quality
Mandatory M14	Principal road network where maintenance work should be considered (BVPI 223, formerly BVPI 96)	Reduce the percentage of the principal road carriageway network where maintenance should be considered, from 36% in 2004/05 to 27% by 2011	Effective Asset Management
Mandatory M15	Non principal road network where maintenance work should be considered (BVPI 224a, formerly BVPI 97a)	Reduce the length of the non-principal classified carriageway where maintenance work should be considered, from 13% in 2003/04 to 5% by 2011	Effective Asset Management
Mandatory M16	Unclassified road network where structural maintenance should be considered (BVPI 224b, formerly BVPI97b)	Reduce the length of the unclassified carriageway network where structural maintenance should be considered, from 16% in 2003/04 to 9% by 2011	Effective Asset Management
Mandatory M17	Footways where structural maintenance should be considered (BVPI 187)	Reduce the percentage of footway Category 1, 1a and 2 networks where structural maintenance should be considered. From 24% in 2003/04 to 14% in 2011	Effective Asset Management
Local L1	Satisfaction with LTP funded public transport facilities	Increase satisfaction with LTP funded public transport facilities to 90% by 2010/11	Delivering Accessibility
Local L2	Cycling trips to urban centres during the morning peak	A 20% increase in cycling trips to Leeds, Wakefield and Halifax centres during the AM peak (0730-0930) by 2010/11	Tackling Congestion
Local L3	AM peak period mode split to urban centres	Reduce the proportion of car-based trips into central Leeds from 57% to 55% by 2010/11 No increase in car mode share in Bradford, Halifax, Huddersfield and Wakefield	Tackling Congestion
Local L4	Peak period rail patronage	Increase peak time rail patronage on local train services into Leeds by 20% to 2010/11	Tackling Congestion
Local L5	Patronage on Quality Bus Corridors	Increase in bus patronage above the West Yorkshire patronage baseline on QBC's	Tackling Congestion

Key Outcome Indicators		Local Targets to 2010/11	Relevant Shared Priority
Local L6	Number of pedestrians KSI in road traffic collisions	A 50% reduction in the number of pedestrians KSI from the 1994/98 average by 2010, and stretched to a 30% reduction from the 2002-2004 average by 2010	Safer Roads
Local L7	Annual road traffic emissions of NO <sub>x</sub> across West Yorkshire principal road network	A 20% reduction in NO <sub>x</sub> from 2004/05 to 2010/11.	Better Air Quality
Local L8	Annual road traffic emissions of CO <sub>2</sub> across West Yorkshire principal road network	No increase in CO <sub>2</sub> emissions from 2004/05 to 2010/11.	Better Air Quality
Local L9	Structures with weight and/or width restrictions	To reduce temporary restrictions on council owned bridges to 1.5% from 4.3% in 2005	Effective Asset Management
Local L10	The percentage of bus shelters that meet modern standards i.e. have seating, lighting and/or heating and are wheelchair accessible	95% of bus shelters to meet modern standards by 2010/11.	Effective Asset Management

## **APPENDIX 3    MONITORING PROGRESS TOWARDS LTP2 TARGETS**

The following pro-forma, developed by the Department for Transport, will be used to monitor and report annual progress towards mandatory LTP2 targets.

**LTP2 Mandatory Indicators Pro-Forma**

LTP West Yorkshire (Joint Plan)

Core Indicator	Definitions	Year Type	Units	Plan Area	Year	Value	Actual and Trajectory Data										Notes	
							2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11				
Road Condition (% of network in need of further investigation)	(1) Principal Roads - BVPI223	Financial	Percentage	Joint Plan Area	Base Data	2004/05	36.00%	Actual Figures									1 = BRADFORD, 2=CALDERDALE, 3=KIRKLEES, 4+LEEDS, 5= WAKEFIELD ,	
					Target Data	2010/11	27.00%	Trajectory										
				Area 1	Base Data	2004/05	44.00%	Actual Figures										
					Target Data	2010/11	39.00%	Trajectory										
				Area 2	Base Data	2004/05	39.00%	Actual Figures										
					Target Data	2010/11	27.00%	Trajectory										
				Area 3	Base Data	2004/05	47.00%	Actual Figures										
					Target Data	2010/11	35.00%	Trajectory										
				Area 4	Base Data	2004/05	27.00%	Actual Figures										
					Target Data	2010/11	21.00%	Trajectory										
	Area 5	Base Data	2004/05	29.00%	Actual Figures													
		Target Data	2010/11	16.00%	Trajectory													
	Area 6	Base Data	2004/05		Actual Figures													
		Target Data	2010/11		Trajectory													
	Area 7	Base Data	2004/05		Actual Figures													
		Target Data	2010/11		Trajectory													
	Area 8	Base Data	2004/05		Actual Figures													
		Target Data	2010/11		Trajectory													
	Area 9	Base Data	2004/05		Actual Figures													
		Target Data	2010/11		Trajectory													
	Area 10	Base Data	2004/05		Actual Figures													
		Target Data	2010/11		Trajectory													
(2) Classified, non-principal, roads - BVPI224a	Financial	Percentage	Joint Plan Area	Base Data	2005/06	10.00%	Actual Figures								Target to be revised once Scanner data available for all areas. 1 = BRADFORD, 2=CALDERDALE, 3=KIRKLEES, 4+LEEDS, 5= WAKEFIELD ,			
				Target Data	2010/11	5.00%	Trajectory											
			Area 1	Base Data	2005/06	2.00%	Actual Figures											
				Target Data	2010/11	2.00%	Trajectory											
			Area 2	Base Data	2005/06	8.00%	Actual Figures											
				Target Data	2010/11	5.00%	Trajectory											
			Area 3	Base Data	2005/06	21.00%	Actual Figures											
				Target Data	2010/11	3.00%	Trajectory											
			Area 4	Base Data	2005/06	12.00%	Actual Figures											
				Target Data	2010/11	6.00%	Trajectory											
	Area 5	Base Data	2005/06	19.00%	Actual Figures													
		Target Data	2010/11	8.00%	Trajectory													
	Area 6	Base Data	2005/06		Actual Figures													
		Target Data	2010/11		Trajectory													
	Area 7	Base Data	2005/06		Actual Figures													
		Target Data	2010/11		Trajectory													
	Area 8	Base Data	2005/06		Actual Figures													
		Target Data	2010/11		Trajectory													
	Area 9	Base Data	2005/06		Actual Figures													
		Target Data	2010/11		Trajectory													
	Area 10	Base Data	2005/06		Actual Figures													
		Target Data	2010/11		Trajectory													

Core Indicator	Definitions	Year Type	Units	Plan Area	Year	Value	Actual and Trajectory Data										Notes				
							2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11							
Road Condition (% of network in need of further investigation)	(3) Unclassified roads - BVPI224b	Financial	Percentage	Joint Plan Area	Base Data	2003/04	16.00%	Actual Figures	16.00%	15.00%								1 = BRADFORD, 2=CALDERDALE, 3=KIRKLEES, 4+LEEDS, 5= WAKEFIELD ,			
					Target Data	2010/11	9.00%	Trajectory			14.00%	13.00%	12.00%	11.00%	10.00%	9.00%					
				Area 1	Base Data	2003/04	3.00%	Actual Figures	3.00%	5.00%											
					Target Data	2010/11	5.00%	Trajectory			5.00%	5.00%	5.00%	5.00%	5.00%	5.00%					
				Area 2	Base Data	2003/04	24.00%	Actual Figures	24.00%	21.00%											
					Target Data	2010/11	8.00%	Trajectory			18.00%	16.00%	14.00%	12.00%	10.00%	8.00%					
				Area 3	Base Data	2003/04	16.00%	Actual Figures	16.00%	15.00%											
					Target Data	2010/11	9.00%	Trajectory			14.00%	13.00%	12.00%	11.00%	10.00%	9.00%					
				Area 4	Base Data	2003/04	19.00%	Actual Figures	19.00%	17.00%											
					Target Data	2010/11	11.00%	Trajectory			16.00%	15.00%	14.00%	13.00%	12.00%	11.00%					
				Area 5	Base Data	2003/04	26.00%	Actual Figures	26.00%	23.00%											
					Target Data	2010/11	12.00%	Trajectory			21.00%	19.00%	17.00%	15.00%	13.00%	12.00%					
				Area 6	Base Data	2003/04		Actual Figures													
					Target Data	2010/11		Trajectory													
				Area 7	Base Data	2003/04		Actual Figures													
					Target Data	2010/11		Trajectory													
				Area 8	Base Data	2003/04		Actual Figures													
					Target Data	2010/11		Trajectory													
				Area 9	Base Data	2003/04		Actual Figures													
					Target Data	2010/11		Trajectory													
				Area 10	Base Data	2003/04		Actual Figures													
					Target Data	2010/11		Trajectory													
Total killed and seriously injured casualties - BVPI99(x)	Calendar	Casualties	Joint Plan Area	Base Data	1994-98		Actual Figures	1994-98	2003	2004	2005	2006	2007	2008	2009	2010	Notes				
				Target Data	2010	1,484	Trajectory	1,484	1,237	1,215											
Child killed and seriously injured casualties - BVPI99(y)	Calendar	Casualties	Joint Plan Area	Base Data	1994-98		Actual Figures	1994-98	2003	2004	2005	2006	2007	2008	2009	2010	Notes				
				Target Data	2010	272	Trajectory	272	203	148											
Total slight casualties - BVPI99(z)	Calendar	Casualties	Joint Plan Area	Base Data	1994-98		Actual Figures	1994-98	2003	2004	2005	2006	2007	2008	2009	2010	Notes				
				Target Data	2010	11,391	Trajectory	11,391	11,566	10,816											
						9,642					11,060	10,776	10,493	10,209	9,926	9,642					

Core Indicator	Definitions	Year Type	Units	Plan Area	Year	Value	Actual and Trajectory Data										Notes	
							2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11				
Total local public transport patronage in target	Millions of passenger journeys (i.e. boardings) per year in the authority	Financial	Million passenger journeys	Joint Plan Area	Base Data	2003/04		Actual Figures										
					Target Data	2010/11		Trajectory										
of which number of bus passenger journeys - BVPI102		Financial	Million passenger journeys	Joint Plan Area	Base Data	2003/04	199.1	Actual Figures	199.1	195.7								
					Target Data	2010/11	209	Trajectory			193.3	200.6	201.0	198.2	198.5	209		
Satisfaction with local bus services- BVPI104		Financial	Percentage	Joint Plan Area	Base Data	2003/04	54%	Actual Figures	54.00%									
					Target Data	2009/10	68%	Trajectory			54.00%				68.00%			
Footway condition - BVPI187 (% of the category 1, 1a and 2 footway network where structural maintenance should be considered.)		Financial	Percentage	Joint Plan Area	Base Data	2003/04	24%	Actual Figures	24%	24%								1 = BRADFORD, 2=CALDERDALE, 3=KIRKLEES, 4+LEEDS, 5= WAKEFIELD ,
					Target Data	2010/11	14%	Trajectory			24%	22%	19%	17%	15%	24%		
					Area 1	Base Data	2003/04	37%	Actual Figures	37%	30%							
					Target Data	2010/11	24%	Trajectory			29%	28%	27%	26%	25%	24%		
					Area 2	Base Data	2003/04	6%	Actual Figures	6%	6%							
					Target Data	2010/11	2%	Trajectory			5%	5%	4%	4%	3%	2%		
					Area 3	Base Data	2003/04	2%	Actual Figures	2%	6%							
					Target Data	2010/11	5%	Trajectory			5%	5%	5%	5%	5%	5%		
					Area 4	Base Data	2003/04	33%	Actual Figures	33%	31%							
					Target Data	2010/11	15%	Trajectory			28%	25%	22%	19%	17%	15%		
					Area 5	Base Data	2003/04	36%	Actual Figures	36%	29%							
					Target Data	2010/11	12%	Trajectory			26%	23%	20%	17%	14%	12%		
					Area 6	Base Data	2003/04		Actual Figures									
					Target Data	2010/11		Trajectory										
Area 7	Base Data	2003/04		Actual Figures														
Target Data	2010/11		Trajectory															
Area 8	Base Data	2003/04		Actual Figures														
Target Data	2010/11		Trajectory															
Area 9	Base Data	2003/04		Actual Figures														
Target Data	2010/11		Trajectory															
Area 10	Base Data	2003/04		Actual Figures														
Target Data	2010/11		Trajectory															
LPT1 - An accessibility target		Calendar	% no car households within 30 mins of hospital by PT	Joint Plan Area	Base Data	2005	89.50%	Actual Figures										
					Target Data	2010	89.50%	Trajectory			89.50%	89.50%	89.50%	89.50%	89.50%			
LTP2 - Change in area wide road traffic mileage		Calendar	Vehicle Kilometres	Joint Plan Area	Base Data	2004	100	Actual Figures	100	100							indicator based on a sample of ATC sites weighted by road length, indexed to 100.	
					Target Data	2010	105	Trajectory			101	102	103	104	105	105		



